INDEXING, ABSTRACTING, RANKING & CITATION COVERAGE:

ARC-ERA (Australian Research Council – Excellence in Research for Australia Initiative), http://www.arc.gov.au/era/default.htm

CIRET (Centre International de Recherches et d'Etudes Touristiques)

CAB Abstracts (CABI), http://www.cabi.org

CitEc (Citations in Economics), http://citec.repec.org

DBH (Norwegian Database for Statistics on Higher Education), http://dbh.nsd..uib.no

DOAJ (Directory of Open Access Journals), www.doaj.org

EBSCO Publishing, http://www.ebscohost.com

EconBiz, http://www.econbiz.de

ECONIS, http://www.econis.eu

EconPapers, http://econpapers.repec.org

Economists Online, http://www.economistsonline.org

EZB (Elektronische Zeitschriftenbibliothek), http://rzblx1.uni-regensburg.de/ezeit

IDEAS (Internet Documents in Economics Access Service), http://ideas.repec.org

ICI (Index Copernicus International), http://www.indexcopernicus.com

INOMICS, http://www.inomics.com

ISSI (Intute Social Sciences Index), http://www.intute.ac.uk/socialsciences

Leisure, Recreation & Tourism Abstracts, http://www.cabi.org

Murdoch University Australian Tourism Research Database, http://wwwlib.murdoch.edu.au/guides/arts/internet/tourism.html#journals

National Library of Australia, http://catalogue.nla.gov.au

NEP (New Economics Papers), http://nep.repec.org

NewJour (Electronic Journals & Newsletters), http://library.georgetown.edu/newjour

NSD (Norwegian Social Science Data Services), http://www.nsd.uib.no

Open J-Gate, http://www.openj-gate.org

RePEc (Research Papers in Economics) http://www.repec.org

Rural Development Abstracts, http://www.cabi.org

SJR (SCImago Journal & Country Rank), http://www.scimagojr.com

SCOPUS (Elsevier Bibliographic Databases), www.info.scopus.com

SocioNet, http://socionet.ru/

SRC (Scentific Reference Cosmos), http://www.srcosmos.gr/srcosmos

ZBW (German National Library of Economics), http://www.zbw.eu

TOURISMOS

An International Multidisciplinary Journal of Tourism

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TOURISMOS

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CONTENTS

> *This paper aims to offer a preliminary case study of CSR issues being addressed in the hospitality sector in order to disseminate best practice. By employing a qualitative research findings reveal that Meliá Hotels International has its own approach to CSR by incorporating a new cultural dimension to this notion. Moreover, findings illustrate how MHI define its CSR policy according to the stakeholder approach, being the main beneficiaries from these activities consumers and local communities. This study also provides evidence that strength of CSR commitment varies by topic, and that value creation for MHI can be uncertain since many CSR initiatives do not cause a reduction in costs.*

> *For many protected areas, the inclusion of interested parties in decision-making processes has become both more important and common. The range of interests can lead to a variety of conflicts. Given the diversity of stakeholders, effective conflict management requires an integrated communicative approach that addresses this range interests. Yet the question remains: Are techniques developed for a specific case, and in one particular culture, applicable to other cases? To explore this question we compared the attitudes of stakeholders in Vatnajökull National Park in Iceland and Daisetsuzan National Park in Japan regarding conflict, communication and consensus. Despite the cultural and geographical distance between the two cases, the results show an 84% concurrence in*

stakeholder views, leading the authors to conclude that, despite minor differences, conflict management techniques can be applied across cultural borders provided that managers are sensitive to local understandings of how people relate to their social and natural environments.

EXPLORING TOURISTS' 'PUSH AND PULL' MOTIVATIONS TO VISIT MAURITIUS AS A HOLIDAY DESTINATION 39

Hemant Kassean Senior Lecturer & Rhaalib Gassita

This study examines the motivational push and pull factors that affect tourists' decision in their choice of a holiday destination. 200 questionnaires were completed using a face to face interview among specific groups of travellers to Mauritius (English, French, German, Italian and South African tourists) at various points on the island. The findings show that rest and relaxation are the most compelling push motivation forces followed by nostalgia, escape, novelty, social interaction. The key pull based motives were found to be climate and weather, landscape and scenery, flora and fauna, beaches, the exotic atmosphere, the Mauritian hospitality and authentic Mauritian culture. Push and pull factors between first time visitors and repeat visitors are discussed.This study contributes to our overall understanding of why holiday makers take travel decisions for long haul destinations like Mauritius and can therefore help destination marketers develop better marketing programmes to meet the specific needs.

INTERNATIONAL TOURISTS' ENVIRONMENTAL ATTITUDE TOWARDS HOTELS IN ACCRA 57

Ishmael Mensah & Rebecca Dei Mensah

The available literature suggests that there has been a rise in green consumerism, not only among general consumers but tourists. This has provided the impetus for the 'greening' of hotels as hotel guests have indicated their preference for hotels that 'take care of the environment'. Ironically, the environmental impacts of hotels especially with regards to the consumption of energy and water are more likely to be exacerbated by their guests. In spite of this, most studies on environmental management in hotels have centred on programmes and initiatives undertaken by management with little focus on the attitudes and behaviour of guests. This study sought to assess international tourists' environmental attitude towards hotels in Accra and the implications for environmental management by hotels. A sample of 343 international tourists was surveyed at major tourist attraction sites in Accra. The results of the study indicate that a majority of respondents generally held the view that hotels do not destroy the environment but contribute to the global environmental problems. Most of them (83%) were therefore willing to pay more to stay

in a hotel with a responsible environmental attitude. There was also a significant positive relationship between some socio-demographic characteristics of tourist such age and sex and their environmental behaviour. The results of this study have implications for environmental education of guests and the marketing of hotels.

In recent years, sustainability has become a fundamental component of all planning processes, while, on the other hand, tourism is seldom seen as a key or priority sector in overall planning. In this article, diverse approaches to sustainable planning that include tourism are examined in order to provide a conceptual framework and some points of reference to contextualize the posterior analysis of a recent planning process undertaken in Catalonia, Spain. The discourse focuses on the proposals, the difficulties encountered in establishing objectives and indicators, leading finally to an evaluation of the suitability and foreseeable effectiveness of the measures approved.

This study examines the relationship between residents' perceived tourism impacts and their support for tourism development. The study was conducted on local residents of Pamukkale, an ancient resort town in the Aegean region of Turkey that is renowned for its thermal tourism resources in the world. To examine the relationship between variables, tourism impact domains were regressed against the support for tourism. The findings revealed positive relationship between tourism impacts and residents' support for tourism development.

The hotel industry is characterised by close and direct contact between the employee and the customer. For this reason, one of the most effective ways to achieve customer satisfaction and loyalty is to ensure that employees who provide the service feel committed to the organisation where they work. By doing so, hotel businesses can gain a sustainable competitive advantage and improve organisational performance. Based on these

premises, this article aims to determine the relationships between certain variables associated with the job and the organisational commitment of the individual. The hypotheses tests reveal a strong relationship between stable and permanent employment and higher levels of organisational commitment among hotel employees.

Ana Ramos, George Ramos, Alexandra Cruchinho, Fernanda Delgado, Paula Pereira, Paula Sapeta & Paulo Afonso

The implementation of the Bologna process in higher education leads to rethinking the teaching-learning assumptions. Higher education today is focused on curricula, teaching-learning processes, subjects and course programmes attending to European credits system, teachers' qualification and training, academic success and scholar results, performance standards, assessment of institutions, assessment of skills (and not merely knowledge).In 2010 a project (Construction of Learning | ConstAp) was developed in the Polytechnic Institute of Castelo Branco, Portugal. The main goal was to motivate the adoption of changes concerning classroom methodologies and students' autonomous workload guidance in the scope of the Bologna process implementation.This paper presents a proposal of pedagogical intervention to deal with the mentioned objectives, a project applied in a specific tourism course. The paper presents the first results collected regarding the project's implementation and seeks to impart a methodology that can be applied to similar courses.

Serafeim Polyzos, Tsiotas Dimitrios & Alexios Kantlis

This paper utilizes the theoretical framework of the Tourism Area Life Cycle (TALC) model and applies an empirical analysis on the data for the period 1980- 2009. The TALC multi-stage process is simulated to a logistic curve and thus it obtains a characteristic growth coefficient r(t) expressing its time duration. This study considers three versions for the logistic growth coefficient and presents the spatial distribution of each coefficient on the Greek interregional map. This approach allows to distinguish the regions that they have reached their tourism developmental capabilities faster than the others and to distinguish these that are still capable for further development. The overall treatment provides the developmental potentials of each Greek prefecture and elects some interesting issues for the tourism policy making in Greece.

Greek museums, in the new era of economic recession, face the agony of surviving and at the same time chase the challenges for sustainable development. The scope of this survey is to define the groups of tourists who visited Greek public museums and their evaluations of the museums' services. The cluster analysis, forms different groups of tourists, and the principal component analysis reveals the factors that represent museum's quality characteristics. The analysis of variance follows, to correlate the already defined clusters per factors and to answer the research questions. The quantitative research reveals that, there are three different groups of tourists, and confirms that visitors behave according to the group they belong. Therefore, in formulating a strategy to attract and satisfy the cultural tourists, the improvement in the provision of educational services and the better training of the personnel are needed, since most problems are noticed on these aspects.

RESEARCH CASE STUDIES:

The purpose of this paper is to explore the attitude and perception of local residents toward tourism impacts and development in Torqabeh, one of the most popular tourism resort located in northeast of Iran. Two hundred and fifty households were randomly chosen as a sample of study and data were collected and analyzed with quantitative methods. The results of analysis revealed that local residents generally expressed a positive attitude toward tourism development in Torqabeh. There was evidence that Tourism-related job, community involvement in making decisions about tourism development, community attachment and length of residence are significant determinants of perceived tourism impacts and development. Furthermore, the study reinforces the need for inclusion of local people during future preliminary process of tourism planning in area.

The main objective of this study is to measure the level of livelihood sustainability of indigenous people at Kg. Sg. Ruil located at a tourist destination of Cameron Highlands, Malaysia. Several indicators

measuring livelihood sustainability as developed by the United Nations Development Program are employed in this study. Among the indicators measured are human assets, financial assets, physical assets, social assets and the disruption or threat to the livelihood of indigenous people (Orang Asli). Face-to-face interviews involving a total of 110 respondents were conducted from October to December 2011. The results indicate that the development of tourism in Cameron Highlands positively impact the indigenous people in terms of increment in their human assets, financial assets, physical and social assets. They also managed to handle the threats that may disrupt their livelihood sustainability.

Saeed Rasekhi & Sepideh Hosseini

Assessing the spatial structure of tourism in selected countries during the period 1995-2010 is the main purpose of current paper. To reach this, through applying new economic geography, some spatial factors affecting on tourism agglomeration have been evaluated using panel data. The results of model estimation indicated that the economies of scale and the tourism cost are the most important factors in determining tourism agglomeration in selected countries. In addition, growth and development level of countries increase the tourism agglomeration in these countries. Also, based on this study results, maintain credibility in satisfaction of tourists increase the tourism agglomeration. Overall, the results of this study indicate the confirmation of new economic geography factors in determining tourism agglomeration, while previous studies are just considered the economic factors affecting on tourism agglomeration.

RESEARCH NOTES:

Eugenio Cianflone, Giuseppa Di Bella & Giacomo Dugo

EC-labelled products, identified by PDO, PGI and TSG tags, are linked to a geographical area and to specific growing/manufacturing methods that guarantee quality and sustain local traditions. These features can promote local products by raising tourists' interest not only in local food but also in the place of origin of the same and in its history. This note wants to report ongoing research on a facet of cultural tourism that has not so far been studied: British Grand Tourists' accounts of local quality products. The selected item was the PGI Sicilian orange, whereas the literary evidence was taken from Brydone's travelogue and from Dennis' travel

book. The result is a description of a PGI product where specialists from Food Science and English Studies work in team to offer a model to be used in cultural tourism.

This report presents a heuristic algorithm for the optimal hub selection in a maritime transport system which is based on the hub and spoke model. This model has been successfully tested in other maritime systems such as the USA aviation. Its implementation in the maritime transport and particularly in areas such as the Aegean Sea gave very good results with respect to resource savings, improvement of services and drastic reduction of the total time needed for travelling in favour of tourism and shipping companies.

EDITORIAL

This is the sixteenth issue of TOURISMOS, finishing its eighth year of publication! In the previous fifteen issues, our multidisciplinary journal aimed at providing a platform that supports the transmission of new scholarly discoveries in the fields of tourism and hospitality, and we have been excited about offering a platform that supports scholars in building upon intellectual treasures and advancing our understanding about various fields of research in novel and meaningful ways. Capitalising on this effort, we now focus on furthering our scope and consolidating our position in both conceptual developments and practical applications in tourism, travel, leisure and hospitality.

All research papers and case studies presented in this issue, address a number of topics namely corporate social responsibility in the hospitality industry, management of human resources and peer support, spatial structure of tourism, tourism development and sustainability issues, tourism destination image, green marketing, promotion of tourism events, supply chain management, tourism marketing, tourists' motivations and perceptions about tourism destinations, hotel management, travel demand and economic growth, and management of special events.

Based on the previous analysis, we trust that you will enjoy reading the present issue, and we look forward to presenting you our next in spring 2014!

Paris Tsartas   Evangelos Christou
Editor-in-Chief   *Editor*

PERSPECTIVES AND PRACTICES OF CSR IN THE HOSPITALITY INDUSTRY: ANALYZING A CASE STUDY

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This paper aims to offer a preliminary case study of CSR issues being addressed in the hospitality sector in order to disseminate best practice. By employing a qualitative research findings reveal that Meliá Hotels International has its own approach to CSR by incorporating a new cultural dimension to this notion. Moreover, findings illustrate how MHI define its CSR policy according to the stakeholder approach, being the main beneficiaries from these activities consumers and local communities. This study also provides evidence that strength of CSR commitment varies by topic, and that value creation for MHI can be uncertain since many CSR initiatives do not cause a reduction in costs.

INTRODUCTION

Over the last decades a number of stakeholders have been demonstrating a growing awareness of the social and environmental consequences of business operations. Therefore, the notion of corporate social responsibility (CSR) has gained popularity. Along with the general trend of attention to CSR, the tourist industry and the hospitality sector have indicated an ever increasing interest in this topic (Henderson, 2007; McGehee et al., 2009; Khairat & Maher, 2012). In fact, a growing number of companies declare their devotion to ethical and socially responsible values (Nergiz et al., 2011; Martínez et al., 2013a), qualifying themselves

as CSR-driven companies and showing their CSR reports together with their annual reports (Font et al., 2012).

It is hardly surprising then that the notion of CSR has received little attention within the context of tourism in academic literature (Bohdanowicz & Zientara, 2009; McGehee et al., 2009). Although a number of researchers and professionals in the hospitality industry agree that CSR has become a necessary business function, much of this research has focused on the link between CSR and financial performance (Lee & Park, 2009), being devoted less attention to clarify how this term is characterized, what role plays in hospitality companies and how it should be implemented in this sector (Bohdanowicz & Zientara, 2009; Chung & Parker, 2010; Tsai et al., 2010; Martínez et al., 2013b). Moreover, CSR actions reported in the literature are limited to environmental issues, most of which have a positive business efficiency impact (Ayuso, 2006; Kasim, 2007; Jovicic, 2011). Actually, although the hospitality industry is taking steps towards stepping up their CSR efforts, the sector still lags behind other industries (McGehee et al., 2009). Given the contextual nature that is recognized in the practice of CSR (Whitehouse, 2006; Martínez et al., 2013c) the academic literature has recognized that the tourism industry would seem to have particular and identifiable obligations outside of the business arena due to its very close relationship with destination environments and societies which are facets of its products (Henderson, 2007; McGehee et al., 2009).

As a reduced number of studies have investigated the range of CSR practices implemented by hotels companies, this study offers a preliminary exploration of the CSR issues being addressed by Meliá Hotels International (MHI), leading hotel company with presence in 27 countries. The existing studies on CSR in the hotel industry are mostly limited to environmental issues glossing over social and cultural aspects (Ayuso, 2006; Bohdanowicz & Zientara, 2009; Jovicic, 2011). Additionally, none of them explore the CSR approaches used to establish CSR policies or the potential stakeholders who benefit from these activities. The current study aims to address these knowledge gaps in the academic literature by presenting the case of an international hospitality company undertaking CSR activities and, consequently, disseminating best practice. Specifically, the objectives of this study are to: (1) Define the view of MHI regarding CSR, (2) elucidate MHI´s social responsibility initiatives and (3) define the possible beneficiaries of these initiatives. To get these objectives, this study is structured as follows. First at all, this article will review the literature on CSR and its application in hospitality industry. The next section will describe the methodology section

including the proposed method to collect the data. Finally, it will be presented the findings of the study and some concluding remarks will be presented.

REVIEW OF THE CORPORATE SOCIAL RESPONSIBILITY LITERATURE

Although CSR is one of the most prominent themes in the academic literature, it is difficult to provide a precise definition of the term. In fact, it is a concept that has no universally definition. One of the main reasons given is that the meaning of CSR varies depending on the business sector under study (Whitehouse, 2006; Martínez et al., 2013c). To complicate this situation, some researchers understand CSR as synonymous with different concepts such as philanthropy, sustainability, triple bottom line or business ethics (Carroll, 1998; van Marrewijk, 2003; McGehee et al., 2009).

Several authors have referred to a sequence of approaches, each including and transcending one other, trying to show responses to the question to whom an organization has a responsibility (Freeman, 1984; Göbbels, 2002). In the early 60s the *shareholder approach* represented the classical view on CSR. Friedman (1962) stated that the sole objective of companies was the profit maximization for shareholders. However, today it is quite accepted that shareholder value maximization is not incompatible with satisfying certain stakeholders´ interests. In the 80s the approach based on the *stakeholders theory* (Freeman, 1984) gained attention. According to this proposal, companies are not responsible to the global society as a whole, but aim to respond to different constituencies (Freeman, 1984). According to this approach careful attention to externalities and their impact on stakeholders is crucial to the company´s future success.

Those stakeholders to whom companies respond will inform us about the main reasons to implement CSR initiatives. Companies driven by competitiveness reasons will focus on investors and shareholders. On the other hand, those companies driven by legitimization will respond to a broader range of stakeholders such as employees, consumers or public administrations (Garay & Font, 2011). Finally, according to the *societal approach* (Göbbels, 2002; van Marrewijk, 2003) companies are responsible to society as a whole of which they are an integral part. Companies must operate by public consent in order to serve the needs of society in a constructive way (van Marrewijk, 2003).

A pragmatic proposal within this societal approach is to extend the traditional bottom line accounting to a "Triple Bottom Line" that would include economic, social and environmental aspects (Elkington, 1997). This approach is closely linked with the concept of sustainability (van Marrewijk, 2003). Within the societal approach, CSR principles have much in common with those of sustainability, and both terms are used interchangeably (Henderson, 2007; van Marrewijk & Werre, 2003).

In this sense, one of the most broadly accepted definitions of CSR is proposed by the World Business Council for Sustainable Development (WBCSD) stating that *"CSR is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as the local community and society at large"* (WBCSD, 1999). The WBCSD states that CSR is an integral part of sustainability and divided CSR into the same three categories accepted as the main dimensions of sustainability: economy, society and environment. Sustainability, however, is considered the ultimate goal of organizations, meeting the needs of the present generations without compromising the ability of future generations to meet their own needs (World Commission of Environment and Development, 1987). Therefore, CSR is understood as an intermediate stage where companies try to balance the triple bottom line performance (van Marrewijk, 2003).

Although a number of frameworks for CSR have been developed, there is no agreement as to which should be used while evaluating CSR implementation. One of the main reasons given is that the meaning and approach of CSR vary depending on the business sector under study (Whitehouse, 2006; Martínez et al., 2013c). CSR has strong contextual characteristics. These features refer to the specific geographic, social, cultural and economic policies of the places in which companies operate. These features play an important role in determining the responsibilities of businesses and, consequently, in their responses to CSR issues (European Commission, 2002). Furthermore, the social, cultural and environmental aspects that companies choose to address vary depending on the sector in which companies operate (Whitehouse, 2006). That is the reason why recent researchers define CSR as a custom-made process, so that, each company should choose which concept and definition is the best option, matching the companies´ aims and intentions and aligned them with the company´s strategy, as a response to the specific circumstances in which it operates (van Marrewijk & Werre, 2003).

Hospitality industry and corporate social responsibility

The hospitality industry is frequently viewed as a source of economic, environmental, social and cultural benefits through its support of job creation, improvements to infrastructures and cultural understanding (Bohdanowicz & Zientara, 2009; Cuccia & Rizzo, 2011; Jovicic, 2011; Liu & Lin, 2011). However, the hospitality industry also imposes a large number of negative impacts on the economic, natural and social environments, including air and noise pollution, biodiversity loss or waste generation (Chan, 2011; Khairat & Maher, 2012). Likewise, hospitality companies consume water, energy, food, paper, linen, laundry, consumables, stationery cleaning materials and other resources, and generates air, water, soil and noise pollution (Chan, 2011), impacting on local communities through their occupation of space, use of infrastructures, and relationships with local business, communities and government (Chung & Parker, 2010).

As a result, stakeholders show a progressive demand not only in terms of higher quality of hotel services and infrastructures in general, but also about further initiatives that the companies take to protect the personality and cultural identity of destinations, along with their natural, human and patrimonial resources (Bigné et al., 2000). In this sense, since this industry offers activities that constantly interact with these systems, companies have a great capacity to initiate significant changes in the economic, natural, social and cultural environment (Bohdanowicz & Zientara, 2009; Chan, 2011). In addition, international tourism associations are becoming increasingly active in responsible and sustainable issues (Khairat & Maher, 2012). The implementation of Agenda 21 launched the emphasis of CSR issues in the tourist industry. This initiative, promoted by the World Travel and Tourism Council, the World Tourism Organization and the Earth Council, set international guidelines relative to sustainable and responsible tourism. In the European sphere, the Initiative for Improving CSR in the Hospitality Sector has been established. Regarding this initiative, the European Federation of Food and Agriculture and Tourism Trade Unions and Hotels, Restaurants and Cafés in Europe drafted compliance parameters concerning equal opportunity, non-discrimination, working conditions, fair pay, vocational training and life-long learning, health and safety, and the relationship between employers and employees at all levels. Other initiatives, such as that of Green Hotels, focus on policies that are designed to save water and energy, and reduce solid waste (Green Hotels Association, 2005).

METHODOLOGY

In this study, a qualitative research is undertaken in order to gain a better understanding of how MHI defines its approach regarding CSR, discusses the CSR initiatives implemented by the company, and elucidates the main beneficiaries from these actions. Our intention is to show MHI´s achievements in these areas and disseminate best practice. An exploratory research is employed. More precisely, a case study based on in-depth personal interviews with CSR managers of MHI is designed. This method is one of the most employed tools in the qualitative research methodology (Yin, 1989) and has been widely applied to the study of CSR (Whitehouse, 2006; Truñó i Gual & Rialp, 2008; Martínez et al., 2013a-b). A single case study was considered to represent the best means of acquiring a deep and contextual insight to generate and build theory (Yin, 1989). The main characteristics of the research are displayed in the Table 1.

Table 1 Research technical record

Methodology	Case study
Case	Meliá Hotels International
Information	Qualitative – Top managers' CSR, sustainability and organizational identity perceptions, attitudes and ratings Quantitative – CSR and sustainability practices
Data collection	Primary data: 14 in-depth interviews with CSR and organizational identity managers of the institution Secondary information (CSR reports, stock market indices, corporate communications, media publications, academic participations)
Data Analysis	Content analysis
Statistical software	ATLAS.ti v.5

Data collection method

MHI case study was selected by means of a theoretical sampling, non-statistical (Truñó i Gual & Rialp, 2008; Martínez et al., 2013a), trying to choose the case that would provide greater opportunity for learning. MHI was selected because it represents, at the discretion of the researchers, special characteristics that make it especially interesting for the study. This study asked open-ended (qualitative) questions to create a more in-depth understanding of CSR into the hospitality industry. To collect the primary data for this study, fourteen in depth interviews were

conducted whit the staff and administrators responsible for the CSR project of MHI. The interviewers are displayed in Table 2.

Table 2 MHI´s managers interviewed for the qualitative study

Non-Executive Vice Chairman	Institutional Office and Corporate Diplomacy Senior Vice President (SVP)
Strategic Planning Group Vice-President	Marketing Strategy & Loyalty Director
Tryp Brand Guest Experience & Marketing Director	Meliá & Innside Brand SVP
Sustainable Development Director	Environmental Executive Manager
Sol Brand Activities & Quality Director	Design & Development Director
Leisure Real State Director	General Manager of Meliá Palas Atenea Hotel
General Manager of Gran Meliá Hotel	

The semi-structured interviews lasted and average of one hour and were undertaken by the researchers. All were recorded on to audio tapes and fully transcribed before being subject to analysis. Finally, a content analysis of the data was carried out. Qualitative content analyses are focused on capturing definitions, process, meanings and type (Altheide, 1996). Authors used the statistical program ATLAS.ti v.5, a software designed to assist qualitative research.

Table 3 Reliability and validity of the study

Concept	Theoretical proposal	Meliá Hotels International case study
Validity of the model	Development of operation measures that sidestep the subjective bias of researchers in data gathering	Data triangulation through the use of multiple information sources (personal surveys, internal documentation, public reports and records, symposia and conferences)
Internal validity	Objectivity of the research: the case study must reflect and explain the real situation being analyzed	Data triangulation (fourteen in-depth interviews)
External validity	Capacity of generalizing the conclusions from the case study	- - - (Ilustrative case study)
Reliability	Verification that the operations of one study and the procedures of data gathering can be repeated with the same results	Information gathering protocol for the case study: personal surveys scripts Database creation—transcription of surveys and work documents— and systematization in ATLAS.ti

Source: Yin (1989)

The analysis process started identifying codes that were assigned systematically to the information and quotations found in the texts. These codes were generated through both a previous literature review and a spontaneous identification of focus of interest as authors were analyzing the contributions. The analysis resulted in a total of seventy-eight codes. All these codes were further analyzed and five mayor categories related to the core category of CSR and sustainability in MHI were identified. Finally, to complete the primary data obtained for this study, diverse published and non-published institutional publications were taken into account as secondary information including internet pages, internal policy reports, marketing brochures and newspaper reports of the organization. To conclude, authors analyze the reliability and validity of the study in order to confirm the robustness of the results shown in this paper. To this end, authors study the reliability, internal and external validity of the research (Yin, 1989) (Table 3).

RESULTS

Views of MHI regarding CSR

For MHI, the concept of CSR is synonymous with sustainability. However, to emphasize endurance over time and a concern for future generations, the company prefers to use the term "sustainability" rather than "CSR". For MHI, the definition of sustainability is fully consistent with that of the United Nations World Commission on Environment and Development (1987). However, regarding the dimensions forming this notion, there is a clear discrepancy between theoretical proposals and MHI´s vision. For MHI, the notion of sustainability is made up of three dimensions that do not completely agree with the notion of CSR described by the "Triple Bottom Line" approach, in which CSR includes economic, social and environmental aspects exclusively (Elkington, 1997; WBCSD, 1999; van Marrewijk, 2003) (Figure 1). As pointed out by one of the interviewees: "*For MHI, sustainability ranges over the triple sphere: environment, society and culture*" (MHI Non-Executive Vice Chairman). The economic dimension does not appear explicitly in this definition because: "*The economic dimension is a priority, but it is not part of the work done on sustainability [...] for us is a consequence, by working in a sustainable manner we will be economically sustainable*" (Institutional Office and Corporate Diplomacy Senior Vice President). A remarkable fact is that the cultural dimension is of great importance for the company. In fact, as stated by one of the managers: "*The cultural*

dimension is vital in tourism. It often explains why a customer chooses one tourist destination or another" (Tryp Brand Guest Experience & Marketing Director).

Figure 1 Differences between MHI CSR model and the "Triple Bottom Line"
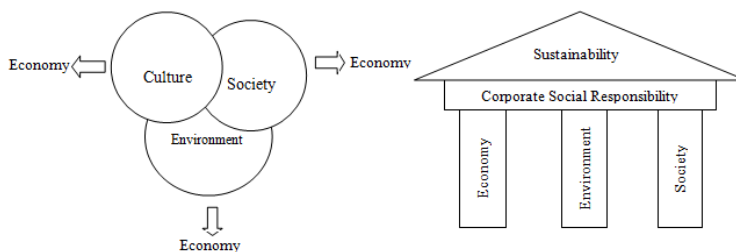
Socially responsible initiatives of MHI

As argued by one of the managers "*MHI focuses its CSR policy in a proactive, collaborative and strategic way with the goal of creating value for both the company and its stakeholders*" (Strategic Planning Group Vice-President). Socially responsible initiatives developed by the organization can be analyzed according to three basic dimensions: (1) environment, (2) society and (3) culture. The environmental dimension of CSR is of vital importance. Some managers of the company recognize that the environmental dimension is the domain in which the company has worked on most. Among the reasons argued, interviewers highlight the "*important cost savings*" related to these activities (Table 4). The savings activities and energy efficiency strategies are incorporated into the SAVE Project. The overall guidelines are determined by the relevance of the different types of environmental impacts related to the hotel industry, leading to the prioritization of four major areas: (1) Energy and emissions: mitigation of the effects of climate change, mainly through savings and efficiency in energy use and the control and reduction of the emission of pollutants to the atmosphere, (2) water: reduction in the consumption of water and control of the disposal of waste water, (3) biodiversity: protection and conservation of environmentally valuable habitats to preserve biodiversity and (4) use of resources and waste management: minimization of the environmental impact generated by the consumption of resources and the creation of waste products. Table 4

summarizes the company efforts to reduce these impacts and some of the financial savings achieved.

Table 4 Environmental dimension: Key Figures

Energy and emissions	Water	Biodiversity	Use of resources management
Reduction in CO_2 emissions: 3,663 tonnes	Water saved: 266,797 m3	Protected areas:1,012,228 m^2	Paper and cardboard sent for recycling: 12,200 kg
Reduction of 4.3% in kg CO_2 per stay	Purified water: 1,662,053 m^3	960 guests involved in activities to protect biodiversity	Electrical and electronic waste collected: 1,900 kg.
Reduction of consumption of diesel oil: 486,374 litres	Reduction of 8.4% per m^3 of water consumed per stay	More than 10,000 people involved in the activities organized for the Biodiversity Day 2010	Energy light bulbs collected: 5,612 kg Vegetable oil collected: 44,087 kg.
*Financial savings from energy saving and efficiency measures: 492,676 €	Volume of water reused in own purification systems: 831,356 m^3	*Cost of separate collection of waste, bacteriological analysis of water and environmental certifications: 708,680 €.	*Costs of sewage charges, rubbish collection and water supply: 4,949,736 €.

In the social arena, commitment to children is core to the social positioning of the company. MHI has pledged its commitment to this social cause because compared to others such as education or disability it "*makes more sense*" in a family business due to the "*legacy effect for future generations*". In this way, a strategic partnership with UNICEF was signed to raise awareness and fight for child protection and the prevention of child sexual exploitation. Thus, company brands are provided with general guidelines for action to avoid child labor and sexual exploitation. Nowadays, the company's social projects are focusing on the following lines of action: (1) education for children (under the slogan "All for them"), (2) people with disabilities and (3) collaborations among hotels and their local communities. In MHI support for social causes, is mainly conducted through partnerships with well-known charity organizations (e.g. UNICEF, Red Cross or Save the Children). At one of the managers stated "*we believe that cooperating with other organizations is the best way to find solutions to the different*

needs in societies in which we operate" (Institutional Office and Corporate Diplomacy Senior Vice President). Support offered by the company is typically financial, but increasingly the employees are encouraged to volunteer their time to CSR initiatives.

Table 5 Social dimension: Key figures

Donation of resources: 385,292€	49,520 people involved in Solidarity Day	1,190 cooperation activities with social organizations
Participation of employee volunteers: 1,164	880 social projects	342 NGO´s and foundations

With respect to the cultural sphere, MHI integrates cultural, gastronomic and artistic elements in their hotels and respects and defends the historical heritage of regions. Thus, company´s hotels integrate cultural aspects of destinations through the following channels: (1) promotion of local customs and cuisine, (2) integration of local architecture, art and crafts, (3) integration of elements of local culture in entertainment (e.g., music, stories, creative expressions and traditional sports or games), (4) provision of information to customers relating to cultural tourism (e.g., monuments, museums, cultural landscapes and shows or traditional celebrations), and (5) promotion of cultural resources of destinations through the provision of open spaces for cultural exchange (e.g., handicrafts, music, performance halls or sites for artistic expression).

With the goal of providing "*coherence and credibility to the corporate policy*", the company chose to obtain a certification scheme at the global level. Thus, the company has obtained the Biosphere Hotel Company Certification. Two of the points that confers greater credibility and transparency on the activities carried out by the company is that this certification is awarded by an independent third party: the Responsible Tourism Institute (RTI), supported by UNESCO, and that this certification ensures compliance with not only environmental standards but also social and cultural standards, for both corporate and hotel units. Besides, when implementing CSR activities, the principle of "Think globally, act locally" is respected. Overall guidelines come from the corporate level leaving a certain level of flexibility for action at the local level. Thus, hotel managers can propose diverse activities to develop at the request of local stakeholders, with the condition of maintaining the global positioning of the company. To obtain this flexibility, MHI opted for the integration of the "Sustainability Strategic Line" as a "crosscutting" component of the processes already existing within the

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company. Sustainability line depends on the Department of Sustainable Development, which was specifically created to manage all of the strategic and operational aspects of CSR and sustainability within the organization. In turn, this department reports to the Strategic Planning Group, which is in charge of developing and managing the company´s strategic plan (Figure 2).

Figure 2 MHI´s organization chart
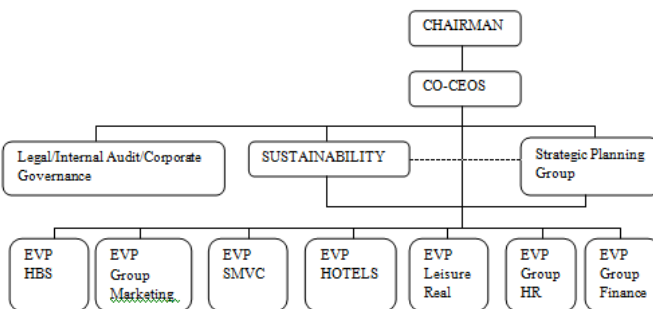
Possible beneficiaries of MHI´s social responsibility initiatives

As reported by the interviewees, three primary parties appear to be positively impacted by CSR initiatives developed by the company: (1) the local community, (2) customers who have taken part in these initiatives, and (3) the own the company. Interviewees reported that the residents of the local communities in which the company operates "*have been benefited greatly from this type of activities as a result of the improvement in their standard of living*" (General Manager of Meliá Palas Atenea Hotel). MHI helps local communities through different social projects mainly conducted through partnerships with well known charity organizations. We highlight other projects such as the recruitment of employees with disabilities, purchases from special employment centers, purchases of raw materials from local suppliers, celebrations of seminars and forums to raise awareness among residents, training of women at risk of social exclusion and victims of gender-based violence, or donation of resources to diverse social causes (Tables 5 and 6).

Table 6 MHI impact on local communities

Percentage of purchases from local suppliers: > 80% in all the countries	Purchases from special employment centres: 3,243,650.32 € (in Spain)	Integration of the disabled: 2.2% (through direct contracting and other measures)

The benefits for customers who have taken part in CSR initiatives can be considered since they will develop a critical approach in evaluating the responsible behavior of companies in relation to socially responsible aspects. It is expected that consumers will gain a better understanding of CSR notion, have a better appreciation for their rights and responsibilities as citizens, and have a greater sense of their role and place in their own society. One of the best examples to exemplify these benefits is the Solidarity Day project. This initiative is held one day each week in 30 company resort hotels in the summer months. The main objective of the project is to raise awareness among MHI guests about the principles of sustainability, local culture, environmental protection, solidarity and cooperation. Thus, it is hoped that customers will acquire knowledge (which in many cases may represent their initial awareness) relating to these ideas and that natural and cultural resources will become respected, generating a more critical sense in terms of the role that people must play in current society.

Finally, interviewees maintain that the communication of socially responsible initiatives will lead to (1) an increased motivation of the company employees, which, in turn, is likely to translate into greater work effort and high-quality service and, by implication, increased customer satisfaction, and (2) a motivation of customers to choose MHI hotel services, which is critical to the performance of any hospitality company. As one of the interviewees reported: "*the employees feel much more proud of the company in which they work and it makes them feel better*" (Marketing Strategy & Loyalty Director). Besides, according to the company "Customer Satisfaction Survey", 40% of customers have taken into account the company´s sustainability policy when choosing their hotel (although managers do not trust completely on this figure since respondents belong to MHI´s loyalty club, so there could be certain bias in their responses). Additionally, due to the "*reduction of opportunism and skepticism*" in the long term one of the results of these activities for MHI may be the formation of a positive corporate image among stakeholders, which will lead to a more favorable corporate reputation. Actually, as one of the managers stated: "*those customers who have come*

to our hotels perceive our company as a responsible and sustainable brand" (General Manager of Meliá Palas Atenea Hotel). To finish, an additional benefit for the company would be related to the investment in eco-friendly technologies that in the long run will translate into significant savings.

CONCLUDING REMARKS

Findings suggest that the focus of CSR was largely outward looking since MHI possesses great regard for impacts on the destinations. While this research presents an illustrative case study and the generalizability of findings is limited, certain inferences may still be drawn. Findings provide a context for understanding how CSR is viewed in the hospitality industry and allow us to contemplate and recommend possible areas of further research.

One of the main conclusions is the conceptual demarcation of CSR in the company which identifies the cultural arena as a new dimension of the CSR policy in the hospitality sector. In the hospitality sector, the special relevance that the cultural dimension holds may be caused since in many cases the appeal of tourist destinations is based on cultural aspects. Actually, previous studies highlight that culture and tourism are strictly complementary activities and that the improvements in the cultural sector would generate positive externalities on the tourism sector (Liu & Lin, 2011; Cuccia & Rizzo, 2011). Thus, one of the objectives of the company is to strength this cultural dimension in its CSR policy. For MHI, CSR is formed by social, cultural and environmental aspects, with an assumed economic dimension. This idea does not completely agree with the notion of CSR described by the "Triple Botton Line" approach, one of the most widely accepted perspectives, where this concept includes economic, social and environmental aspects exclusively (Elkington, 1997; WBCSD, 1999; van Marrewijk, 2003). These results highlight the idea that there is no a standard formula for CSR (van Marrewijk & Were, 2003).

As a second conclusion, findings illustrate how MHI define the concept according to the stakeholder approach (Freeman, 1984), not to the social approach (Göbbels, 2002; van Marrewijk, 2003), despite being this latter proposal the broader view on CSR in the academic literature. MHI understands that has responsibilities not only towards society but towards a whole range of stakeholders that can affect or be affected by its activity. Among these collectives, customers and local communities are of special interest for the firm. Both collectives benefit from the company´s activities. Responsibilities towards these groups are not only based on

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philanthropy and corporate donations. However, there is a broader range of environmental, social and cultural duties that hospitality companies should carry out, due to the specific contextual features of this sector. These results suggest that one of the perspectives more appropriate to manage effectively CSR policies is precisely through the stakeholder theory.

Furthermore, this study has provided evidence that strength of CSR commitment varies by topic. There was a strong emphasis on environmental issues. Environmental aspects are also an area where cost savings can be gained. CSR practices implemented coincide with previous studies, with cutting operating costs and minimizing resource consumption being the most common initiatives (Ayuso, 2006; Kasim, 2007). But, as a new contribution, this research has shown that there are other meaningful practices implemented across the "Triple Bottom Line" beyond these environmental initiatives, implementing relevant social and cultural practices. This is relevant because most literature has focused on environmental issues (Kasim, 2007; Garay & Font, 2011). Moreover, environmental practices appear to be directly motivated by competitiveness reasons for the purpose of gaining competitive advantage by reducing costs (Garay & Font, 2011). However social and cultural practices cannot be explained by economic reasons, but legitimization and altruism. However, since social and cultural initiatives do not cause a reduction in costs, but an important investment, it can be stated that value creation for the company may be uncertain. Several authors argue that not all CSR programs create value for the firm, since, in many cases CSR projects increase costs (Tsai et al., 2010).

Finally, another important insight from the study is that certification schemes can bring credibility and transparency to CSR activities in the hospitality sector. We highlight this point as we believe that the existence of these systems could help reduce existing skepticism about CSR activities undertaken by many hotel companies. This challenge can be addressed with third party certification schemes (e.g. the Responsible Tourism Institute, supported by UNESCO, and the Biosphere Hotel Company Certification) which grant corporate credibility and transparency. Several previous studies have shown how important certification schemes are since they act as external audits being used to reduce public scrutiny (Font et al., 2012).

The research design, being exploratory in nature and due to the chosen sample, results in a number of important research limitations. Results presented in this research cannot be generalized to the global hospitality sector. Specifically, the data do not necessarily represent the

full diversity of CSR actions undertaken in the global industry that can be important in explaining differences in their stakeholder relationships. However, the authors are satisfied that this design was necessary, given the lack of previous research in the hospitality sector, and was worthwhile in terms of generating a preliminary case study exploration of the CSR issues being addressed by one of the leaders companies in the hospitality sector.

Future research directions include further research into CSR definition, conceptualization and practices in the hospitality and tourism sector. Given the priorities of CSR and the importance of the role of stakeholders and local communities in cities where companies operate, a potential area to explore is the effects on a community and further the extent to which companies may still feel responsibility to that community. Moreover, it would be interesting to analyze how companies create value through CSR aspects. Finally, CSR in these industries, while clearly a business priority, may be distinctive. Is this because the business model is different in the hospitality sector, or could it be that CSR is changing in other subsectors (e.g. transportation…) as well? This study has opened the door to more questions pertaining to CSR, justifying that this issue continues to grow, evolve and necessitate additional examination.

REFERENCES

Altheide, D.L. (1996). *Qualitative media analysis. Qualitative Research Methods*. Thousand Oaks, Sage.

Ayuso, S. (2006). Adoption of voluntary environmental tools for sustainable tourism: Analyzing the experience of Spanish hotels. *Corporate Social Responsibility and Environmental Management*, Vol. 13, pp.207-220.

Bigné, J.E., Font, X. & Andreu, L. (2000). *Marketing de los destinos turísticos. Análisis y estrategias de desarrollo*. Madrid, ESIC Market.

Bohdanowicz, P. & Zientara, P. (2009). Hotel companies´ contribution to improving the quality of life of local communities and the well-being of their employees. *Tourism and Hospitality Research*, Vol. 9, No.2, pp.147-158.

Bohdanowicz, P., Zientara, P. & Novotna, E. (2011). International hotel chains and environmental protection: An analysis of Hilton's we care! programme (Europe, 2006-2008). *Journal of Sustainable Tourism*, Vol. 19, No.7, pp.797-816.

Carroll, A.B. (1998). The four faces of corporate citizenship. *Business and Society Review*, Vol. 100, No.1, pp.1-7.

Chan, E.S.W. (2011). Implementing environmental management systems in small and medium-sized hotels: Obstacles. *Journal of Hospitality & Tourism Research*, Vol. 35, No.1, pp.3-23.

Liu, I.D. & Lin, C.F. (2011). The development of cultural tourism: A review of UK experience. *Tourismos: An International Multidisciplinary Journal of Tourism*, Vol. 6, No.2, pp.363-376.

Chung, L.H. & Parker, L.D. (2010). Managing social and environmental action and accountability in the hospitality industry: A Singapore perspective. *Accounting Forum*, Vol. 34, pp.46-53.

Cuccia, T. & Rizzo, I. (2011). Heritage and tourism: Theoretical and empirical issues. *Tourismos: An International Multidisciplinary Journal of Tourism*, Vol. 6, No.3, pp.37-56.

Elkington, J. (1997). *Cannibals with forks: The triple bottom line of the 21st century business*. Oxford, Capstone Publishing, Ltd.

European Commission (2002). *Corporate Social Responsibility: A business contribution to sustainable development*. Luxembourg, European Commission Directorate General for employment and social affairs. Unit D.I, Industrial Relations and Industrial Change.

Font, X., Walmsley,A., Cogotti, S., McCombes, L. & Häusler, N. (2012). Corporate social responsibility: The disclosure performance gap. *Tourism Management*, Vol. 33, pp.1544-1553.

Freeman, R.E. (1984). *Strategic Management: A stakeholder approach*. Boston, Pitman.

Garay, L. & Font, X. (2011). Doing good to do well? Corporate social responsibility reasons, practices and impacts in small and medium accommodation enterprises. *International Journal of Hospitality Management*, Vol. 31, No.2, pp.329-337.

Göbbels, M. (2002). Reframing corporate social responsibility: The contemporary conception of a fuzzy notion (cited in van Marrewijk 2003).

Green Hotels Association (2005). Http://www.greenhotels.com/whatare.html. Accessed the 20 th of May 2013.

Henderson, J.C. (2007). Corporate social responsibility and tourism: Hotel companies in Phuket, Thailand, after the Indian Ocean tsunami. *International Journal of Hospitality Management*, Vol. 26, No.1, pp.228-239.

Jovicic, D. (2011). The environmental management systems and contemporary tourism development. *Tourismos: An International Multidisciplinary Journal of Tourism*, Vol. 7, No.1, pp.377-391.

Kasim, A. (2007). Towards a wider adoption of environmental responsibility in the hotel sector. *International Journal of Hospitality & Tourism*, Vol. 8, pp.25-49.

Khairat, G. & Maher, A. (2012). Integrating sustainability into tour operator business: An innovative approach in sustainable tourism, *Tourismos: An International Multidisciplinary Journal of Touris*m, Vol. 7, No.1, pp.213-233.

Lee, S. & Park, S. (2009). Do socially responsible activities help hotels and casinos achieve their financial goals? *International Journal of Hospitality Management*, Vol. 28, No.1, pp.105-112.

Liu, I.D. & Lin, C.F. (2011).The development of cultural tourism: A review of UK experience. *Tourismos: An International Multidisciplinary Journal of tourism*, Vol. 6, No.2, pp.363-376.

Madsen, H. & Ulhi, J.P. (2001). Greening of human resources: Environmental awareness and training interests within the workforce. *Industrial Management & Data Systems*, Vol. 101, No.2, pp.57-65.

Maignan, I. & Ferrell, O.C. (2004). Corporate social responsibility and marketing: An integrative framework. *Journal of the Academy of Marketing Science*, Vol. 32, No.1, pp.3-19.

Martínez, P., Pérez, A. & Rodríguez del Bosque, I. (2013a). Exploring the role of CSR in the organizational identity of hospitality companies: A Case from the Spanish tourism industry. *Journal of Business Ethics*, Published online, DOI: 10.1007/s10551-013-1857-1.

Martínez, P., Pérez, A., & Rodríguez del Bosque, I. (2013b). Responsabilidad social corporativa: Definición y práctica en el sector hotelero. El caso de Meliá Hotels International. *Revista de Responsabilidad Social de la Empresa*, Vol. 5, No.1, pp.141-173.

Martínez, P., Pérez, A. & Rodríguez del Bosque, I. (2013c). Measuring corporate social responsibility in tourism: Development and validation of an efficient measurement scale in the hospitality industry. *Journal of Travel & Tourism Marketing*, Vol. 30, pp.365-385.

McGehee, N.G., Wattanakamolchai, S., Perdue, R.R. & Calvert E.O. (2009). Corporate social responsibility within the U.S. lodging industry: An exploratory study. *Journal of Hospitality and Tourism Research*, Vol. 33, pp.417-437.

Nergiz1, H., Kozak, M. & Balta, S. (2011). Ethical approaches and their application in hotel managers´ decision making, *Tourismos: An International Multidisciplinary Journal of Tourism*, Vol. 6, No.1, pp.84-104.

Truñó i Gual, J. & Rialp, J. (2008). La responsabilidad social corporativa: Gestión empresarial de un activo intangible. *Revista de Contabilidad y Dirección*, Vol. 7, pp.1634-1684.

Tsai,W.H., Hsu, J.L., Chen, C.H., Lin, W.R. & Chen, S.P. (2010). An integrated approach for selecting corporate social responsibility programs and costs evaluation in the international tourist hotel. *International Journal of Hospitality Management*, Vol. 29, No.3, pp.385-396.

van Marrewijk, M. (2003). Concepts and definitions of CSR and corporate sustainability: Between agency and communion. *Journal of Business Ethics,* Vol. 44, No.2, pp.95-105.

van Marrewijk, M. & Were, M. (2003). Multiple levels of corporate sustainability. *Journal of Business Ethics*, Vol. 44, No.2, pp.107-119.

Whitehouse, L. (2006). Corporate social responsibility: Views from the frontline. *Journal of Business Ethics*, Vol. 63, No.3, pp.279-296.

World Business Council for Sustainable Development (1999). *Corporate social Responsibility: Meeting Changing Expectations*. Switzerland.

World Commission on Environment and Development (1987). *Our Common Future*. Oxford: Oxford University Press

Yin, R.K. (1989). *Case Study Research: Design and Methods. Applied social Research Methods Series*. Newbury Park CA, Sage.

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MANAGING CONFLICTING ATTITUDES: NATIONAL PARKS IN ICELAND AND JAPAN

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For many protected areas, the inclusion of interested parties in decision-making processes has become both more important and common. The range of interests can lead to a variety of conflicts. Given the diversity of stakeholders, effective conflict management requires an integrated communicative approach that addresses this range interests. Yet the question remains: Are techniques developed for a specific case, and in one particular culture, applicable to other cases? To explore this question we compared the attitudes of stakeholders in Vatnajökull National Park in Iceland and Daisetsuzan National Park in Japan regarding conflict, communication and consensus. Despite the cultural and geographical distance between the two cases, the results show an 84% concurrence in stakeholder views, leading the authors to conclude that, despite minor differences, conflict management techniques can be applied across cultural borders provided that managers are sensitive to local understandings of how people relate to their social and natural environments.

INTRODUCTION

Climate change, loss of biodiversity, and conflicts over the use of natural resources are topics of worldwide debate, and one tool increasingly used by governments to preserve natural environments for conservation and socio-economic ends are protected areas (PA). The

International Union for Conservation of Nature (IUCN) plays a leading role in defining what constitutes a protected area, as PAs these may have been established for different purposes. In the last few decades, a growing amount of land across the globe has been designated as PAs protected areas (Chape, Blyth, Fish, Fox, & Spalding, 2003; WDPA, 2011), arguable because of the rapid disappearance of wilderness (Moran, 2006), yet largely driven by the introduction of new categories of PA (Locke & Dearden, 2005; Phillips, 2003). The increase in the number and size of protected areas can be seen as a positive trend as, from a biocentric point of view, it reflects the growing interest and importance of protecting the environment as part of sustainable development (WCED, 1987). But this expansion, through the establishment of new protected areas categories, has also been criticized. However, it is generally agreed that environmental protection is of worldwide significance; impacting sustainable development and resource use, and is important from both a local and global perspective (Saarinen, 2006), especially as global influence on protected areas is increasing (Dearden, Bennett, & Johnston, 2005; McCool, Nkhata, Breen, & Freimund, 2013). Protected areas management is increasingly becoming complex due to increased public participation (Harrington, Curtis, & Black, 2008; Lockwood, 2010), the more varied aims of those establishing protected areas (McCool *et al.*, 2013), and the question of how to balance conflicting interests among stakeholders (Schaller & Jónasson, 2011).

For many decades, environmental protection meant 'fortress conservation' (Brown, 2002), and input from the public was not regarded as important (Jordan, Vogt, Kruger, & Grewe, 2013; Phillips, 2003). But between the 1970s and 1990s several international conferences on conservation highlighted the importance of the public in PA decision making. Nowadays, including the public is seen as an integral part of PA management (Phillips, 2003; Thomas & Middleton, 2003) and good governance (Bosselmann, Engel, & Taylor, 2008; Pechlaner, Raich, & Kofink, 2011). Conflict is an integral a part to the management of protected areas (*cf.* Cole & McCool, 1997; Kyllönen *et al.*, 2006; Walker & Daniels, 1997). Even though public participation in the decision-making processes of PAs is important, it is by definition fraught, bringing the potential for conflict between stakeholders with different attitudes and objectives.

Yet protected areas, tied as they are to ideas of stewardship, "doing good", and preventing man-made destruction, are certainly meaningful to the parties concerned. Ultimately, the agents involved in the decision-

making process are individuals whose values, beliefs and perceptions are important to take into consideration.

Given the range of such conflicts, it is critical to examine whether conflict techniques can be applied to different cases in non-Western and developing countries. When moving from a general blueprint to a specific case, from the global to the local, it is also important to identify which conflict management tools or strategies may require adaptation to a specific community's cultural characteristics (Axelrod, 1997; LeBaron, 2003; Mitchell-Banks, 1997).

This study, presented in parts in a conference paper (Schaller & Jónasson, 2011), attempts to examine such factors by surveying PA stakeholders viewed within the four realms of personal experience: interpersonal, intrapersonal, supra-personal and transpersonal. To do this, protected areas stakeholders from two different cultures were asked to identify their perception of conflict management tools that might be applied across cultures. The research focuses on two national parks, one in Iceland and one in Japan, to find out what similarities or differences exist between the two different cultural groups in terms of their perspectives on PA management. By doing so, the results of this study increase the impact beyond protected areas management and suggest a broader application of conflict management techniques in conservation and environmental management.

TWO CASE STUDIES – ICELAND AND JAPAN

In an attempt to understand the underlying principles that need to be kept in mind when using a communicative approach to manage conflicts between stakeholders and build consensus among them, the Vatnajökull National Park (Icelandic: *Vatnajökulsþjóðgarður*) in Iceland, and the Daisetsuzan National Park (Japanese: 大雪山国立公園) in northern Japan, were selected as case studies. The two selected national parks share not only key geological features, but also evince a strong bond between local people and the land, especially in the case of Iceland (Helldén & Ólafsdóttir, 1999).

Iceland

Iceland (approximately 103,000km^2) is an island, lying just south of the Arctic Circle in the North Atlantic. Settled by Vikings from western Scandinavia around 871 (Ogilvie & Pálsson, 2003), Iceland has one of Europe's lowest population densities (about 3 inhabitants per km^2).

Located on the Mid-Atlantic ridge, Iceland is known for its volcanic activity, as in the case of the recent eruptions of Eyjafjallajökull, early in 2010, and Grímsvötn in 2011. Iceland is one of the most volcanically active countries in the world, and is thus rich in diverse geological features. Volcanoes, avalanches, and long cold seasons mark the environment hostile, and yet Iceland is blessed with many natural resources, such as abundant fishing grounds, birds, and low- and high-temperature geothermal fields, widely utilized for energy production (Thórhallsdóttir, 2007).

For centuries, Icelanders have seen their natural environment as evil and deadly (Árnason, 2005). Nowadays a great admiration for nature is evident among tourists visiting Iceland (Ólafsdóttir & Runnström, 2009; Sæþórsdóttir, 2010), with modern Icelanders also sharing this admiration for nature, but attaching different values to it (Benediktsson, 2007). The natural environment has had an influence on Icelandic society too, and made Icelanders more used to uncertainty than most western societies (Eyjolfsdóttir & Smith, 1996). The exposure of society over time to the harsh environmental factors in Iceland can be seen as the driving force behind Icelandic activism and short-termism (*ibid*), and Icelanders are "despite all their cultural achievements […] children of nature" (Swatos, 1984, p. 39). Though Iceland adopted Christianity around the year 1000, old beliefs and practices were allowed in private, and still remain present in the stories about and belief in the *Huldufólk* (English: hidden people or elves), which can be seen as a projection of the mind upon the non-human environment (Jónasson, 2005, p. 207).

The Vatnajökull National Park (VNP), established in 2008 (Ministry for the Environment, 2008), is located mainly in the central highlands of Iceland, towards the east (see Figure 1), and covers about 13,000 km^2 (13% of the landmass of Iceland).The main feature of the VNP is the Vatnajökull glacier, which covers approximately 8,000 km^2. The VNP consists mainly of state-owned land. At the time of writing, only a fraction of the land within the national park is privately owned and negotiations with landowners to expand the VNP are ongoing (Schaller, 2011). The management structure of the VNP is set out in the Act on Vatnajökull National Park (Alþingi, 2007; Ministry for the Environment, 2007), and consists of representatives of different stakeholders that include various interest groups, primarily, if not exclusively linked to political interests and administrative needs (Schaller, 2011).

Figure 1. Location and approximate size of the Vatnajökull National Park in Iceland (blue: Vatnajökull NP, including Vatnajökull glacier)
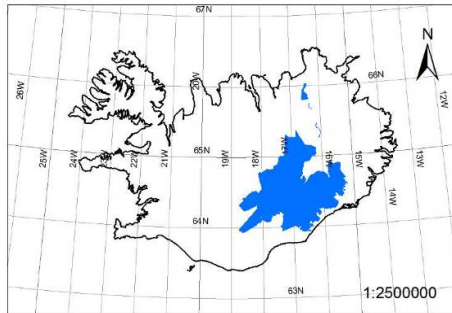
Japan

Japan (approximately 378,000 km^2) is a collection of various islands, of volcanic origin, on the Pacific coast of Asia. Its four main volcanic islands are Hokkaido, Honshu, Shikoku and Kyushu. Japan's interior mainland is mostly mountainous and covered with forest. The Japanese population (about 337 inhabitants per km^2) lives mainly on the islands' low coastal flatlands. Japan's location on the Pacific 'Ring of Fire' means it experiences ongoing volcanic activity, such as the eruption of Shinmoedake, in the south of Kyushu, in January 2011. However, geological formations, continuous earthquakes (such as the major earthquake of March 2011), and the abundance of hot springs (Japanese: *onsen*) are other indications of volcanic activity in the region.

The Japanese people express a strong emotional bond with their natural environment (Japanese: *shizen*) (Thomas, 2001). The concepts of nature, which shape their view of nature today, can be seen to have emerged at the end of the 19th century (*ibid*) These concepts embody a strong spiritual relationship between humans and their natural environment, and are rooted in both Buddhism and Shintoism (*ibid*). Some attitudes can also be dated further back to ancient Japanese and indigenous religious concepts (*e.g.* the Ainu in Hokkaido), where not only animals were worshiped, but also natural features such as forests, caves, hot springs and waterfalls (Eagles, Bowman, & Tao, 2001; Oyadomari, 1989). Japan is also a nation with a rich tradition in fishing and rice harvesting, and a strong notion of *Uchi-Soto* or 'inner group' (Japanese:

uchi) and 'outer group' (Japanese: *soto*) - a difference that can be seen in interactions between local individuals, and with others who are not local or otherwise related (Takata, 2003, p. 543). Though modern Japanese culture still expresses strong links with nature, Western influences have begun to dominate since the second half of the 20th century (Thomas, 2001). In the beginning 20th century, the development of national parks in Japan has followed that in the Western world, and incorporates Western-influenced concepts of nature. Nevertheless, "concepts of nature and nature protection in East Asia are still linked to ancient religious philosophies and religious practices" (Eagles *et al.*, 2001, p. 12).

Figure 2 Location and approximate size of the Daisetsuzan National Park in Hokkaido, northern Japan (blue: Daisetsuzan NP)
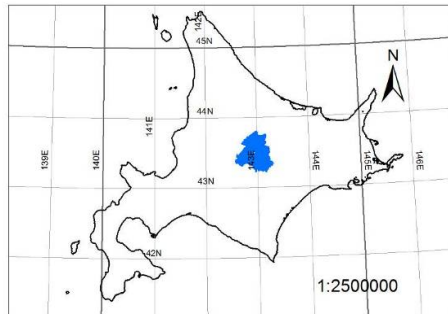
The Daisetsuzan National Park (DNP), established in 1934, was one of the first national parks in Japan (Ministry of the Environment, 2008b, p. 48; Aikoh, 2008; Ito, 1996; Shiratori & Ito, 2001). It is 2,267 km^2 (Tawara, 2004; Yoda & Watanabe, 2000) in size and sits in a mountainous area in the centre of Hokkaido (see Figure 2). Approximately 5.5% of Japan is covered by NPs (Ministry of the Environment, 2008a, 2009) and its national park system management (Japanese: *chiiki-sei*) follows standards laid out by the IUCN, consisting of a system of zoning regulations and multiple-use parklands, wherein land is not necessarily set aside for conservation (Hiwasaki, 2005, 2006). The management of NPs in Japan is shaped by the fact that many stakeholders are incorporated into the management system, due to their ownership of the land within the park boundaries. The DNP is typical of this ownership and management structure (Hiwasaki, 2005; Schaller, 2011).

METHODS

General overview of the data collection

The study examines the human perspective of stakeholders on issues related to the management of NPs to see how the values and attitudes of local stakeholders might influence decision-making processes. A survey was used to evaluate the opinions of stakeholder themes related to *conflict, communication,* and *consensus* (the 'three Cs') in NP management. The survey was carried out with stakeholders of the Vatnajökull NP and Daisetsuzan NP and build upon the 'three Cs' as a framework strategy in protected areas conflict management (Schaller, 2011).

Prior to the final survey, two pilot surveys were used to ensure the quality of the questions and, thereby, to optimize the quality of the results (White, Jennings, Renwick, & Barker, 2005). These two pilot surveys were carried out with students at the University of Iceland and stakeholders of a protected area in the north of Iceland.

The layout and model used in the survey

The questionnaire was closed-format, with 37 statements (the list of statements can be found in Schaller, 2011). Each statement provided the respondent with the option of selecting an answer on a five-point Likert rating scale of disagreement-agreement (White *et al.*, 2005). The scale ran from 'strongly disagree' and 'disagree' to 'agree' and 'strongly agree', with the neutral option of 'no opinion.'

The questionnaire was divided into three segments: the first segment dealt with demographic questions; the second segment provided definitions of basic concepts or terms used (e.g. Vatnajökull National Park, stakeholder, local community); and the third segment was divided into three components addressing each of the 'three Cs' — *conflict, communication,* and *consensus*. In each of these three parts, the statements made use of the four-realm approach (Jónasson, 2005) to assess the different dimensions of human relationships with the environment. The questionnaire in Iceland was conducted in English, whereas the questionnaire in Japan was translated and conducted in Japanese.

The statements used in the final questionnaire are intended to examine the relationship of the 'self' and 'life' (Abt, 1989), and incorporate the four realms of the self: intrapersonal, interpersonal, supra-

personal and transpersonal (Jónasson, 2005), within the framework of the 'three Cs'. The four realms framework is a simple way of describing the constant interaction between an individual's inner subjective world and the external reality (*ibid*). Figure 3 illustrates the four dimensions.

Figure 3 The relationship between the self and the four realms: the experiencing self is at the centre; in the "south" is the intrapersonal; in the "west" the interpersonal; in the "east" the supra-personal; and in the "north" the transpersonal (derived from Jónasson, 2005)

The way they are employed in the survey can be summarized as follows:

The **intrapersonal** is the dimension located in the "space between" the sensing self and the unconscious. People might not be aware, or fully aware, of the ways in which their life experience is processed at the unconscious level; but there are clues in the way the person reacts to other people and his or her environment; and this forms attitudes on which people construct their views. With regard to the intrapersonal realm, the questionnaire set out to gauge respondents' assumptions in particular about their attitudes to the running of the NPs. The following statement (no. 3-4) offers an example of how this is addressed: *"There are stakeholders that are in conflict with me because they think differently about what matters to me regarding the VNP/DNP."*

The **interpersonal** is the aspect of personal experience that takes place in the dynamic intermediate space located between the self and another human being. This is where interactions between people happen, as well as changes in self-perception and attitude, which are triggered by reflecting on one's experience of others. Many of the questionnaire's interpersonal statements concerned respondents' views of the future management of the NPs, such as whether they have a clear vision about

the future (statement no. 3-5 is an example: *"It is very likely that a conflict arises regarding the management of the VNP/DNP within my community because there are conflicting interests among us"*).

In the **supra-personal** realm, it is human experience of the non-human environment that prevails: relations with nature (and other non-human entities less relevant to the topic at hand), particularly the way people either identify themselves with it or differentiate themselves from it. Statements covering this realm in the questionnaire concerned both the role of nature and who should decide the fate of nature in protected areas. Statement no. 3-9, for example, posits that *"[...] nature within the VNP/DNP is there for us to exploit it."*

Finally, the **transpersonal** is experienced in the space in between the self and objects of sacred value: holy spaces, transformative symbols, and so forth. This experience is manifested in concepts such as 'Mother Earth', holy mountains, holy rivers, etc. Statements concerning the transpersonal in the questionnaire were designed to gather clues as to the sacred value or significance which respondents assign to nature, with correspondingly august terms: *'sacred ground'* (no. 3-11), *'humanity at large'* (no. 3-13), and *'common respect and love'* (no. 3-37).

Participants in the survey

Questionnaire respondents were selected to represent stakeholders involved in the management of the selected NP (*e.g.* representatives of governmental organizations, NGOs, landowners); and individuals and organizations that might have a stake in decision making of the respective NP. To select the stakeholders in the target group for this questionnaire, a stakeholder analysis was executed. The stakeholder analysis for each NP aimed to identify representatives of environmental, economic and social groups, as well as governmental and administrative bodies, as the concept of sustainability defined by the United Nations (UN, 2002).

In Iceland, the questionnaire was sent out via email to the stakeholders on 7 October 2009. Those invited to participate sent their responses to the questionnaire either via email or in printed form. The questionnaire was open for participation until 1 November 2009. In Japan, the questionnaire was sent out in printed form to the selected stakeholders on 24 November 2009. Participants returned the questionnaire in printed form. The questionnaire was open for participation until 12 December 2009.

Limitations in the survey

This exploratory survey and its results are subject to certain limitations. First, it must be noted that the number of stakeholders in Iceland was not very extensive, due to the simple fact that very few people live in rural Iceland. Therefore, the number of participants in Iceland was lower than in Japan. Second, the survey in Iceland was conducted in English, which may have influenced the quality and number of responses. Although most Icelanders are proficient in English, not all are, as Icelandic is the native language. In Japan, the questionnaire was translated into Japanese, which may have benefitted the overall willingness and quality of participation. It should, however, be mentioned that, as with all translations, there may be some slight differences between the statements as rendered in English and Japanese. This may have an impact on the direct comparability of the statements and responses, although close collaboration and consultation with researchers at the Hokkaido University was intended to minimize any such differences. In the case of Japan, the authors relied upon the suggestions from the Japanese partner for the selection of the stakeholders of the target group.

RESULTS AND DISCUSSION

Results

In Iceland a total of 51 individuals (from 49 organizations) were asked to participate in the survey, and in Japan 101 individuals (from 100 organizations). In Iceland, 19 individuals participated, and in Japan 53 individuals participated. The response rate was 37% in Iceland, 52% in Japan, or 47% on average. Most participants were males, older than 36, with a university degree. The participants were asked to state their occupational sector, but since the survey in Iceland and Japan used a slightly different segmentation, the answers were grouped into the following sectors for comparison: economic, environmental, social, administrative, and other. Most of participants fell into one of the specific sectors, but a few identified themselves as 'other' or provided no response. Most of the participants in Iceland located themselves in the economic sector, whereas most of the participants in Japan identified themselves with the administrative sector (see Table 1).

Table 1 Occupation and Sector of Participants of Survey in Iceland and Japan (total and percentage)

	Iceland		Japan		Total	
Economic	9	(47%)	16	(30%)	25	(35%)
Environmental	1	(5%)	10	(19%)	11	(15%)
Social	1	(5%)	4	(8%)	5	(7%)
Administrative	4	(21%)	20	(38%)	24	(33%)
Other	3	(16%)			3	(4%)
Not specified	1	(5%)	3	(6%)	4	(6%)
Sum:	19		53		72	

When the Japanese responses are compared to the Icelandic responses, a clear pattern of overall agreement emerges (see Table 2). The following table breaks down the questionnaire and presents data in a simple version providing only the count of response most frequently given. The data has been normalized (combining 'strongly disagree' and 'disagree' together, as well as 'strongly agree' and 'agree' to only a single count) in order to account for errors of not using the whole range of possible answers in the participants' answers. The table presents the data in a matrix of the three main parts (conflict [CONF], communication [COM], and consensus [CONS]), and the four realms (interpersonal, intrapersonal, supra-personal, and transpersonal). The table shows (1) what most participants gave as their answer to each statement, and (2) the overlap between the answers from Iceland and Japan.

Table 2 Answers to the Questionnaire – Comparison between Icelandic and Japanese Answers to the Statements of the Survey
(ICE: maximum answer from Iceland, JPN: maximum from Japan, B: maximum from both).

	Statement	Interpersonal				Intrapersonal				Supra-personal				Transpersonal		
		3-1	3-2	3-3	3-4	3-5	3-6	3-7	3-8	3-9	3-10		3-11	3-12	3-13
CONF	disagree	B		B				B	ICE	B					
	no-opinion					ICE									
	agree		B		B	ICE/JPN	B		JPN		B		B	B	B
	Statement	3-14	3-15	3-16	3-17	3-18	3-19	3-20	3-21	3-22		3-23	3-24	3-25	
COM	disagree		JPN		ICE/JPN										
	no-opinion														
	agree	B	ICE/JPN	B	ICE	B	B	B	B	B		B	B	B	
	Statement	3-26	3-27	3-28	3-29	3-30	3-31	3-32	3-33	3-34		3-35	3-36	3-37	
CONS	disagree		JPN					B							
	no-opinion		ICE		ICE										
	agree	B		B	JPN	B	B		B	B		B	B	B	

In most cases (31 out of 37 statements) participants from both countries answered the questionnaire similarly; the answers differed in only six statements.

Discussion

A super majority (84%) of the responses in both countries are similar (marked with "B" in Table 2). This may come as a surprise, since one might assume that there would be a stronger divergence in responses in the light of cultural differences between the two countries. And indeed, below the overall similarities, it has to be noted that there are also significant differences. One is a pervasive qualitative distinction in tone. Participants in Japan tended to put stronger emphasis on their agreement or disagreement with the statements given, while participants from Iceland tended more frequently to use the neutral "no-opinion" option.

The results from the two countries differ in six instances, and in half of these the answers differ substantially. Participants from Japan express a stronger agreement with statements no. 3-5, 3-27 and 3-29 in the survey than participants from Iceland. These statements target the perception of the individual towards the community, which in turn would suggest that participants from Japan have a stronger *uchi* connection (positive emotional bond), or sense of obligation to their local community, and a better overview of the different stakeholders and their interests. Statement no. 3-8 (*"Nature within the VNP/DNP has a right in its own, therefore, the interests of the community are in conflict with the interest of nature"*) is of particular interest, since this statement probes the perception of the individual and his or her connection with the natural environment. The answers of the Icelandic and Japanese participants suggest that that there is less of an emphasis on the anthropocentric valuation of nature in Japan than in Iceland. Responses to statements no. 3-15 (*"It is easy for me to communicate my vision of the future management of VNP/DNP to others"*) and no. 3-17 (*"Stakeholders of the VNP/DNP do openly communicate their interests to one another"*) point to communication as being a difficult issue for participants in both countries. On the one hand, there is almost total divergence among Japanese participants about whether they agree or disagree with the statement that it is *"easy for them to communicate their vision of the future management of the national park with others"* (statement no. 3-15); on the other hand, they believe that stakeholders *"do not openly communicate their interests to one another"* (statement no. 3-17). In this context, the participants from

Iceland mostly agree with 3-15, but there is no consensus for 3-17. As mentioned in earlier sections, it might not be surprising that the Japanese participants highlight difficulties in communicating openly with others, but the responses to these statements also show that Icelanders share similar concerns. The data also suggests that Icelanders, too, find communication difficult.

Responses to the statements designed to gauge what a protected area, or nature in general, means to people, affirm the positive relationship people feel to nature in general. For example, 80% of respondents overall agreed, or strongly agreed, with statement no. 3-28 (*"I sense inner harmony or consensus when I enjoy having untouched wilderness and nature around me"*). It is also interesting to note that of the four dimensions of interaction between people and the environment addressed in the survey, it is only in the transpersonal – which might be seen as the loftiest or most intangible of the realms – that there was complete overall consensus between respondents from Japan and Iceland.

However, as mentioned above, these results and comparisons must be taken as speculative rather than conclusive, given the small number of participants in Iceland and the potential impact on an over- or under-representation of certain types of stakeholders in comparison with those participating in Japan.

CONCLUSION

International conservation agencies now consider it good practice to include stakeholders in PA decision making and management (Phillips, 2003; Thomas & Middleton, 2003). Conflict management techniques, however, that are designed to make use of such input do not often consider the 'deeper layers' of stakeholder attitudes, such as inner motives, cultural attitudes, and sacred beliefs. This study set out to explore such factors and the need to consider them when using a communicative approach to manage PA conflicts and build consensus between stakeholders.

Two cases from different cultures were used to find out whether the shared experience of living in or near a NP shaped similar perceptions among individuals who represent stakeholders in four different dimensions. The hope was that the similarities, as well as the differences, could help to identify some unifying principles to keep in mind when it comes to PA management and that may be applicable across cultures.

Of the six statements to which there were substantially different responses from participants from each country (Iceland and Japan), none

were in the transpersonal realm, and only one was from the supra-personal realm. On the other hand, there was a consistently high level of consensus for each of the 'three Cs.' Although more data would be required to verify this, it points to the possibility that variations in cross-cultural consensus will centre more on the human parameters and modalities specific to a particular culture, rather than on the elements of the 'three Cs.'

The results of this study suggest that across the two different cultures that were investigated there are basic universal values and shared subjective perceptions of nature conservation. This indicates that similar, or even identical, conflict management techniques can be applied to build consensus among stakeholders within different cultural settings, on a wider scale than expected, although, due attention has to be paid to specific cultural contexts. This suggests that certain conflict management techniques are applicable to a larger range of regions and projects, to balance conflicting interests and help shape sustainable use of natural resources than previously considered

ACKNOWLEDGMENTS

REFERENCES

Abt, T. (1989). *Progress Without Loss of Soul: Toward a Wholistic Approach to Moderinization Planning: Toward a Wholistic Approach to Modernization Planning* (B. L. Matthews, Trans.). Wilmette, Chiron Publ., U.S.

Aikoh, T. (2008). Monitoring Trampling Impacts from the Disposal of Human Waste at Campsites. In D. Siegrist, C. Clivaz, M. Hunziker & S. Iten (Eds.), *Visitor Management in Nature-based Tourism - Strategies and Success Factors for Parks and Recreational Areas*. Rapperswil, Hochschule für Technik.

Alþingi (2007). *Lög um Vatnajökulsþjóðgarð [ACT on Vatnajökull National Park]*. Reykjavik, Lagasafn.

Árnason, T. (2005). *Views of Nature and Environmental Concern in Iceland.* PhD Doctoral Thesis, Linköpings Universitet, Linköping.

Axelrod, R. (1997). The dissemination of culture - A model with local convergence and global polarization. *Journal of Conflict Resolution,* Vol. 41, No.2, pp.203-226

Benediktsson, K. (2007). "Scenophobia", geography and the aesthetic politics of landscape. *Geografiska Annaler Series B-Human Geography,* Vol. 89B, No.3, pp.203-217

Bosselmann, K., Engel, R. & Taylor, P. (2008). *Governance for Sustainability – Issues, Challenges, Successes.* Gland. Switzerland, IUCN.

Brown, K. (2002). Innovations for conservation and development. *The Geographical Journal,* Vol. 168, No.1, pp.6-17

Chape, S., Blyth, S., Fish, L., Fox, P. & Spalding, M. (2003). 2003 United Nations List of Protected Areas (pp. 44). Gland. Switzerland, IUCN.

Cole, D.N. & McCool, S.F. (1997, May 20-22). Limits of Acceptable Change and Natural Resources Planning: When is LAC Useful, When is it Not? *Paper presented at the Proceedings - Limits of Acceptable Change and related planning processes: progress and future directions*, Missoula, MT.

Dearden, P., Bennett, M., & Johnston, J. (2005). Trends in Global Protected Area Governance,1992–2002. *Environmental Management,* Vol. 36, No.1, pp.89-100

Eagles, P.F.J., Bowman, M.E. & Tao, T.C.-H. (2001). *Guidelines for tourism in parks and protected areas of East Asia*. Gland, Switzerland and Cambridge, UK, IUCN.

Eyjolfsdóttir, H. M., & Smith, P. B. (1996). Icelandic Business and Management Culture. *International Studies of Management & Organization,* Vol. 26, No.3, pp.61-72

Harrington, C., Curtis, A. & Black, R. (2008). Locating Communities in Natural Resource Management. *Journal of Environmental Policy & Planning,* Vol. 10, No.2, pp.199-215

Helldén, U., & Ólafsdóttir, R. (1999). *Land degradation in NE Iceland: an assessment of extent, causes and consequences*. Lund, Department of Physical Geography, Lund University.

Hiwasaki, L. (2005). Toward sustainable management of national parks in Japan: Securing local community and stakeholder participation. [Article]. *Environmental Management,* Vol. 35, No.6, pp.753-764

Hiwasaki, L. (2006). Community-based tourism: A pathway to sustainability for Japan's protected areas. *Society & Natural Resources,* Vol. 19, No.8, pp.675-692

Ito, T. (1996). Influence of Forestry on the Formation of National Park Policy in Japan. *Journal of Forest Planning.* Vol. 2, pp.85-95.

Jónasson, H.I. (2005). *In a land of a living God: The healing imagination and the Icelandic heritage.* PhD Doctoral Thesis, Columbia University, New York.

Jordan, E.J., Vogt, C.A., Kruger, L.E. & Grewe, N. (2013). The interplay of governance, power and citizen participation in community tourism planning. *Journal of Policy Research in Tourism, Leisure and Events,* Vol. 5, No.3, pp.270-288

Kyllönen, S., Colpaert, A., Heikkinen, H., Jokinen, M., Kumpula, J., Marttunen, M., Muje, K. & Raitio, K. (2006). Conflict management as a means to the sustainable use of natural resources. *Silva Fennica,* Vol. 40, No.4, pp.687-728

LeBaron, M. (2003). Culture-Based Negotiation Styles. In G. Burgess & H. Burgess (Eds.), *Beyond Intractability*: Conflict Research Consortium, University of Colorado, Boulder.

Locke, H. & Dearden, P. (2005). Rethinking protected area categories and the new paradigm. *Environmental Conservation,* Vol. 32, No.1, pp.1-10

Lockwood, M. (2010). Good governance for terrestrial protected areas: A framework, principles and performance outcomes. *Journal of Environmental Management,* Vol. 91, No.3, pp.754-766

McCool, S.F., Nkhata, B., Breen, C. & Freimund, W. A. (2013). A heuristic framework for reflecting on protected areas and their stewardship in the 21st century. *Journal of Outdoor Recreation and Tourism,* Vol. 1–2, No.0, pp.9-17

Ministry for the Environment (2007). *ACT on Vatnajökull National Park*. Reykjavik, Iceland.

Ministry for the Environment (2008). Establishment of the Vatnajökull NP. http://www.umhverfisraduneyti.is/frettir/nr/1277. Accessed the 2 nd of December 2008.

Ministry of the Environment. (2008a). National Parks of Japan *Outstanding Natural Beauty for Future Generations* (pp. Folder (p.9)), Ministry of the Environment - Japan.

Ministry of the Environment (2008b). *National Parks of Japan & Japan's Strategy for a Sustainable Society*. Toyko, Ministry of the Environment.

Ministry of the Environment (2009). Laws and Data - National Parks of Japan. Http://www.env.go.jp/en/nature/nps/park/doc/index.html. Accessed the 25 th of November 2009.

Mitchell-Banks, P. (1997). Community, Culture and Conflict. In B. Solberg & S. Miina (Eds.), *Conflict Management and Public Participation in Land Management*. Joensuu, The European Forest Institute.

Moran, E. F. (2006). *People and Nature: An Introduction to Human Ecological Relations*. Malden, Oxford, Victoria, Blackwell Publishing Ltd.

Ogilvie, A.E.J. & Pálsson, G. (2003). Mood, Magic and Metaphor: Allusions to Weather and Climate in the Sagas of Icelanders. In S. Strauss & B. S. Orlove (Eds.), *Weather, Climate, Culture*.

Ólafsdóttir, R. & Runnström, M.C. (2009). A GIS Approach to Evaluating Ecological Sensitivity for Tourism Development in Fragile Environments. A Case Study from SE Iceland. *Scandinavian Journal of Hospitality and Tourism,* Vol. 9, No.1, pp.22 - 38

Oyadomari, M. (1989). The Rise and Fall of the Nature Conservation Movement in Japan in Relation ot some Cultural-Values. *Environmental Management,* Vol. 13, No.1, pp.23-33

Pechlaner, H., Raich, F. & Kofink, L. (2011). ELEMENTS OF CORPORATE GOVERNANCE IN TOURISM ORGANIZATIONS. *Tourismos : an International Multidisciplinary Journal of Tourism,* Vol. 6, No.3, pp.57-76

Phillips, A. (2003). Turning Ideas on Their Head - The New Paradigm for Protected Areas. *The George Wright Forum,* Vol. 20, No.2, pp.24

Saarinen, J. (2006). Traditions of sustainability in tourism studies. *Annals of Tourism Research,* Vol. 33, No.4, pp.1121-1140

Sæþórsdóttir, A.D. (2010). Planning Nature Tourism in Iceland based on Tourist Attitudes. *Tourism Geographies,* Vol. 12, No.1, pp.25-52

Schaller, H. (2011). *Dealing with Volcanic Terrains: Conflict Management at Protected Areas*. Saarbrücken, Germany, Lambert Academic Publishing.

Schaller, H. & Jónasson, H.I. (2011, November 21-23). The question of a common ground: attitudes towards conflict management among stakeholders of protected areas in Iceland and Japan. *Paper presented at the Managing Alpine Future II - Inspire and drive sustainable mountain regions*, Innsbruck, Austria.

Shiratori, K. & Ito, T. (2001). Motorized Access Control as a Wildland Recreation Management Tool: Access Changes and Visitor's Behavior at Daisetsuzan National Park. In T. Sievänen, C. C. Konjinendijk, L. Langner & K. Nilsson (Eds.), *Forest and Social Services - The Role of Research*: The Finnish Forest Research Institute.

Swatos, W.H. (1984). The Relevance of Religion - Iceland and Secularization Theory. *Journal for the Scientific Study of Religion,* Vol. 23, No.1, pp.32-43.

Takata, T. (2003). Self-enhancement and self-criticism in Japanese culture - An experimental analysis. *Journal of Cross-Cultural Psychology,* Vol. 34, No. 5, pp. 542-551.

Tawara, H. (2004, 23-29 August 2004). Forests and National Parks of Hokkaido. *Paper presented at the Social Role of Forests for Urban Population*, Sapporo, Japan.

Thomas, J.A. (2001). The cage of nature: Modernity's history in Japan. *History and Theory,* Vol. 40, No.1, pp.16-36

Thomas, L. & Middleton, J. (2003). *Guidelines for Management Planning of Protected Areas*. Gland. Switzerland and Cambridge. UK, IUCN.

Thórhallsdóttir, T.E. (2007). Environment and energy in Iceland: A comparative analysis of values and impacts. *Environmental Impact Assessment Review,* Vol. 27, No.6, pp.522-544

UN (2002). *World Summit on Sustainable Development*. Johannesburg, United Nations.

Walker, G.B. & Daniels, S.E. (1997). Foundations of Natural Resource Conflict: Conflict Theory and Public Policy. In B. Solberg & S. Miina (Eds.), *Conflict Management and Public Participation in Land Management*, Joensuu: The European Forest Institute.

WCED (1987). *Our Common Future*. Oslo, World Commission on Environment and Development.

WDPA (2011). Homepage of World Database on Protected Areas. Http://www.wdpa.org. Accessed the 8 th of February 2011.

White, P.C.L., Jennings, N.V., Renwick, A.R. & Barker, N.H.L. (2005). Questionnaires in ecology: a review of past use and recommendations for best practice. *Journal of Applied Ecology,* Vol. 42, No.3, pp.421-430

Yoda, A. & Watanabe, T. (2000, 1999 May 23–27). Erosion of mountain hiking trail over a seven-year period in Daisetsuzan National Park, central Hokkaido, Japan. *Paper presented at the Wilderness science in a time of change conference-Volume 5: Wilderness ecosystems, threats, and management*, Missoula, MT.

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EXPLORING TOURISTS' 'PUSH AND PULL' MOTIVATIONS TO VISIT MAURITIUS AS A HOLIDAY DESTINATION

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This study examines the motivational push and pull factors that affect tourists' decision in their choice of a holiday destination. 200 questionnaires were completed using a face to face interview among specific groups of travellers to Mauritius (English, French, German, Italian and South African tourists) at various points on the island. The findings show that rest and relaxation are the most compelling push motivation forces followed by nostalgia, escape, novelty, social interaction. The key pull based motives were found to be climate and weather, landscape and scenery, flora and fauna, beaches, the exotic atmosphere, the Mauritian hospitality and authentic Mauritian culture. Push and pull factors between first time visitors and repeat visitors are discussed. This study contributes to our overall understanding of why holiday makers take travel decisions for long haul destinations like Mauritius and can therefore help destination marketers develop better marketing programmes to meet the specific needs. highly, while north Italian managers seem more concerned about issues of co-ordination and the quality of service provision.

Keywords: *Travel motivations, push and pull factors, tourists, Mauritius*

JEL Classification: *L83, M1, O1*

INTRODUCTION

An understanding the factors that influence peoples' choices of their holiday destinations can play a key role in planning activities more effectively by the tourism authority. According to Adair (1990), motivation covers all reasons which influences the way an individual acts. Consequently, without a tourist's motivation to travel there would be no

travel industry. However, every destination is becoming more and more competitive and each individual has the opportunity and freedom to choose from several destinations (Crompton, 1992). Destination marketers and planners are making considerable efforts to study and understand the tourism process and are trying to gain insight into why people engage themselves in travelling to a particular place. This study explores the motivation of long-haul, leisure and pleasure travellers from various countries supplying tourists to Mauritius. Although motivation is only one of variable explaining tourist behaviour, it is considered to be one of the most elementary one because of its impelling and compelling force Iso-Aloha, (1982); Crompton, & McKay (1997).

In the context of Mauritius, little attention has been paid to examining the motivations of tourists visiting the island, and the reasons why tourists opt for this particular destination. Therefore, the purpose of this study is to fill this gap in providing some insights into why tourists opt for Mauritius as a tourist destination and also what attracts them. Many of the island's visitors are not at their first visit to the island. This paper also attempts to establish the reasons why some people choose to come back again to the same destination.

Mauritian tourism sector

Tourism which is the third pillar of the Mauritian economy after the Export Processing Zone (E.P.Z) manufacturing sector and agriculture, contributes significantly to economic growth. According to CSO (2010), in the past two decades tourist arrivals increased at an average annual rate of 9% with a corresponding increase of about 21% in tourism receipts. In 2009, gross tourism receipts were US$1189 million and contributed to around 11% of GDP. The tourism industry has established itself firmly as a vital economic activity on the island through its direct contribution to GDP growth and foreign exchange earnings, and, indirectly, through employment creation. The hotel and restaurant sector accounts for more than 5% of GDP, while the tourism industry generates direct skilled jobs for more than 28,753 people in large establishments and an indefinite number of indirect employment in the form of supporting services. Kassean (2010) argues that competition has become intense between similar island tourist destinations like Seychelles and the Maldives. Marketing strategies have focused on branding Mauritius and the luxurious large hotel resorts and their entertainment opportunities like golf club, casinos, deep sea fishing and the tourist spots in the island. The importance of positioning Mauritius as a tourist destination would be a

key strategy in the future and also, in the way local people who are involved in this sector benefit meaningfully from such initiatives.

LITERATURE REVIEW

There are a number of studies on motivation in the tourism and travel industry: Gray's Sunlust and Wanderlust (1970) typology of tourists, Dann's (1977) Pull and Push Theory, Optimal Arousal Theory (Iso-Aloha, 1980), Pearce (2002)'s (1988) Travel Career Ladder, among many others and adapted versions. Motivation can be considered as a viable method to decrypt human behaviour, more specifically that of travellers. However, referring to both the demand (tourists) and supply (destination) side, Push and Pull Theory has been used by several authors to explain the subject matter. Correia *et al,* (2004) and Money & Crotts, (2003), attempted to explain why people travel to exotic places among Portuguese travellers using push and pull motivations. The results showed the influence of push and pull factors on the way tourists perceive the destination and allowed comprehension about why tourists adopt specific behaviours. Another research by Sangpikul (2007) applied the push and pull motivations to investigate travel motivations of Japanese senior travellers to Thailand. The study identified the influencing needs and wants of the Japanese senior travellers while examining these with regards to socio-demographic variables and psychological well-being factor. Both studies used the push and pull theory to explain underlying concepts of why travellers opt for a particular destination and comprehensively viewed salient features of both travellers from different market segments and the destination.

Lee (2000) argues that the identification of motivations can be considered as critical in order to understand the different desires of travellers and to segment markets. Crompton and McKay (1997) identified that there are three key reasons for putting in effort into research on tourist motivation:

- First, motives are the key to designing offerings for tourists;
- Second, motives directly relate to the subsequent satisfaction that the tourist assesses;
- Finally, identifying and prioritizing motives allows tourism marketers and planners to understand visitors' decision processes.

Motivation

Mill and Morrison (1998) argue that motivation arises when an individual wants to satisfy a need. According to Moutinho, (2000) motivation is a situation which drives an individual towards an action that is likely to bring satisfaction. In psychology and sociology, the concepts of motivation are directed towards emotional and cognitive aspects (Awaritefe, 2003) or internal and external motives (Gnoth, 1997). Internal motives are associated with drives, feelings and instincts whereas external motives involve mental representations such as beliefs or knowledge (Uysal and Yoon 2005), (Sonmez *et al.* 1999). These factors all exert pressures on the human mind which influence the individual to carry out an activity to satisfy a need.

Maslow's (1970) hierarchy of needs theory can be seen in a hierarchy of five categories. The most basic category of needs is that of physiological consisting of items such as hunger, thirst and sleep. Ascending stepwise the other needs are safety, social belongingness and love, esteem, and self-actualization. Human needs normally follow this order while satisfying the lower level need first and then moving to a higher order need. However, there may exist cases where higher level needs prevail even though lower level needs have not been met. Despite these criticisms Maslow's theory is often used explain the hierarchy of human needs. (Cosenza & Davis,1981).

Motivation for travel

Motivation for travel is considered as a key factor in explaining tourist behaviour (Mansfield, 1992; Fodness 1994; Crompton and McKay 1997; and Gnoth 1997). Motivation being an important factor influencing an individual into action, it would be useful to understand how a particular decision is arrived at.

Examples of definitions relating to travel motivations are:

- The set of needs and attitudes which predispose a potential tourist to act in a specific goal-directed way" (Pizam et al., 1979).
- "People's motivations to travel begin when they become aware of certain needs and perceive that certain destinations may have the ability to serve those needs" (Lubbe, 1998).
- Lundberg (1976) points out that what travellers call their motivations "maybe only reflections of deeper needs, needs

which he himself does not understand, may not be aware of, or may not wish to articulate."

In literature related to motivation, it has been acknowledged that certain forces drive an individual to act. Dann (1977) coined these forces as push and pull forces leading people to travel. The push forces are related to the desire to travel of the tourist while pull forces are associated with the qualities of the destination which tend to attract the tourist.

PUSH FACTORS

According to Uysal and Hagnan (1993), push and pull forces act separately and people travel because they are pushed by motivation variables into making travel decisions. Yoon and Uysal (2005) added that the push motivations are emotional and internal aspects of the individual which lead to travel decisions. Push motivations can to be socio-psychological influences onto leisure travellers about their choice of a destination. Dann (1977) suggested two factors as push travel motives: anomie and ego-enhancement. Anomie means the desire to transcend the feeling of isolation obtained in everyday life, where the tourist simply wishes to run away from routine. On the other hand ego-enhancement originates from the need of recognition, which is gained through the status conferred by travel (Fodness, 1994). Crompton (1979) developed a conceptual framework based on Dann's (1977) study that would integrate push motivations of travellers. The influencing factors he found were: the desire for escape from a perceived mundane environment, rest and relaxation, prestige, regression, health and fitness, adventure and social interaction, enhancement of kinship relationships, exploration and evaluation of self, and excitement. Yuan and McDonald (1990) identified five push factors from 29 motivational items in their study throughout four countries. The push dimensions were escape, novelty, enhancement of kinship relationships, prestige, and relaxation/hobbies. The findings showed that the most important factors in pushing the individual to travel for an overseas holiday were firstly novelty and followed by escape.

According to Beard and Ragheb (1983) who developed a model called the Leisure Motivation scale, motivators had been attempted to be classified into four categories:
- Intellectual
- Social
- Complete mastery
- Stimulus avoidance

The different categories proposed by the researchers help to find out the various reasons why people engage in leisure activities, thus travelling for leisure purposes can be classified as same, while the different categories acting as push influences (Floyd & Gray, 2004).

Firstly, the intellectual component assesses the extent to which individuals are motivated to engage in leisure activities involving mental deeds such as learning, discovery, thought or imagery. As for the social component, it reviews the degree to which individuals engage in leisure activities for social reasons. Furthermore it includes two basic needs, firstly the need for friendship and interpersonal relationships while the second is the need for the esteem of others. The complete mastery component is mainly of physical nature which assesses the extent to which individuals engage in leisure activities in order to achieve master, challenge and competition. The stimulus avoidance component assesses the desire to escape and get away from over stimulating life situations. It can also be the need for some individuals to avoid social contact, to seek solitude and calm conditions whilst for others it can be looking for rest and relaxation. The model can be said to have been adapted from Maslow's hierarchy of needs, recognising human needs are not same for everyone. The different categories illustrated may act independently or as an amalgam of such motivators operating as driving forces for the individual to travel. The travel career ladder proposed by Lee and Pearce (2002), Green *et al,.* (2003) emphasize the range of socio-psychological motivations for seeking out holiday experiences and considers five levels of needs. These are relaxation, safety and security, relationships, self-esteem and development, and self-actualization/fulfilment. From the travel career ladder, Lee and Pearce (2002) suggest that people progress upward through motivation levels with accumulated travel experiences. A framework developed by Pearce (2002), Fig 1 identified as the travel career patterns, may be referred as an adjusted version of the travel career ladder though quite different. The two frameworks were empirically tested and generated very similar motivation factors. A total of 14 motivators out of 74 were obtained with slightly different mean ranking orders when segmenting high and low travel groups. These factors were ordered as: novelty, escape/relaxation, self-actualization, nature, self-enhancement, romance, kinship-belonging, autonomy, self-development (host-site involvement), nostalgia, stimulation, isolation and recognition.

Figure 1 Travel career patterns concepts (Pearce (2002), 2005)
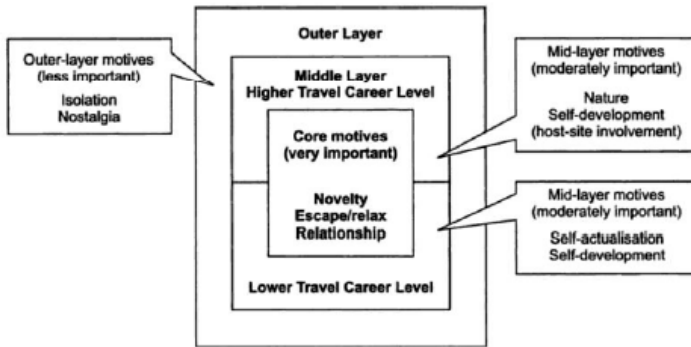
Source: Lee and Pearce (2002): socio-psychological framework

Through the different above typologies on travel motivations, push factors are these driving forces that compel the traveller to satisfy a need. They may be classified in different orders due to the complexity of human nature where each individual has specific needs to be satisfied while travelling.

PULL FACTORS

Pull motivations are external, situational, or cognitive aspects to the tourist that compel the latter to travel to a destination (Yoon and Uysal, 2005). To be more explicit the tourist is attracted by the destination attributes effecting from publicity or promotion or any other means thus giving a perceived image of the particular destination. Indeed, it is evident that pull motivations play an important role into shaping the tourist travel motivations. In fact this may boost up the needs of the individual to have an experience at the particular destination as indicated by Dann (1981) who argued that pull factors of the resort such as sunshine, relaxed tempo, and friendly natives both respond to and reinforce push factor motivation. McGee et al. (1996) confirmed that pull motivations are those that are inspired by a destination's attractiveness such as beaches, recreation facilities, cultural attractions, entertainment, natural scenery, shopping and parks which may stimulate and reinforce inherent push motivations.

In a study carried out from 53 attraction items, Yuan and Mc Donald (1990) identified seven pull factors: budget, culture and history, ease of

travel, wilderness, cosmopolitan environment, facilities and hunting. The findings indicated that individuals from each country might travel for the same reasons but reasons for choosing a particular destination and the level of importance attached to the factors might differ among the countries due to the varying nature of each destination. Furthermore the pull factors in the form of driving forces are described as positive ones which boost an individual to travel to specific destinations and negative ones such as fears and aversions which lead not to travel to certain destinations (Gilbert and Terrata, 2001).

Relating pull motives further to the destination, potential activities offered to the traveller may be referred as key attributes of the destination. Several researches suggested linking activities between travellers and destinations (Gunn, 1994; Mansfeld, 1992 and Canter, 1977). Additionally You et al. (2000) attach travel infrastructures together with environment quality and safety as major dimensions of destination attributes. Obviously, when including these dimensions as destination attributes further reinforce pull motives hence be more destination specific. Without a doubt, pull factors are closely related to the destination and are those factors inferred to the traveller in form of a brand image or perceived destination experience. It is therefore essential to have a look onto what forms part of a tourist destination, as perceived by the traveller to better understand the to-be traveller's necessities while opting for a particular destination. In contrast to consumer products, place products are more complex thus representing a significant challenge to define a destination (Morgan et al., 2002). Mill and Morrison (1998), describe the destination product as predominantly "a bundle" of services and experiences which is convergent to Buhalis's (2000) definition stating that the tourist destination is as an amalgam of tourist products, services and public goods consumed under the same brand name, thus offering the consumer an integrated experience. An attempt from Crouch et al (2000), comprehensively summarize the various factors that together contribute to a tourist destination. They highlighted that the service infrastructure and destination environment are important categories in building the tourist destination experience. Furthermore, the service infrastructure and destination environment consists of dimensions, completing the tourist destination as illustrated in the figure 2 below:

As such the perceived destination experience conceptualizes fully the pull factors which will affect the traveller. Pearce et al (1998) gave some insight on pull factors which may fulfil people's motives for travelling. They argue that assigning motivation power to pull factors is tricky due to fact these attributes are often translated into socio-psychological push-

based motives. For example, one individual may find scuba-diving suiting his needs for adventure and excitement, while another may find it as a form of novelty and a third as escape from a mundane environment. Therefore, one single attribute or activity may represent a mix of motives which serves as an attempt to satisfy the needs of the individual.

Figure 2 The tourist destination experience founded by Crouch *et al* (2000)
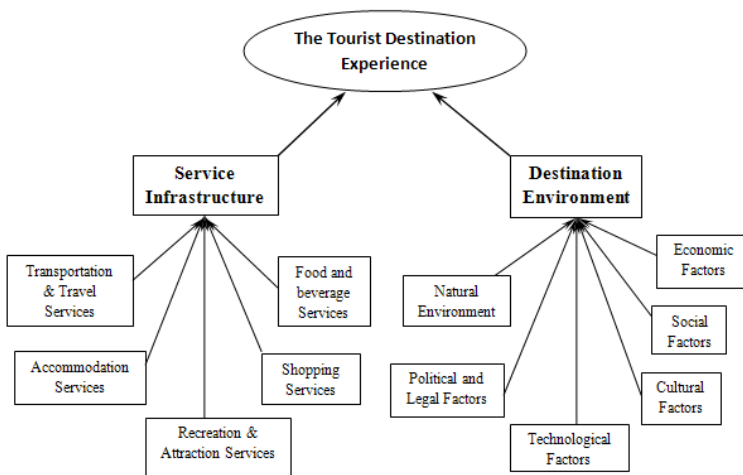
METHODOLOGY:

A sample of 200 questionnaires were completed using a face to face interview among specific groups of travellers to Mauritius (English, French, German, Italian and South African tourists) at various points on the island.

Mansfeld, (1992) argues that there is no variation among those visiting a destination for the first time or more in push based motives.

> *H1: There is a significant difference between first time and repeat visit in push based motives to same destination.*

McGee et al. (1996) state that there is no difference between first time travel to a destination, and repeated ones in pull based motives.

H2: There is a significant difference between first time and repeat visit in pull based motives to the same destination.

FINDINGS

Considering the push motives which compelled the tourists to take a holiday and to travel to Mauritius are described in descending order in terms of their mean score are shown on the figure 3 below:

Figure 3 Mean score of push-based motives
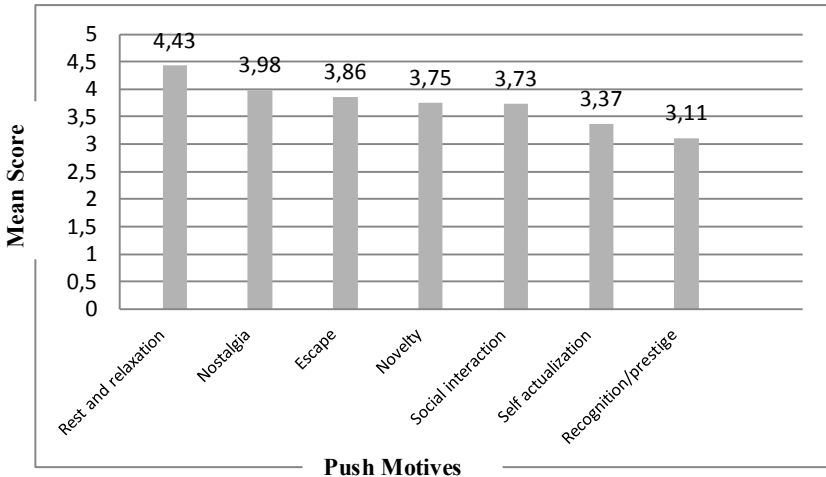
The most important motives were rest and relaxation followed by nostalgia followed by nostalgia, escape, novelty, social interaction, self-actualization and recognition and prestige.

Rest and relaxation accounted for 90% of the survey population. Other views expressed were: a need to go on a holiday, the majority of information gathered were in-line with the push-based motives such as "Discovering and exploring a new place." and "Discover people while resting." forming part of novelty and rest and relaxation. The desire to travel were also to fulfil their wishes "Gift to my wife who deserve to see the best place in the world.", "Who would not want to go to a paradise like Mauritius?", "Mauritius and Maldives considered as most beautiful places in the world." and "Doing kite surf is my passion" which indicate

that the respondents were longing to travel to Mauritius, forming part of nostalgia and self-fulfilment. However, there were diverging responses which included: "To party", "Need a sun tan" and "Appropriate timing during school holidays".

Figure 4 Mean score of pull-based motives
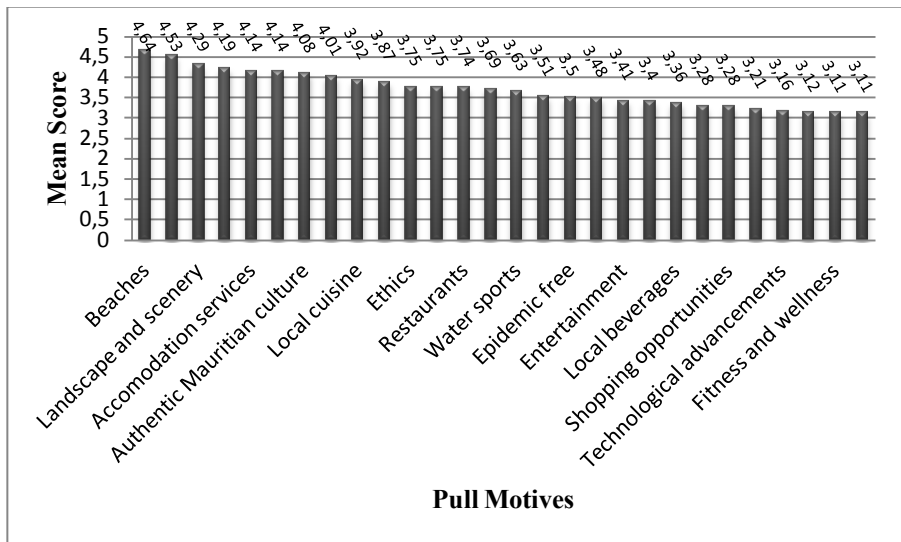
The findings in Figure 4 above show that on average, the tourists expressed high levels of agreement towards items of the destination environment including beaches, the climate and weather, and landscape and scenery. These may be considered as the core elements influencing the travellers to opt for Mauritius. Onto the other side, the Mauritian hospitality and accommodation services were the most agreeable factors driving the tourists to the island on the side of the service infrastructure. It can be observed that the least compelling factors were fitness and wellness and nightlife.

Concerning the respondent's views, "a safe and comfortable environment for small children", "paradise", "tropical destination giving an exotic treat" and "friendly and helpful people" were the most cited and reliable comments with regards to the destination environment made giving insight about the destination choice of the travellers which are in-line with the pull-based motives.

H1: There is a significant difference between first time and repeat visitor push based motives to the same destination.

Since this hypothesis asks for comparison between two groups, first time and repeater visitors, and their different motives, Mann-Whitney Test was carried out to sort out whether there are significant differences between push based motives of the two categories of visitors.

Table 1 Mann-Whitney Test for the push based motives

	Visitor ...	Sig.	Mean Rank	Sum of Ranks
Escape	First timer		106.09	10609.00
	Repeater		94.91	9491.00
	Asymp. Sig. (2-tailed)	.152		
Nostalgia	First timer		86.53	8653.00
	Repeater		114.47	11447.00
	Asymp. Sig. (2-tailed)	.000		
Novelty	First timer		117.94	11793.50
	Repeater		83.06	8306.50
	Asymp. Sig. (2-tailed)	.000		
Social interaction	First timer		87.53	8753.00
	Repeater		113.47	11347.00
	Asymp. Sig. (2-tailed)	.001		
Self actualization	First timer		98.99	9899.00
	Repeater		102.01	10201.00
	Asymp. Sig. (2-tailed)	.701		
Recognition/prestige	First timer		95.51	9551.00
	Repeater		105.49	10549.00
	Asymp. Sig. (2-tailed)	.211		
Rest and relaxation	First timer		107.24	10723.50
	Repeater		93.76	9376.50
	Asymp. Sig. (2-tailed)	.064		

The results in Table 1 above show that there is a significant difference for only three of the push-based motives: nostalgia (p=.000), novelty (p=.000) and social interaction (p=.001) between first time visitors and repeat visitors, where the asymptotic significance (Asymp. Sig.) is less than the 0.05 significance.

Table 2 Two independent sample test showing significance under Mann-Whitney Test for the pull based motives

Pull-based motives	Visitor category
	Asymp. Sig.
Ease of access	.589
Modes of transport	.700
Accommodation services	.265
Water sports	.001
Nightlife	.037
Entertainment	.010
Land based sports	.132
Attractions	.901
Fitness and wellness	.016
Shopping opportunities	.147
Arts and crafts	.003
Restaurants	.011
Local cuisine	.000
Local beverages	.035
Climate and weather	.008
Landscape and scenery	.721
Flora and fauna	.013
Beaches	.015
Exotic atmosphere	.686
Epidemic free	.949
Politically stable	.696
Safety and security	.336
	Asymp. Sig. (2-tailed)
Technological advancements	.295
Historical and cultural sites	.368
Authentic Mauritian culture	.000

Comparing the mean ranks of the just-mentioned valid motives, the results further demonstrate that repeat visitors were more motivated to go on a holiday to Mauritius for: firstly, social interaction (mean

rank=113.47) as opposed to first-time travellers (mean rank=87.53) and secondly they had been longing to travel to the island out of nostalgia (mean rank=114.47) as opposed to first-time visitors (mean rank=86.53).

As for first time visitors, experiencing something new (mean rank=117.94) defined as novelty push-based motive was subject to greater motivation force to come for a holiday at the destination as opposed to repeaters (mean rank=83.06).

The concluding remark for the first hypothesis (H1) after analysis is that the hypothesis is partially accepted.

H2: There is a significant difference between first time and repeat visitor pull based motives.

This hypothesis required Mann-Whitney Test to be carried out to enable finding out whether there is a significant difference among the pull-based motives of the first time and repeat visitors. Table 2 below shows the results of the test:

From the outcome illustrated in Table 2 above, Water sports(p= .001), Nightlife(p= .037), Entertainment(p= .010), Fitness and wellness(p= .016), Arts and crafts(p= .003), Restaurants(p= .011), Local cuisine (p =.000), Local beverages(p =.035), Climate and weather(p= .008), Flora and fauna(p= .013), Beaches(p =.015), Mauritian hospitality(p= .000), Ethics(p= .000) and Authentic Mauritian culture(p= .000) were the motives which differs from first time and repeat visitors. The previously mentioned significant motives all show that they were those with highest motivation forces to repeat visitors as opposed to the other pull-based motives which did not obtain sufficient evidences to differ between first timers and repeaters, therefore, hypothesis H2 is partially accepted.

DISCUSSION

The research was in line with the findings of Dann's push and pull theory (1977). As opposed to Yuan and McDonald (1990) who stated that novelty, followed by escape were the most influencing motives, this research showed that the push-based motives were classified in the following order: rest and relaxation, nostalgia, escape, novelty, social interaction, self-actualisation and recognition/prestige. Push-based motives cannot always be in line with a previous research studies. Each individual has his personal reasons to take a decision and same may be applied to a particular market segment. From the surveyed population, it can be inferred that the travellers perceived the destination as a place to

rest and relax prior to their other needs. However, the other motives were consistent with the findings of previous studies.

With regards to pull factors, it can be argued that the different destinations have different levels of attraction for different individuals. In the case of Mauritius, the first five top ranked attributes were beaches, climate and weather, landscape and scenery of the island, Mauritian hospitality and accommodation services proposed to the travellers. With regards to first time visitors and repeat visitors, it was found that there repeat visitors were more motivated to go on a holiday to Mauritius for social interaction as opposed to first-time travellers and secondly they had been longing to travel to the island out of nostalgia as opposed to first-time visitors.

CONCLUDING REMARKS

This study contributes to the overall understanding of why holiday makers take travel decisions for long haul destinations. Based on the push and pull theory from Dann (1977), motives of travellers were assessed both in terms of their socio-psychological variables and destination attributes of the island of Mauritius. In general, the research findings show that rest and relaxation are the most compelling motivation forces for those visiting Mauritius. This result is similar to the findings of Andreu *et al* (2005) who carried their studies in Turkey among British travellers, where rest and relaxation gathered the highest score. On the side of the destination attributes, the first five top ranking attributes of the island were: beaches, climate and weather, landscape and scenery, Mauritian hospitality and accommodation services. These factors may be considered as the core products and services viewed from the perspective of English, French, German, Italian and South African travellers.

Additionally, the research attempted to conceptualize differences between first time and repeat visitor groups. It has also been possible to identify specific motives between first time travellers and repeat visitors, illustrating genuine motivational influences of the travellers.

REFERENCES

Adair, J. (1990). *Understanding motivation*. Guildford, Surrey Talbot Adair Press.
Ajzen, I. & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, Vol. 84, pp.888-918.

Andreu, L., Kozak, M., Avci, N. & Cifter, N. (2005). Market segmentation by motivations to travel: British Tourists Visiting Turkey. *Journal of Travel and Tourism Marketing*, Vol. 19, No.1, pp.1-14.

Ashworth, G.J. & Voogd, H. (1990). *Selling the city: marketing approaches in public sector urban planning*. London, Belhaven Press. xii + 178

Beard, J.G. & Ragheb, M.G. (1983). Measuring leisure motivation. Measuring leisure satisfaction. *Journal of Leisure Research*, Vol. 12, No.1, pp.20-33.

Buhalis, D. (2000). Marketing the competitive destination of the future. Tourism Management, Vol. 21, No.1, pp.97-116.

Correia, A. & Pimpao, A. (2004). Decision-making processes of Portuguese tourist travelling to South America and Africa. *International Journal of Culture, Tourism and Hospitality Research*, Vol. 2, No.4, pp.330-373.

Cosenza, R.M. & Davis, D.L. (1981). Family vacation decision making over the family lifecycle: A decision and influence structure analysis. *Journal of Travel Research*, Vol. 20, No.2, pp.17-23.

Crompton, J.L. & McKay, S.L. (1997). Motives of visitors attending festival events. *Annals of Tourism Research*, Vol. 24, No.2, pp.425-439.

Crouch, G.I., Perdue, R., Timmermans, H. & Uysal, M. (2004). *Consumer psychology of tourism, hospitality and leisure*. United Kingdom, CABI Publishing.

Dann, G. (1977) Anomie, Ego-enhancement and tourism. *Annals of Tourism Research,* Vol. 4, No.4, pp.184- 194.

Dann, G.M. (1981). Tourism motivations: An appraisal. *Annals of Tourism Research,* Vol. 8, No.2, pp.187-219.

Floyd, M.F. & Gray, L.P. (2004). Profiling risk perceptions of tourists. *Annals of Tourism Researc*h, Vol. 31, No.4, pp.1051-1054.

Fodness, D. (1994). Measuring Tourist Motivation. *Annals of Tourism Research,* Vol. 21, No.3, pp.555-581.

Gilbert, D. & Terrata, M. (2001). An exploratory study of factors of Japanese tourist demand for the UK. Http://www.emeraldinsight.com/journals.htm?articleid=867369 Accessed the 8 th of May 2011.

Gnoth, J. (1997). Tourism motivation and expectation formation. *Annals of Tourism Research,* Vol. 24, No.2, pp.283-304.

Gray, H.P. (1970). Wanderlust. Sunlust *An analysis of summer sun tourists - outbound package holidays. International Travel: International Trade*. Heath, Lexington.

Green, C.G. *et al.* (2003). New York Restaurant Industry: Strategic Responses to September 11, 2001. In C.M. Hall, J.T. Dallen and Duval, D.T. (Eds.) *Safety and security in tourism. Relationship, management and marketing* (pp. 63-79), The Howarth hospitality press.

Gunn, C.A. (1994). *Tourism Planning*. New York, Taylor & Francis.

Hoyer, K.G. (2000). Sustainable Tourism or Sustainable Mobility? The Norwegian Case information search, planning, and purchases of

international travel vacations. *Tourism Management,* Vol. 24, Issue 2, pp.191-202.

Iso-Ahola, S.E. (1980) Experience-related factors as determinants of leisure satisfaction. *Scandinavian Journal of Psychology,* Vol. 23, Issue 1, pp.141-146.

Kassean, H. (2010). Challenges for Mauritius as a small island Tourist Destination. Proceedings of conference in Bali Dec 2010

Lee & Pearce (2002). Travel motivation: linking theory to practicewith accumulated travel experience. Http://www.emeraldinsight.com/journals.htm?articleid=1819392&show

Lee, Y.S. (2000). Gazing at KumKang Mountain: the emergence of commercial tourism in South Korea. *29th International Geographical Congress*: 14th – 18th, Seoul, Korea. linkinghub.elsevier.com/retrieve/pii/S0261517708000915

Lubbe, B. (1998). Primary image as a dimension of destination image: An empirical assessment. Journal of Travel and Tourism Marketing, Vol. 7, No.4, pp.21-43.

Lundberg, D.E. (1976). *The Tourist Business*. Boston, CBI Publishing.

Mansfield, Y. (1992). From motivation to actual travel. *Annals of Tourism Research,* Vol. 19, pp.399-419.

Maslow, A. (1943). A theory of human motivation.

Maslow, A. (1970). Travel motivation: linking theory to practice.

McGee M et al. (1996). Event tourism is globally important in terms of its popular appeal and ability .... may stimulate and reinforce inherent push factors . .bai2006.atisr.org/CD/Papers/2006bai6162.doc. Accessed the 7 th of May 2011.

Mill, R.C. & Morrison, A.M. (1998). The tourism system: An introductory text, 3rd ed. Dubuque, Iowa: Kendall/Hunt. Publishing Company

Money, R.B. & Crotts, J.C. (2003). The effect of uncertainty avoidance on

Moutinho, L. (2000). Trends in Tourism. In Strategic Management in Tourism. Wallingford, UK: CAB

Murray, E.J. (1964). *Motivation and emotion*. New Jersey, Prentice-Hall.

Pearce, P.L. (2005) (1982). The Social psychology of tourist behaviour. Oxford, Pergamon Press.

Pearce, P.L. (2002) 1988. Methodology in Tourism Research. *Annals of Tourism Research,* Vol. 15, pp.1-28. Gmelch, Sharon Bohn.

Pearce (2002), P L. & Lee L (2005): "Developing the travel Career Approach to Tourist Motivation" in Journal of Travel Research Vol. 43

Pizam et al. (1979) THE EVALUATION OF NORWEGIANS' TRIP SATISFACTION TOWARD SOUTHERN. .www.emeraldinsight.com/books.htm?chapterid=1761499& Accessed the 7 th of May 2011.

Sangpikul, A. (2007). A factor-cluster analysis of tourist motivations: A case of U.S. senior travellers. *Original Scientific Paper*, Vol. 56, No.1, pp.23-40.

Sirakaya E. (2003). A tourist market portfolio for .... Segmentation: A tourism stakeholder view - Elsevier.

Sonmez, S.F. et al. (1999). Tourism in crisis: Managing the effects of terrorism. *Journal of Travel Research,* Vol. 38, pp.13-18.

Theoretical analyses on. hierarchy of needs theory www.emeraldinsight.com/journals.htm?articleid=1819392 Accessed the 7 th of May 2011.

Uysal, M. & Hagan, L. (1993). An Exploratory Study of Factors of Japanese Tourism Demand for the UK. *International Journal of Contemporary Hospitality Management,* Vol. 13, Issue 2, pp.70-78.

Yoon, Y. & Uysal, M. (2005). An examination of the effects of motivation and satisfaction on destination loyalty: a structural model. Tourism Management, www.emeraldinsight.com/journals.htm?articleid=1795789&show=html

You, L. et al. (2000). Cultural influences on tourist buying behavior

Yuan & McDonald, (1990). Linking Attitudes and Demographics in a Tourist Segmentation Model ...www.deakin.edu.au/dro/eserv/.../kattiyapornpong-linkingattitudes-2008.pdf. Accessed the 7 th of May 2011.

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INTERNATIONAL TOURISTS' ENVIRONMENTAL ATTITUDE TOWARDS HOTELS IN ACCRA

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The available literature suggests that there has been a rise in green consumerism, not only among general consumers but tourists. This has provided the impetus for the 'greening' of hotels as hotel guests have indicated their preference for hotels that 'take care of the environment'. Ironically, the environmental impacts of hotels especially with regards to the consumption of energy and water are more likely to be exacerbated by their guests. In spite of this, most studies on environmental management in hotels have centred on programmes and initiatives undertaken by management with little focus on the attitudes and behaviour of guests. This study sought to assess international tourists' environmental attitude towards hotels in Accra and the implications for environmental management by hotels. A sample of 343 international tourists was surveyed at major tourist attraction sites in Accra. The results of the study indicate that a majority of respondents generally held the view that hotels do not destroy the environment but contribute to the global environmental problems. Most of them (83%) were therefore willing to pay more to stay in a hotel with a responsible environmental attitude. There was also a significant positive relationship between some socio-demographic characteristics of tourist such age and sex and their environmental behaviour. The results of this study have implications for environmental education of guests and the marketing of hotels.

Keywords: *Environmental, Behaviour, Attitude, Tourist, Hotel, Accra*

BACKGROUND

The adoption and implementation of sustainable tourism practices by the tourism industry has been partly occasioned by the observation that

tourists are becoming increasingly concerned about the environmental conditions of destinations they intend to visit. Foster *et al.* (2000) identify consumer demand as one of the forces exerting pressure on service sector firms to be environmentally friendly. Generally, there has been a growth of *green consumerism* (Holden, 2000). Consumers are increasingly becoming environmental-conscious and will buy products from organizations that 'take care of the environment'. The tourism industry has not been insulated from this wave of environmentalism since tourists are also becoming discerning and will travel to destinations that offer clean and green tourist products. In a study of UK consumers' attitude on package holidays by Market and Opinion Research International (Ipsos MORI) in 2000 which was commissioned by the Association of British Travel Agents (ABTA), 87% of respondents indicated that the not damaging the environment is the most important consideration when choosing a holiday whilst 76% indicated that their holiday should benefit the people of the destination they were travelling to. Also, Conde Nast Traveller Magazine conducted a readers' poll which showed that 96% of readers thought hotels and resorts should be responsible for protecting the environment they operate in, with 74.5% saying a hotels' environmental policies influence their decision to stay there (Conde Nast Traveller, 2007).

However, studies on the environmental performance of firms have concentrated on the supply side i.e. environmental practices and initiatives by businesses with customers often left out of the picture. Despite the importance of the environment in the tourist's choice of hotel, the issue has not been subjected to much intellectual discourse and empirical research. Research in this area has often been undertaken by research organizations such as J.D. Power and Associates and Ipsos MORI instead of academics. There have been very few attempts to look at hotel guests' attitude towards environmental management practices of the hotel industry. Research on travelers' attitudes toward environmentally friendly hotels and guest rooms has been limited to a few studies (Millar and Baloglu, 2011). Andereck (2008) is also of the view that few studies have considered tourists' views of environmentally responsible and innovative business practices.

Given the limited empirical academic research on the environmental attitude of tourists towards hotels in spite of growing environmentalism and green consumerism, this study sought to assess international tourists' environmental attitude and the implications for environmental management by the hotels. To achieve this objective, the study examined the perceptions of international tourists in Accra on hotel environmental

issues, the extent to which environmental activities by hotels influence their choice of hotels, their willingness to pay more for a stay in an environmentally-responsible hotel and the relationship between their socio-demographic characteristics and their willingness to pay more.

LITERATURE REVIEW

There has been a general rise in green consumerism. European, North American and Oceanic researches have shown that care for the environment, and sub-themes like social responsibility have become of increasingly significant consumer value (Kotler, Bowen and Makens, 1999; Smith and Haugtvedt, 1997). Also, Synovate conducted a global survey in 2007 in association with Aegis, which was repeated it in 2008 in association with BBC World. The results of the survey indicated that consumers in most countries are becoming more aware and willing to act on environmental concerns. In the 2007 survey, 53% of respondents reported that they bought green products and this rose to 61% of respondents in 2008 (World Business Council for Sustainable Development, 2008). There is also recognition that tourists are becoming increasingly concerned about the environmental conditions of places they travel to as evidenced in the popularity of green or ecotourism products (Weaver and Lawton, 2002).

However, individuals differ in their levels of environmentally friendly behaviour (Carrus *et al*, 2005, Kals *et al*, 1999). A study by Crouch *et al.* (2005) indicated that 'environmentally caring tourists' differed significantly in sociodemographics, travel behaviour and travel motivations. Kalafatis, *et al* (1999) also used Ajzen's theory of planned behaviour to conclude that consumers might hold attitudes about the environment that do not translate into environmentally friendly behaviour. However, other researchers have suggested a positive relationship between environmental awareness and pro-environmental behaviour (Lee and Moscardo, 2005). The results of studies by Laroche *et al.* (2001) and Manaktola and Jauhari (2007) also indicated that people who were more concerned about the environment tended to have more environmentally-friendly buying behaviours.

The number of customers looking for green hotel properties has also grown (Manaktola and Jauhari (2007). According to a 2002 survey, in the UK, 87% of Brits, 60% of Australians and 54% of Americans indicated that they were more likely to patronize hotels with a "responsible environmental attitude" (IHEI, 2002). Available evidence suggests that hotel guests do not only expect their hotels to practice sound

environmental management practices but are also prepared to pay extra to stay in hotels that are environmental-conscious (Arias *et al*, 2003; Masau and Prideaux, 2003; Han *et al*, 2009). However, Manaktola and Jauhari (2007) in a study in India concluded that though consumers in the lodging industry had a positive attitude and behavior towards green practices in hotels, it did not translate into their willingness to pay more. In a related study by Millar and Baloglu (2011), a large majority of respondents (i.e. 77.5% of business travellers and 84% of leisure travellers) indicated they would pay the same price for a green hotel property just like for one that is not green. The available literature also suggests that cleanliness is one of the most important, factors in the selection of accommodation facilities (Dolnicar, 2002; Lockyer, 2003).

Studies by Vining and Ebreo, (1990) indicated that Customers who frequently engaged in environmentally-friendly purchasing behaviours were older than average. However, Andereck, (2008) found a negative correlation between age and perceived value of green practices, indicating that younger respondents valued environmental practices more highly. Research has also indicated that people with Judeo-Christian beliefs are less environmental conscious (Schultz *et al*, 2000). Laroche *et al*. (2001) also proved that women were more environmental-conscious than men and were willing to pay more for green products. This is corroborated by Han *et al* (2009) who discovered in their study that female customers and older customers both had a stronger willingness to pay more for a green hotel.

People with different social practices and cultural traits are likely to place different values on and have different attitudes toward nature or the environment (Johnson, *et al*, 2004). Studies by Baysan (2001) suggested that German tourists appeared to have a greater consideration for the environmental consequences of tourism. In a related study, Sarigöllü (2009) discovered that Turks were more concerned about the environment than Canadians. Dolnicar (2010) also found in a study that having a higher level of environmental concern, being more altruistic, feeling more morally obliged to behave in an environmentally friendly way, being older and feeling a higher level of regional identity with the place of residence are the best predictors of pro-environmental behavior of tourists.

METHODOLOGY

Data for this study were collected through a survey of international tourists at major attraction sites in the city of Accra such as Osu Oxford

Street, Kokrobite Beach, La Beach, Du Bois Centre and Nkrumah Mausoleum. International tourists were targeted because by definition, they would patronize some form of overnight accommodation. Convenience sampling method was employed to select 384 tourists from some popular attraction sites in Accra. The fact that a non-random sample was used makes sample size determination for estimate accuracy non relevant. However if it could be assumed that the sample was representative than the following sample size determination would be informative. The sample size of tourists (n = 384) was derived by computing the minimum sample size required for accuracy in estimating proportions by considering the standard normal deviation set at 95% confidence level (1.96), percentage picking a choice or response (50% = 0.5) and the confidence interval (0.05 = ±5).

The questionnaire included close-ended questions on respondents' socio-demographic characteristics and environmental attitudes. Questions relating to attitudes were divided into cognitive (perception of hotel environmental issues); affective (preferences for environmentally responsible hotels); and behavioural (willingness to pay more for an environmentally-responsible hotel). Likert scales (e.g. 1 = strongly disagree – 5 = strongly agree; and 1 = no influence – 5 = very strong influence) were used to design response sets for the close-ended questions. These scales were used to collect data relating to attitudes of respondents. Fieldwork was undertaken between June and August 2010 in Accra. The questionnaire was self-administered to those who were identified as international tourists and accepted to participate to the study. To avoid problems of double response and response bias, respondents were first asked if they have not already taken part in the study. Also, care was taken not to sample all or majority of people in a group. A total of 343 questionnaires out of the sample of 384 international tourists were returned from the field and considered appropriate for analysis thus representing a response rate of 89.8%.

DISCUSSION OF FINDINGS

More than half (56.6%) of the respondents were females, mainly aged between 21 and 29 years (46.8%). They were however, fairly well-educated since more than half (52.8%) had obtained a bachelors degree or higher national diploma. In terms of their marital status, it was observed that they were mostly single (66.1%) but this could be attributed to their relative younger ages and high level of education. These findings coincide with the results of a study on tourists' vulnerability to crime in Ghana by

Boakye (2010) who indicated that dominance of young people who are mainly single and are students of tertiary institutions in his sample. The highest number of respondents (27.8%) was Americans, followed by Brits and Germans respectively. The continent of origin of the respondents generally reflects the pattern of international tourist arrivals in Ghana where Europeans are in the majority (57.1%) and the Asia/Oceania region is the least represented (4.2%).

Environmental attitude of international tourists

McDougal and Munro (1994) claimed that attitude is comprised of cognitive (beliefs and knowledge), affective (feelings of like or dislike) and behavioural components (action or intent to act). The relation of all three components to tourists' environmental attitude towards hotels is herewith discussed.

Table 1 Perception of Hotel Environmental Issues

Environmental Issues	N	Percentage in agreement	Mean	Std. Dev
Hotels claim to be environmentally responsible is indeed so	341	14.7	2.53	0.91
Hotels educate their guests on environmental responsibility	326	19.7	2.52	0.98
Hotels contribute to environmental protection and conservation	337	39.8	3.14	0.90
Hotel development and operations destroy the environment	337	34.1	2.90	1.08
Hotels contribute to the global environmental problems	337	45.6	3.25	0.90
Hotels claim to be environmental-conscious to enhance their images	333	69.1	3.65	0.90
Hotels have a responsibility to preserve and protect natural areas	341	87.1	4.21	0.78
I am more likely to book a hotel with a responsible environmental attitude	340	82.4	4.13	0.87

Based on a scale of 1-5; 1= strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, and 5 = strongly agree.

From Table 1, the greater majority of respondents (72.2%) did not believe that hotels impact negatively on the environment. The statements that attracted the greatest disagreements were hotels' claim to be environmentally responsible and education of their guests (Mean = 2.53 and 2.52 respectively). Only 14.7% of respondents agreed that hotels claiming to be environmentally responsible were indeed so.

Tourists were therefore aware of the issue of greenwashing. Hotel managers should therefore ensure that their purported environmental friendliness reflects in their day-to-day operations. The fact that 69.1% of repondents agreed that hotels claimed environmental consciousness in order to enhance their images, lends further credence to this. This implies that when hotels are merely projected as environmentally-friendly through external communications to customers, it will not necessarily cajole them into believing and thereby patronising such hotels.

Moreover, less than one-fifth (19.7%) were in agreement with the statement that 'hotels educate their guests'. This pre-supposes that hotels in Accra were not doing enough to involve their guests in their environmental management activities though these guests could be more crucial to the realization of the environmental targets of such hotels (Anguera *et al*, 2000). Respondents were uncertain that hotels contribute to environmental protection and conservation (M = 3.14) and to global environmental problems (M = 3.25). Also, most respondents (87.1%) agreed that hotels have a responsibility to preserve and protect natural areas. Hotels therefore have a duty to protect the environment and when they live up to that responsibility they would be preferred by tourists since 82.4% of the respondents indicated that they were more likely to book hotels with responsible environmental attitude.

Environmental activities influencing choice of hotel

Respondents generally felt that some environmental activities undertaken by hotels influenced their choice of hotel as observed in Table 2. Considerations which strongly influenced choice of hotel were 'good sanitation practices' (M = 3.86) and 'location in clean and green environment' (M = 3.89).

These findings lend further credence to previous findings that cleanliness is one of the most important factors influencing the choice of accommodation (Dolnicar, 2002; Lockyer, 2003). A clean environment probably assures tourists of their environmental health and the quality of services to expect from a hotel.

Table 2 Environmental activities influencing choice of hotel

Environmental activities of hotels	N	No influence	Some influence	Strong influence	Mean	Std. Dev.
Use of recycled materials such as paper and plastic	341	32.6	52.5	15.0	2.30	1.15
Use of water and energy-efficient appliances	341	17.3	46.9	35.7	2.88	1.20
Use of local materials	339	18.9	55.8	25.4	2.69	1.16
Design which reflects the local architecture and landscape	338	13.6	50.5	35.8	2.97	1.14
Contribution towards the conservation of the environment	339	14.5	49.3	36.2	3.02	1.17
Use of home or locally grown vegetables and fruits	339	27.4	44.3	28.3	2.62	1.29
Promotion of towel and napkins reuse programmes	336	27.4	50.0	22.6	2.53	1.25
Good sanitation practices	341	5.9	23.8	70.4	3.86	1.11
Location in a clean and natural environment	341	5.3	22.6	72.2	3.89	1.06

However, the hotels' use of recycled materials had the least influence (2.30) on choice of hotel by the tourists. Almost a third of respondents (32.6%) believed it had no influence on their choice of hotel. It appears from the foregoing that tourists placed higher premium on the physical appearance of the environment; namely how clean, healthy or green the physical environment of the hotel is. Environmental activities of hotels that reinforced conservation of resources and enhanced the well-being of host communities such as 'use of recycled materials', 'use of water and energy-efficient appliances' and 'use of home or locally grown vegetables

and fruits' did not have much influence on tourists' choice of accommodation.

Willingness to pay more for a stay in environmentally-responsible hotel

Studies by IHEI (2002) have revealed that most tourists preferred to stay in hotels with a responsible environmental attitude. Indeed, almost all respondents (96%) indicated that they preferred to stay in hotels which take good care of the environment.

Figure 1 Extra Amount Tourists are willing to Pay
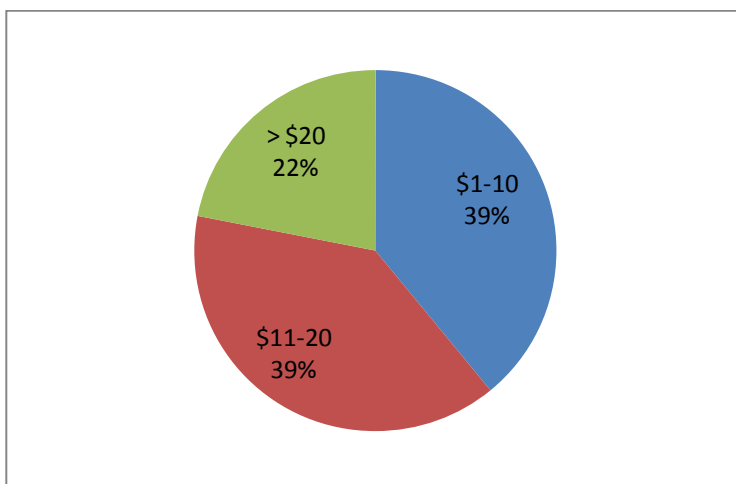
This epitomizes growing green consumerism and environmental consciousness among tourists, from especially the developed world; since most of the respondents were from Europe and North America. It also coincides with the results of a poll conducted by Accor in Sydney where 90% of guests polled preferred to stay in hotels that cared for the environment (Hotelonline, 2000). Also, 84% were willing to pay more for their stay in a hotel which was environmentally responsible.

This result confirmed previous studies by Arias et al. (2003), Masau & Prideaux (2003) and Han et al. (2009) which indicated that tourists were willing to pay more for their stay in environmentally-friendly

accommodation. For those who were willing to pay more for a stay in an environmentally responsible hotel, 39% of them were willing to pay between $1-10 for a one-week stay as shown in Figure 1.

Table 3 Willingness to Pay More and Socio-demographics

| Characteristic | Willing to pay more | | x^2 | p-value |
	Yes	No		
Age (n= 341)				
Less than 20	9.4	21.8	13.352	0.010*
21-29	45.1	54.5		
30-39	21.3	14.5		
40-49	14.0	7.3		
50 or more	10.1	1.8		
Total	100	100		
Gender (n= 342)				
Male	42.5	47.3	0.427	0.306
Female	57.5	52.7		
Total	100	100		
Level of Education (n = 342)				
Secondary	15.0	25.5	4.722	0.094
Bachelors or HND	52.6	52.7		
Masters or Doctorate	32.4	21.8		
Total	100	100		
Religion (n = 303)				
Christian	77.0	70.2	9.003	0.061
Moslem	4.3	4.3		
Jew	5.5	2.1		
Non-religious	9.8	23.4		
Other	3.5	0.0		
Total	100	100		
Marital Status (n = 329)				
Single	62.8	82.7	7.860	0.020*
Married	27.8	11.5		
Separated	9.4	5.8		
Total	100	100		
Annual Income (n = 307)				
Less than $25000	22.0	33.3	8.201	0.145
$25000-$34000	24.7	35.4		
$35000-$44000	18.9	10.4		

$45000-$54000	13.9	6.3		
$55000-$64000	11.2	8.3		
$65000	9.3	6.3		
Total	100	100		
Continent ($n = 330$)				
European	55.0	70.0	5.654	0.130
American	34.6	24.0		
Asian/Oceanic	5.0	0.0		
African	5.4	6.0		
Total	100	100		

significant at the p < 0.05 significance level

The same percentage was willing to pay between $11-20. It could also be deduced from this finding that it pays to be environmentally-responsible since guests are willing to pay more for a stay in environmentally-responsible hotels. Hotels can therefore cash in on their environmental management and sustainability programmes.

Available literature suggests that guests' willingness to pay for environmentally friendly products and services is related to their socio-demographic variables such as age, sex and religion. Table 3 shows a chi-square test at $p < 0.05$ which indicate that only marital status and age were significantly related to willingness to pay more. There were also strong relationships between willingness to pay and level of education (p = 0.094) as well as religion (p = 0.061). However, the relationship was only significant at the $p < 0.10$ level. Majority of respondents who were single (82.7%) were not willing to pay more for accommodation in environmentally friendly hotels. Relatively more of the married people were willing to pay more (27.8%) than those who were not (11.5%). Also, there were less singles willing to pay more (62.8%) compared to those not willing to pay more (82.7%).

A similar trend was observed in terms of age and willingness to pay. There were more people under 20 years (21.8%) who were not willing to pay more than those willing to pay more (9.4%). However, a greater percentage (10.1%) of those who were 50 years and above were willing to pay more compared to of those not willing to pay (1.8%). The older a person, the greater the willingness to pay more for a hotel that is environmentally-responsive, a finding which is consistent with that of Han et al (2009) who revealed that older customers have a stronger willingness to pay more for a green hotel.

CONCLUSIONS AND RECOMMENDATIONS

First, the positive environmental attitude of tourists, provides enormous opportunities for improving the environmental performance of hotels. The majority of respondents (87.1%) agreed that hotels have a responsibility to preserve and protect the environment and that they (82.4%) are more likely to book a hotel with a responsible environmental attitude. The majority of international tourists had a positive attitude towards environmental management by hotels. They expected hotels to protect the environment and they preferred to stay in hotels which protect the environment. In fact, 95.9% of respondents indicated that they prefer to stay in a hotel which takes good care of the environment.

Tourists therefore believe that hotels have a responsibility to protect the environment and they are also more likely to book a hotel with a responsible environmental attitude. In fact, they are even willing to pay more for a stay in a hotel which is environmentally responsible. This should provide the needed impetus for hotels to embark on environmental management programmes, knowing that such efforts will be appreciated and rewarded. It is also a recipe for the success of environmental management programmes initiated by the hotels since guests will be willing to play an active role if only they are involved.

The environmental-consciousness among international tourists and their preference for hotels which are environmentally-responsible has implications for future demands for hotels and consequently, hotel development. Tourists consider the environmental conditions of hotels before patronizing them. The study reveals that good sanitation practices and location in a clean and green environment are the most important considerations for choosing a hotel by international tourists. It means that hotels which remain unclean and impact adversely on the environment risk losing some of their customers. It is therefore hotels that offer a clean, green and healthy environment that will remain competitive and not necessarily those that offer the best of facilities and amenities.

Finally, the hotels must also step-up environmental education among their guests. Only 19.7% of respondents agreed that hotels educate their guests on environmental responsibility. The hotels must make their guests an integral part of their environmental management activities. Before guests check into their rooms, they must be informed about the environmental programmes the hotel is undertaking and what is expected of them. Such information should also be readily available on the websites of the hotels. Hotels could also provide bulletin boards at their receptions which will display environmental information and tips. Frontline staff should be educated so that they can in turn dialogue with

guests. Verbally engaging guests and responding to their queries and concerns would be more effective than merely displaying notices on environmentally-responsible behaviour expected from guests.

REFERENCES

Andereck, K.L. (2008). Tourist perception of environmentally friendly innovations. Http://www.besteducationnetwork.org. Accessed the 15 th of March 2008 at 07:45.

Anguera, N., Ayuso, S., & Fullana, P. (2000). Implementation of EMS in seasonal hotels; Assuring stability. In R. Hillary (Eds.), *ISO 14001 Case Studies and Practical Experiences*. Sheffield, UK, Greenleaf Publishing Ltd.

Arias, E., Becerra, M., Muñozy, C. & Sainz, J. (2003). *Tourists' willingness to pay for green certification of hotels in Mexico*. Instituto Nacional de Ecología.

Baysan, K. (2001). Perceptions of the environmental impacts of tourism: a comparative study of the attitudes of German, Russian and Turkish tourists in Kemer, Antalya. *Tourism Geographies,* Vol. 3, No.2, pp.218-235.

Boakye, K.A. (2010). Studying Tourists' suitability as crime targets. *Annals of Tourism Research,* Vol. 37, Issue 3, pp.727-743.

Carrus, G., Bonaiuto, M. & Bonnes, M. (2005). Environmental concern, regional identity and support for protected areas in Italy. *Environment and Behaviour*, Vol. 37, No.2, pp.237-257.

Condé Nast Traveler (2007). *The Ethical Traveler Index*. Http://www.concierge.com/cntraveler/articles/10771?pageNumber=11. Accessed the 8 th of October 2011, at 2.35.

Crouch, G., Devinney, T., Dolnicar, S., Huybers, T., Louviere, J. & Oppewal, H. (2005). New horses for old courses. Questioning the limitations of sustainable tourism to supply-driven measures and the nature-based contexts. ANZMAC CD Proceedings.

Dolnicar, S. (2002). Business travellers' hotel expectations and disappointments: A different perspective to hotel attribute importance investigation, Faculty of Commerce Papers, University of Wollongong. Http://ro.uow.edu.au/commpapers/42. Accessed the 3 rd of February 2010, at 15:15.

Dolnicar, S. (2010). Identifying tourists with smaller environmental footprints. *Journal of Sustainable Tourism*, Vol. 18, No.6, pp.717-734.

Foster, S.T., Sampson, S.E. & Dunn S.C. (2000). The impact of customer contact on environmental initiatives for service firms. *International Journal of Operations and Production Management*, Vol. 20, No.2, pp.187–203.

Han, H., Hsu, L.J. & Lee, J. (2009). Empirical investigation of the roles of attitudes toward green behaviours, overall image, gender, and age in

hotel customers' eco-friendly decision-making process. *International Journal of Hospitality Management*, Vol. 28, pp.519-528.

Holden, A. (2000). *Environment and Tourism*. New York, Routledge.

Hotel Online Special Report (2000*)*. Environmental survey shows growing importance of environment for hotel guests. Http://www.hotelonline.com/News/2000-3rd/Sept00-EnvironmentGuests.html. Accessed the 3 rd of September 2000, at 20:18.

International Hotels Environment Initiative (IHEI), Consumer Attitudes Towards the Role of Hotels in International Environmental Sustainability, Press release of report commissioned by Small Luxury Hotels of the World. Http://www.hotelonline.com/Neo/News/PR2002_3rd/Jul02_IHEI.html. Accessed the 23 rd of July 2002, at 6.15.

Johnson, C. Y., Bowker, J. M. & Cordell, H. K. (2004). Ethnic variation in environmental belief and behavior: An examination of the new ecological paradigm in a social psychological context. *Environment and Behaviour*, Vol. 36, pp.157-186.

Kals, E., Schumacher, D. & Montada, L. (1999). Emotional affinity towards nature as a motivational basis to protect nature, *Environment and Behaviour,* Vol. 31, No.2, pp.178-202.

Kotler, P., Bowen, J., & Makens, J. (1999). *Marketing for Hospitality and Tourism* (2nd ed.). Upper Saddle River, N.J, Prentice- Hall Inc.

Laroche, M., Bergeron, J. & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, Vol. 18, No.6, pp.503–520.

Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, Vol. 18, No.6, pp.503–520.

Lee, W.H. & Moscardo, G. (2005). Understanding the impact of ecotourism resort experiences on tourists' environmental attitudes and behavioural intentions. *Journal of Sustainable Tourism,* Vol. 13, No.6, pp.346–565.

Lockyer, T. (2003). Hotel cleanliness- how do guests view it? Let us get specific. A New Zealand study. *International Journal of Hospitality Management*, Vol. 22, pp.297-305.

Manaktola, K. & Jauhari, V. (2007). Exploring consumer attitude and behaviour towards green practices in the lodging industry in India. *International Journal of Contemporary Hospitality Management*, Vol. 19, No.5, pp.364-377.

Market and Opinion Research International (2002). *Package Holidays 2002*. London: Association of British Travel Agents (ABTA).

Masau, P. & Prideaux, B. (2003). Sustainable tourism: A role of Kenya's hotel industry. *Current Issues in Tourism*, Vol. 6, No.3, pp.197-208.

Millar, M. & Baloglu, S. (2011). Hotel guests' preferences for green guest room attributes. *Cornell Hospitality Quarterly,* Vol. 52, No.3, pp.302-311.

Sarigöllü, E. (2009). A cross-country exploration of environmental attitudes, *Environment and Behaviour*, Vol. 41, No.3, pp.365-386.

Schultz, P.W., Zelezny, L. & Dalrymple, N.J. (2000). A Multinational Perspective on the relation between Judeo-Christian religious beliefs and attitudes of environmental concern. *Environment and Behaviour*, Vol. 32, No.4, pp.576-591.

Smith, S.M. & Haugtvedt, C.P. (1997). Implications of understanding basic attitude change processes and attitude structure for enhancing pro-environmental behaviours. In M.J. Polonsky & A.T. Mintu-Wimsatt (Eds.), *Environmental Marketing* (pp.155-176), Binghamton, New York: Haworth Press.

Vining, J. & Ebreo, A. (1990). What makes a recycler? A comparison of recyclers and non- recyclers, *Environment and Behaviour*, Vol. 22, pp.55-73.

Weaver, D.B. & Lawton, L.J. (2002). Overnight ecotourist market segmentation in the Gold Coast hinterland of Australia. *Journal of Travel Research,* Vol. 40, pp.270–280.

World Business Council for Sustainable Development (2008). Sustainble consumption facts and trends, from a business perspective. Http://www.wbcsd.org/DocRoot/I9Xwhv7X5V8cDIHbHC3G/WBCSD_Sustainable_Consumption_web.pdf. Accessed the 15 th of October 2011, at 2.30.

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APPENDIX

Survey Instrument

Module A: Environmental attitudes of respondents

1. What type of hotel are you currently staying in?
    i) Bed and breakfast ☐   iv) midscale   ☐
    ii) Budget ☐   v) upscale/luxury ☐
    iii) Guest House ☐   vi) Other (specify)
....

2. *Please indicate the extent to which you agree or disagree with the following statements, using the following scale.*

	1 Strongly Disagree	2 Disagree	3 Neither agree nor disagree	4 Agree	5 Strongly Agree
a) Hotel development and operations destroys the environment					
b) Hotels have a responsibility to preserve and protect natural resources					
c) I am more likely to book a hotel with a responsible environmental attitude					
d) All hotels that claim environmental responsibility are indeed so					

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e) Hotels educate their guests on environmental responsibility					
f) Hotels that claim to be environmental-conscious, do so to enhance their images.					
g) Hotels contribute to the global environmental problems					
h) Hotels contribute to environmental protection and conservation					

3. Do you prefer to stay in a hotel that takes good care of the environment?

    i) Yes ☐   ii) No ☐

4. a). Will you be willing to pay more for a hotel you know is environmentally responsible?

    i) Yes ☐   ii) No ☐

  b). If yes, how much extra will you be willing to pay for a one week stay in a hotel?

i) $ 1- $5 ☐	iii) $11-15 ☐	v) $21-25 ☐
ii) $ 6-10 ☐	iv) $16-20 ☐	vi) $26+ ☐

5. *Please indicate the extent to which the following influenced your choice of hotel.*

	No influence	Little influence	Some influence	Strong influence	Very strong Influence
a). Hotel's use of recycled materials such as paper and					

plastic					
b).Hotel's use of water and energy-efficient appliances					
c). Hotel's use of local materials					
d). Hotel designed to reflect the local architecture and landscape					
e). Hotel's contribution towards the conservation of the environment					
f). Hotel's use of home or locally grown vegetables and fruits					
g). Existence of towel and napkins reuse programmes in hotel					
h). Hotel's good sanitation practices					
j). Hotel's location in a clean and natural environment					

Module B: Socio-economic characteristics of respondents

1. Age
   I) Under 20   iii) 30-39   ☐   (v) 50-59   ☐
   ☐
   ii) 21-29   iv) 40-49   ☐   (vi) 60 or more ☐
   ☐

2. Sex: a) Male ☐   b) Female ☐

3. Marital Status: a) Single ☐   b) Married ☐   c) Separated
   ☐   d) Widowed ☐

4. Educational Background
   i) Grade School/primary   ☐   iv) university/polytechnic
   graduate ☐
   ii) High school/secondary   ☐   v) Postgraduate
      ☐
   iii) Technical/vocational   ☐

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5. Religion
   i) Christian ☐   iii) Muslim   ☐   v) Jewish
☐
   ii) Hindu   ☐   iv) Others (please specify)………...............

6. Annual Income
   i)Under $2500   iii) $35000-$44000   v) $55000-$64000 ☐
☐   ☐
   ii) $2500-$34000   iv) $45000-$54000   vi) $65000+   ☐
☐   ☐

7. Nationality..

THE ROLE OF TOURISM IN SUSTAINABLE DEVELOPMENT STRATEGIES

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In recent years, sustainability has become a fundamental component of all planning processes, while, on the other hand, tourism is seldom seen as a key or priority sector in overall planning. In this article, diverse approaches to sustainable planning that include tourism are examined in order to provide a conceptual framework and some points of reference to contextualize the posterior analysis of a recent planning process undertaken in Catalonia, Spain. The discourse focuses on the proposals, the difficulties encountered in establishing objectives and indicators, leading finally to an evaluation of the suitability and foreseeable effectiveness of the measures approved.

INTRODUCTION

This article briefly examines diverse approaches to sustainable planning that include tourism in order to provide a conceptual framework and some points of reference that contextualize the posterior analysis of a recent planning process undertaken in Catalonia, Spain, in which the authors of this article were engaged as "external tourism experts". The final document was a multi-sector *Strategy for Sustainable Development in Catalonia* (Generalitat de Catalunya, 2010) which obviously included

the tourism sector as one of the components. By tracing the process, the recommendations made with respect to tourism and the final outcome in the form of a strategy document, the authors intend to illustrate some of the difficulties incurred in planning towards more sustainable forms of tourism in the general context of sustainable development planning. Catalonia constitutes an excellent case to study, given the complexity of the region due to its key role in Spain's tourism sector combined with a varied and well developed economy based on both industry and agriculture in a rich natural environment.

In recent years it has almost invariably become general practice to incorporate the sustainable development paradigm in regional and sector planning in order to enrich its approach and procedures. To all effects, sustainability has become a fundamental component of all planning processes. This approach has been incorporated into tourism planning over the last two decades (Dutton & Hall, 1989; Inskeep, 1991; Eber, 1992; WTO, 1993; Bramwell, Henry, Jackson, & Van Der Straaten, 1996; Berke & Manta-Conroy, 2000; Berke, 2002; Gunn & Var, 2002; WTO, 2004; Weaver, 2006; Hall, 2007; Tourism Sustainability Group, 2007; Ruhanen, 2008; Soteriou & Coccossis, 2010). In contrast, tourism is seldom seen as a key or priority sector in overall planning processes, in spite of its economic importance in many regions (Dredge & Moore, 1992; Connell, Page, & Bentley, 2009). Moreover, although sustainability appears as the underlying focus of planning, its meaning is seldom defined and not always clearly understood.

In consonance with the tourism sector's assumption of a key role in an increasing number of countries and regions, specific development plans have been drawn up worldwide, but tourism has also been incorporated into general planning strategies. Soteriou and Coccossis (2010) examined a wide range of strategic and sustainability planning experiences among European national tourism organizations (NTO). They identified a large number of dimensions that had been addressed in planning. Of these the most frequently encountered were (in descending order): respecting the carrying capacity of ecosystems; conservation and protection of the natural and socio-cultural heritage; minimizing negative economic, environmental, cultural and social impacts; addressing the needs of both current and future generations; adopting a long-term perspective; addressing equally economic, environmental and socio-cultural issues; environmental management systems and eco-labels. They also identified the tools most frequently used in tourism planning and these proved to be traditional strategic instruments, such as cost-benefit analyses and feasibility studies. Some useful sustainability tools had been

incorporated by about half the NTOs analyzed, including carrying capacity studies, forecasting and trend analysis, impact assessment studies and sustainability indicators. This study also revealed certain defects and aspects of tourism planning with room for enhancement: better communication, involvement and training of tourism partners in order to create a more supportive environment for effective operation that, in turn, could lead to improvement for the operationalization of sustainability in tourism; increased attention to the concept of social equity; greater importance attributed to local concerns and wider participation in recognition of the interdependences of tourism with other sectors.

Further challenges that handicap tourism planning were identified by Cooper, Ruhanen, & Craig-Smith (2004), consisting of: inadequate statistical reporting; and the complexity of a multi-sector industry and its fragmentation in multiple SMEs that make it difficult to coordinate knowledge management. Likewise, in Soteriou and Coccossis's (2010) analysis, various limiting factors in tourism planning were identified. First and foremost, the lack of statistical data, information, impact measurement and research in general were pinpointed, followed by pressures exerted through political influences or private sector demands. The almost universally recognized lack of statistical references constitutes a serious handicap in the establishment of indicators to evaluate impacts and the application of measures and hence monitor progress towards the goals established in any strategy**.**

ANTECEDENTS AND METHODOLOGY APPLIED IN THE CATALONIAN STRATEGY

As is well known, Catalonia is a key national and international tourism destination and tourism is undoubtedly a strategic sector in the region's present -and presumably also future- economy. Its importance is widely recognized not only among economic and political stakeholders, but also the general public. One would therefore expect its future sustainable development to be considered a priority issue in the framework of general regional policy. Understandably, the Catalan government's Strategic Plan for Tourism 2005-2010 (Generalitat de Catalunya, 2006) pinpointed sustainability as one of the key leitmotifs. It also commissioned a report on European experiences in sustainable tourism applicable in Catalonia in 2007 (Sabaté, 2007). The more recent Strategy for Sustainable Development in Catalonia (EDSCAT) document, drawn up between 2008 and 2010 (and approved by the Catalan government on 31st August 2010) is a wider ranging strategy, intended to

guide development within sustainability parameters in the north-eastern region of Spain until the year 2026 (Generalitat de Catalunya, 2010).

The process, carried out under the direction and coordination of the Department for the Environment, was divided into two phases (Llurdés, Priestley, & Romagosa, 2009). The first consisted of individual sector analyses and diagnosis by independent "experts", corresponding to three groups: the main economic sectors -agriculture and forestry, industry, trade, tourism-; territorial elements -urban growth, transport and mobility, natural areas-; and public services -water, energy, waste. All the reports followed a unified methodology: each diagnosis included an analysis of the main impacts; the identification of a number of objectives and challenges to be addressed; the related strategic objectives to be achieved; and a list of tools and actions to be applied. The impacts were grouped under four main headings: territorial, environmental, climatic and socio-economic variables. Indicators related to these impacts and challenges were also pinpointed, in order to make it possible to monitor progress in the achievement of objectives. The result is the formulation of a preliminary list of proposals that would increase sustainability, a comprehensive proposal that combines the main findings of the various specialised reports (Llurdés, Priestley, & Romagosa, 2009). Uniformity was sought in order to facilitate the drawing up of a coherent and well coordinated strategy as the end product of the second phase. The first phase also included a process of public participation in which the corresponding stakeholders were invited to offer their opinions and attend a presentation session in which the experts' proposals were discussed and revised, together with consultations with the various government departments and sectorial organisations and organisms.

The second phase of drawing up the Strategy was much more complex, as the ultimate objective was to bring together all the sectorial proposals within the wider framework of a common, applicable development strategy. Hence, consensus was sought among the different experts and the strategy directors in the selection of a number (finally 40) of broad-based challenges or objectives as an "umbrella" for the more specific sector objectives. Each sector then identified its priority objectives within this list and proceeded to draw up individual fact sheets for each priority challenge, depicting three scenarios for future development: the projection of current trends, legislative or policy limits as defined at present (if such existed), and limits considered to conform to sustainability objectives (obviously the stated goal of the strategy). A further requirement was the indication of specific actions that could achieve these objectives, together with equally specific, measurable

indicators to monitor progress in the future that constituted an essential component of the final document. The methodology applied certainly conforms to standard practice in the formulation of strategies.

Coccossis (1996) suggested four possible interpretations for tourism in the context of sustainable development: from a tourism sector point of view, stressing economic sustainability; from the perspective of ecological sustainability; focusing on the long-term competitiveness of a destination; and tourism seen as part of a development strategy in the overall physical and human environment. Taking this into account, it could be said that the first phase of the strategy incorporates the first three perspectives -economic and ecological sustainability and long-term destination competitiveness-, while the second phase is approached from Coccossis's fourth perspective -tourism seen as part of a development strategy in the overall physical and human environment.

DRAWING UP THE STRATEGY: THE TOURISM REPORT IN PHASE I

Spain emerged as a tourism destination in the late 1950s when the economies of the main European countries had begun to recover from World War II, Spain's ostracism in its aftermath was receding and the sun, sand, sea paradigm was blossoming. Spain's Mediterranean fringe and island archipelagos constituted ideal destinations. The sector grew very rapidly over the following three decades (1960–1990) –before the application of sustainability principles-, largely without control and totally devoid of planning, as the country's priority was the acquisition of foreign exchange for much needed industrial and urban development (Priestley and Llurdés, 2007). It is now undoubtedly one of the world's top tourism destinations, placed 4th in international arrivals and 2nd in income (UNWTO, 2013) and, within Spain, Catalonia is placed first in supply (3 million beds of which 531,000 are commercially exploited), international arrivals (25%) and income (19.5%) (Instituto de Estudios Turísticos 2009a). In domestic tourism, Catalonia is the second destination with 22.4 million visits (14.5% of the total), confirming the importance of the region in global terms (Instituto de Estudios Turísticos, 2009b).

The main characteristics of tourism in Catalonia can be summed up as follows: tourism forms part of the region's economic structure and has served a vertebrate role in the territory; demand, largely based on the sun, sand and sea product, is highly seasonal and supply is concentrated on the coast and principally in a number of large scale resorts in Costa Brava and

Costa Daurada (Roses, Lloret de Mar, Calella, Salou, for example) (Observatori de Turisme de Catalunya, 2010a); the source of demand is diverse (both national -more concentrated on the Costa Brava, Costa Daurada and in the Pyrenees- and international -more concentrated in Barcelona and on the Costa Brava-) (Observatori de Turisme de Catalunya, 2010b); both the private and public sectors participate actively; it is a very mature but dynamic destination where signs of changes can be distinguished in recent years. The wide variety of landscapes have made it possible to develop other traditional types of tourism, such as winter sports (in the Pyrenees) and urban / cultural tourism (Barcelona, Tarragona, Girona, for example), together with more innovative forms, including rural and gastronomic tourism. This is not only in response to demand, but also a result of the creation of new products and supply -especially inland- where tourism is seen as an opportunity able to contribute to the economic and social sustainability of many rural areas (López, 2009).

The authors based their report on available data and publications, together with their accumulated experience as researchers in many projects related to tourism in Catalonia. As a result of the early expansion of large scale tourism in Catalonia, the sector is faced with two different sets of challenges: the correction of deep-rooted defects in many of the consolidated resorts and the implantation of sustainable practices in currently developing destinations. In order to achieve the relative overall sustainability of mature destinations, a balance must be found between the somewhat limited carrying capacity of many natural resources and the operative viability of certain consolidated infrastructures and services that generate employment (Priestley & Mundet, 1998; Priestley, 2007). It is in the light of these considerations that this analysis was undertaken bearing in mind the inherent difficulties of the reconversion of such destinations, a process that is already being addressed by many municipalities through product diversification and destination quality improvements (Donaire & Mundet, 2001).

One of the principal problems that have to be addressed is the impact of large resorts in coastal areas. However, it is the huge number of second homes that generates greatest impact, due not only to their volume, but also to the predominantly low density construction, their dispersion and preference for attractive locations. Moreover, they are notably less sustainable in social and economic terms than commercial forms of tourism, as the occupancy rate is very low, many being occupied for only a few weeks in the year. An additional aspect closely related to tourism sustainability is the temporal and spatial pattern of demand. Foreign

demand focuses on the coast (in summer) and in Barcelona (throughout the year), while the pattern of domestic tourism, especially that of the Catalan population, shows a trend towards the diffusion of demand inland (Observatori de Turisme de Catalunya, 2010b). Hence, in spite of trends towards product and territorial diversification, the reduction of seasonality is still a key challenge, as in some cases it prejudices the economic viability of certain enterprises and, in general, it has highly negative impacts on the employment structure, creating a large number of seasonal jobs.

Meanwhile, new factors have appeared to complicate the scenario: a worldwide economic crisis and the acceleration of climate change. Tourism has always shown resilience in the face of crisis, but, even so, increasing international competition makes it absolutely essential to apply sustainability criteria in all future developments. The main risks as a result of climate change are: a rise in sea level which would undoubtedly affect the infrastructures associated with coastal tourism; an increase in temperatures, which could affect the seasonality of activities and hence demand (with a move towards spring and autumn), the viability of winter sports tourism, and water and energy consumption in general (Esteban, López, & Aguiló, 2005; Saurí & Llurdés, 2010). Hence, planning for the future is fundamental in guaranteeing the sustainability of the "tourism environment" and of the economy and eventually will require actions that affect the land, infrastructures and the configuration of products.

On the basis of detailed analysis, a long list of specific impacts and challenges was drawn up, constituting a schematic but comprehensive diagnosis of the situation and indicating multiple proposals for ensuring the future viability of tourism in Catalonia, while respecting sustainability parameters. The proposals include many measures aimed at: the intensification of planning instruments for key destinations where viability is at risk (mass coastal and ski resorts) and for the management of natural protected areas; incentivising measures towards the creation and expansion of tourism products that favour diversification and reduce seasonal concentration of demand; encouraging the use of collective tourist lodging (rather than private properties); the more widespread application of sustainable management practices (water and energy saving, waste reduction and waste recycling) including environmental certification systems; upgrading employment by increasing training and incentivising the creation of permanent jobs.

This could appear to be a wish list of good practices for any destination, but the proposals included numerous specific actions to be taken and called on the public administrations to assume greater

leadership in both the design and promotion of integrated products through the coordination of all the stakeholders throughout the region and to provide assistance and grants to implement some measures. These would include, for example: the obtainment of environmental certification systems, for both environmental management systems (ISO 14000 or EMAS) and environmental quality branding (Catalan Eco-label or European Ecologic Label); the introduction of renewable energy sources beyond the existing obligatory regulations (Technical Building Code). The proposals coincide with current legislation and policy, but go several steps further by indicating many specific measures that could be applied, by requesting renewed vigour, more intensive action, greater public leadership and more incentives for private sector participation.

PHASE II: TOURISM IN THE OVERALL MULTI-SECTOR STRATEGY

As already indicated, the second phase of drawing up the Strategy was much more complex, due to the fact that the elements chosen had to fit into this wider picture; there was considerable divergence on some of the key objectives, especially the specific sector-related priorities. Finally, aspects related to the natural and rural environment (protected areas, agriculture) and transverse objectives (improvements in the use and management of water, energy and waste) took preference over specific sector-related priorities. In addition, the evaluation of the importance of each challenge for each sector –an additional component of the process- is not by any means a mathematical exercise and thus depended on subjective assessments. Hence, of the 40 challenges identified for the different sectors (industry, construction and regional planning, agriculture, commerce, tourism, energy, transport and mobility, home and administration), only 16 could be classified as of "very high" or "high incidence in tourism" (Generalitat de Catalunya, 2010) and these did not by any means include all the challenges that had been pinpointed as of great importance for the tourism sector. In this way, the wide range of proposals for the sector put forward in the first phase were reduced to relatively few priority objectives; obviously, in this wider and multi-sector context, tourism had lost protagonism (Table 1).

Moreover, the challenges had to be accompanied by equally specific, quantifiable indicators to monitor progress, for which a requisite was obviously the existence of reliable data over a period of time in the past and the possibility of collecting it in the future. This requisite had negative consequences for the role of tourism, as the tourism proposals

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could not always comply with this condition. In fact, the difficulty of identifying valid indicators for monitoring progress in achieving sustainability in the tourism sector is a problem also identified elsewhere (Orams, 1995; Berry & Ladkin, 1997; Swarbrooke, 1999; Ruhanen, 2008). Hence some challenges that were considered important by the authors had to be discarded and others –the majority- evaluated with indicators that can constitute no more than a partial measurement.

As noted, the following step was the drawing up of individual fact sheets for each priority challenge that, therefore, constituted simple guidelines for implementation. A comparison between the interim and final documents reveals the clear differences between the ambitious challenges, objectives and measures outlined in the first phase tourism report and the tourism-related contents of the general strategy drawn up in the second phase.

Table 1 Priority challenges for tourism and corresponding indicators

	General challenge / objective	Indicator (related to tourism)
1	Minimise built-up surface and promote efficient land use	% of total land surface built up
4	Promote integrated management of areas with specific characteristics (coasts, high mountain areas, etc.)	Nº of environmentally certified beaches / Nº of second homes
8	Introduce eco-efficiency and landscape integration criteria and measures in construction	% of environmentally certified tourism accommodation establishments
9	Guarantee conservation of species, habitat and geological heritage, while increasing knowledge about them	Area of protected natural areas
11	Upgrade socio-environmental services and the protective and productive functions of the natural and agro-forest systems	Nº of visitors to each protected natural area
12	Integrate natural heritage conservation objectives in sector policy, especially in rural areas	% of protected natural areas with Specific Protection and Management Plans
13	Complete the system of protected natural areas, guaranteeing their sustainable management	% of protected natural areas with Specific Protection and Management Plans

14	Significantly increase the quota of sustainable mobility of both people and merchandise	% of sustainable trips (i.e. using public transport) for leisure purposes
24	Ensure the availability of water resources, especially in inland basins	Annual water consumption
25	Reduce water consumption through increased efficiency	Annual water consumption
27	Reduce waste production and encourage recycling	Total volume of waste produced by the tourism sector
28	Increase selective waste collection the enhancement of materials, reduce waste requiring final disposure, in accordance the objectives of sector Plans	% of selective waste collection in the tourist sector
34	Promote agricultural production, manufacturing and service provision based on sustainability criteria	% of environmentally certified tourism accommodation establishments
37	Introduce tools / measures that guarantee the diversification and future viability of economic activity according to sustainability criteria	Degree of non-seasonality in tourism sector
38	Increase employment in added-value activities that, in addition, produce products and offer services that are more energy efficient, use fewer materials and contaminate less	% of permanent jobs (over total nº) in tourism sector
40	Draw up and implement strategies to adapt to climatic change	% of environmentally certified tourism accommodation establishments

DISCUSSION

At the outset, it must be recognized and accepted that, given that the construction of tourism infrastructure has already left a considerable imprint, thus damaging the landscape and, by and large, causing irreversible impact, expansion can be slowed down and the quality of the "tourism environment" upgraded, but, to be realistic, major changes cannot be contemplated. Contradictory as it may seem in a quest for sustainability, mass tourism cannot and should not be abandoned in Catalonia, as a significant drop in visitor numbers would generate highly negative effects on the economic sustainability of tourism. Moreover, the concentration of supply and demand in a limited number of large scale

destinations can in many respects be more sustainable in environmental terms than spreading impacts throughout a region (as argued in the conceptual framework). Besides, at present, no other economic sector capable of compensating a hypothetical drastic reduction of tourist arrivals can be identified.

The large scale infrastructures are oriented towards four major products -sun, sand and sea; winter sports; urban; and cultural tourism- on which the sector relies heavily and these should retain their predominating role, as they have certain competitive advantages. However, they are threatened by their own excessive success and the first two by the effects of climate change. Hence, the key strategic objectives to guarantee their continued success and relative sustainability can be summed up as: restructuring towards higher quality destinations and infrastructures; monitoring of and adjustments to the possible effects of climate change; diversification towards more specialized niche products that will attract a wider range of client types, additional added value and less concentrated demand in terms of season and location. All this requires impact control, regional planning and management, improved training, incentives for local administrations and private companies, and innovative initiatives and promotion methods.

The types of tourism that have been expanding in recent years (rural, nature and ecotourism, adventure and active tourism and golf) could be developed further, especially as they have certain advantages over the more traditional forms. For example, they do not inherit mass structures and practices, so suitable sustainable strategies can be developed; their location is less concentrated, so the benefits can be distributed better; they can be adapted better to the effects of climate change. Product specific strategic plans should be drawn up, covering the entire territory, followed by a revision of existing regulations and policies. In the case of rural and nature tourism, good management of protected natural areas is especially important. With reference to adventure tourism, it must continue to focus on environmentally unaggressive forms (as already guaranteed, for example, by the prohibition of four wheel drive cars in natural protected areas). Another key question in the case of adventure and active tourism is the commercialisation of the product. Golf tourism is not universally recognised as a sustainable product. Hence, in planning for the expansion of golf tourism, it is essential to design a competitive product that differs from that offered in other regions, while applying the 2003 Environmental Management Plan in order to contribute towards its environmental sustainability, while its economic sustainability has been amply proven (Priestley, 2012).

Certain needs common to all products have also been identified:

- The coordination of all stakeholders and administrative bodies involved, in order to guarantee the homogeneous application of strategies and initiatives throughout the region and a full understanding on the part of entrepreneurs, local populations and political authorities of the competitive advantages of the measures.
- The drawing up of routes, connections and links, not only for each product throughout the region, but also for multi-based products in particular areas.
- Improved identification of roads, routes, accommodation units and activities through clear and uniform signposting and labelling.
- Upgrading of skills and professional training of all employees and personnel at all educational levels.
- The design and application of promotion and commercialisation structures of Catalonia as an integrated unit for the entire range of tourism products.
- Monitoring of all regulations and recommendations related to sustainability at regional level (Generalitat de Catalunya, 2006), national level (Secretaría de Estado de Turismo y Comercio, 2007) and international level as well (European Commission, 2003 and 2007; Tourism Sustainability Group, 2007).

The underlying, overall objectives are therefore to reorient mass tourism, but not eliminate it, while developing more innovative forms on more sustainable parameters. The challenge is awesome and the measures needed are numerous and varied, but the future, not only of tourism in Catalonia is at stake, but also a significant proportion of the region's economy and its sustainable development. To sum up, it could be said that the keys to the future sustainability of tourism in Catalonia emerge as territorial and tourism planning, followed up with adequate management, in order to integrate -rather than fragment- supply and attractions. To this end, thematic products, such as cultural, hiking or cycling routes are extremely important. Finally, quality is also an essential factor, understood as environmental quality, product quality and good service, which can be sought through certification and training, although Sabaté's (2007) analysis of European initiatives concluded that, while the various certification systems are a powerful tool, the proliferation of different systems tends to confuse the general public.

Nevertheless, the final document of the Strategy did not incorporated by any means all of these recommendations, although the sector reports were annexed. There is certainly a considerable difference between the challenges, objectives and proposals for action outlined in the first phase and the contents of the strategy that was finally drawn up. The quest for transversal objectives, consensus on priorities (among which environmental elements assumed protagonism) and the cross-sector applicability of instruments obviously reduced the importance of individual sectors. It would, however, appear somewhat contradictory that, in spite of the significant contribution of tourism to the GNP, this sector was clearly relegated to a secondary role. This is partly explained by the "inter-sectorial" nature of tourism, partly by the sector's need for global rather than purely environmental measures and also partly by the statistical gaps that would make the monitoring of progress -based on quantifiable indicators- impossible in some cases and only partially viable in others (through the use of certification systems as indicators of quality or of the degree of success in the application of sustainable practices). Hence, while the final document constitutes a programme for working towards overall sustainability, its effectiveness in achieving such goals for tourism risks being limited, unless the authorities take into account the numerous recommendations outlined in the sector report. As a result, it is essential to complement this strategy with sector-specific plans incorporating the recommendations in the first phase report.

CONCLUSIONS

The previously explained Catalan strategy initiative should constitute an important contribution for increasing the region's general sustainability. It is certainly a clearly structured plan, developed step by step, from diagnosis, through the phase of definition of strategic challenges to that of specific objectives, to be achieved by means of concrete tools and measures, the success of which will be gauged by indicators. Consensus was sought among the various government departments and private sector stakeholders but, even so, given its ambitious nature, considerable determination and good management will be required in its implementation. Its effectiveness is therefore somewhat unforeseeable. On the other hand, the strategy is by no means sufficient to render tourism development significantly more sustainable.

In general terms, it could be said that this initiative falls within the range of strategic planning processes that have appeared over the last two decades, as outlined in the introduction. It is also clearly illustrative of the

fact observed by various authors (Dredge & Moore, 1992, Connell, Page, & Bentley, 2009) that tourism is not considered a priority sector in overall planning processes, even where it is a key economic sector. Two factors have been pinpointed as the main reasons for this: tourism's inter-sectorial and fragmented nature that weakens its "lobbying" capacity; and a widely encountered trend to focus on purely environmental issues and factors (water and energy consumption, residues, atmospheric contamination, etc.). Hence few stakeholders are waving the tourism banner sufficiently vigorously.

One would, however, suppose that in the case of sustainable strategy design dedicated exclusively to tourism, the results would be very different. But in this case, it has been seen that the difficulties lie largely at the implementation stage. Several years ago Butler (1999) and UNWTO (WTO, 2006 and 2007) already pointed out that, in the case of mature destinations (such as the coast of Catalonia), the accent must be placed on improvement in relative terms in a quest for "more sustainable" tourism -or "less unsustainable" tourism-, if planners are to be truly realistic about the viable objectives. Other handicaps identified elsewhere were the lack of statistical data that would permit the establishment of standards for indicators and accurate monitoring of progress and certainly the authors encountered huge problems in this respect in the Catalan case. In fact, European and other international initiatives are largely limited to policy documents and multiple certification systems, with the consequent overreliance on the latter in strategies, as they really only serve as partial indicators of quality or of the application of sustainable practices. However, these are the main indicators available and hence, in spite of their serious limitations, were almost the only ones that could be proposed in the Catalan strategy. In fact, the lack of valid statistics to facilitate the monitoring process has also been identified by Soteriou and Coccossis (2010) in other countries, so Catalonia is not an exception in this respect.

Bearing the difficulties in mind, a comprehensive approach, focusing on the "big picture", would be more suitable in the case of planning, as Soteriou and Roberts (1998) and Calingo (1989) proposed some years ago, because this would lead to the development of more effective strategies than a formalized process that might inhibit creative thinking. Certainly, the tightly structured process followed in this case has limited the foreseeable effectiveness of the final proposals for the tourism sector. Moreover, most of the authors analysed initially stressed the need to address planning from the perspective of the overall sustainability of tourism development rather than the sustainability of individual elements or components which usually focused on the environment. Although this

is a key issue, long-term perspectives for the industry in general are also fundamental and, in the case of mature destinations, frequently take priority over an environment that has already suffered significant modifications. In fact the overall sustainability of tourism depends on a combination of environmental, economic and social factors (Swarbrooke, 1999) that are difficult to balance. Likewise, it depends on territorial and product integration to a much greater extent than on single, quantifiable actions, as proposed in the strategy.

Many strategic planning tools are available, but virtually all of them require prior studies, the existence of data over long periods of time or the possibility of collecting it in the future. They include topics such as: carrying capacity; environmental impact assessment; coastal zone management; and life cycle, risk and cost-benefit analysis. Data available is usually insufficient or incomplete, causing difficulties not only for the establishment of indicators but also for carrying out analyses. In this sense, as Dodds and Butler (2010: 48) state, "the problem with achieving sustainability lies in implementation rather than definition". Moreover, time, as Lew (2010) points out, is yet another barrier, given that the implementation of proposals or measures over a lengthy time-span risk being ignored or abandoned, unless accompanied by firm, constant political endeavour and determination to implant them, as most stakeholders limit their vision to short-term perspectives.

The decision-making process in the drawing up of the Catalan strategy demonstrated the difficulties involved in making connections between sustainable issues in different industries and activities, thus forming a potential barrier to sustainable development. It would therefore appear that strategic tourism planning could be addressed best through specific sectorial plans, and that these should set broad-based, general objectives, in a quest for long-term, overall sustainable development. This does not imply that the monitoring of specific components through quantifiable indicators should be eliminated, but that these should be combined with a quest for more general sustainability "improvement trends" that cannot be measured exactly.

REFERENCES

Berke, P. (2002). Does sustainability development offer a new direction for planning? Challenges for the twenty-first century. *Journal of Planning Literature*, Vol. 17, No.1, pp.21-36.

Berke, P. & Manta-Conroy, M. (2000). Are we planning for sustainable development? An evaluation of 30 comprehensive plans. *Journal of the American Planning Association*, Vol. 66, No.1, pp.21-33.

Berry, S. & Ladkin, A. (1997). Sustainable tourism: A regional perspective. *Tourism Management*, Vol. 18, No.7, pp.433-440.

Bramwell, B., Henry, I., Jackson, G. & Van Der Straaten J. (1996). A framework for understanding sustainable tourism management. In B. Bramwell, I. Henry, G. Jackson, A.G. Prat, G. Richards and J. Van Der Straaten (Dirs.) *Sustainable tourism management: Principles and practice*. Tilburg, Tilburg University Press.

Butler, R.W. (1999). Sustainable tourism: A state-of-the-art review. *Tourism Geographies*, Vol. 1, No.1, pp.7-25.

Calingo, L.M.R. (1989). Achieving Excellence in Strategic Planning Systems. *SAM Advanced Management Journal*, Vol. 54, No.2, pp.21-23.

Coccossis, H. (1996). Tourism and sustainability: Perspectives and implications. In G.K. Priestley, J.A. Edwards and H. Coccossis (Dirs.) *Sustainable tourism? European experiences*. Wallingford, CABI.

Connell, J., Page, S.J. & Bentley, T. (2009). Towards sustainable planning in New Zealand: monitoring local government planning under the Resource Management Act. *Tourism Management,* Vol. 30, pp.867-877.

Cooper, C., Ruhanen, L. & Craig-Smith, S. (2004). Developing a knowledge management approach to tourism research. In R. MacLellan *et al.* (eds) *Proceedings of the Torism State of the Art II Conference*. Glasgow, University of Strathclyde.

Dodds, R. & Butler, R. (2010). Barriers to implementing sustainable tourism policy in mass tourism destinations. *Tourismos: an international multidisciplinary journal of tourism*, Vol. 5, No.1, pp.35-53.

Donaire, J.A. & Mundet, L. (2001). Estrategias de reconversión turística de los municipios litorales catalanes. *Papers de Turisme*, Vol. 29, pp.50-65.

Dredge, D. & Moore, S. (1992). A methodology for the integration of tourism in town planning. *Journal of Tourism Studies,* Vol. 3, No.1, pp.8-21.

Dutton, I. & Hall, M.C. (1989). Making tourism sustainable: The policy / practice conundrum. In *Proceedings of the Environment Institute of Australia Second National Conference*. Melbourne.

Eber, S. (dir.). (1992). *Beyond the green horizon: A discussion paper on principles for sustainable tourism*. London, WWF and Tourism Concern.

Esteban, A., López, F. & Aguiló, E. (2005). Impactos sobre el sector turístico. In Ministerio de Medio Ambiente *Impactos del cambio climático en España*. Madrid, Ministerio de Medio Ambiente.

European Commission (2003). Basic orientations for the sustainability of European tourism, *Unpublished communication (COM (2003) 716 final.* Brussels.

European Commission (2007). Agenda for a sustainable and competitive European Tourism. *Unpublished communication (COM (2007) 621 final.* Brussels.

Generalitat de Catalunya (2006). *Pla estratègic del turisme a Catalunya 2005-2010*. Barcelona, Departament de Comerc, Turisme i Consum.

Generalitat de Catalunya (2010). *Estratègia per al Desenvolupament Sostenible de Catalunya*. Barcelona, Departament de Medi Ambient i Habitatge.

Gunn, C.A. & Var, T. (2002). *Tourism Planning*. London, Routledge.

Hall, C.M. (2007). *Tourism planning. Policies, processes and relationships* (2nd ed.) Harlow, Prentice Hall.

Inskeep, E. (1991). *Tourism planning: An integrated and sustainable development approach*. New York, Van Nostrand Reinhold.

Instituto de Estudios Turisticos (2009a). *Movimientos Turísticos en Fronteras (Frontur). Informe Anual 2008*. Madrid, Ministerio de Industria, Turismo y Comercio.

Instituto de Estudios Turisticos (2009b). *Movimientos Turísticos de los Españoles (Familitur). Informe Anual 2008. Cataluña*. Madrid, Ministerio de Industria, Turismo y Comercio.

Lew, A.A. (2010). Time as a major barrier to sustainable development. *Tourism Geographies,* Vol. 12, No.3, pp. 481-483.

López, F. (Dir.) (2009). *Atles del turisme a Catalunya*. Barcelona, Generalitat de Catalunya.

Llurdés, J.C., Priestley, G.K. & Romagosa F. (2009). *Estratègia per al desenvolupament sostenible de Catalunya. Informe del sector turístic*. Barcelona, Generalitat de Catalunya.

Observatori de Turisme de Catalunya (2010a). *Oferta de recursos intermedis 2009*. Barcelona, Direcció General de Turisme.

Observatori de Turisme de Catalunya (2010b). *Evolució de l'activitat turística 2009*. Barcelona, Direcció General de Turisme.

Orams, M.B. (1995). Towards a more desirable form of ecotourism. *Tourism Management*, Vol. 16, No.1, pp. 3-8.

Priestley, G.K. (2007). Sostenibilidad, ciclo de vida y desarrollo de los destinos turísticos: hacia un nuevo "modelo" del turismo español. In G.K. Priestley and J.C. Llurdés (Dirs) *Estrategia y gestión del turismo en el municipio*. Bellaterra, Universitat Autònoma de Barcelona.

Priestley, G.K. (2012). El turismo de golf. In J.A. Duro (Dir.) *Índice UAB de actividad turística 2012*. Bellaterra, Universitat Autònoma de Barcelona.

Priestley, G.K. & Llurdés, J.C. (2007). Planning for sustainable development in Spanish coastal resorts. In S. Agarwal and G. Shaw (Eds) *Managing coastal tourism resorts. A global perspective*. Clevedon, Channel View Publications.

Priestley, G.K. & Mundet, L. (1998). The Post-Stagnation Phase of the Resort Cycle. *Annals of Tourism Research*., Vol. 25, No.1, pp.85-111.

Ruhanen, L. (2008). Progressing the sustainability debate: A knowledge management approach to sustainable tourism planning. *Current Issues in Tourism*, Vol. 11, No.5, pp.429-455.

Sabaté, X. (2007). *Turisme sostenible: experiències europees aplicables a Catalunya*. Barcelona, Generalitat de Catalunya.

Saurí, D. & Llurdés, J.C. (2010). El turismo. In J.E. Llebot (Ed.) *Segon informe sobre el canvi climàtic a Catalunya*. Barcelona, Generalitat de Catalunya.

Secretaría de Estado de Turismo y Comercio (2007). *Turismo 2020. Plan del Turismo Español Horizonte 2020. Plan del Turismo Español*. Madrid, Ministerio de Industria, Comercio y Turismo.

Soteriou, E.C. & Coccossis, H. (2010). Integrating sustainability into the strategic planning of national tourism organizations. *Journal of Travel Research*, Vol. 49, No.2, pp. 191-205.

Soteriou, E.C. & Roberts, C. (1998). The Strategic Planning Process in National Tourism Organizations. *Journal of Travel Research*. Vol. 37, No.1, pp.21-29.

Swarbrooke, J. (1999). *Sustainable tourism management*. Oxford, CABI Publishing.

Tourism Sustainability Group (2007). *Action for more sustainable European tourism*. Brussels, European Commission.

United Nations World Tourism Organization (UNWTO) (2013). *UNWTO Tourism Highlights 2013 Edition*. Madrid, UNWTO.

Weaver, D. (2006). *Sustainable tourism*. Amsterdam, Elsevier.

World Tourism Organization (WTO) (1993). *Sustainable tourism development. Guide for local planners*. Madrid, WTO.

World Tourism Organization (WTO) (2004). *Indicators of sustainable development for tourism destinations: A guidebook*. Madrid, WTO.

World Tourism Organization (WTO) (2006). *Structures and budgets of national tourism organizations 2004-2005*. Madrid, WTO.

World Tourism Organization (WTO) (2007). *Davos Declaration. Climate change and tourism. Responding to global challenges*. Davos, WTO – UNEP.

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TOURISM IMPACTS and SUPPORT FOR TOURISM DEVELOPMENT: THE CASE OF PAMUKKALE IN TURKEY

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This study examines the relationship between residents' perceived tourism impacts and their support for tourism development. The study was conducted on local residents of Pamukkale, an ancient resort town in the Aegean region of Turkey that is renowned for its thermal tourism resources in the world. To examine the relationship between variables, tourism impact domains were regressed against the support for tourism. The findings revealed positive relationship between tourism impacts and residents' support for tourism development.

Keywords: *Tourism Impacts, Tourism Development, Pamukkale, Denizli, Turkey.*

JEL Classification: *L83, M1, O1*

INTRODUCTION

Pamukkale is located in the southwestern part of Turkey and borders the city of Denizli. It is considered as one of the most spectacular places in the world with its natural beauty and archeological values (Dilsiz, 2002; Yüksel et al., 1999; Şimşek et al., 2000; Lasaponara et al., 2008). Accordingly, Pamukkale made the UNESCO's World Heritage List in 1988 (Şimşek et al., 2000; Dilsiz, 2002; Yüksel et al., 1999). To protect and preserve this world heritage site, several projects and scientific studies were initiated by the Ministry of Culture and Tourism of Turkey,

the International Research and Application Center for Karst Water Resources and the Governorship of Denizli (Dilsiz, 2001; Şimşek et al., 2000). Two decades ago, scientists from various fields, tourism investors, local authorities and planners participated in an international meeting for the preservation of Pamukkale (Dilsiz, 2001; Yüksel et al., 1999); the resulting report of this meeting was published as the *Pamukkale Preservation and Development Plan* by the Governorship of Denizli, Ministry of Culture and Tourism and UNESCO (Dilsiz, 2001; Yüksel et al., 1999). The purpose of *Pamukkale Preservation and Development Plan* was to reverse the color change of originally white travertines by creating activities compatible with Pamukkale's original natural and archeological environments (Dilsiz, 2001). Moreover, the International Research and Application Center for Karst Water Resources has developed and enacted a strategic action plan to protect the travertines from further pollution by increasing the amount of fresh water flowing to the travertines (Şimşek et al., 2000). Residents' stand on resource use issues and receptiveness to both visitors and tourism industry are an integral part of any destination planning and paramount in creating a sustainable tourism industry (Davis, et al., 1988). Accordingly, the growth and the direction of the tourism development is affected by residents' reciprocal interaction with visitors and the industry (Ap, 1992; Murphy, 1985; Sirakaya, et al., 2008).

There seems to be a renewed interest by the scientific community to study resident attitudes in emerging destinations, to revisit established models and theories, or study them within parameters of new paradigms like the *Sustaincentric Tourism Development* (see for example Sirakaya-Turk and his colleagues' studies 2005, 2008, 2010). Not long time ago, Harrill & Potts (2003) argued that understanding attitudes toward tourism development projects and initiatives is the most important initial step in gaining public support for tourism (Harrill & Potts, 2003). Although, it is perhaps challenging to contribute to theory-development in a substantive manner, emerging destinations like the Pamukkale, manifestation of contemporary developmental paradigms, mixed findings of resident-attitudes studies combined with newly developed sophisticated statistical tools will continue to create an upsurge of empirical studies (Sirakaya, Teye, & Sonmez, 2002; Smith & Krannich, 1998; Weaver & Lawton, 1999).

This empirical study examines the relationship between residents' perceived environment, economic, cultural, social and travertine impacts and their support for tourism development. The study was conducted on local residents in Pamukkale. The research population consisted of

residents those lived in Pamukkale district of Denizli province in Turkey. Factor analysis was run to determine the underlying constructs of environment, economic, cultural, social and travertine impacts domains followed by a multiple regression analysis.

LITERATURE REVIEW

Studies of the effects of tourism are becoming more prevalent in the past decade (Ko and Stewart, 2002; Spanou, 2007). Thus far, extant studies reveal that the tourism industry creates increases employment opportunities, income, tax revenues, improves infrastructure and quality of life of many communities around the globe (Gursoy et al., 2002; Hsu, 2000; Jurowski et al., 1997; King et al., 1993; Lankford and Howard, 1994; Liu and Var, 1986; Milman and Pizam, 1988; Ross, 1992; Ige and Odularu, 2008). The effects of tourism on the attitudes of local people have become an interesting subject for tourism scholars (Pappas, 2008). Recent tourism research reveal that tourism has positive and negative effects, some studies conclude that it has negative effects on socio-cultural environment but has positive effects on the economics of region and thus it is implied that the opinions of local people are different from each other (Yoon et al., 2001).

In tourism literature, local peoples' reactions for the developments of tourism are searched in so many researches (Jurowski et al., 1997; Yoon et al., 2000; Usal 1990). As far as the comprehended advantages of tourism pass costs, it is probable for local people to agree on supporting the developments of tourism (Yoon et al., 2000). It is intended for the conceptual models and theories to explain the relationship between local peoples' comprehensions of tourism and its effects since the beginning of 1990's (Teye et al., 2002). These models are value-attitude, value-attitude-behavior models (Lindberg and Johnson, 1997; Madrigal, 1995; Madrigal and Kahle, 1994), social representation theory (Madrigal, 1993) and growth machine theory (Madrigal, 1995). A lot of studies were interested in the subjects about the relationship between local peoples' comprehensions of tourism developments and its effects (Williams and Lawson 2001; Teye et al., 2002). Most of the studies have focused on the key factors describing the effects on the attitudes and comprehensions of local people for tourism since 1980 (Amuquandoh, 2010). Described factors are indicated as the situation of region economy community attachment (Gursoy and Rutherford, 2004; Lankford, 1994), vicinity of touristic area (Faulkner and Tideswell, 1997; Weaver and Lawton, 2001)

and socio-demographic characteristic features (Teye et al., 2002; Weaver and Lawton, 2001).

Researches about the attitudes of local people for tourism spread over a wide area; as effects on the environment, socio-cultural effects and economic effects (Kuvan and Akan, 2005; Choi and Murray, 2010, Yoon et al., 2001). In literature, increasing advantages of tourism for environment are also described (Choi and Murray, 2010; Yoon et al., 2001; Kuvan and Akan, 2005). It is concluded by the researchers that local people think that tourism has both positive and negative effects (Liu and Var, 1986; Liu et al., 1987; Puczko and Ratz, 2000). The negative effects of tourism on the environment can be classified as the pollution of natural, cultural and historical remains, destroying or abolishing and positive effects are the protection of cultural and historical remains, supplying better ways and increase of recreation activities (Yoon et al., 2001). It is necessary to focus on especially specific environmental problems from many and varied environmental problems (Kuvan and Akan, 2005). Local peoples' approach for the effects of tourism on environment is described as the attitude dimension depending on the variety and number of the subjects about environment in many studies (Kuvan and Akan, 2005). In so many studies, effects are reported as reduction of life quality, parking problems, commercialization of cultural activities, damage of daily life, increase of alcohol consumption, accession of garbage, damage of values, increase of individual or organizational crime and increase of traffic for local people in destination (Ap, 1992; King et al., 1993; Lindberg and Johnson, 1997; Liu et al., 1987; Liu and Var, 1986; McCool and Martin, 1994; Milman and Pizam, 1988; Ross, 1992). Sustainable Tourism Attitude Scale (SUS-TAS) evaluating the attitudes of local peoples' intended for tourism has got seven factors such as economic factors, visitor satisfaction, long term planning, community inputs, economic gains, social costs and environment (Choi and Sirakaya, 2005) and especially validity and structural evidences are presented (Sirakaya et al., 2008).

Studies held about the attitudes of local people in tourism are mainly concentrated on economic effects. (Kuvan and Akan, 2005; Choi and Murray, 2010, Yoon et al., 2001; Kuvan and Akan, 2005). Developments in tourism emphasize the importance of economic activities to enhance the economic development of the area (Ko and Stewart, 2002). Researchers -while inspecting the attitudes of local people on the effects of tourism emphasize comprehension of economic effects more (Yoon et al., 2001). Financial effects have positive relations through total effects of tourism (Yoon et al., 2001). When other studies are inspected, people

working in jobs related to tourism substantially confirm the positive tendency of tourism (Kuvan and Akan, 2005).

The effect of tourism over national economy is limited (Yan and Wall, 2001). Tourism effects the economies of local people mostly (Jurowski et al., 1997; Yoon, 2002; Avcıkurt, 2007). The most important advantage of tourism expansion is indicated that it creates jobs and decreases unemployment (Jurowski et al., 1997; Yoon, 2002; Avcıkurt, 2007; Srivastava, 2011). The change of investments and expenses (Akis et al., 1996), economic expansion (Milman and Pizam, 1995), increase of real estate and house costs, product and service prices and increase of income for the region and government (Perdue et al., 1987), maintenance and improvement of infrastructure and increase of the cost of living can be given as an example of economic effects of tourism development (Yoon, 2002).

Increase of positive economic and social profits of tourism might change the ideas of local people rating economic and cultural gains obtained from tourism industry as insufficient (Yoon et al., 2001).

Profits of tourism can be indicated as follows; increase of life quality, protection of cultural and historical values, increase of shopping opportunities, giving attention to hygiene, giving more places to recreation activities and renovation in recreation activities (Ap, 1990, 1992; Gursoy et al., 2002; Jurowski et al., 1997; Madrigal, 1995; McCool and Martin, 1994; Perdue et al., 1990; Ross, 1992). Social and cultural effects of tourism developments might influence the opinions of local people as negative (Yoon, 2002; Perdue et al., 1987; Özgüç, 2003).

Studies show that tourism presents characteristics of local culture and changes traditional culture and advances local services (Liu and Var, 1986). The effects of tourism on socio-cultural values are bounded to the factors as the level of development and the number of tourists (Brunt and Courtney 1999; Soykan, 2004).

Besides the problems created by tourism, local people are also aware of the profits of tourism (Kuvan and Akan, 2005). Participants in the less income category think that tourism has negative economic effects, only a few people take the advantage of tourism and it reduces forest area in the region (Kuvan and Akan, 2005).

The term of "tourism development" is about tourism attractions and service-related improvements like accommodation and infrastructure supporting tourism (Sharma and Dyer, 2009). Different theories and models about the development of tourism in researches are the sources of the studies (Pappas, 2008). In a lot of studies, it is concluded that the comprehension of the effect by local people has a strong relation with the

support of tourism (Ap, 1992; Gursoy et al., 2002). The development of tourism for the purpose of economic profits is supported by local people (Gursoy et al., 2002).

In this study, the relationship between the effects of tourism and tourism support of local people is analyzed. With this study analyzing the relationship between the tourism support of local people in Pamukkale and the effects of tourism such as the comprehended positive and negative effects of tourism on environment, economic effects, cultural effects, social effects and effects on travertines; the vacancy of this subject about Pamukkale is tried to be filled.

This study examines the relationship between residents' perceived environment, economic, cultural, social and travertine impacts and their support for tourism development. The study was conducted on local residents in Pamukkale. The research population consisted of residents those lived in Pamukkale district of Denizli province in Turkey. Factor analysis was run to determine the underlying constructs of environment, economic, cultural, social and travertine impacts domains followed by a multiple regression analysis.

The purpose of this study was to understand the relationship between residents' perceived tourism impacts and support of tourism development. For this purpose the study was conducted on local residents in Pamukkale, a resort town on the Aegean region of Turkey.

METHODOLOGY

The data was collected via a combination of two methods: self-reported questionnaires and face-to-face interviews with residents of Pamukkale. The questionnaires were distributed to 3565 households of Pamukkale 538 residents with an effective response rate of 15%. The survey instrument consists of two parts. The first part contained six questions related to tourists' demographic background. The second part consisted of 35 Likert-type scale items that asked participants to indicate their level of agreement with each scale item anchored at 5 (strongly agree), 4 (agree), 3 (neither agree nor disagree), 2 (disagree), and 1(strongly disagree) Environment, economic, cultural, social, and travertine impacts are independent variables and the support for tourism development is the dependent variable.

Again the research population consisted of residents of Pamukkale district of Denizli province in Turkey. Data was entered into and analyzed by SPSS program. Descriptive statistics were obtained on socio-demographic variables. Factor analysis was run to determine the

reliability, reduce the number of variables into meaningful domains, and to determine the internal validity. Reliability test was conducted by examining the Cronbach's alpha for each domain.

During the analysis process, first, the questionnaires were evaluated in terms of the distribution of responses, outlier values and missing values. Concerning the missing values, Listwise and All Values methods were applied to check any significant differences between the two groups based on the complete list of questionnaires. No significant differences were found between these two groups. Then, the data set was evaluated for normality by taking into account the kurtosis and skewness values. "Z" normal distribution, tailbox graphics and Kolmogorov-Smirnov test were also applied on the data set.

The dependent variable was operationalized as the support for tourism and independent variables as "tourism impacts". Factor analysis with varimax rotation was run to reduce the dimensions of attitudinal items, to determine the reliability, and establish internal validity of the domains. As commonly done, the Factors with Eigenvalues greater than 1 were kept for further analysis; KMO statistics and Barlett's Test of Sphericity indicated that the data was suitable for factor analysis. Factor analysis was run several times by excluding, each time item that loaded on more than one factor and/or had items with low factor loadings until six clean factors were obtained. Factor scores were obtained for individual domains and were used in subsequent.

The Following hypotheses were tested using multiple regression analysis.

H1: There is a positive direct relationship between residents' perceived negative environment impacts and support for tourism.

H2: There is a positive direct relationship between residents' perceived positive environment impacts and support of tourism.

H3: There is a positive direct relationship between residents' perceived economic impacts and support of tourism.

H4: There is a positive direct relationship between residents' perceived cultural impacts and support of tourism.

H5: There is a positive direct relationship between residents' perceived social impacts and support of tourism.

H6: There is a positive direct relationship between residents' perceived travertine's impacts and support of tourism.

DATA ANALYSIS AND RESULTS

A pilot testing of the study was realized by interviewing residents. In reciprocal interviews, how residents showed reaction to questions was inspected, where they hesitated and if there were inarticulate parts were asked and residents' levels in perceiving questions were taken into account. After the pilot testing the last shape was given to the survey form and this survey was applied on residents living to Pamukkale. Surveys were tried to be made by interviewing face-to-face.

Questionnaire technique was used to collect data with face-to-face. 14 questionnaires were eliminated because of bad data quality, and in consequence 524 questionnaires were used for data analysis.

Demographic findings are shown in Table 1.

Table 1 Demographic factors

Demographic Factors	Number	Percent (%)	Demographic Factors	Number	Percent (%)
Gender	168	31.7	Marital status	345	66.7
Female	362	68.3	Married	172	33.3
Male	530		Single	517	
Total			Total		
Education Level	183	35.7	Income level (TL)		
Primary-secondary	220	42.9	600 and below	191	38.2
High school	110	21.4	601-1499	239	47.8
University	513		1500 and above	70	14.0
Total			Total	500	
Age	123	23.3			
25 years old and below	122	23.1			
26-30	97	18.3			
31-35	54	10.2			
36-40	56	10.6			
41-45	85	14.5			
46 years old and above	537				
Total					

31.7% of participants were female and 68.3% of participants were male. When we look at the education level 35.7% are primary school graduates, 42.9% are high school graduates, and 21.4% have university. 23.3% of the participants are 25 years old and younger, 23.1% are between 26-30 years old, 18.3 % are between 31-35 years old, 10.2% are between 36-40 years old, 10.6% are between 41-45 years old and 14.5% are 46 years old and older. 66.7% of participants were married and 33.3% of participants were single. When monthly income level inspected it is seen that 38.2% of participants' income is 600 TL and below, 47.8% is between 601-1499 TL, and 14% is 1500 TL and more than that.

Table 2 Exploratory Factor Analysis

Factor Number and Name	Factor Loading	Eigen value	Defined Difference percentage
Negative Environment impacts		23.03	12.93
Tourism is damaging to the local.	.63		
Tourism has resulted in trafic congestion, noise and pollution.	.71		
Construction of hotels and other tourist facilities have destroyed the natural environment.	.68		
Tourism provides more parks and other recreational areas for local residents.	.53		
Tourism has serious negative increase environmental impacts.	.71		
Tourism has created significant environmental pollution.	.72		
Tourism has negative impacts on the natural resources.	.68		
Economic impacts		17.11	10.38
Tourism has created more jobs for your community.	.72		
Tourism has attracted more investment to your community.	.77		
Tourism has led to more spending in your community.	.67		
Our standard of living has increased considerably because of tourism.	.60		
Tourism has increased price of goods and services.	.49		
Tourism has given economic benefits to local people and small businesses.	.73		
Tourism revenues are more important than revenues from the other industries for local government.	.49		
Positive Environment impacts		4.63	9.45
Tourism helps to increase local awareness and appreciation of the environment.	.69		

Preserves environment and improves the appearance (and images) of an areas.	.74		
Improves living utilities infrastructure (supply of water, electric, and telephone, etc.).	.65		
Improves public facilities (pavement, traffic network, and civic center.	.68		
Because of the increased awareness generated by tourism, more measures are now being taken to protect the travertines in the area.	.64		
Cultural impacts		4.55	8.81
Owing to tourism development, local people now have more recreation opportunities.	.61		
Tourism has encouraged a wide variety of cultural activities like crafts, art, and music in a community.	.65		
Tourism has resulted in more cultural exchange between tourists and residents.	.65		
Meeting tourists from other regions is a valuable experience to better understand their culture.	.64		
Tourism has resulted in positive impacts on the cultural identity of our community.	.49		
Social impacts		3.52	7.22
High-spending tourists have negatively affected our way of life.	.55		
Tourism has changed our precious traditional culture.	.76		
Local residents have suffered from living in a tourism destination area.	.68		
Tourism has increased the crime rate.	63		
Travertine impacts		3.14	7.19
Travertine in and around Pamukkale have been seriously damaged by tourism.	.65		
The construction of tourism facilities in Pamukkale has created serious damage to the travertines in Pamukkale.	.67		
The use of water resources from tourism facilities has caused considerable damage to the travertines in Pamukkale.	.72		
The use of travertines for recreational activities by tourists has harmful effects on the travertines.	.70		

N= 538. Kaiser-Meyer-Olkin sampling value=0.90; Barlett test= 6359.24 (p<.001); Total variance explained in the data=55.63%

The result of reliability test indicated that the overall scale was fairly reliable with an alpha value of, 0.84. Alpha values is over 0.8 are considered to be reliable (Nunnally, 1967). Barlett test result was 6359.24

and p<.001 level and Kaiser-Meyer-Olkin sample value was 0.89 indicating that data is suitable for factor analysis.

After the initial elimination, 32 items loaded saliently within six domains. Table 2 displays the domain descriptors, the number of items in each domain, Eingenvalues, a percentage of variances explained and the result of KMO and Barlett tests. Six factors were labeled as follow: factor 1= negative environment (seven items; alpha = .84); factor 2 = economic (seven items; alpha = .82); factor 3 = positive environment (five items; alpha = .81); factor 4= cultural (five items; alpha = .77); factor 5 = social (four items; alpha = .72); and factor 6= travertine impacts (four items; alpha = .80).

According to Table 2, the factor loading range from a low of 0.49 to a high of 0.77. Variables evaluated under factor that factor load is bigger, equal factor loads removed.

The first factor explains 12.9% of the variance in the data set. This factor includes variables such as; "Tourism is damaging to the local", "Tourism has resulted in traffic congestion, noise and pollution", "Construction of hotels and other tourist facilities have destroyed the natural environment", "Tourism provides more parks and other recreational areas for local residents", "Tourism has serious negative increase environmental impacts", "Tourism has created significant environmental pollution", and "Tourism has negative impacts on the natural resources . When the content of these variables are inspected, this factor seems to indicate Negative Environment Impacts. The second factor, Economic impacts, explains 10.3% of the variance and include variables such as "Tourism has created more jobs for your community"; "Tourism has attracted more investment to your community"; "Tourism has led to more spending in your community"; "Our standard of living has increased considerably because of tourism"; "Tourism has increased price of goods and services"; "Tourism has given economic benefits to local people and small businesses"; and "Tourism revenues are more important than revenues from the other industries for local government.". The third factor, Positive Environment Impacts, explains 9.4% of the variance in the data and includes variables such as "Tourism helps to increase local awareness and appreciation of the environment"; "tourism preserves environment and improves the appearance (and images) of an areas"; "tourism improves living utilities infrastructure (supply of water, electric, and telephone, etc.)" and so on. The fourth factor, Cultural impacts, explains 8.8% of the variance and includes variables such as "Owing to tourism development, local people now have more recreation opportunities"; "Tourism has encouraged a wide variety of cultural

activities like crafts, art, and music in a community"; "Tourism has resulted in more cultural exchange between tourists and residents" and so on. The fifth factor, Social impacts , explains 7.2% of the variance and includes variables such as High-spending tourists have negatively affected our way of life"; "Tourism has changed our precious traditional culture"; "Local residents have suffered from living in a tourism destination area" and so on. The six factor, Travertine impacts defines 7.1% of the variance and includes variables such as "Travertine in and around Pamukkale have been seriously damaged by tourism"; "The construction of tourism facilities in Pamukkale has created serious damage to the travertines in Pamukkale"; "The use of water resources from tourism facilities has caused considerable damage to the travertines in Pamukkale" and so on.

To determine the effects of independent variables on the dependent variable which is the support for tourism, regression analysis was used. Multiple regression analyzes the relationship between a dependent variable (the support for tourism) and multiple independent variables (e.g., Negative environmental, economic, positive environmental, cultural, social and travertine impacts). Table 3 below illustrates the results of the regression analysis.

Table 3 Regression analysis of factors that affect destination loyalty

Variables	Beta	t	Sig
(Fixed)	.99	3.33	.001[*]
Negative Environment impacts	-.12	-2.28	.023[*]
Economic impacts	.16	3.53	.001[*]
Positive Environment impacts	.30	6.32	.001[*]
Cultural impacts	.19	3.85	.001[*]
Social impacts	.01	.19	.853
Traverten impacts	.14	2.89	.004[*]

Multi regression = .55   *R Square = .30*

Adjusted R Square = .29   *F: 37.99*

According to the findings, the model is significant at 5% alpha level (F=37, p=.001) and explained 30% of the error variance in the model (R^2
108

= 0.30). Out of the six variables, five collectively affect the support for tourism significantly. These variables are negative environmental impacts, economic impacts, positive environmental impacts, cultural impacts and travertine impacts.

Based on the findings of the regression analysis, positive environmental impact contributed the most to the model with a β= .30 (t=6.32; p=.001). For a unity increase in perceptions of positive impacts, the support for tourism increased %0.3, hence the H_3 was confirmed. In order of importance the next independent variable was the cultural impacts with a β value of .19 (t=3.85; p=.001), followed by economic impacts β=.16 (t=3.527; p=.023), travertine impacts β=.14 (t=2.89; p=.004), and negative environment β=.12 (; t=2.276; p=.023). Based on these results H_1, H_2, H_3, H_4 and H_6 are supported. H_5 that there is a positive direct relationship between residents' perceived social impacts and support of tourism was not supported.

CONCLUSION

This study examines the relationship between residents' perceived tourism impacts and their support for tourism development. The study was conducted on local residents in Pamukkale, an ancient resort town on the Aegean region of Turkey. To examine the relationship between tourism impacts and residents' support for tourism development, factor analysis was run to determine the underlying constructs of various tourism-impact domains followed by a multiple regression analysis. The findings revealed positive relationship between tourism impacts and residents' support for tourism development.

The questionnaires were applied to 538 residents Pamukkale destination in Denizli to find out the relationship between residents' perceived tourism impacts and support of tourism development.

The research population consisted of residents those lived Pamukkale district of Denizli province in Turkey. The result of reliability test, alpha value was found as 0.84. Alpha value is over 0.8 (Nunnally, 1967), hence the scale is reliable. Dependent variable is the support for tourism and independent variables are tourism impacts. Factor analysis was used to obtain mutually exclusive groups of variables and multiple regression analysis was used in order to test hypotheses.

32 variables were regrouped under 6 domains and explained .55 of the variance. Six factors were labeled as follow: factor 1= negative environment (seven items); factor 2 = economic (seven items); factor 3 =

positive environment (five items); factor 4= cultural (five items); factor 5 = social (four items); and factor 6= travertine impacts (four items).

For the purpose of determining the effects of independent variables ("Negative environment, economic, positive environment, cultural, social and travertine impacts) on the dependent variable which is the support for tourism, The findings revealed that five variables affect the support of tourism significantly. These are negative, economic, positive environment and cultural and travertine impacts.

The independent variable that explains the most variance in the dependent variable is "positive environmental impacts", followed by cultural impacts, economic impacts, travertine impacts, and negative environment.

The findings of this research indicate that there is a direct relationship between residents' perceived negative-positive environment impacts and support of tourism, there is a positive direct relationship between residents' perceived economic impacts and support of tourism, there is a positive direct relationship between residents' perceived cultural impacts and support of tourism, there is a positive direct relationship between residents' perceived travertine's impacts and support of tourism. But there is no positive direct relationship between residents' perceived social impacts and support of tourism.

This research has been focused in the residents in Pamukkale and does not examine the perception of the residents in Denizli. Due to the limitation of this study, the finding can only be generalized to a similar population. Future studies on tourism impacts may explore different groups local government and tourism business.

REFERENCES

Akis, S., Peristanis, N. & Warner, J. (1996). Residents' Attitudes to Tourism Development: The Case of Cyprus. *Tourism Management*, Vol. 17, No.7, pp.481-494.

Altunışık, R., Coşkun, R., Yıldırım, E. & Bayraktaroğlu, S. (2002). *Sosyal Bilimlerde Araştırma Yöntemleri SPSS Uygulamalı*. Sakarya, Sakarya Kitabevi.

Amuquandoh, F.E. (2010). Residents' Perceptions of The Environmental Impacts of Tourism in The Lake Bosomtwe Basin, Ghana. *Journal of Sustainable Tourism*, Vol. 18, No.2, pp.223-238.

Andereck, K.L., Valentine, K.M., Knopf, R.C. & Vogt, C.A. (2005). Resident Perception of Community Tourism Impacts. *Annals of Tourism Research*, Vol. 32, No.4, pp.1056-1076.

Ap, J. (1990). Residents' Perceptions Research on The Social Impacts of Tourism. *Annals of Tourism Research*, Vol. 17, No.4, pp.610–616.

Ap, J. (1992). Residents' Perceptions of Tourism Impacts. *Annals of Tourism Research*, Vol. 19, No.4, pp.665–690.

Avcıkurt, C. (2007). Turizm Sosyoloji: Turist-Yerel Halk Etkileşimi. Ankara, Detay Yayıncılık.

Brunt, P. & Courtney, P. (1999). Host Perceptions Of Sociocultural Impacts, *Annals of Tourism Research*, Vol. XXVI, No.3, pp.493-515.

Choi, H.C. & Murray, I. (2010). Resident Attitudes Toward Sustainable Community Tourism, *Journal of Sustainable Tourism*, Vol. 18, No.4, pp.575-594.

Choi, H.C. & Sirakaya, E. (2005). Measuring Residents' Attitude Toward Sustainable Tourism: Development of Sustainable Tourism Attitude Scale. *Journal of Travel Research*, Vol. 43, pp.380-394.

Demirkaya, H. & Çetin, T. (2010). Residents' Perceptions on The Social and Cultural Impacts of Tourism in Alanya (Antalya-Turkey), *Akademi Dergisi*, Vol. 14, No.42, pp.383-392.

Denizli Governorship, Ministry of Culture, and UNESCO. (1992). Pamukkale (Hierapolis) Preservation and Development Plan, and The International Workshop on Pamukkale, 30 June-3 July 1991, Pamukkale, Denizli.

Denizli Ticaret Odasi (2007). Ekonomik Yönü ile Denizli, Denizli Ticaret Odası Yayınları 34.

Dilsiz, C. (2002). Environmental Issues Concerning Natural Resources at Pamukkale Protected Site, Southwest Turkey. *Environmental Geology*, Vol. 41, pp.776-784.

Erdoğan, E. & Aklanoğlu, F. (2008). Termal Turizm ve Afyon Gazlıgöl Örneği, *E-Journal of New World Sciences Academy*, Vol. 3, No.1, pp.83-92.

Faulkner, B. & Tideswell, C. (1997). A Framework for Monitoring Community Impacts of Tourism. *Journal of Sustainable Tourism*, Vol. 5, No.1, pp.3-28.

Fletcher, JE. (1989). Input-output Analysis and Tourism Impact Studies. *Annals of Tourism Research*, Vol. 16, pp.514-529.

Gu, M. & Wong, P.P. (2006). Resident Perception of Tourism Impacts: A Case Study Of Homestay Operators in Dachangshan Dao, North-East China. *Tourism Geographies*, Vol. 8, No.3, pp.253-273.

Gursoy, D. & Rutherford, D.G. (2004). Host Attitudes Toward Tourism: An Improved Structural Model. *Annals of Tourism Research*, Vol. 31, No.3, pp.495–516.

Gursoy, D., Jurowski, C. & Uysal, M. (2002). Resident Attitudes: A Structural Modeling Approach. *Annals of Tourism Research*, Vol. 29, No.1, pp.79-105.

Hair, J. F., Black, W.C., Babin, B.J., Anderson, R.E. & Tatham, R.L. (2006). *Multivariate Data Analysis*, Sixth Edition. New Jersey, Prentice Hall.

Hsu, C.H.C. (2000). Residents' Support For Legalized Gaming and Perceived Impacts of Riverboat Casinos: Changes in Five Years. *Journal of Travel Research*, Vol. 38, No.4, pp.390-395.

Husbands, W. (1989). Social Status And Perception Of Tourism In Zambia. *Annals of Tourism Research*, Vol. 16, No.2, pp.237–253.

Ige, Cyril Segun and Oduluru, Gbadebo Olusegun. (2008). Analysis of the Impact of Tourism on the West Africa Economy: A Panel Data Approach. *Tourismos: An International Multidisciplinary Journal of Tourism*, Vol. 3, No.2, pp.71-90.

International Research And Application Center for Karst Water Resources (UKAM). (1995). Report on Conversation and Development of Pamukkale Travertines, Hacettepe University.

Jurowski, C., Uysal, M. & Williams, D.R. (1997). A Theoretical Analysis of Host Community Resident Reactions to Tourism. *Journal of Travel Research*, Vol. 36, No.2, pp.3–11.

Karaatlı, M. (2005). SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri, In Ş. Kalaycı (Eds), Ankara: Asil Yayın Dağıtım.

Kahraman, N. &Türkay, O. (2006). *Turizm ve Çevre*. Ankara, Detay Yayıncılık.

King, B., Pizam, A. & Milman, A. (1993). Social Impacts of Tourism: Host perceptions. *Annals of Tourism Research*, Vol. 20, No.4, pp.650–665.

Ko, D.W. & Stewart, W.P. (2002). A Structural Equation Model of Residents' Attitudes for Tourism Development. *Tourism Management*, Vol. 23, pp.521-530.

Kuvan, Y. & Akan, P. (2005). Residents' Attitudes Toward General and Forest-Related Impacts of Tourism: The Case Of Belek, Antalya. *Tourism Management*, Vol. 26, pp.691-706.

Kültür ve Turizm Bakanlığı, Http://www.kultur.gov.tr/TR/BelgeGoster aspx?F6E1034. Accessed the 25 th of February 2008, at 14:45.

Kültür ve Turizm Bakanlığı, Türkiye Turizm Stratejisi (2023), Ankara, Http://www.kultur.gov.tr/TR/Tempdosyalar/189566_TTstrateji2023.pdf. Accessed the 06 th of September 2008, at 08:55.

Kültür ve Turizm Müdürlüğü, Http://www.pamukkale.gov.tr/tr/content. aspid=5. Accessed the 18 th January 2008, at 10:25.

Lankford, S.V. (1994). Attitudes and Perceptions Toward Tourism and Rural Regional Development. *Journal of Travel Research*, Vol. 32, No.3, pp.35-43.

Lankford, S.V. & Howard, D.R. (1994). Developing a Tourism Impact Attitude Scale. *Annals of Tourism Research*, Vol. 21, No.1, pp.121–139.

Lasaponara, R., Masini, N. & Scardozzi, G. (2008). New Perspective For Satellite-based Archaeological Research in The Ancient Territory of Hierapolis (Turkey). *Advances in Geosciences*, Vol. 19, pp.87-96.

Lindberg, K. & Johnson, R.L. (1997). Modeling Resident Attitudes Toward Tourism. *Annals of Tourism Research*, Vol.24, No.2, pp.402–424.

Liu, J.C. & Var, T. (1986). Residents Attitudes Toward Tourism Impacts in Hawaii. *Annals of Tourism Research*, Vol. 13, pp.193-214.

Liu, J.C., Sheldon, P.J. & Var, T. (1987). Across-National Approach to Determining Resident Perceptions of The Impact of Tourism on The Environment. *Annals of Tourism Research*, Vol. 14, No.1, pp.17-37.

Maccallum, R.C., Widaman, K.F., Zhang, S. & Hong, S. (1999). Sample Size in

Factor Analysis. *Psychological Methods*, Vol. 4, No.1, pp.84-99.

Madrigal, R. (1993). A Tale of Tourism in Two Cities. *Annals of Tourism Research*, Vol. 20, No.2, pp.336-353.

Madrigal, R. (1995). Residents' Perceptions and The Role of Government. *Annals of Tourism Research*, Vol. 22, No.1, pp.86-102.

Madrigal, R. & Kahle, L.R. (1994). Predicting Vacation Activity Preferences on the Basis of Value System Segmentation. *Journal of Travel Research*, Vol. 32, No.3, pp.22–28.

McCool, S.F. & Martin, S.R. (1994). Community Attachment And Attitudes Toward Tourism Development. *Journal of Travel Research*, Vol. 32, No.2, pp.29-34.

Milman, A. & Pizam, A. (1988). Social Impact of Tourism on Central Florida. *Annals of Tourism Research*, Vol. 15, No.2, pp.191–204.

Nepal, S.K. (2008). Residents' Attitudes to Tourism in Central British Columbia, Canada. *Tourism Geographies*, Vol. 10, No.1, pp.42-65.

Nunnally, J.C. (1967). *Psychometric Theory*. New York, McGraw Hill.

Oosterhaven, J. & Fan, T. (2006). Impact of International Tourism on the Chinese Economy. *International Journal of Tourısm Research*, Vol. 8, pp.347-354.

Özdamar, K. (2002). *Paket Programlar İle İstatistiksel Veri Analizi*. Eskişehir, Kaan Kitabevi.

Özgüç, N. (2003). *Turizm Coğrafyası Özellikler ve Bölgeler*. İstanbul, Çantay Kitabevi.

Öztürk, E. (2005). SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri. In Ş. Kalaycı (Eds), Ankara: Asil Yayın Dağıtım.

Pappas, N.V. (2008). City of Rhodes: Residents' Attitudes Toward Tourism Impacts and Development. *Anatolia: An International Journal of Tourism and Hospitality Research*, Vol. 13, No.1, pp.51-70.

Perdue, R.R., Long, P.T. & Allen, L. (1987). Rural Resident Tourism Perceptions and Attitudes. *Annals of Tourism Research*, Vol. 14, pp.420-429.

Perdue, R.R., Long, P.T. & Allen, L. (1990). Resident Support For Tourism Development. *Annals of Tourism Research*, Vol. 17, No.4, pp.586-599.

Puczko, L. & Ratz, T. (2000). Tourist And Resident Perceptions of The Physical Impacts of Tourism At Lake Balaton, Hungary: Issues For Sustainable Tourism Management. *Journal of Sustainable Tourism*, Vol. 8, No.6, pp.458-478.

Ross, G.F. (1992). Resident Perceptions of The Impact of Tourism on an Australian City. *Journal of Travel Research*, Vol. 30, No.3, pp.13-17.

Sayılı, M., Akca, H., Duman, T. & Esengun, K. (2007). Psoriasis Treatment Via Doctor Fishes as a Part of Health Tourism: A Case Study of Kangal Fish Spring, Turkey. *Tourism Management*, Vol. 28, pp.625-629.

Semenderoğlu, A., Durmuş, H. & Güler, S. (1993). Pamukkale'nin Dünü, Bugünü, Yarını, *Çevre Dergisi*, Temmuz-Ağustos-Eylül, Vol. 8, pp.9-12.

Sharma, B. & Dyer, P. (2009). An Investigation of Differences in Residents' Perceptions on the Sunshine Coast: Tourism Impacts and Demographic Variables. *Tourism Geographies*, Vol. 11, No.2, pp.187-213.

Simsek, S., Günay, G., Elhatip, H. & Ekmekçi, M. (2000). Environmental

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Protection of Geothermal Waters and Travertines at Pamukkale, Turkey. *Geothermics*, Vol. 29, pp.557-572.

Sirakaya-Turk, E., Ekinci, Y. & Kaya, A.G. (2008). An Examination of the Validity of SUS-TAS in Cross-Cultures. *Journal of Travel Research*, Vol. 46, pp.414-421.

Sirakaya-Turk, E., Ingram, L. & Harrill, R. (2008). Resident Typologies Within the Integrative Paradigm of Sustaincentric Tourism Development. *Tourism Analysis*, Vol. 13, No.5-6, pp.531-544.

Soykan, F. (2004). Bir Turizm Coğrafyası Araştırması: Kırsal Alanların Turizm Potansiyelinin Saptanması ve Şirince Köyü'ne (İzmir) Uygulanması. İzmir, Ege Üniversitesi Edebiyat Fakültesi Yayınları No:122.

Spanou, E. (2007). The Impact of Tourism on the Socioculturel Structure of Cyprus. *Tourismos: An International Multidisciplinary Journal of Tourism*, Vol. 2, No.1, pp.145-162.

Srivastava, S. (2011). Economic Potential of Tourism: A Case Study of Agra. *Tourismos: An International Multidisciplinary Journal of Tourism*, Vol. 6, No.2, pp.139-158.

Teye, V., Sönmez, S.F. & Sırakaya, E. (2002). Residents' Attitudes Toward Tourism Development. *Annals of Tourism Research*, Vol. 29, No.3, pp.668-688.

Tezbaşaran, A.A. (1997). *Likert Tipi Ölçek Geliştirme Kılavuzu*. Ankara, Türk Psikologlar Derneği Yayınları.

Usal, A. (1990). Turizmin Sosyo-kültürel Etkileri ve Ege Bölgesi Örneği, 1.Ulusal Turizm Kongresi (Bildiriler), D.E.Ü. Aydın.

Weaver, D.B. & Lawton, L.J. (2001). Residents' Perceptions in The Urban-Rural Fringe. *Annals of Tourism Research*, Vol. 28, pp.439-458.

Williams J. & Lawson, R. (2001). Community Issues and Resident Opinions of Tourism. *Annals of Tourism Research*, Vol. 28, No.2, pp.269-290.

Yan, M. & Wall, G. (2001). Economic Perspectives on Tourism in China. *Tourism and Hospitality Research*, Vol. 3, pp.257–275.

Yoon, Y., Chen, J.S. & Gursoy, D. (1999). An Investigation of the Relationship Between Tourism Impacts and Host Communities' Characteristics. *Anatolia: An International Journal of Tourism and Hospitality Research*, Vol. 10, No.1, pp.29-44.

Yoon, Y., Gursoy, D. & Chen, J.S. (2000). Validating a Tourism Development Theory With Structural Equation Modeling. *Tourism Management*, Vol. 22, No.4, pp.363-372.

Yoon, Y. (2002). Development of a Structural Model for Tourism Destination Competitiveness from Stakeholders' perspectives, Unpublished Ph. D. Thesis Faculty of the Virginia Polytechnic Institute and State University.

Yuksel, F., Bramwell, B. & Yuksel, A. (1999). Stakeholder Interviews and Tourism Planing at Pamukkale, Turkey. *Tourism Management*, Vol. 20, pp.351-360.

www.pamukkale.org.tr, (30.03.2009)

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INFLUENCE OF CERTAIN VARIABLES ON ORGANISATIONAL COMMITMENT: A CASE STUDY IN THE HOTEL SECTOR OF CORDOBA

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The hotel industry is characterised by close and direct contact between the employee and the customer. For this reason, one of the most effective ways to achieve customer satisfaction and loyalty is to ensure that employees who provide the service feel committed to the organisation where they work. By doing so, hotel businesses can gain a sustainable competitive advantage and improve organisational performance. Based on these premises, this article aims to determine the relationships between certain variables associated with the job and the organisational commitment of the individual. The hypotheses tests reveal a strong relationship between stable and permanent employment and higher levels of organisational commitment among hotel employees.

Keywords: *Hotel employment, organisational commitment, Spain*

JEL Classification: *L83, M1, O1*

INTRODUCTION

The success of a company is only possible if it understands analyses and puts in place measures which encourage employees to commit to their business projects and consider corporate objectives as personal objectives. Similarly, business objectives take into account individual and group objectives which motivate employees. Moreover, business owners should pay attention to each area of employment and provide a personalised improvement programme which is directed at various groups in

accordance with the employment characteristics of that group (Lee & Way, 2010).

The empirical evidence shows that, to a certain extent, customer satisfaction is the result of employee satisfaction and commitment (Schlesinger & Heskett, 1991; Larshon & Shina, 1995; Kutanls et al., 2012). The link between the external client and the employee arises from the satisfaction and commitment of both parties, as well as in the continuity of the relationship between them. Perhaps the most pressing issue in the hotel sector is clients' perception of the quality of the service they have received as this is closely associated with the level of organisational commitment felt by employees (Hartline et al., 2003). The highly significant nature of this within the hotel sector is due to the fact that hotel management differs from other kinds of businesses and organisations given the high level of contact between clients and employees. According to a study by Hawkings and Lee (1990) on the factors which lead an employee in the hotel sector to demonstrate a certain degree of commitment to their organisation, employee commitment is based upon job satisfaction and professional commitment. There are a series of determining factors or characteristics which can lead to the commitment (or not) of an individual (Galup et al., 2008; Katsaros & Tsirikas, 2012). Furthermore, managers and directors of hotels must listen to their employees' thoughts and concerns (Chiang, 2010).

The start of the new decade has revealed itself to be the bearer of an unprecedented economic crisis. In spite of this difficult and dramatic situation, tourism is proving to be highly resistant to the worst consequence of the crisis: unemployment. Particularly noteworthy are the data from the World Tourism Barometer (United Nations World Tourism Organization –UNWTO-, 2011), which show that tourism is directly responsible for 5% of world GDP (and 9% indirectly), represents 30% of world services trade and provides employment to one in twelve people across the globe. According to the International Labour Organization –ILO- (2012), the world needs to create 600 million new job posts in the next decade in order to maintain economic growth. The ILO also states that for every job created in tourism, one and a half is generated within the economy related to tourism.

The main objective of this paper is to determine the influence of certain job-related variables on the organisational commitment of hotel industry employees in Cordoba (Spain). To achieve this aim, we test hypotheses on the type of contract (full-time or part-time contracts and duration of employment), the length of service and family dependence on the income earned by the hotel employee. With the same purpose and

methodology, we also attempt to determine the possible relationship between employee gender and organisational commitment towards the hotel where the services are provided.

The paper is structured as follows. Following the introduction, we provide some background on the conceptualisation and dimensions of the organisational commitment construct. This is followed by a description of the study area. We then describe the methodology used and the hypotheses that are tested. The next section includes results drawn from the analysis and a discussion of the most significant findings. Finally, conclusions are drawn in the last section.

BACKGROUND

At the beginning of the 21st century, Davis and Newstrom (2001) defined commitment as the extent to which an individual identifies with an organisation and wishes to continue participating actively in it. These authors maintain that commitment is usually stronger among employees with a longer tenure within an organisation (because they will have experienced personal success within the business) and among those who work within a group of committed employees. As defined by Arciniega (2002), organisational commitment is a set of linkages which keep a subject attached to an organisation. According to Testa (2001), organisational commitment can also be seen as an emotional response by an employee to a positive appraisal of the work environment. This response should be considered as an endorsement of the organisation, particularly when the individual firmly believes in the values and goals of the organisation or when he or she shows a strong desire to remain within the organisation (Scholarios & Marks, 2004).

Commitment therefore functions as a link which includes either behaviour or an attitude. It is necessary that this link brings with it a particular way of acting or a positive attitude towards an organisation which predisposes the individual to behave in such a way that will be of benefit to the organisation (Meyer & Herscovitch, 2001). However, it goes further than loyalty, leading to an active contribution towards the achievement of goals within the organisation. Moreover, it often reflects employees' support of the mission and goals of the organisation they work for, their willingness to exert effort to achieve them and their intention to continue working for the organisation (Davis & Newstrom, 2001).

The organisational commitment construct has been a topic of research interest due to the fact that, as mentioned above, it is associated

with many of the main factors inherent to the success of a business such as performance, absenteeism, employee turnover, and quality of working life (Porter et al., 1974; Mowday et al., 1982; Reichers, 1985; Griffin & Baterman, 1986; Mathieu & Zajac, 1990; Meyer & Allen, 1991; Salvador, 2005, among others). This study of organisational commitment has mainly been marked by its multidisciplinary nature, which has led to it being defined, measured and studied in various ways over the years.

It can be said that the origins of research into commitment under the umbrella of organisational behaviour can be found primarily in the work of Porter and colleagues (Porter et al., 1974; Mowday et al., 1982). In the 1980s, after nearly a decade of research into the topic, Mowday et al. (1982) published a study which has become a clear point of reference for the academic community. In their research, Mowday et al. (1982: 27) define organisational commitment as "the relative strength of an individual's identification with and involvement in a particular organisation". With regards to developing a model of organisational commitment, this has traditionally revolved around either a one-dimensional or multi-dimensional approach. In the case of the former, the model developed by Porter et al. (1974) is noteworthy. Despite the authors' three-dimensional definition of commitment, they treat the construct as being one dimensional. Reaching a consensus on how to model organisational commitment is an incredibly difficult task, even more so when trying to arrive at a multidisciplinary theoretical framework. Nevertheless, the bulk of current research accepts and is based on the multi-dimensional model (Meyer et al., 2004) However, according to Meyer and Herscovitch (2001), there is also a lack of consensus about the multi-dimensional model originating from: differences between earlier one-dimensional concepts, studies carried out within a theoretical context, and some combination of these factors.

Moreover, they understood the second component (continuance commitment) to be the need an individual has to remain with an organisation without necessarily having any emotional links to it. An individual with a high level of continuance commitment perceives staying with the organisation as a necessity. This need is borne of individuals' binding choices (McGee & Ford, 1987) which lead them to a situation where the costs associated with leaving the organisation are perceived as greater than the costs of staying. These binding costs arise for various reasons. For example, they might be linked to the sacrifices already made to remain with the organisation and those which arise from the lack of alternatives to the current organisation. To summarise, this dimension is related to the threat of loss as a factor inciting a person to commit to the

organisation. This may be a result of the direct threat of loss (i.e., the value they attach to their current post) or by the indirect threat of loss (i.e., the lack of alternatives to change or improve upon the circumstances relative to their current job).

It is also important to point out that managers who design and implement strategies within the hotel sector must evaluate and ascertain which factors (i.e., the work environment, working conditions, professional training and development, supervision, pay policies, working status, etc.) play an important role in providing what employees expect from employment (Lee & Way, 2010; Kutanls et al., 2012). In having an understanding of these factors, organisations can develop the appropriate human resource policies which will make it possible to achieve the organisational commitment of their employees. To move closer to this objective, this study reflects upon the importance of certain variables inherent to the job position and attempts to demonstrate that these variables have repercussions on commitment.

DESCRIPTION OF STUDY AREA

Spain, as a whole, can be considered one of the premier tourist destinations worldwide given the number of tourist arrivals and tourism expenditure. In 2012, a total of 57.7 million international tourists came to Spain, which represents a year-on-year increase of 1.8% or one million more tourists over 2011 (National Statistics Institute –NSI-, 2013a). In 2012, a total of 982,109 tourists visited Cordoba.

The hotel sector of Cordoba plays a key role in the socioeconomic development of the province due mainly to the sector's dynamic nature and its ability to create employment. This is significant within an environment of widespread crisis. Indeed, according to the Working Population Survey 2013 (NSI, 2013b) unemployment in the province reached extremely worrying levels in the third quarter of 2013, with 37.16% of the population unemployed (adults aged 16 and over). The hotel sector, however, is maintaining its levels of employment. These data confirm that the hotel sector is very strong: employment growth is good during growth periods in the economic cycle, while the sector is highly resistant to times of economic recession as it maintains and even improves levels of employment. In order to attain these positive figures, Cordoba has differentiated its tourism offering by investing in quality cultural and rural tourism services. The main data on the hotel sector of the province of Cordoba are shown in Table 1.

Table 1 Key figures for the hotel sector in Cordoba. Year 2012

Hotel Category	Number of Hotels	Rooms	Staff
Five star	3	284	65
Four star	17	2,271	506
Three star	23	1,818	283
Two star	27	1,365	135
One star	17	877	85
TOTAL	**87**	**6,615**	**1,074**

Source: NSI (2013a)

METHODOLOGY

The fieldwork was carried out from April to October 2010. After considering the use of personal interviews, telephone surveys, and other survey instruments, a written questionnaire was considered to be the most appropriate survey methodology. The questionnaire included various sections, but for the purposes of this study the section referring to the "General vision of organisational commitment" is the most important. The questionnaire was developed based on the well-known Organisational Commitment Questionnaire (OCQ) of Porter et al. (1974). In the first phase of the survey, a personal telephone call was made to hotel managers, in which the project was presented and their collaboration was requested. *In situ* meetings were arranged in order to explain the main objectives of the project and distribute the questionnaires and blank envelopes.

The widespread use of this instrument among the scientific community studying organisational commitment is attributable to its sound psychometric properties. The OCQ consists of 15 items in which respondents are asked to indicate their level of agreement or disagreement with the items on a five-point Likert scale. The scores obtained from the responses are added up and a mean score is calculated. The higher the mean score, the higher the individual's organisational commitment. The research specifications of the fieldwork are shown in Table 2.

Table 2 Research specifications of fieldwork

Geographical scope	Province of Cordoba
Target population	Hotel staff
Population size	1,074 employees from 87 hotels
Measurement instrument	Structured and closed-ended questionnaire
Sample size	585 respondents
Response rate	54%
Error	2.735%
Data gathering period	April-October 2010

The SPSS 15.0 software package and two groups of statistical techniques were used for processing the data. The basic data for the study was obtained by means of a descriptive statistical analysis technique, while analysis of variance (ANOVA) and multiple regression were used to test the hypotheses on organisational commitment and identify potential relationships between the independent variables and the construct.

The hypotheses that we aim to test are put forward and described below:

Hypothesis 1. There is no difference in level of organisational commitment between genders.

This hypothesis is in line with the literature on the most common job roles and those specific to the hotel sector (Aranya et al., 1986; Jacobsen, 2000).

Hypothesis 2. Organisational commitment is lower among part-time employees.

Some studies (Ross & Wright, 1998; Van Dyne & Eng, 1998; Sinclair et al., 1999) conclude that part-time employees show a lower level of organisational commitment. The above hypothesis also takes into account the logic arising from theories of partial inclusion and social exchange.

Hypothesis 3. Permanent employees are more committed.

This hypothesis suggests the existence of a direct relationship between job security derived from permanent or indefinite contracts and employees' organisational commitment resulting from a greater emotional attachment to the organisation (Arnold & Feldman, 1982; Greenhalgh & Rosenblatt, 1984; Ashford et al., 1989; Van Dyne & Eng, 1998, Buonocuore, 2010).

Hypothesis 4. Greater family dependence on income leads to higher commitment.

Several authors (Mathieu & Zajac, 1990; Dunham et al., 1994; Mueller et al., 1994; Kim et al., 1996; Lam et al., 2001, among others) have reported that that there is a positive relationship between organisational commitment and relative income. However, the main difficulty lies in measuring the relationship. This hypothesis proposes the existence of a direct relationship between family dependence on income and level of commitment.

Hypothesis 5. Commitment increases with length of service.

This hypothesis has been put forward based on the assumption that length of service is a fundamental factor of socialisation within the company. Despite there being no clear line of investigation within the scientific research, the most recent studies are inclined to suggest a positive relationship between length of service and organisational commitment (Morris & Sherman, 1981; Sarker et al., 2003; Kim & Rowley, 2005, among others).

RESULTS AND DISCUSSION

Table 3 shows the main socio-professional variables of the respondents surveyed.

Table 3 shows that most workers earn between €750 and €1,500 per month and that many of them have full-time, permanent contracts. The table also shows that length of service (almost 7 years on average) is an important variable in determining job stability and providing employees opportunities for career growth and development.

Some conclusions can be drawn from Table 4 regarding employees' organisational commitment in the hotel sector of Cordoba and its relationship with the variables studied. The idea is that these results can aid hotel directors and managers to manage their human resources more efficiently and gain a better understanding of the principal factors which influence the commitment levels of the individuals they employ.

Table 3 Socio-professional variables

Variables		
Salary (€/month) (N=579)	Less than €500	2.9%
	€500- €750	9.0%
	€750- €1,000	40.5%
	€1,000- €1,500	42.3%
	€1,500- €2,500	4.3%
	More than €2,500	1.0%
Type of contract (N=577)	Permanent	65.6%
	Temporary	34.4%
Working hours (N=541)	Full time	80.0%
	Part-time	20.0%
Average length of service at the hotel (years)		6.70

Table 5 shows the scores of the items on the questionnaire relating to organisational commitment. The data contained in the table highlight one of the main problems affecting the Spanish economy in general and the services sector in particular, namely the lack of flexibility among the workforce to adapt to new stages of the economic cycle. Therefore, incentivising measures need to be put in place in order to support functional (and geographical) mobility. The aim is that when the overall economic situation takes the 'recession' route, the quantitative workforce of businesses must not only adapt to the changing circumstances by reducing staff numbers (as is currently happening, unfortunately), but also through an appropriate functional mobility policy (flexibility) which allows employment to be maintained.

Table 4 Mean differences and ANOVA

Variables	Category	Commitment (mean)	F (p-value)
Gender	Male Female	3.74 3.70	0.378 (0.539)
Family dependence on income	Less than 40% 40%-75% More than 75%	3.61 3.69 3.78	32.309 (0.100)
Working hours	Full-time Part-time	3.70 3.75	0.631 (0.427)
Department	Administration Accounts Restaurant Reception Maintenance Housekeeping Kitchen Management Others	3.71 3.45 3.73 3.60 3.78 3.84 3.73 4.03 3.67	1.687 (0.099)**
Hotel category	One star Two star Three star Four star Five star	3.71 3.45 3.73 3.60 3.78	6.219 (0.000)*
Type of contract	Permanent Temporary	3.80 3.60	10.519 (0.001)*
Length of service (in years)	Less than 10 10-20 20-30 More than 30	3.70 3.79 3.61 3.76	0.435 (0.728)

*Significant at the 5% level; ** Significant at the 10% level*

This need is even more pressing, if possible, within the hotel sector given that it is a business environment which suffers from additional difficulties, particularly in terms of human resource planning (quantitatively in terms of numbers of employees and qualitatively in terms of the necessary skills) as a result of the instability and seasonality of demand. There is no doubt that if the sector wishes to move towards so-called '*flexicurity*' (flexibility and job security), it will have to develop

policies which make this very modern and important facet attractive to employees as a means of guaranteeing improved productivity and competitiveness among the organisations operating in the sector. Indeed, European institutions are calling for this route to be followed in various productive sectors of the Spanish economy.

Table 5 Scores on items relating to organisational commitment

I am willing to put in a great deal of effort in order to help this organisation be successful	4.39
Deciding to work for this organisation was a definite mistake on my part (R)	4.37
I really care about the fate of this organisation	4.25
I feel very little loyalty to this organisation (R)	4.15
I am proud to tell others that I am part of this organisation	4.03
There's not much to be gained by sticking with this organisation indefinitely (R)	3.89
I talk up this organisation to my friends as a great organisation to work for	3.87
It would take very little change in my present circumstances to cause me to leave this organisation (R)	3.81
I am extremely glad that I chose this organisation to work for over others I was considering at the time I joined	3.67
I find that my values and the organisation's values are very similar	3.50
For me, this is the best of all possible organisations to work for	3.49
This organisation really inspires the very best in me in terms of job performance	3.43
I often find it difficult to agree with this organisation's policies on important matters relating to its employees (R)	3.19
I would accept almost any type of job assignment in order to keep working for this organisation	3.00
I could just as well be working for a different organisation as long as the type of work was similar (R)	2.71
Total mean organisational commitment	3.72

(R) is the inverse transformation of the scores as the items included a negative rather than an affirmative statement.

Multiple regression analysis was performed to determine a possible relationship between the independent variables (predictor and explanatory

Hypothesis 2. Organisational commitment is lower among part-time employees.

The results of the ANOVA test showed no statistical significance for the difference in means between organisational commitment and the two categories of the variable 'working hours' (part-time and full-time). Nevertheless, the multiple regression analysis showed a negative (in favour of those hired on a part-time basis) and significant coefficient, thus rejecting the independence of both variables. The hypothesis is therefore rejected and it cannot be stated that more working hours increases organisational commitment. In fact, and in line with Still (1983) and Thorsteinson (2003), the opposite occurs.

Hypothesis 3. Permanent employees are more committed.

The ANOVA test showed that the difference in means between type of contract and organisational commitment is statistically significant. The multiple regression analysis confirms this result as the coefficient is positive and significant (coded as 0 = temporary contract, 1 = permanent contract) and rejects the independence of the variables, thus indicating a greater level of commitment among employees with permanent contracts in line with Greenhalgh and Rosenblatt (1984) and Nikolaou et al. (2005). This hypothesis is therefore accepted.

Hypothesis 4. Greater family dependence on income leads to higher commitment.

The ANOVA test showed that the relationship between family dependence on income (a concept similar to relative income) and organisational commitment is increasing, with a difference in means that is significant at the 10% level. The multiple regression analysis, however, showed a positive coefficient but no statistical significance. Therefore, the hypothesis is rejected.

Hypothesis 5. Commitment increases with length of service.

A clear trend was not found for the relationship between organisational commitment and length of service. Although organisational commitment increases marginally from the time the employee joins the company until reaching 20 years of service, it then decreases and does not return to previous levels until reaching 30 years of service with the company. This initial conclusion is also confirmed by the ANOVA test, which showed no statistical significance for the difference in means between organisational commitment and length of service. The multiple regression analysis showed a neutral and non-significant coefficient, thus suggesting that a shorter or longer length of service does not reduce or increase the level of commitment. Therefore, the hypothesis

that commitment increases with length of service must be rejected as in Sarker et al. (2003).

CONCLUSIONS

In recent decades, companies in general have come to view their intellectual capital, which primarily comprises human resources, as cornerstone to ensuring quality services for increasingly demanding customers. This is of even greater importance in the hotel sector where contact between employees and customers are particularly intense. Furthermore, customer satisfaction with their hotel stay largely depends on the service and attention customers they receive from hotel employees. However, to ensure that hotel employees provide a quality service, they must feel satisfied with their work and be committed to the hotel that employs them. Hotels whose employees are committed to the company's organisational culture and strategic business goals will no doubt achieve a sustainable competitive advantage over time.

Based on the fieldwork, we have identified the relationships between organisational commitment and some of the most important variables related to the job, such as working hours (part time or full time), type of contract (permanent or temporary), length of service, the degree of family dependence on the income earned, and an individual or personal variable of importance in the sector, namely the gender of the employee (given the large presence of females in the sector). Understanding these relationships could be of aid to hotel managers in managing human resources more efficiently through the implementation of specific job practices and policies that foster the organisational commitment of their employees.

The results of the analyses for the hotel sector in Cordoba (Spain) have shown that despite what is generally believed in the sector, hotel employment is quite stable over time, with many workers employed full time and earning an average salary of between €750 and €1,500, which must be analyzed taking into account that 20% of workers have a part-time contract. The results have also shown that the mean organisational commitment of hotel employees is 3.72 (out of 5), indicating that they have a medium to high level of commitment. This suggests that hotel managers are managing their human resources in an appropriate manner and fostering job motivation and job satisfaction, which although more temporary in nature, translates into a stable level of organisational commitment over time.

The hypotheses tests did not reveal a relationship between employee gender and organisational commitment; a surprising finding in a sector

that employees a large number of women. As regards the job-related variables, we found that stable employment results in a significant level of organisational commitment. This could be considered a logical result given that employees with a permanent contract enjoy greater job security, and hence feel greater affective loyalty towards the company. Hotel managers should reflect upon this as they too often string together precarious temporary contracts, thereby reducing the job commitment of employees who have contracts of this type. The results of the statistical analyses did not reveal a significant relationship between organisational commitment and working hours, length of service or family dependence on the income earned.

Future lines of research could be aimed at a more in-depth study of the relationship between organisational commitment and effective client orientation to measure the results achieved with the development of this construct. In this sense, it would be convenient to promote the use of quality circles to engage employees in assessing work-related issues, proposing strategies of action and finding solutions with a view to improving organisational commitment. Similarly, these future lines of research could also explore such as other aspects of human resource management, particularly with regard to more modern theories of motivation in order to verify the possible association between these attitudinal concepts.

REFERENCES

Aranya, N.; Kushnir, T. & Valency, A. (1986). Organizational commitment in a male-dominated profession. *Human Relations*, Vol. 39, pp.433-448.

Arciniega, L. (2002). *Organizational commitment Mexico How to make people put the shirt?* México, Limusa.

Arnold, H.J. & Feldman, D.C. (1982). A multivariate analysis of the determinants of job turnover. *Journal of Applied Psychology*, Vol. 67, pp.350-360.

Ashford, S.J., Lee, C. & Bobko, P. (1989). Content, causes and consequences of job insecurity: a theory-based measure and substantive test. *Academy of Management Journal*, Vol. 32, No.4, pp.803-820.

Buonocuore, F. (2010). Contingent work in the hospitality industry: A mediating model of organizational attitudes. *Tourism Management*, Vol. 31, pp.378–385

Chiang, C. (2010). Perceived organizational change in the hotel industry: An implication of change scheme. *International Journal of Hospitality Management*, Vol. 29, pp.157–167

Clark, A.E. (1996). Job satisfaction in Britain. *British Journal of Industrial Relations*, Vol. 34, pp.189-217.

Davis, K. & Newstrom, J. (2001). *Human behavior at work*. Mexico, McGraw Hill.

Dunham, R.B., Grube, J.A. & Castaneda, M.B. (1994). Organizational commitment: the utility o fan integrative definition, *Journal of Applied Psychology*, Vol. 79, pp. 370-380.

Galup, S., Klein, G. & Jiang, J. (2008). The impacts of job characteristics on is employee satisfaction: a comparison between permanent and temporary employees. *Journal of Computer Information Systems*, Vol. 48, No.4, pp.58-68.

Greenhalgh, L. & Rosenblatt, Z. (1984). Job insecurity: toward conceptual clarity. *Academy of Management Review*, Vol. 9, pp.438-448.

Griffin, R.W. & Bateman, T.S. (1986). Job Satisfaction and Organizational Commitment. In C. L. Cooper and I. Robertson (Eds.). *International of Industrial and Organizational Psychology*, Chichester: Wiley & Sons, pp.99-102.

Hartline, M.D., Wooldridge, B.R. & Jones, K.C. (2003). Guest Perception of Hotel Quality: Determining Employee Groups Count Most. *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 54, pp.43-52.

Hawkings, D.E. & Lee, Y.T. (1990). An empirical analysis of organizational commitment among American hotel sales and marketing professionals. *Hospitality Research Journal*, Vol. 14. No.2, pp.103-112

International Labour Organization (2012). *Global Employment Trends 2012: Preventing a deeper jobs crisis*. Geneva, Publications Services ILO.

Jacobsen, D.I. (2000). Managing increased part-time: does part-time work imply part-time commitment? *Managing Service Quality*, Vol. 10, pp.187-200.

Kim, J.W. & Rowley, C. (2005). Employment commitment: a review of the background, determinants and theoretical perspectives. *Asia Pacific Business Review*, Vol. 11, pp.105-124.

Kim, S.W., Price, J.L., Mueller, C.W. & Watson, T.W. (1996). The determinants of career intent among physicians at a U.S. Air Force hospital. *Human Relations*, Vol. 49, pp.947-975.

Katsaros, K. & Tsirikas, A. (2012). Hotel mangers´s behaviour towards change uncertainty in Greece. *Tourismos: an international multidisciplinary Journal of Tourism*, Vol. 7, No.2, pp.359-379.

Kutanls, R.O., Mescl, M., Comlekcl, I. & Sahln, O. (2012). Investigating hotel employee involvement in strategic human resources management. *Tourismos: an international multidisciplinary Journal of Tourism*, Vol. 7, No.1, pp.117-134.

Lam, T.; Zhang, H. & Baum, T. (2001). An investigation of employees' job satisfaction: the case of hotels in Hong Kong. *Tourism Management*, Vol. 22, pp.157-165.

Larson, P.D. & Sinha, A. (1995). The TQM Impact: A Study of Quality Manager's Perceptions. *Quality Management Journal*, Vol. 2, No.3, pp.53-66.

Lee, C. & Way, K. (2010). Individual employment characteristics of hotel employees that play a role in employee satisfaction and work retention. *International Journal of Hospitality Management*, Vol. 29, pp.344-353.

Mathieu, J. E. & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, Vol. 108, pp. 171-194.

McGee, G. W. & Ford, R. C. (1987). Two (or more) dimensions of organizational commitment: re-examination of the affective and continuance commitment scales. *Journal of Applied Psychology*, Vol. 72, pp. 638-642.

Meyer, J.P. & Allen, N.J. (1991). A three component conceptualization or organizational commitment. *Human Resource Management Review*, Vol. 1, pp.1-89.

Meyer, J. P.; Beckert. E. & Vandenberghec, E. (2004). Employee commitment and motivation: a conceptual analysis and integrative model. *Journal of Applied Psychology*, Vol. 89, No.6, pp.991-1007.

Meyer, J.P. & Herscovitch, L. (2001). Commitment in the workplace. Toward a general model. *Human Resource Management Review*, Vol. 11, pp.299-326

Morris, J. & Sherman, J. D. (1981). Generalizability of an organization commitment model. *Academy of Management Journal*, Vol. 24, pp.512-526.

Mowday, R. T.; Porter, L. W. & Steers, R. M. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism and turnover*. New York, Academic Press.

Mueller, C. W.; Boyer, E. M.; Price, J. L. & Iverson, R. D. (1994). Employee attachment and non-coercive conditions of work: The case of dental hygienists. *Work and Occupations*, Vol. 21, pp.179-212.

National Statistics Institute (2013a). *Hotel occupancy Survey*. Madrid, Publications Services NSI.

National Statistics Institute (2013b). *Economically Active Population Survey*. Madrid, Publications Services NSI.

Nikolaou, A., Theodossiou, I. & Vasileiou E.G. (2005). Does job security increase job satisfaction? A study of the European experience. Paper presented at 2nd World Conference SOLE/EALE, European Association of Labour Economists, San Francisco: 14-16 March 2005.

Porter, L.W.. Steers, R.M.. Mowday, R.T. & Boulian, P.V. (1974). Organizational commitment, job satisfaction and turnover among psychiatric technicians. *Journal of Applied Psychology*, Vol. 59, pp.603-609.

Reichers, A.E. (1985). A review and reconceptualization of organizational commitment. *Academy of Management Review*, Vol. 10, pp.493-512.

Ross, C.E. & Wright, M.P. (1998). Women's work, men's work, and the sense of control. *Work and Occupations*, Vol. 25, pp.333-355.

Salvador, C. (2005). Components of commitment and its influence on customer satisfaction. *Journal of Psychology*, Vol. 20, No. 3, pp.316-322.

Sarker, S.J., Crossman, A. & Chinmeteepituck, P. (2003). The relationships of age and length of service with job satisfaction: an examination of hotel

employees in Thailand. *Journal of Managerial Psychology*, Vol. 18, No.7-8, pp.745-758.

Schlesinger, L.A. & Heskett, J.L. (1991). Breaking the cycle of failure in services. *MIT Sloan Management Review*, Vol. 32, No.3, pp.17-28.

Scholarios, D. & Marks, A. (2004). Work-life balance and the software worker. *Human Resource Management Journal*, Vol. 14, No.2, pp.54-74.

Sinclair, R.R., Martin, J.E. & Michel, R.P. (1999). Full-time and part-time subgroup differences in job attitudes and demographic characteristics. *Journal of Vocational Behavior*, Vol. 55, pp.337-357.

Still, L.V. (1983). Part-time versus full-time salespeople: individual attributes, organizational commitment, and work attitudes. *Journal of Retailing*, Vol. 59, pp.55-79.

Testa, M.R. (2001). Organizational commitment, job satisfaction, and effort in the service environment. *The Journal of Psychology*, Vol. 135, No.2, pp.226-236.

Thorsteinson, T.J. (2003). Job attitudes of part-time vs. full-time workers: a meta-analytic review. *Journal of Occupational and Organizational Psychology*, Vol. 76, pp.151-177.

United Nations World Tourism Organization (2011). *Tourist data*. Madrid, Publication Services UNWTO.

Van Dyne, L. & Eng, S. (1998). Organizational citizenship behaviour of contingent workers in Singapore. *Academy of Management Journal*, Vol. 41, pp.692-703.

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ARE STUDENTS AND TEACHERS READY FOR BOLOGNA? A PEDAGOGICAL PROJECT IN A TOURISM COURSE

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The implementation of the Bologna process in higher education leads to rethinking the teaching-learning assumptions. Higher education today is focused on curricula, teaching-learning processes, subjects and course programmes attending to European credits system, teachers' qualification and training, academic success and scholar results, performance standards, assessment of institutions, assessment of skills (and not merely knowledge).In 2010 a project (Construction of Learning | ConstAp) was developed in the Polytechnic Institute of Castelo Branco, Portugal. The main goal was to motivate the adoption of changes concerning classroom methodologies and students' autonomous workload guidance in the scope of the Bologna process implementation.This paper presents a proposal of pedagogical intervention to deal with the mentioned objectives, a project applied in a specific tourism course. The paper presents the first results collected regarding the project's implementation and seeks to impart a methodology that can be applied to similar courses.

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OVERVIEW

The implementation of the Bologna process in Europe brought a new structure and a new organizational model for higher education graduation courses. These changes were recognized through the publication of laws to be pursued by higher education institutions (HEI), considering strict deadlines to accomplish in terms of the Bologna process implementation. Since 2006, when it all began, a continuous adaptation to these changes has been trailed by educational agents, mainly focused on operational and organizational tasks. The fact is that the main issue that should prompt the Bologna process implementation - the pedagogical changes - were left behind.

Briefly, we can state that the Bologna process is based in student-centred teaching (European Comission, 2009), where the focus is on what the student is able to do after completing the learning activities. This is the background that justifies the overall acceptance of the European Credits Transfer and Accumulation System (ECTS) and the resulting changes, namely in what regards quality assurance and recognition at the european level. Thus, the definition of objectives regarding knowledge to be achieved by students becomes fundamental, to understand how students deal with this knowledge and what are the skills required.

Only meaningful activities can engage students in learning (Biggs & Tang, 2007). This task is the field where the teacher can express his creativity in appealing students, eager for experiences that can turn knowledge into real life happenings – after all, the variable 'teacher' is much more powerful than the variable 'method' concerning students achievement and healthy work environment (Fonseca, 1999).

According to Tyler "Learning takes place through the active behaviour of the student: it is what he does that he learns, not what the teacher does." (cited in Biggs & Tang, 2007: n/p). The teaching practices in the classroom, based upon the teacher's knowledge and actions, are one of the characteristics of the former model of teaching. In this new context it is important to reflect about these practices and try to derive pedagogical activity to the adoption of active methodologies and activities able to engage students (Figure 1).

Learning has to be centred in what the student is able to do, encouraging individual and cooperative (team-based) learning in order to develop soft skills, which are usually fundamental in a team work environment, as Azim (2012) discussed.

Figure 1 Old-style vs. new context teaching

Old-style	New context
The quality of learning depends on the quality of the transmission form	Promotes interaction and participation
Transmission of a large quantity of contents	Teachers should motivate and challenge students
Students as passive elements in receiving information	Enables the relation between the learning with the knowledge already acquired
It may lead to a poor engagement with the issues or potentialities of a learning environment	The intervention is shared between moments led by teacher and others that allow the active participation of students
Large groups and knowledge transmission in only one direction: teacher ⇨ student	Enables a deeper understanding of the subjects

The ECTS also brought a new meaning to the students' workload, once it considers all the hours that students spend in their learning process. This new approach requires the definition of objectives for the curricula, in terms of skills to be achieved, and also curricular flexibility and learning centred in the student [usually known as student centred learning (SCL)]. And this is a substantial transformation regarding previous models: instead of based on large bibliographic sources knowledge, the teacher comes closer to act as an intermediary between the knowledge and the student. The task of the teacher is to encourage and help students to seek for knowledge, showing the way (but not leading), alowing learner's empowerment and autonomy. Experimental work and soft skils become relevant to release criativity and critical thinking in students.

SCL is an approach based in construtivist theories, moulded by innovative methods of teaching that look for interaction with the students and other teachers. SCL allows, in fact, an active learning by encouraging problem soving and critical and reflexive thinking (Attard, Di Orio, Geven & Santa, 2010; Biggs & Tang, 2007; Felder & Brent, 1996; Santa & Geven, 2010). SCL is focused on expectations about what students are able to do at the end of the period of learning – it is, in this sense, an approach based on learning outcomes (Kennedy, Hyland & Ryan, 2007) and mainly deals with autonomy.

The association between learning outcomes, the teaching-learning methodologies and the assessment process has been studied by different researchers. For example, Biggs & Tang (2007) call on the concept of constructive alignment as one of the most exciting ideas committed to higher education. The assumption regarding the model is that curricula are assembled to assure consistency between learning and assessment activities and learning objectives committed to a subject. Thus, "Learning outcomes are statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of a process of learning" (Kennedy et al, 2007: 5) and, for that reason, carries a fundamental shift in the core of the educational process, from teaching to learning. This educational refocusing, based on the appeal to retrieve students' abilities to think and wonder (opposite to the former knowledge and ideas reproduction process) will allow students to face this knowledge based society in a better way, giving them tools to deal with change and to adapt to environments and circumstances (Atay & Yildirim, 2010) – in a wider sense it's kind of a Darwinian process.

Nevertheless, there are huge difficulties throughout Europe to change traditional teaching-learning processes (whether regarding SCL or skills based teaching), even if the countries attend the principles of the Bologna Declaration, or put in practice ECTS, or even are structured in common graduation courses, and so on. As Ritzen (2010: 175) put it: "(…) under the surface of the same Bachelor-Master structure the sea is full of different and incomparable fish", meaning that there are several problems to overcome, at national and, mostly, international terms.

THE CHANGING ROLE OF TEACHERS

Bologna brought some extra work to teachers, regarding teaching activities: besides having to master specific scientific area(s) to work with students, they must also pay attention to the learning environment concerning the subjects they have to teach [Guerra (1990) cited in García-Valcárcel (2001)]. So, the bottleneck lies in how to appeal teachers to put in place pedagogical concerns when the huge majority of them had probably never been close to these issues?

The pedagogical dimension attached to higher education is growing in attention from education sciences specialists. Cachapuz (2001) refers the need for pedagogical improvement of teachers; Román (1980) argued that verbalism, dogmatism and expositive classes should no longer take place. Today interaction and information exchanges between teacher and student is far more important than before. Instead of passing existing

knowledge it's desirable to stimulate students criativity (Blikstrein & Zuffo, 2003).

The improvement of teaching practices it is an evolutionary and sharing encouragement, but needs, nevertheless, reliable data. Therefore, data collection tools are needed, as well as information sharing systems concerning new (or innovative) pedagogical practices. Given the nature of the teaching-learning process, its complexity and its multidimensionality, it is necessary to assess this process collecting information available from different sources. Thus, it is important to take into consideration information provided by teachers, students and institutional management, pedagogical and scientific bodies.

Having the theory of Constructive Alignment as reference, which refers to the congruence concerning what students must be able to perform, know or understand and how it should be delivered and assessed by teachers (Fry, Ketteridge, & Marshall, 2009), a project called Construction of Learning (ConstAp) was outlined at the Polytechnic Institute of Castelo Branco (IPCB), a portuguese higher education institution. The awareness of teachers and students about the need to promote autonomous work development and guidance to achieve success in higher education, under the Bologna process framework, it is one of the goals to achieve by the ConstAp project. This aspect also refers to the implementation of continuous assessment of students, trying to get teachers to implement strategies involving systematic completion of activities by students, actively enabling the learning process.

The project was first implemented, in an early stage of development, in one graduation course (precisely the one we will approach later on) and then implemented in six graduation courses in the HEI, in different knowledge fields. Depending on the results accomplished, it is expectable the widening of the project to all courses taught at IPCB. In this sense, it becomes relevant to be aware about the activities that are proposed attending the development of students' autonomous work and how the teachers monitor those activities and the students' engagement.

Higher education is a complex web of competences, knowledge and abilities. Plus, knowledge does not last forever, it's continuously changing: students and their aptitudes change as time goes by and research about teaching evolves and bring new frontiers and paradigms. Therefore, any teacher has to constantly question about how they carry out their profession.

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THE CONSTAP PROJECT AT IPCB

Outline of the Project

The ConstAp Project was settled attending to the challenges presented by the Bologna process, to study-centred learning approach and to learning based on skills achievement. One other important objective is related with the teaching quality assurance within the requirements deriving from the National Agency for Accreditation of Courses in Portugal. In order to answer to those requirements, the ConstAp project was outlined to fulfil some gaps detected in Bologna's implementation institutional reports produced previously. The objectives referred earlier depend mainly on the motivation and initiative revealed by teachers; therefore, the project allows a broader discussion about changes needed in higher education.

The development of the project seeks to provide access to a set of educational tools which are not commonly used in the IPCB, targeting the improvement of teaching and learning. Regarding the specific objectives, it is possible to point out: to encourage the use of active teaching and learning methodology, as well the implementation of continuous assessment; to adjust the students' workload throughout the period of assessment (on a weekly basis); to monitor the time students work autonomously, time that must be guided by the teacher; to help to develop the students' process of self-regulation of learning (working methods); to promote cooperation and coordination of the different activities developed during the semester; to collect data related with the training trajectory to be analysed in the scope of courses' quality assurance.

The project defines several monitoring tools that outline a methodological process involving learning activities and, consequently, its objectives and skills to achieve. Monitoring also comprises specific sheets designed to gather the information about the activities developed by the student in contact hours (hours spent in the classroom or in contact with the teacher) and for the ones developed in autonomous work (away from the teacher). These sheets were set considering the availability of information to students in a similar way and the collection of information allowing assessing some aspects of the educational process, such as:

- types of activities developed by teachers in contact hours and overall perception about the dynamics of the subjects, in the classroom;
- types of activities proposed for managing students' autonomous work;

- the appreciation of activities developed by students in the classroom through their contribution in the teaching and learning process;
- understanding the phases of assessment and organization of work during the semester;
- relation between the estimated time to carry out activities completion and the time spent by students to carry out those activities;
- organization and articulation of work in a course program (in all the dimensions), considering all the subjects and activities.

The sheets were initially applied to a single program course, in the school year 2010/2011, which was the Tourism Management graduation course tutored at the Management School of IPCB. It was supposed to test its structure and comprehension from students and teachers. The project was designed considering its implementation to 1st year students, aiming to contribute also to their integration into higher education requirements. It was supposed to enable scholar achievement, in the freshman year but also in the years after, once it considerers that by performing specific activities students will learn better how to manage time and to organize themselves. Academic failure and school dropout were expected to drop by actively engaging students in learning.

Methodology

The project requires that the teacher delivers, in the beginning of the working week, the lessons plan, identifying the activities to develop. These activities must be connected with skills to achieve, allowing students to relate syllabus with the teaching practices. Assessment practices derive from teaching and must result from its phases or steps. There must also be a clear definition of activities to accomplish in periods devoted to students' autonomous work and the mechanisms to control the average time spent by students to fulfil them.

Attending the need to organize the teaching/learning process, planning and organization principles applied to cross-educational activities were considered. These crossed activities should allow a better perception of students about the objectives and skills involved in every training stage. These activities should also be linked with assessment, to continuously track the evolution of knowledge and skills acquisition by students. The ConstAp project aims also to simplify the analysis of the students' autonomous workload and the monitoring provided by teachers.

The completion of this information allows measuring the students' workload in a specific semester and graduation course.

Finally, the implementation of a single assessment grid allows teachers (namely the course coordinator) to follow-up overall school results, identifying cases of school failure and drop-out during the students' formational journey. This supervision will turn timely knowledge about students' situations easier and an early intervention to look for appropriate solutions. It is important to say that it is fundamental an articulation with the tutoring system existing in the HEI.

Project implementation

After the 'beta phase' implementation (one graduation course), the project was widened to other courses at the IPCB. The project has greatly benefited from the voluntary participation of teachers and the data collected was analysed according to a previously prepared grid. This grid collects information related to autonomous workload carried out, the management of activities developed and the comparison between the effective and the planned working hours (ECTS).

The main issues to be answered by the project are: what kind of activities are developed in each subject?; what actions are settled by teachers in each activity?; what kind of assessment methods are used in classrooms hours?; what kind of activities are requested to be developed autonomously?; how many activities are carried out in each subject and how are they allocated throughout the time?; how much time did the student spent to accomplish each activity?

Each one of these questions will be answered by making use of some assessment indicators, namely: activities carried out; methodologies used in these activities; distribution of assessment moments along the time; relation between the planned autonomous working hours and the ones it was possible to determine; the difficulties found.

The actions were carried out sequentially and can be resumed as mentioned below: a) debriefing session regarding the key issues of the project (with teachers and students); b) project's monitoring and encouragement (throughout the semester); c) data collection from the sheets; d) statistical analysis of the data collected; e) reports completion: global report, providing institutional information; course report.

CASE STUDY: IMPLEMENTATION OF THE CONSTAP PROJECT

The graduation course in Tourism Management at the IPCB

The degree in Tourism Management (DTM) aims to answer to labour market needs by training professionals who meet the intermediary and final sectors of tourism. The DTM is designed to prepare professionals to perform functions in the management of tourism enterprises and official tourism bodies. It seeks to put together disciplinary knowledge with the development of professional skills that help the inclusion in the labour market. In each semester, classroom learning coexists with seminars, workshops, field trips and tutorial guidance. The several components pursue the goal of equipping students with soft and instrumental skills that are necessary for the exercise of a professional activity and to develop skills of communication, human relations and teamwork. The aim is also to create an entrepreneurial spirit and encourage quality and creativity, which are crucial in the tourism sector.

The objectives referred before were established with a perspective of respect to the nature, the mission and the values pursued by the IPCB's Management School (MS/IPCB). In its mission, MS/IPCB undertakes: to provide students with high skills (cultural, scientific, technical and professional) in social sciences and management areas; to produce and convey knowledge in the referred areas; the accomplishment of research and applied research; to serve the community, enhancing regional development; to promote cultural, scientific and technical exchange with analogous national and international institutions.

The graduation course began to be tutored at the MS/IPCB in the year 2005-2006, but promptly closed due to institutional reasons. It was rebooted in the year 2010-2011 and changes have been introduced in the new curricula in order to balance the training process with the needs of the labour market. DTM is structured in accordance with the legal framework governing HEI in Portugal and is organized into 180 ECTS dispersed in six semesters. It provides a high delivery of foreign languages; it includes also a component of high importance related to entrepreneurship. The course provides also, in its curricula, the achievement of an internship in the 3rd year, corresponding to a professional practice on the job during 486 hours. The study plan is provided in Annex 1.

The curricula of the DTM is rooted in the guidelines of national and European scientific community; a tourism management professional must

support and develop his knowledge, qualifying for a full performance of the job and to develop the activity in an environment of constant evolution, following the philosophy of continuous and phased learning throughout life. The course has a very marked professional character and is focused in the creation and development of tourism activities. The research component is grounded on interdisciplinary work that is required for students, bringing together, at various times, specific skills from different subjects.

Teaching, learning and project implementation

The definition of the teaching methodologies result of the learning objectives settled. In this sense, teachers adopt tools and resources to lead the construction of learning by students, guiding the acquisition of knowledge. The use of active methods of teaching and learning, extended to all subjects, allows students to relate theoretical concepts with practice and problem solving activities. The widespread use of continuous assessment is another key aspect, which is related both to the teaching methods and with the identification of the learning steps towards the envisaged goals. The approach of the training process has been focused on the students and their learning, having as central element their performance in the acquisition of skills and the encouragement for collaborative work among peers.

The average workload is assessed through questionnaire to students and this information is compared with the one provided by teachers about the expectable workload. This information returns to the teacher of the subject and to the course coordinator for analysis. The application of the ConstAp project at the DTM aims at controlling the autonomous working hours and the activities in each subject. The point of view was that in the classroom it is easier to control the working time of the students, but outside the classroom it is much more difficult and generally overlooked by teachers.

Continuous assessment allows the teacher to follow the continuing acquisition of skills by students. Its fulfilment allows corrections along the lecturing in the semester, permitting processes of school failure reversion and support the evolution of each student. The combination of various assessment moments among the different subjects it is pursued, in order to maintain well-adjusted levels of autonomous work during the semester. This work enables teachers to be aware about the process of assessment in each subject, including the overall assessment timing. The course coordinator has to relate the assessment provided with the skills

and objectives outlined, by conducting meetings with staff and students, on one hand, and taking advantage of the tutorial system to discuss the quality of the training, on the other.

The assessment methodologies are, whenever possible, interdisciplinary: an assessment methodology may involve more than one subject; an assessment methodology in a subject may be continued in subsequent subjects; an assessment methodology may involve public presentations, in the form of seminar or workshop, among other possibilities. The aim is to stimulate creativity and research skills to address some of the challenges of the professional world.

First results

Attending to the goals, the questions to answer and the assessment indicators previously mentioned, it is possible to show some results achieved after the first year of application. The main ones are:

1. It becomes possible to collect information regarding the activities and methodologies used by teachers. One can observe it in the following tables (Table 1 and 2) which relate to some subjects tutored at the DTM.

Table 1 Examples of activities developed in the subjects*

Subject	Activities
Subject II	Practical work with oral presentation; written test
Subject III	Reports; practical work; written test
Subject IV	Reports; Assessment Grid construction regarding …
Subject V	Report; practical works; oral/audio-visual presentation

There were two subjects that decided not to apply the ConstAp project

2. There is an unequal distribution of activities in terms of the different subjects tutored at the DTM – in fact, there are subjects that allocate activities throughout the period, other that focus activities in a limited number of moments and other that centre the activities on a particular period. These situations may be perceived from examples regarding some subjects tutored at the DTM (Table 3).

Table 2 Learning methodologies used in several activities and subjects

Subject	Methodologies
Subject II	Lectures; reading literary work and presentation; translation of a tourism brochure made in other subjects; research, selection and presentation of information concerning a case, paper, situation, …; written test
Subject III	Lectures; learning by discovery; discussion; practical work with oral and/or audio-visual presentation; written test
Subject IV	Lectures; video visioning; answering questions; group analysis and discussion; findings presentation; Assessment Grid construction regarding…; touristic tour/route with report completion; study visit to… with report completion
Subject V	Lectures; Report completion about defined themes; practical work; oral and/or audio-visual presentation

Table 3 Moments of Delivery of Autonomous Work (AW) and/or Written Test (WT) – example

Subject		Weeks														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Subject II	AW									1 2	3					
	WT													1		
Subject III	AW			1	2		3				4				5	
	WT													1		
Subject IV	AW		1		2	2 3	2	2 4	2	2	2	2	2	2	5	
	WT															
Subject V	AW		1		2	2 3	2	2 4	2	2	2	2	2	2	5	
	WT															

3. The uneven distribution of activities affects the time students spend working during the period (semester/year). This irregular scattering of activities can be seen in Figure 2 and 3.

Figure 2 Average time spent (hours) in autonomous work –
specific subject example
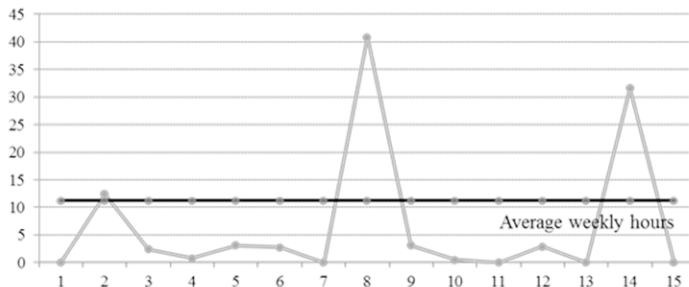
Figure 3 Number of activities and autonomous work time
throughout winter semester
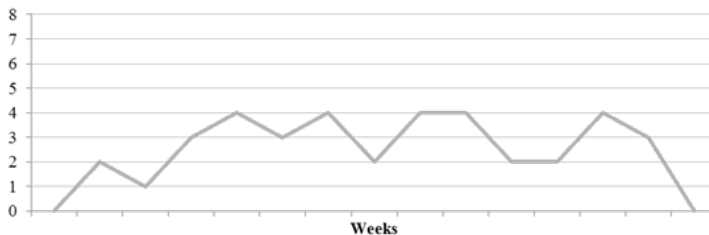
4. It is possible to say, although not definitely, that the time students dedicate to autonomous work is lower than the one expected by teachers, according to the ECTS assigned (Table 4 and Figure 4). This brings some bad news: the assessment model and the methodologies used are probably outdated, which means that a great deal of efforts must be carried out to change the *status quo*.

Table 4 Relation between autonomous working hours planned and
found – semester example

Subject	AW Planned (1)	AW Found (2)	Difference (3) = (2)-(1)
Subject II	36 hours	NI	---
Subject III	92 hours	34 hours	- 58 hours
Subject IV	92 hours	18 hours	- 74 hours
Subject V	40 hours	48 hours	8 hours

NI – No Information

Figure 4 Relation between autonomous working hours planned
and found, per Subject (CU/S)
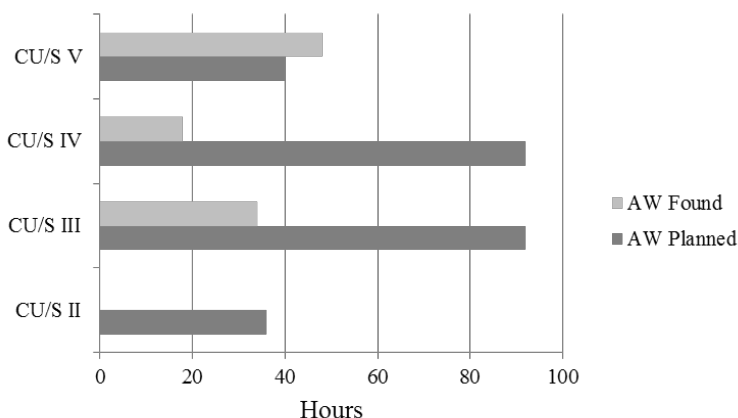
Although some positive results that were already gathered, it became
evident for us the need to implement some changes in the process in order
to turn it more effective.

PROJECT'S DIFFICULTIES AND REDEFINITION

In this new approach regarding teaching and learning, former
teaching practices and curricula management are being restructured and
new practices are becoming important. This is not an easy process to deal
with once higher education teachers, hiding behind the pedagogic
autonomy cliché, often show high reluctance to question their teaching
methods. The attribution of value to the autonomous work carried out by
the student, and guided by the teacher, it is another issue difficult to deal

with. So far, classroom was the field where teachers could express themselves in pedagogical and scientific terms; now, it is asked from teachers to control the work students carry out outside the physical boundaries of the classroom. Thus, there is a need for strategies that support this changing environment, strategies that involve changing training assumptions by the teacher and awareness to the importance of this kind of work by the student.

With this objective in mind, it was decided to review the sheets available in the scope of the ConstAp project. According to the first results assembled during the first year, it was possible to identify some improvements, especially due to some comments and proposals made by teachers involved. Among the difficulties pointed out, and considering simplification and more expedite actions, we can mention: i) difficulties to fulfil an excessive number of sheets; ii) difficulties to understand some of the elements required; iii) reliability of the information regarding the autonomous workload.

One other difficulty found when implementing the project was persuading the teachers about the need to guide the students' autonomous work and monitor its application. It became also clear the need to deepen the students' perceptions about the linkage between the autonomous working hours carried out and the subject's assessment.

The importance of the teachers' educational development is critical because the pedagogical act can function as an enhancer of the factors that contribute to a successful school (Veloso, Costa, & Lopes, 2010): the project's implementation allowed identifying some gaps at the level of educational practices renovation and continuous training.

After taking these aspects into consideration, we found important to redraft and turn simpler the sheets available to collect the data. To explain the operational aspects of the project more clearly and encourage more subjects/teachers to be involved, other actions were used in order to improve the project implementation, such as seminars and training actions. Finally, it was decided to strengthen the monitoring system. The major changes were, then: simpler sheets; directive answers from teachers; collection of data more objective and measurable.

The three sheets available to teachers to fulfil were replaced by only one (Annex 2), with direct answers, and aiming that teachers could adjust activities to objectives and skills, encourage autonomous work and continuous assessment.

The three sheets available to teachers to fulfil were replaced by only one (Annex 2), with direct answers, and aiming that teachers could adjust

activities to objectives and skills, encourage autonomous work and continuous assessment.

DISCUSSION AND FUTURE PERSPECTIVES

Due to knowledge provided by literature, namely the changes occurring in society, and based on the experience of one year of project application, it is important to reflect about the positive and negative characteristics of the project.

Besides the results previously referred, and considering the improvements made in the second year of implementation, we continue to believe that it is a project targeting the main issues related to autonomous work monitoring, continuous assessment and strengthening of the relation between skills, objectives and syllabus contents. These are fundamental issues when considering the changes brought by the Declaration of Bologna.

The annual monitoring of the project seems to be appropriate to implement a process of enduring improvement until the day when practices make the project unnecessary. In this sense, besides the operational aspects and the resistance to change previously identified, there are some possibilities of upgrading the project. Once those options are not definitely chosen, we point some issues to be considered: to include some team matching or co-teaching activities; creation of a catalogue of soft skills at the DTM; to encourage the assessment of skills and not the knowledge per se; to reinforce teachers' training activities; to analyse the assessed activities and build a portfolio of good practices, feeding back to the institution; to develop the operational aspects near teachers and students; to develop teachers and students encouragement; to evolve to an approach near to Problem Based Learning; to implement some kind of software solution to turn easier the data collection and analysis; to correlate the project implementation with the academic success and school dropout ratios.

These are in fact some future developments that are feasible to follow, searching for further development of the ConstAp project.

CONCLUSIONS

Changes undergone by the Bologna Process, although concluded in terms of curriculum organization, are not yet complete, especially when we think about educational activities developed by HEI. Even recognizing the effort of a great deal of teachers to adjust their methodologies to these

new requirements regarding teaching and learning, the identification and benchmarking of educational good practices is left behind, as well the use and spreading of active methodologies.

ConstAp project applied at the Degree in Tourism Management meets the objectives of the Bologna declaration and the Courses Accreditation Agency's requirements of quality. It tries, in fact, to link the legislation with the effective needs of students - professional, cultural and social, that are rapidly changing - based on skills and not only knowledge.

The project aims, besides the objectives mentioned before, to contribute to the process of changing the educational and cultural model, intrinsic to the transmission of knowledge and assessment practices. Thus, it is our deep conviction that the methodology designed and the implementation management assure the gathering of relevant information that may, at least, lead to a reflection on the practices pursued by teachers.

The implementation has been an important *apport* by questioning educational issues and promoting dialogue among the teachers regarding what and how to change. The combination between objectives, skills, methodologies, educational activities, autonomous work and assessment tools is still being argued at the school level - which is good, of course, and may lead to the following step: to put in practice changes in the educational/learning process.

The activities that were developed allowed the identification of difficulties in approaching a new educational model; but it has contributed to guide the work that has to be done with the teachers in terms of motivation and training to face the challenge.

It seems to us that this is a project that seeks to move subjects closer (cross-disciplinary approach) and that can be seen has a good practice. The lack of a diffusion channel in the internet is a gap that we are trying to overcome by building an integrated solution, involving data collection, teachers' interaction and communication to peers facing similar problems.

REFERENCES

Atay, L. & Yildirim, H. (2010). Determining the factors that affect the satisfaction of students having undergraduate tourism education with the department by means of the method of classification tree. *Tourismos: an International Multidisciplinary Journal of Tourism*, Vol. 5, No.1, pp.73-87.

Attard, A., Di Iorio, E., Geven, K. & Santa, R. (2010). Student-Centred Learning - Toolkit for students, staff and higher education institutions. Http://download.ei-ie.org/SiteDirectory/hersc/Documents/2010%20T4SCL%20Stakeholders%

20Forum%20Leuven%20-%20Student-Centred%20Learning%20Toolkit.pdf. Accessed the 6 th of March 2013, at 11:30.

Azim, T. (2012). Graduation between level of the tourism education and requirements of the Tourism and Hospitality work field. *Tourismos: an International Multidisciplinary Journal of Tourism*, Vol. 7, No.2, pp.299-321.

Biggs, J. & Tang, C. (2007). *Teaching for Quality Learning at University – What the Student does* (3rd ed.). Maidenhead, UK, Society for Research into Higher Education/Open University Press.

Blikstrein, P. & Zuffo, M. (2003). As sereias do ensino electrónico [The mermaids of electronic teaching]. In M. Silva (Eds.) *Educação Online* [Education Online], (pp. 23-38), São Paulo: Loyola Editions.

Cachapuz, A. (2001). Em Defesa do Aperfeiçoamento Pedagógico dos Docentes do Ensino Superior [In Defense of Pedagogical Improvement of Higher Education Teachers]. In C. Reimão (Eds.) *A Formação Pedagógica dos Professores do Ensino Superior* [Pedagogical Training of Higher Education Teachers], (pp. 55-61), Lisbon: Colibri Editions.

European Comission (2009). *ECTS User's Guide, Luxembourg: Office for Official Publications of the European Communities*. Luxembourg, Office for Official Publications of the European Communities.

Felder, R. & Brent, R. (1996). Navigating the Bumping Road to Student-Centered Instruction. *College Teaching*, Vol. 44, No.2, pp.43-47.

Fonseca, V. (1999). *Insucesso escolar: abordagem psicopedagógica das dificuldades de aprendizagem* [School Failure: psychopedagogic approach of learning difficulties] (2nd ed.). Lisbon, Âncora..

Fry, H., Ketteridge, S. & Marshall, S. (2009). *A Handbook for Teaching and Learning in Higher Education – Enhancing Academic Practice*, 3rd ed. London, Routledge.

García-Valcárcel, A. (2001). La Función Docente del Profesor Universitario, su Formación y Desarrollo Profesional. In A. García-Valcárcel (Eds.) *Didáctica Universitaria* (pp. 9-43), Madrid: Editorial La Muralla.

Kennedy, D., Hyland, Á. & Ryan, N. (2006). Writing and Using Learning Outcomes: A Practical Guide. Http://sss.dcu.ie/afi/docs/bologna/writing_and_using_learning_outcomes.pdf. Accessed the 6 th of March 2013, at 13:15.

Ritzen, J. (2010). *A Chance for European Universities, Or: Avoiding the Looming University Crisis in Europe*. Amsterdam, Amsterdam University Press.

Román, J. (1980). Introducción a los métodos activos de ensenanza. In J. Román, G. Musitu and E. Pastor (Eds.) *Métodos activos para Enseñanzas Medias y Universitarias* (pp. 14-31), Madrid: Cincel-Kapelusz.

Santa, R. & Geven, K. (2010). Student-Centered Learning - A survey on the views of national unions of students and higher education staff. Http://download.ei-ie.org/SiteDirectory/hersc/Documents/2010%20T4SCL%20Stakeholders%

20Forum%20Leuven%20-%20Survey%20Analysis.pdf. Accessed the 6 th of March 2013, at 17:45.

Veloso, H., Costa, A. & Lopes, J. (2010). *Factores, Representações e Práticas Institucionais de Promoção do Sucesso Escolar no Ensino Superior* [Factors, Representations and Institutional Practices in Promoting School Achievement in Higher Education]. Porto, U. Porto Editorial.

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Appendix 1 - Study plan

Subject	Working Hours	Contact Hours	ECTS
1st Year / 1st Semester			
English I	135	99	5
Spanish I	135	99	5
Fundamentals of Tourism	162	70	6
Statistics Applied to Tourism	108	68	4
Business Management and Entrepreneurship	162	70	6
Fundamental Notions of Law	108	68	4
1st Year / 2nd Semester			
English II	135	99	5
Spanish II	135	99	5
Strategic Marketing	162	70	6
Itineraries and Touristic Tours	162	70	6
Tourism Public Policies	108	68	4
Tourism Law	108	68	4
2nd Year / 3rd Semester			
English III	135	99	5
Spanish III	135	99	5
Touristic Market Research	135	69	5
Tourism Economics	135	69	5
Market Studies	135	69	5
Management Accounting	135	69	5
2nd Year / 4th Semester			
English IV	135	99	5
Spanish IV	135	99	5
Sociology of Tourism	135	69	5
Analysis and Financial Management	162	70	5
Territorial Marketing	108	68	5
Culture and Heritage	135	69	5
3rd Year / 5th Semester			
Communication Strategies	108	68	4
Events Marketing	135	69	5
Certification and Quality in Tourism	162	70	6
Tourism Operations Management	162	70	6
Human Resources Management	108	68	4
Strategic Management in Tourism	135	69	5
3rd Year / 6th Semester			
Information Technology and Communication	135	69	5
Tourism and Development	135	69	5
Seminar on Research Methodology	54	21	2
Internship	486	22	18

Appendix 2 – Sheet used in the ConstAp project, by subject

**SCHOOL OF MANAGEMENT
DEGREE IN TOURISM MANAGEMENT**

Instituto Politécnico
de Castelo Branco

Contact activities and autonomous work

Subject:

Date:

1. Activities fulfilled in the classroom (contact hours)

Class n.er:

Week in which the activity is carried out:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Type of class:

Theoretical ☐   Theoretical-Practical ☐   Practical and Laboratory ☐   Field work ☐
Internship ☐   Tutorial Guidance ☐   Seminar ☐   Other ☐

Activities to develop in the classroom:

By the teacher

1. ☐ Syllabus exposition	% time:	
2. ☐ Exercises	% time:	
3. ☐ Testing/trials	% time:	
4. ☐ Study visit /field trip	% time:	
5. ☐ Technique/equipment demonstration	% time:	
6. ☐ Symposium/conference/workshop participation	% time:	
7. ☐ Other	% time:	

By the student	Individual	Group		
1. ☐ Exercises	☐	☐	% time:	
2. ☐ Testing/trials	☐	☐	% time:	
3. ☐ Reading activities	☐	☐	% time:	
4. ☐ Discussion/debate			% time:	
5. ☐ Research/practical work	☐	☐	% time:	
6. ☐ Oral presentation	☐	☐	% time:	
7. ☐ Study visit /field trip	☐	☐	% time:	
8. ☐ Performance of technique	☐	☐	% time:	
9. ☐ Symposium/conference/workshop participation			% time:	
10. ☐ Oral assessment	☐	☐	% time:	
11. ☐ Oral presentation	☐	☐	% time:	
12. ☐ Written assessment test			% time:	
13. ☐ Assessment presentation/discussion of reports/essays/…	☐	☐	% time:	
14. ☐ Other:_____	☐	☐	% time:	
			Total:	100%

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Considering the mentioned activities, which are considered to the subject's assessment? – where applicable**:**

2. Activities developed during autonomous working hours

Week(s) in which the activity is carried out:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

To each activity developed in the classroom (contact hours), may be linked autonomous work hours (fulfilled by students outside the classroom hours).

Activity description:

By the student:	Individual	Group
1. ☐ Exercises	☐	☐
2. ☐ Testing/trials	☐	☐
3. ☐ Reading activities		
4. ☐ Research/practical work	☐	☐
5. ☐ Work/essay development	☐	☐
6. ☐ Oral presentation	☐	☐
7. ☐ Study visit /field trip		
8. ☐ Technique implementation	☐	☐
9. ☐ Symposium/conference/workshop participation		
10. ☐ Assessment planning		
11. ☐ Other		

Observations:

DETERMINING THE TOURISM DEVELOPMENTAL DYNAMICS OF THE GREEK REGIONS, BY USING TALC THEORY

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This paper utilizes the theoretical framework of the Tourism Area Life Cycle (TALC) model and applies an empirical analysis on the data for the period 1980-2009. The TALC multi-stage process is simulated to a logistic curve and thus it obtains a characteristic growth coefficient r(t) expressing its time duration. This study considers three versions for the logistic growth coefficient and presents the spatial distribution of each coefficient on the Greek interregional map. This approach allows to distinguish the regions that they have reached their tourism developmental capabilities faster than the others and to distinguish these that are still capable for further development. The overall treatment provides the developmental potentials of each Greek prefecture and elects some interesting issues for the tourism policy making in Greece.

INTRODUCTION

Tourism in Greece

Greece constitutes a popular touristic destination of the Mediterranean Sea and its touristic development is based on natural beauty, historical and cultural heritage, on good weather conditions and on the rich island morphology. Tourism is one of the major dynamic

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economic sectors in Greece affecting the configuration of the social and economic structure of its regions and it is regarded as one of the most important factors contributing to population stability, especially for remote regions (Andriotis, 2003; Polyzos and Minetos, 2011).

Greek tourism after the 50's presented a rapid and constant diachronic development, participating today in the GNP with a percentage of over 18% and creating an import of exchange greater than 9 billion dollars, fact that contributes to the country's income and employment (Polyzos et al., 2007; Polyzos and Tsiotas, 2012).

Tourism in Greece has grown into a major economic component contributing importantly to income and employment. Within the last three decades, touristic flows have been increasing rapidly in certain locations. A lot of coastal and insular regions have become popular destinations for leisure tourism and recreation (Polyzos and Tsiotas, 2012).

The growth of tourism is an outcome of many factors, such as the rising standards of living, the transportation's development, the growth of income and free time and the "industrialization" of tourism. Moreover, tourism has many impacts, both positive and negative, on the economy, society, the natural, built and cultural environment of the host community of a destination (Polyzos and Sdrolias, 2006).

Tourism constitutes a subject of research in economic, social and environmental sciences (Zhong et al., 2008) and a major topic of interest concerns its sustainable development that avoids environmental damage and protects long-term natural and cultural resources, in a socially and economically acceptable way (Rodrıguez et al., 2008).

The quality of the environment constitutes probably the most important factor for the attractiveness of a tourist destination and thus the environmental protection becomes an issue of critical importance for tourism development. Sustainable tourism aims to turn tourism development into a positive experience for local people, tourism companies and tourists themselves.

Impacts of touristic development

Tourism is the cause for a great number of environmental problems especially during the peak periods. The over-utilization of natural and cultural resources by tourist activities brings many times tourism into a conflict with the environment (Coccossis and Parpairis, 1995). In addition, a lot of negative social impacts are evident too, such as loss of local traditions and abandonment of traditional economic activities, which undermine the social structures and lag the local identity of each place.

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The environmental and other consequences result to the development of alternative environmental friendly forms of tourism, such as the *ecotourism* (Navratil, et al., 2013), the *agro-tourism* (Chatzigeorgiou et al., 2009) or *rural tourism* (Sharpley and Jepson, 2010; Partalidou and Koutsou, 2012), the *green* and the *soft tourism*. The development of such alternative forms of tourism in Greece mainly concerns the non coastal regions, since the seaside attribute suggests a strong determinative factor for the classic touristic development (Polyzos and Tsiotas, 2012).

In general, the touristic development of a region is highly connected with the maximum number of tourists that each place is able to accommodate, without causing any environmental harm. This critical value is called *tourism carrying capacity* (Simon et al., 2004) and it has recently become an important parameter for sustainable tourism development issues.

Life Cycle Assessment in tourism analysis

Life Cycle Assessment (LCA) suggests a common approach for the interpretation of tourist regions' development (De Camillis et al., 2010). It concerns a process of constructing a hypothetical model for resort evolution, developed by Butler in 1980, attempting to illustrate the stages of tourism development in a certain region (Butler, 2006).

This assessment seems to be the most widely accepted until now, suggesting that the number of visitors in a tourist region increases as time passes and its carrying capacity saturates after a certain level. Consequenlty, the attractiveness of an established touristic destination declines to time and this region is set unable to compete with other newer tourism destinations.

This paper utilizes the LCA and specifically the *Tourism Area Life Cycle* (TALC) Theory for studying the tourism developmental dynamics of the Greek regions. The purpose of the study is to determine the level of saturation for the touristic development of each Greek prefecture and thus to elect these regions that are capable for further touristic evolution. The TALC assessment is expected to mine some information that would be useful for the Greek tourism policy making, especially *at the current period of the economic crisis* (Polyzos et al., 2013), where the country is facing high decline rates and needs more than ever to utilize its developmental potentials.

This article is organized as following: Section 2 describes the methodological framework of the TALC model, its limitations and its

version used in this study. Section 3 presents the results of the analysis and an evaluation and, finally, at section 4 some conclusions are drawn.

METHODOLOGICAL FRAMEWORK

The TALC model

The TALC model (Butler, 2006; Zhong et al., 2008; Candela and Figini, 2012) was introduced by Butler in 1980 and describes the evolution process of a tourist destination, by utilizing the product cycle concept as used in marketing. According to this theory, each tourism area passes through a process of certain stages as the number of visitors increase, which are *exploration*, *involvement*, *development*, *consolidation*, *stagnation* and *decline* or *rejuvenation* stage (figure 1).

The first four stages signify the *growth phase*, describing the restriction of the number of visitors by some factors such as low accessibility, inadequate facilities, and local knowledge, which grows rapidly as facilities are improved and awareness grows.

Figure 1 The evolution phases of TALC theory
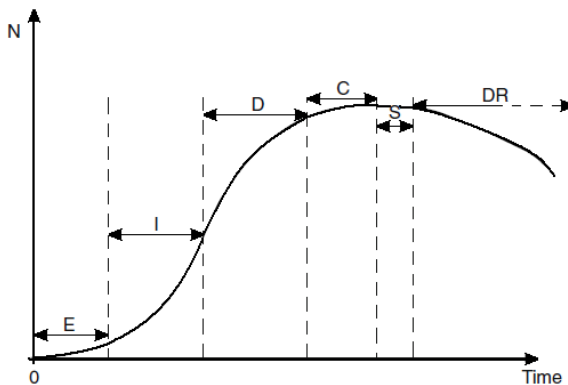
E=exploration, I=involvement, D=development, C=consolidation, S=stagnation, DR=decline or rejuvenation

The stages that are next to *stagnation* describe the *phase of gradual decline* as an effect of mass tourism to a set of factors concerning the *quality of environment* (land scarcity, water quality and air quality), the *level of provided facilities* (transportation, accommodation and other

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services) or to some *social factors* (crowding, resentment by the local population). Gradually, both the rate of increase in visitor number and the relative attractiveness of the area will decline, due to overuse and to the impact of visitors. Eventually, the visitors' number will reach the tourism area's carrying capacity.

According to Butler (2006), the *exploration* (*E*) stage describes the process where few adventurous tourists visit places with no public facilities, while non-local visitors have been attracted to the area by its unique or considerably different natural and cultural features. At the *involvement* (*I*) stage the number of visitors increases, while a limited interaction between tourists and some local residents begin to provide facilities for visitors that begin to emerge (some advertising specifically to attract tourists can be anticipated here) as this stage progresses.

The stage of *development* (*D*) concerns growth of additional tourist facilities and increased promotional efforts, reflecting a well-defined tourist market area shaped in part by heavy advertising in tourist-generating areas. The number of tourists arriving in the destination increases and tourism begins to be dominated by external interests and as this stage progresses, local involvement and control of development will decline rapidly. At the *consolidation stage* (*C*) the destination becomes a fully fledged part of domestic and international tourism that becomes a dominant economic sector for the region.

At the *stagnation* (*S*) stage the number of visitors reaches its potential peak (upper limit) electing this area a destination for conservative tourists and no longer a fashionable destination. Tourism operators must proceed to major promotional investments in order to maintain the total number of tourists and to make positive profits. This phase is related with the beginning of serious environmental, social, and economic difficulties for the tourism destination (Candela and Figini, 2012).

Finally, the last stage of TALC theory is described by a fork potential, the *decline* or *rejuvenation* stage (*DR*). At the *decline* potential tourists are progressively more attracted by other newer and more popular destinations and so the tourism destination loses its volume of visitors and becomes more dependent on short-term trips of countryside or tourists of neighbour countries. At this stage tourism infrastructures become obsolete and may contribute to alternative uses. Local tourist operators may start planning new projects to recover the destination's attractiveness, and to *rejuvenate* the tourism product (Candela and Figini, 2012).

Limitations and criticism of the TALC model

TALC theory has been criticized mainly for its simplicity, its lack of precision and its limited application scale (Prideaux, 2000; Uysal et al., 2013). Bianchi (1994) disputes this natural sequence of stages supporting that not necessarily all touristic destinations pass through this particular sequence of stages. According to Hovinen (1981), the developmental process is unique for a destination, described from a different length and shape of the LCA curve. Haywood (1986) pointed that geographic and morphological peculiarities (such as are between the States of the USA) is reasonable not to produce a pattern life cycle curve, since they form an entire mosaic of different resorts and tourist destinations that asynchronously participate to this stage-defined process of diachronic development.

Haywood's approach also drives the consideration of Cooper and Jackson (1989), described the singularity in the study of tourism destinations, as in the cases of the *Island of Man*, where the exploration stage lasted almost a century, and of *Cancun* (Mexico), where the certain stage was covered within a decade. In correspondence to the Life Cycle Theory of a product, the form of TALC's curve has been proved sensitive to a wide set of factors, such as the *rate of change of economic growth*, the *national policies*, the *accessibility infrastructures*, the *surrounding competitive environment* countries, as well as the *evolving preferences of tourists* (Prideaux, 2000).

TALC theory has been criticized as a mono-parametric procedure, since TALC curve's determination is primarily defined by the number of visitors of each destination. Of course this suggests simultaneously a benefit, because data on tourist numbers are more easily available in comparison to other qualitative, demographic and socio-economic indicators, such as the tourist income or the number of individuals occupied by sector.

Such differences are being reflected on the form of the curves of each indicator. For example, tourist revenue for a destination can present an increase, despite the decrease of the number of tourist arrivals, in the case that visitors have the potential of making higher expenses (Prideaux, 2000). Moreover, in each stage the carrying capacity (Simon et al., 2004) or the ability of each destination to serve visitors changes. This is particularly important at the end of the evolution stage and after the stage of decline, when the quality factor of "*tourist experience*" starts to lose its glamour, indicating thus that the carrying capacity of the destination has been exceeded.

Another aspect in the criticism of TALC theory regards its tendency to simplify the unique and complex developmental process describing tourism, since this model tends to classify the endogenous social, political and economic parameters that are unique for each destination. This statement is obviously inaccurate, because also the non tourism-number indicators may lack of a desirable microeconomic treatment (Candela and Figini, 2012).

The above criticisms do not invalidate the undeniable utility of the TALC model regarding tourism policy, planning and forecasting, but they rather aim to point out the multivariate nature (Cooper and Jackson, 1989) of this phenomenon in the tourist industry. The TALC model is effective for initializing the touristic process of a region and thus for providing a framework motivating further analyses, fact that advances tourism evolution research (Butler, 2006; Candela and Figini, 2012; Uysal et al., 2013). TALC assessment is particularly popular for the geographers, since it incorporates to the analysis the dynamic component of spacetime touristic growth (Simon et al., 2004; Zhong et al., 2008).

Methodology and Data

The TALC model has been traditionally associated with the *Product Life Cycle* and the *Logistic Curve* (Tsoularis, 2001; Hernandez and Leon, 2007). Letting t represent the time variable, $N(t)$ the number of visitors to a tourist destination and $r(t)$ the growth coefficient for the total number of tourists, then the growth rate for the number of tourists $dN(t)/dt$ for the destination is expressed by relation (1).

$$\frac{dN(t)}{dt} = r(t) \cdot N(t) \tag{1}$$

The ordinary differential equation (ODE) shown in relation (1) is solved using the method of *separation of variables*, obtaining an exponential solution shown at relation (2), where A is a coefficient depending on the starting conditions.

$$N(t) = A \cdot exp\{r(t) \cdot t\} \tag{2}$$

This exponential model can be augmented by the factor $1 - \dfrac{N(t)}{K}$, where the parameter K is the upper limit $\lim\limits_{t \to \infty} N(t) = K$ related with the tourism destination's environmental carrying capacity (Tsoularis, 2001).

The growth curve of relation (2) depends on the coefficient $r(t)$, where, for positive values, it gets a sigmoid shape that asymptotically equals to the carrying capacity. Several logistic curves may be drawn for different $r(t)$ (figure 2), under the same set of starting conditions describing N and K (Tsoularis, 2001). As larger the $r(t)$ is, the faster in time the curve reaches the tourist carrying capacity K. Moreover, it seems that in cases of small $r(t)$ values, where the sigmoid curve is more extended in the time axis, the growth curve fits better to the TALC curve of figure 1.

Figure 2 Several logistic curves for a set of $r(t)$ coefficients (N_o=10 and K=100)
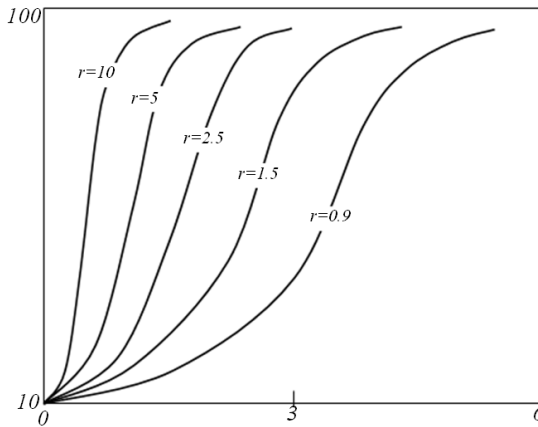
Given that the tourist carrying capacity K is both non-constant and unknown as well as that variable $N(t)$ varies for each tourism region, then the term $1 - \dfrac{N(t)}{K}$ is impractical to be included in this analysis. The formula of the TALC model of this study is shown at relation (3), which originates from relation (2) after applying a logarithmic transformation.

$$ln(N(t)) = ln(A) + r(t) \cdot t \Rightarrow r(t) = ln(N(t)) + ln(A) \qquad (3)$$

Under the homogeneity assumption, according to which all regions have equal starting points describing their touristic developmental potentials, the parameter *A* is considered constant, since it depends just on the starting conditions.

The available data refer to the diachronic *total number of visitors* (tourists) $N_t(t)$ and the *total number of overnight stayings* $N_s(t)$ per Greek prefecture, for the period 1980-2010. These data are treated as integer variables describing the Greek regions that *attract greater number of tourists* (touristic *load*) or are *more popular for long-term vacations* (the *duration* of the touristic load), and their coefficients $r_t(t)$ and $r_t(t)$ are expected to reveal the level of saturation per region.

For a further evaluation, a third variable $N(t)=N_s(t)/N_t(t)$ was introduced to the analysis, targeting to elect these Greek regions that are *more popular for long-term vacations per tourist capita* (*duration/load*). This ratio suggests a measure that is conceptually closer to carrying capacity than the other variables are, in the extent that it can describe the *pure touristic load that a tourism monad* (visitor or tourist) *applies to the destination*. Consequently, the TALC coefficient $r(t)$ may operate as an alternative carrying capacity index for the Greek regions, regardless the omission of the *K* term in the mathematical relation of the TALC model.

Since the available data do not distinguish the domestic or foreign origin of tourists, some perspectives from the Greek tourist geography are not taken under consideration. The following section presents the results of the analysis and discusses them through a Regional Economic and an Environmental perspective.

RESULTS AND DISCUSSION

The results of the TALC analysis are shown in table 1 and are drawn at the maps of the figures 3, 4 and 5. The auxiliary map at the appendix shows the names and the morphology of the Greek regions. The map of figure 3 depicts the interregional distribution of the growth coefficient $r_t(t)$ that expresses the total number of tourists per prefecture. The darkest areas correspond to the most touristic saturated regions that are more popular in attracting tourism masses and they are facing, in parallel, a faster touristic saturation process.

As it is shown in figure 3, the darkest regions correspond to the prefectures of *Thessaloniki* (47), *Attiki* (6), *Herakleeo* (21) and *Dodekaneesa* (10). Among these prefectures, the (10) and (21) are insular and the (47) and (6) are coastal regions. This indicates the maritime

orientation of tourism in Greece that is due to obvious morphological reasons.

Table 1 Numerical results of the TALC growth coefficients

PREFECTURE	r(t)	r_t(t)	r_{st}(t)	PREFECTURE	r(t)	r_t(t)	r_{st}(t)
ACHAIA	4,66	62,16	66,82	KERKYRA	10,36	65,07	75,43
AITOLOAKARNANIA	3,66	58,62	62,29	KILKIS	3,95	45,88	49,83
ARGOLEEDA	4,99	63,1	68,09	KORINTHIA	6,6	60,36	66,95
ARKADIA	3,71	56,14	59,85	KOZANI	3,68	54,98	58,66
ARTA	3,44	51,78	55,23	KYKLADES	7,07	63,25	70,32
ATTIKI	4,67	74,65	79,32	LAKONIA	2,79	59,08	61,86
CHALKIDIKI	10,07	61,89	71,96	LARISSA	4,21	58,42	62,63
CHANIA	8,3	62,56	70,86	LASITHI	9,74	62,47	72,21
CHIOS	7,04	52,37	59,41	LESVOS	8,21	56,55	64,76
DODEKANEESA	10,56	70,45	81,01	LEFKADA	6,43	52,28	58,71
DRAMA	4,11	51,2	55,31	MAGNESIA	5,73	62,88	68,61
EVOIA	7,83	60,1	67,93	MESSEENIA	4,58	59,08	63,66
EVROS	3,69	59,39	63,07	PELLA	4,3	51,35	55,65
EURYTANIA	5,15	51,82	56,97	PIERIA	7,05	57,55	64,59
FLORINA	3	53,73	56,72	PREVEZA	6,12	55,24	61,36
FOKIDA	1,63	60,88	62,52	RETHYMNO	10,63	61,19	71,83
FTHIOTIDA	6,15	57,53	63,68	RODOPH	3,84	55,09	58,93
GREVENA	3,23	45,86	49,09	SAMOS	9,79	57,08	66,87
HELEIA	3,56	62,15	65,7	SERRES	3,93	53,94	57,87
HEMATHIA	3,44	53,65	57,09	THESPOTIA	3,93	52,7	56,63
HERAKLEEO	9,79	67,32	77,11	THESSALONIKI	3,67	67,44	71,11
IOANNINA	2,99	61,42	64,41	TRIKALA	1,54	59,95	61,5
KARDITSA	4,77	53,18	57,94	VEEOTIA	3,33	54,35	57,68
KASTORIA	2,99	55,36	58,35	XANTHI	3,91	54,24	58,15
KAVALA	6,13	60,71	66,84	ZAKEENTHOS	9,7	58,47	68,17
KEFALLONIA	8,7	55,37	64,07				

$r(t)$= number of the stayings per tourists capita
$r_t(t)$= total number of tourists
$r_s(t)$= total number of overnight stayings (values x10^{-4})

The coastal couple of the darkest areas (6) and (47) (figure 3) refer to the most dense populated Greek prefectures *Attiki* and *Thessaloniki*, which are considered as megacities (Tsiotas and Polyzos, 2013) for the scale of the country. The insular prefecture (21) is also of great population possessing the fourth place in the country's ranking. Consequently, the touristic load of these three darkest regions may be regarded as an effect of population. The information for the growth coefficient $r_t(t)$ provided at figure 3 is more creditable for environmental assessment whether is considered in common with the quality of infrastructures and facilities that affect the capability of a region to prevent environmental degrading and related issues caused by touristic overloading.

Figure 3 Map illustrating the interregional distribution of the growth coefficient for the total number of tourists $r_t(t)$
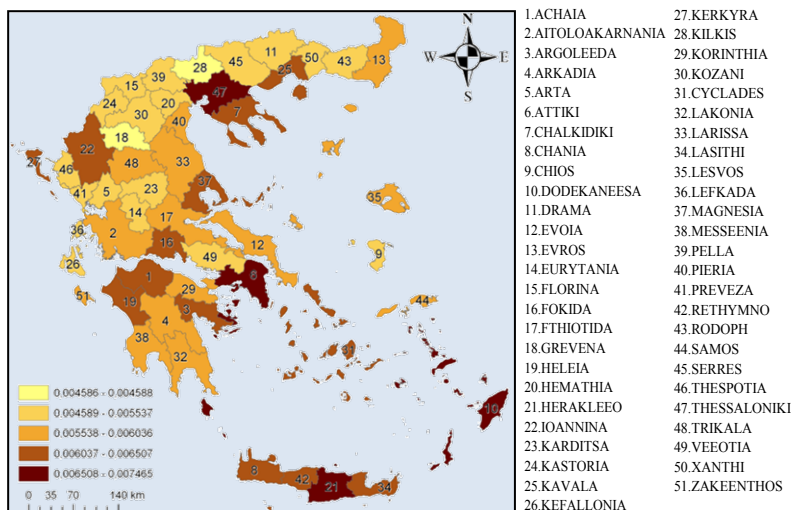
Nevertheless, the case of *Dodekaneesa* (10) seems to correspond to a clearer result, since this region of insular clusters does not have a significant population compared to the country's total. This region constitutes a tourism destination located in the *South-East Aegean* and its darkest status in the map denotes that it is comparatively one of the most saturated regions in *Greece* in terms of touristic load. The core figure of prefecture (10) is the island of *Rhodes*, constituting a receptor suitable for sustainable touristic development, since its large insular area favors developing larger transportation and urban infrastructures and thus attracting larger numbers of tourists.

The developmental potential of *Rhodes* should be considered in common with its vicinity to *Turkey* (figure 6), fact that may operate either positively or negatively. Through the positive perspective, *Rhodes* should invest in attracting tourist masses from the dense populated touristic origin of *Turkey* and thus to establish a developmental channel that may provide all-season tourist arrivals to the island. On the other hand, this state of neighborhood may operate negatively and induce tourist leaks from the Greek side into the Turkish side, fact that may accelerate the TALC-stage shifting and finally the saturation of the *Dodekaneesa* prefecture.

The regions of figure 3 that are next in the colored ranking are also insular or coastal, except the case of *Ioannina* (22). According to the map, the islands of *Southern-East Aegean* (figure 6) appear to have high levels of saturation, indicating that it is more likely to be lying into one of the TALC meta-consolidation stages. This raises some critical issues concerning the proper developmental policies that should be followed to maintain the tourism vitality at this sector of the *Aegean*, especially since this region lacks of land transportation connections and thus of homeostatic mechanisms with the rest of the country. The multi-productive economy of the island of *Crete* seems to be efficient here to play a determinative role in this further development.

The non-insular prefectures of Greece that belong to the second ranking group of figure 3 do not seem to follow a standard typology. Some regions probably owe this tourism performance due to their central urban role in local scale, such as the prefectures of *Ioannina* (22), *Achaea* (1) and *Kavala* (25), while some other prefectures probably owe this performance due to their neighborhood with the Greek metropolitan areas of *Athens* and *Thessaloniki*, such as the prefectures of *Argoleeda* (29) and *Chalkidiki* (7). An interesting evaluation in this case can be made if taking under consideration the impact of environmental degrading that the tourist overcrowding causes to a tourism destination (Zhong et al., 2008). According to this point of view, the high ranking status of the prefectures of *Achaea* (1), *Fokida* (16) and *Magnesia* (37) seems to be correlated with higher environmental risk, since these regions are accessing bays or closed parts of the sea.

The second map (figure 4) depicts the interregional distribution of the *growth coefficient* $r_s(t)$ for the total number of (overnight) stayings in touristic lodgings per prefecture. The overall impression produced from this map is that the *Aegean Sea*, located at the *East Greece*, seems to outperform in saturation the *Ionian Sea*, located at *West Greece*, implying that the *Aegean Sea* is more popular than the *Ionian* in the preferences of tourists. This kind of popularity interprets, in terms of the TALC theory, that the *Aegean Sea* receives greater in duration touristic loads than the *Ionian Sea* and that it is consequently being subjected to faster TALC stage-shifting.

Figure 4 Map illustrating the interregional distribution of the growth coefficient for the total number of overnight stayings $r_s(t)$
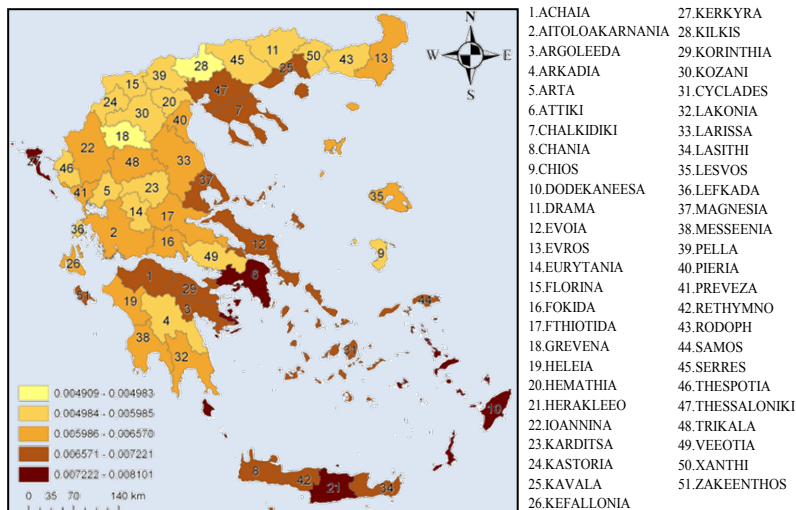
The above interpretation elects a twofold issue for the Greek tourism policy. On the one hand, it indicates to the policy makers to target at developing the tourism of the *Ionian* side (*West*) of *Greece,* which seems more capable in accepting longer term touristic loads according to the current Greek economic and political framework. On the other hand, it rings the alarm for adopting more sustainable tourism policies and innovative practices for the *Aegean Sea,* in order to avoid its consequent TALC tourism decline, since the *Aegean Sea* diachronically suggested a vital productivity coefficient for the Greek economy.

Moreover, it seems that *the darkest colored prefectures* in figure 4 *configure coastal foreheads that allow the access to the sea, mainly to the Aegean,* for the rest of the Greek regions. For example group of prefectures (7), (25) and (47) constitutes a coastal forehead for the prefectures (50), (11), (45), (28), (39) and (20), for accessing to the *Northern Aegean* Sea. Also the group of prefectures (37), (12) constitutes a coastal forehead for all the regions of *Central* and *West Greece* for accessing to the *Central Aegean*. Next, the group of prefectures (6), (1), (29) and (3) constitutes a coastal forehead of the regions of *Peloponnesus* (19), (38), (32), (4) and of *Central Greece* (2), (16), (49) for accessing to the *Southern Aegean*.

This observation implies that the interregional distribution of the total number of overnight touristic stayings in Greece is determined more by endogenous touristic acts rather than it depends on exogenous causes. This interprets either that the foreign touristic load in Greece is inconsiderable in contributing to the geography of Greek tourism or that the Greek tourism infrastructures and facilities were structured to serve the *Aegean's* tourism, undermining with this way the total developmental dynamics of the country. According to diachronic imprint of the Greek tourism, the second interpretation appears more rational, since foreign tourism in Greece cannot be considered inconsiderable.

Next, figure 5 depicts the interregional distribution of the *growth coefficient r(t)* for the number of the touristic stayings per tourists capita, allowing to apply a scale free assessment for the Greek tourism dynamics. This map combines the information of the two previous $r_t(t)$ and $r_s(t)$ maps and thus it leads to a more effectual assessment. The growth coefficient $r(t)$ expresses the density of the touristic stayings or the intension of touristic loads per unit and it suggests a transformation of the map of figure 5 after removing the number of tourists effects.

At figure 5 three (3) darkest tourism zones are distinguished in the map of Greece. The first consists of the prefectures of *Chalkidiki* (7) and *Lesvos* (35), shaping an ellipsoid extended at the *Northern* and *North-East Aegean*. Despite their geographical proximity, there are remarkable differences between this pair of prefectures. First of all, prefecture (7) is a coastal region while prefecture (35) is an insular region. Next, the prefecture of *Chalkidiki* (7) suggests a coastal touristic forehead that mostly specializes in receiving domestic tourism from the *Northern Greece*, while the prefecture of *Lesvos* (35) does not present such a specialization. On the other hand, prefecture (35) is adjacent to *Turkey*, fact that elects a considerable externality for its local economy. Such differences describe a bipolar rather than a clustering role for this pair of prefectures, implying that supplementary policies are more suitable for their sustainable tourism development.

The second darkest zone in figure 5 is located at the *Southern* and *Southern-East Aegean*, shaping an arc of islands that includes the *Cretan* prefectures (8),(42),(21),(34) the prefecture of *Dodekaneesa* (10) and the prefecture of *Samos* (44). The geographic location and the regional economic profile of these prefectures distinguish them into a pair of tourism destination groups, where the first consists of the *Cretan* prefectures and the second of the prefectures (44) and (10). This separation is driven by the self-contained economy of the multi-

productive *Crete* and by the proximity of the prefectures (44) and (10) to the *Turkey*.

Figure 5 Map illustrating the interregional distribution of the growth coefficient for the number of the stayings per tourists capita *r(t)*
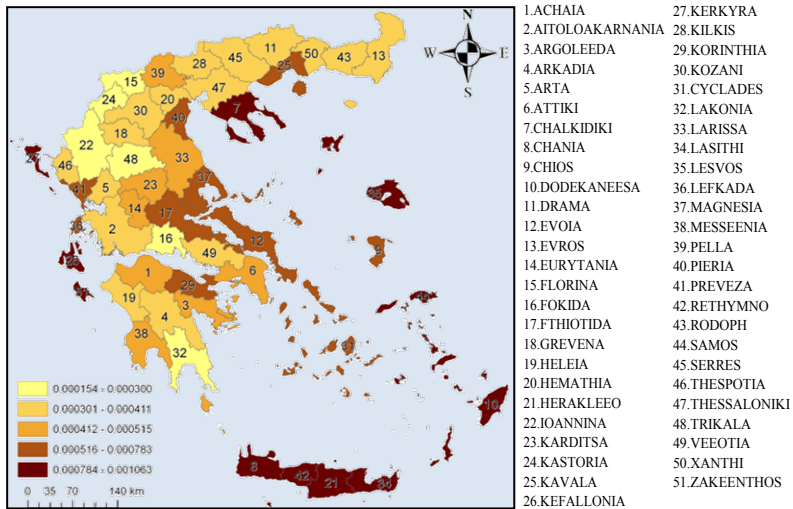
Next, the third darkest zone in figure 5 is located at the *Ionian* side, including the prefectures (27), (26) and (51). The mixed $r_s(t)$ and $r_t(t)$ consideration provided by figure 5 implies that a tourist who visits the *Ionian* side of Greece seems to spend the same time for vacation with a tourist who visits the *Aegean* side, fact that sets no comparative advantage to the TALC potentials of the *Ionian* side. Nevertheless, according to figure 3, the *Ionian Islands* are more capable in receiving larger number of tourism, implying a direction where the tourism development should invest to.

The second rank of saturation in figure 5 seems to concern more the hinterland rather than the insular Greece. The only insular regions at this saturation level are the prefectures (31) in the *Aegean* and (36) in the *Ionian*. The popular *Aegean* tourism destination of *Cyclades* (31) appears not to have yet reached its upper limit of tourism capacity, probably due to existence of numerous and scattered island destinations. On the other side, the *Ionian* prefecture of *Lefkada* (36) seems to maintain yet its

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touristic vitality, due to its direct road connection with the rest of the country.

At second rank of saturation, the most distinguished among the hinterland regions of figure 5 is the cluster of the *Central Greece*, consisting of the prefectures (37), (17) and (12). This status is obviously due to the central position of this cluster, providing an access to the *Aegean Sea*. Finally, the prefectures (25), (40) and (29) that belong to this saturation group are satellites to metropolitan prefectures of *Attiki* and *Thessaloniki*, implying that their tourism activity is mainly of domestic orientation.

An especially interesting observation in figure 5 concerns the unsaturated status of the metropolitan prefectures *Attiki* (6) and *Thessaloniki* (47). This interprets that the touristic loads received by these regions are of small intension (duration) and thus that these metropolitan regions operate as short-term tourism stations that intermediate to air or maritime transportation routes, offering a break for relaxation, shopping or sightseeing before the tourism destinations. Finally, the other unsaturated regions in figure 5 are non-insular or non-coastal, deviating from the fundamental maritime orientation of the Greek tourism. The unsaturated coastal regions of *East Macedonia* and *Thraca* provide a receptor for developing the tourism at the *Northern-East Aegean*.

Under an overall assessment, the saturated status for most of the insular and coastal regions in Greece places them at the consolidation or meta-consolidation stages of the TALC chain. This elects critical political issues for the country, concerning the essential investments in infrastructure and facilities for preserving sustainable tourism or the policies that are capable to develop alternatives in the Greek tourism. The unsaturated Greek regions suggests receptors for developing alternative forms of environmental friendly tourism, such as *ecotourism*, *agro-tourism,* (Chatzigeorgiou et al., 2009; Sharpley and Jepson, 2010; Partalidou and Koutsou, 2012), *green* and *soft tourism*.

CONCLUSIONS

This article used the theoretical framework of the Tourism Area Life Cycle (TALC) model, in order to determine the tourism developmental potentials of the Greek prefectures.

The TALC theoretical process was based on logistic growth curves and the empirical analysis used data of the period 1980- 2009. The foregoing analysis distinguished regions that have reached their tourism

developmental capabilities faster than others and these that are still capable for further tourism development.

The TALC analysis recognized the maritime orientation of the Greek tourism and elected that the most of the insular areas cover the peak in the TALC developmental process, fact that should alert the tourism policy makers, especially under the seasonality constraint of the Greek maritime tourism.

Furthermore, the TALC analysis indicated a higher level of saturation in the *Aegean Sea*, in comparison with the *Ionian*, and the necessity for some saturated regions, such as *Rhodes* and *Crete*, to rearrange their tourism orientation for playing a leading role to the tourism sustainability of the *Aegean*.

The analysis also elected some unsaturated coastal regions, such as the *East Macedonia* and *Thraca*, capable in becoming receptors for the further development of the *Aegean Sea*. Moreover, the insular and coastal side of the *Ionian Sea* seems to be shifted at slower rates in the TALC chain, providing another tourism developmental receptor.

Finally, when an area faces touristic saturation then it is more likely to face a great number of environmental problems. The results of the foregoing TALC analysis illustrate zones of great environmental concern, due to tourist overloading.

The previous empirical TALC analysis is considered a useful tool for the Greek tourism policy making, especially *at the current period of the economic crisis*, where the country is facing high decline rates and needs more than ever to utilize its sustainable developmental potentials in all dimensions.

REFERENCES

Andriotis, K. (2003). Host, guests and transformation of the coast: Implications for sustainable tourism development in Crete. *Paper Presented at the International Scientific Conference "Sustainable Tourism Development and the Environment"*. University of the Aegean, Chios Island, Greece: 2-5 October 2003.

Bianchi, R. (1994). Tourism development in resort dynamics: An alternative approach. In Cooper, CP. and Lockwood, A. *Progress in tourism, recreation and hospitality management*, Vol. 5, Chichester, UK: Wiley.

Butler, R.W. (2006). *The Tourism Area Life Cycle, Vol. 1 Applications and Modifications*. Channel View Publications.

Candela, G. & Figini, P. (2012). *The Economics of Tourism Destinations* (*Springer Texts in Business and Economics*). Berlin, Germany, Springer-Verlag Publications.

Chatzigeorgiou, C., Christou, E., Kassianidis, P. & Sigala, M. (2009). Examining the relationship between emotions, customer satisfaction and future behavioural intentions in agrotourism. *Tourismos: An International Multidisciplinary Journal of Tourism*, Vol. 4, No.4, pp.145-161.

Coccossis, H. & Parpairis A. (1995). Assessing the Interaction between Heritage, Environment and Tourism: Mykonos, In H.Coccossis and P. Nijkamp (Eds) *Sustainable Tourism Development*, Hampshire, UK: Avebury Press.

Cooper, C.P. & Jackson, S. (1989). Destination life cycle: The Isle of man case study. *Annals of Tourism Research*, Vol. 16, No.3, pp.377-398.

De Camillis, C., Raggi, A. & Petti, L. (2010). Tourism LCA: state-of-the-art and perspectives. *International Journal of Life Cycle Assessment*, Vol. 15, pp.148–155.

Haywood, M.T. (1986). Can the tourist area life cycle be made operational? *Tourism Management*, Vol. 7, No.3, pp.154-167.

Hernandez, J. & Leon, C. (2007). The interactions between natural and physical capitals in the tourist lifecycle model. *Ecological Economics*, Vol. 62, pp.184-193.

Hovinen, G.R. (1981). The tourist cycle in Lancaster County, Pennsylvania. *Canadian Geographer*, Vol. 25, No.3, pp.283-286.

Navratil, J., Picha, K., Knotek, J., Kucera, T., Navratilova, J. & Rajchard, J. (2013). Comparison of attractiveness of tourist sites for ecotourism and mass tourism: the case of waters in mountainous protected areas. *Tourismos: An International Multidisciplinary Journal of Tourism*, Vol. 8, No.1, pp.35-51.

Partalidou, M. & Koutsou, S. (2013). Locally and socially embedded tourism clusters in rural Greece. *Tourismos: An International Multidisciplinary Journal of Tourism*. Vol. 7, No.1, pp.99-116.

Polyzos S. & Minetos, D. (2011). An Ordinal Regression Analysis of Tourism Enterprises' Location Decisions in Greece. *Anatolia*, Vol. 22, No.1, pp.102-119.

Polyzos S. & Sdrolias L. (2006). Strategic Method of Confrontation of Tourist Competition: The Case of Greece. *Journal of Travel and Tourism Research,* Vol. 6, No.1, pp.12-28.

Polyzos, S. Arabatzis, G. & Tsiantikoudis, S. (2007). The Attractiveness of Archaeological Sites in Greece: A Spatial Analysis. *International Journal of Tourism Policy and Research*, Vol. 1, No.3, pp.246-266.

Polyzos, S. & Tsiotas, D. (2012). The Evolution and Spatial Dynamics of Coastal Cities in Greece. In S. Polyzos (Eds.) *Urban Development*, Rijeka, Croatia,: Intech Publications.

Polyzos, S., Tsiotas, D. & Sdrolias, L. (2013). Greek regional productivity at the period of the economic crisis: obtaining information by using Shift–Share analysis. *MIBES Transactions,* Vol. 7, pp.92-109.

Prideaux, B. (2000). The resort development spectrum - a new approach to modeling resort development. *Tourism Management*, Vol. 21, pp.225-240.

Rodriguez, JRO., Parra-Lopez, E. & Yanes-Estevez, V. (2008). The sustainability of island destinations: Tourism area life cycle and teleological perspectives. The case of Tenerife. *Tourism Management*, Vol. 29, pp.53–65.

Sharpley, R. & Jepson, D. (2010). Rural Tourism: A spiritual experience? *Annals of Tourism Research*, Vol. 38, No.1, pp.52–71.

Simon, F., Narangajavana, Y. & Marques, D. (2004). Carrying capacity in the tourism industry: a case study of Hengistbury Head. *Tourism Management*, Vol. 25, pp.275–283.

Tsoularis, A. (2001). Analysis of Logistic Growth Models. *Research Letters in the Information and Mathematical Sciences,* Vol. 2, pp.23-46.

Tsiotas, D. & Polyzos, S. (2013). Introducing a new centralities measure from the interregional road transportation network analysis in Greece. *Annals of Operations Research*, DOI 10.1007/s10479-013-1434-0.

Uysal, M., Woo, E. & Singal, M. (2013). The Tourist Area Life Cycle (TALC) and Its Effect on the Quality-of-Life (QOL) of Destination Community. In M. Uysal, R. Perdue and J. Sirgy (Eds.) *Handbook of Tourism and Quality-of-Life Research: Enhancing the Lives of Tourists and Residents of Host Communities*, London: Springer Science+Business Media Publications.

Zhong, L., Deng, J. & Xiang, B. (2008). Tourism development and the tourism area life-cycle model: A case study of Zhangjiajie National Forest Park, China. *Tourism Management*, Vol. 29, pp.841-856.

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APPENDIX

Figure 6 Map indicating the names and the morphology of the
Greek regions (source: Google maps – self edited)

A NOTE ON THE MECHANISMS TO OBTAIN SUSTAINABLE ECOTOURISM THROUGH PRICE MANAGEMENT

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This note studies a market signal mechanism for assessing the short and long term tradeoff offered by the existence of natural resources in a tourism destination. We develop a theoretical model in which the destination price index is the tool for obtaining the sustainability of tourist areas. We assume that the stock of natural resources accumulates due to the regenerative natural capacity, but, at the same time, it is negatively affected by the number of tourists. When the demand price elasticity is higher than one, we show that there is a tradeoff between the use of the natural resources and the development of the tourism sector. In this scenario, we analyze how the optimal price changes as the parameters of the model vary.

Keywords: *tourism, environmental sustainability, price elasticity of demand*

JEL Classification: *L83, M1, O1*

INTRODUCTION

It is well-known that international tourism has positive effects on long-run economic growth through different channels. First, tourism is a significant foreign exchange earner, which allows to import capital goods or basic inputs used in the production process. Second, tourism plays an important role in spurring investments in new infrastructure and

competition between local firms and firms in other tourist countries. Third, tourism stimulates other economic industries by direct, indirect and induced effects. Fourth, tourism contributes to the generation of employment and to increase income. Fifth, tourism allows the exploitation of economies of scale in national firms (see Andriotis, 2002; Brida and Risso, 2010; Croes, 2006; Fagance, 1999; and Lin and Liu, 2000). Finally, tourism is an important factor of diffusion of technical knowledge, stimulation of research and development, and accumulation of human capital. The theory that considers tourism as a factor that causes long-run economic growth is known in the literature as the Tourism Led Growth Hypothesis. (see Balaguer and Cantavella-Jordá, 2002; Brida et al., 2008; Brida et al., 2009; Brida et al., 2010; Brida et al., 2010b; Shan and Wilson, 2001) Tourism is the leading source of foreign exchange in at least one of three developing countries that have made it a priority sector, and this holds especially for small islands (see Schubert et al., 2011). From the one hand, it is important to note that a portion of the foreign exchange generated by tourism is expatriated by Transnational Corporations, through transfer pricing. This is particularly true for small economies where most of tourism industry is not owned by residents. On the other hand, the role of environmental quality in the process of tourism development and economic growth must be considered, in particular for those countries that depend heavily on international tourism revenue and whose tourist sector is based on natural and environmental resources. As pointed by (Cerina, 2007), there is a twofold relationship between natural resources and tourism. The presence of natural attractions in a particular destination impacts positively the arrival of tourists, and at the same time, natural resources are negatively affected by intensive tourism.

As stated in Butler's classic article on the Tourist Area Cycle of Evolution (Butler, 1980) there is a tradeoff between the short and long term incentives to obtain a sustainable tourism sector for the economy. More precisely, Butler affirms that "While the maximum number of people visiting an area at any one time under such arrangements may be less than most present policies of maximum short-term development, more visitors could be catered for in the long term".[1] Although the author does not mention the list of instruments to manage the tradeoff, from the literature can be inferred that most of them are designed to keep tourists' arrivals within predetermined capacity limits, or to increase the capacity limits.

The economic performance of small open economies that depend heavily on international tourism revenues and whose tourism sector is mainly based on natural resources poses interesting interrogations

regarding the role of environmental assets on the sustainability and effectiveness of their development process. For example, is economic growth of these economies sustainable in the long run? Can the market itself guarantee the development of the tourism sector in such a way that the use of environmental resources is efficient or the intervention of the state is needed in order to regulate the market? In this paper we propose a mechanism based on the employment of a market signal suitable for assessing the short and long term tradeoff offered by the existence of natural resources in a tourism destination. To this end, we develop an intertemporal model for a small open economy in which the destination price index is the tool to obtaining the sustainability of tourist areas. Our dynamic model can be placed within the theoretical literature about the relation between tourism and economic growth, which was originated by the classic articles of (Hazari and Ng, 1993) and (Hazari and Sgro, 1995).[2]

Industrial Organization models usually explain the price as a consequence of the interaction between supply and demand, where consumers and firms optimize their respective utility and profit. In this paper, the price is a tool which influences the sustainability of natural resources consumption. The economic analysis concerning the sustainability of the renewable resource in a tourist area has been framed in the literature of sustainable growth with renewable resources and pollution. These models analyze the combination of three main assumptions. First, it is assumed that the number of tourists negatively affects the natural resources though wastes, ecosystem alteration, impacts on wildlife and pollution. Second, it is supposed that the quality of the environment accumulates due to the regenerative capacity of nature. Finally, it is presupposed that the utility of tourists is negatively influenced by prices in the destination. The assumption about how the tourism activity affects natural resources is elaborated through different mechanisms. (Hernández and Leon, 2004) assume a predator-prey scheme between the physical and the natural capital in tourism development. The physical capital (predator) needs the natural capital (prey) to grow through the joint generated rent, but natural capital is degraded by the existence of the former one. On the other hand, (Lozano Ibáñez et al., 2005) assume that natural resources is affected by the number of units of accommodation, i.e. beds, at the destination, and, (León et al., 2007) by the number of tourists. Furthermore, (Cerina, 2007) assumes that tourists' entries generate pollution reducing the stock of environmental quality.

The assumption on the law of accumulation of the natural resources has been dominated by a bounded and concave reproduction function as

in (Wirl, 2003; Ayong Le Kama, 2001; Hernández and Leon, 2004; and Lozano Ibáñez et al., 2005). This class of functions is based on the assumption that an exogenously given rate of regeneration is associated with an ideal quality of the natural resource. The perturbations of the system set in motion a mechanism of natural regeneration proceeding towards the ideal quality. However, (Cerina, 2007) introduces the possibility to undertake measures to reduce the negative impact of the tourism activity. As the abatement is costly, Cerina models the tradeoff between extracting resources from the economy's output and the deterioration of the natural resource. Finally, the behavioral assumption of the models is dominated by the optimization of an intertemporal utility function. The aggregate utility comes from consumption and the level of natural resources as in (Cerina, 2007; León et al., 2007; and Lozano Ibáñez et al., 2005). The intertemporal utility was revised by the Green Gold Rule in (Beltratti et al., 1993), where the households obtain the highest indefinitely maintainable level of instantaneous utility (see also Ayong Le Kama, 2001; and Wirl, 2003).

The theoretical model studied in this note leads to two main results: 1) when the price elasticity of demand is lower than one (inelastic), or equal to infinity (perfectly elastic) the price is not a good instrument to control the deterioration of the natural resources. The optimal solution is to increase the price to infinity, meaning that there would be no tourists and the quality of natural resources would be the highest; 2) on the other hand, when the demand price elasticity is higher than one, there is a tradeoff between the use of natural resources and the development of the tourism destination. This final result encompasses four further conclusions: 1) when the demand price elasticity increases, the proportion of the natural resources employed increases; 2) when the elasticity of demand to quality of the natural resources increases, the proportion of the natural resources employed decreases; 3) when the speed of recovering of the natural resources increases, the proportion of the natural resources employed decreases; 4) when the discount rate increases, the proportion of the natural resources employed increases.

Our conclusions have relevant policy implications. The price of tourism services constitutes a relevant and effective tool in order to control the use of natural resources, whenever the demand price elasticity is higher than one. In particular, the policymaker is able to influence the price of the tourism destination by using of the fiscal leverage so as to decrease the proportion of natural resources employed. The application of these charges produces a change in the general level of price at the tourist

destination, which at time, reinforces the use of a price index in the model.

The article is organized in three sections. Section 2 presents the model, in the third section we solve the model and the main results are derived. Final conclusions are included in the last section.

THE MODEL

We study a model of a tourist destination, endowed with an environmental resource which is the main attraction for visitors. According to the existing literature a visitor obtains utility from several sources. For example, from the quality and quantity of: services supplied by privates, public goods provided by local authorities and environmental or cultural and social resources. Since this paper focuses on the interaction between the number of tourists and the stock or quality of environmental, the attention is restricted to the utility obtained from an environmental renewable resource.

We assume that, at any time t, tourists satisfaction are positively influenced by the current stock or quality of environmental resources which is defined by a general index of "environmental quality" denoted by E. [3] Prices of the destination are simplified with an index price P.

Total tourist demand is defined by:

$$D = D(E, P) \qquad (1)$$

As usual, we assume that $D_E > 0$ and $D_P < 0$.

The economy supplies tourism services in an international tourism market where a large number of tourism economies participate. It is important to highlight that although international competition fixes the price for a given quality of services, a country could charge a higher price provided that its services are considered of a higher quality (i.e. characterized by a higher stock of environmental, cultural and social resources) than other countries, without losing all the demand. That is, the international market has a monopolistic competitive structure represented by a continuum of tourism markets differentiated by their quality and the (equilibrium) price paid for tourism services. It is assumed that other markets prices remain fixed.

Each tourist buys one unit of tourism services and there is a fix marginal cost for supplying a unit of tourism services. The tourist area is populated with a constant population of identical infinitely-lived residents

whose number is normalized to one. Residents own firms that provide tourism services, so they obtain the profits:

$$\Pi = PD(E,P) - cD(E,P)$$
2)

Where c is the marginal cost and $D(E,P)$ is the tourist demand, or the total number of visitors arriving at time t, as a function as the environmental quality state E and the price P.

For the sake of simplicity, it is assumed that the country provides tourism services with labor and natural resources. Thus, residents consume all profits, and then we have: $C = \Pi$ at any time t.

Residents have a lifetime utility given by:

$$U(P) = \int_{t=0}^{\infty} e^{-\rho t} u(\Pi_t) dt \qquad (3)$$

where $\rho > 0$ is the subjective discount rate and u, the instantaneous utility of residents, depends on the profits that they obtain from running their tourist firms.

The environmental resource is the main attraction for tourists and its quality is described by the state variable E. The quality of the environment accumulates due to the regenerative capacity of nature that depends on the level of environmental quality. Tourism activity has damaging effects on the environment (Davies and Cahill, 2000), and the intensity of the negative impact is closely related to the number of visitors at the destination.

Thus, it is assumed that the environmental quality evolves over time according to:

$$\dot{E} = \phi(E_s - E) - \beta D(E,P) \qquad (4)$$

The first term in the right side of the differential equation shows that the quality of natural resources moves to a highest natural state E_s with the speed ϕ, with $0 < \phi \leq 1$. This term represents the natural rate of recovery of the system due to regeneration. The second term represents the negative visitor impacts on the environmental quality. Because tourists increase wastes, lead to ecosystem alteration, impact on wildlife,

it assumed that every tourist generates the level of pollution β with $\beta > 0$. It is suggested in (Lozano Ibáñez et al., 2005) that different type of visitors produce different impacts. It is assumed here that β captures the average impact of every tourist. Notice that without tourist intervention, i.e. if $\beta = 0$, the quality of natural resources will be in its highest natural quality state E_s.

THE SOCIAL OPTIMUM

A benevolent social planner chooses the price in each t, $P(t) \geq 0$, that maximizes the objective (3) subject to the equation of the renewable tourist resources (4).

Without loss of generality it is assumed that the marginal cost is negligible $c = 0$. Moreover, we suppose that the demand function is given by $D(P, E) = E^\theta P^{-\alpha}$, where $\theta > 0$ and $\alpha > 0$ represent tourist demand elasticity respect to the quality and the price, respectively.

Assuming a logarithmic instantaneous utility function, the Hamiltonian of this system is given by:

$$H = \theta Log E + (1 - \alpha) Log P + \mu \left(\phi (E_s - E) - \beta E^\theta P^{-\alpha} \right) \quad (5)$$

In the Appendix we present the solution of the dynamic optimization problem. It is important to point out that the optimal autonomous system has two different behaviors according to the value of the demand price elasticity. When the price elasticity is inelastic, or perfectly elastic the price is not a good instrument to control the deterioration of the natural resources. The optimal solution is to increase the price to infinity. In this case there would be no tourists and the quality of the natural resources would be the highest (E_s).

When the demand price elasticity is higher than one (i.e. $\alpha > 1$), there is a tradeoff between the use of natural resources and the development of the tourism destination.

The price in the stationary state

As it is shown in the Appendix, the stationary price is given by:

$$P = \left[\frac{E^{-\theta} (\alpha - 1)}{\mu \alpha \beta} \right]^{-1/\alpha} \quad (6)$$

Substituting the optimal expenditure E^* and μ^* (see equation (17) in the Appendix) we obtain that the price is given by:

$$P = \left[\frac{(-1+\alpha)(\rho+\phi)\left[\frac{E_s\theta\phi}{(-1+\alpha)\rho+(-1+\alpha+\theta)\phi}\right]^{1-\theta}}{\beta\theta}\right]^{-1/\alpha}$$

That can be synthesized as:

$$P = \left[\frac{\beta\theta}{(\alpha-1)(\rho+\phi)(E^\star)^{1-\theta}}\right]^{1/\alpha} \tag{7}$$

Which, given the fact that $D(P,E) = E^\theta P^{-\alpha}$, yields the following demand in equilibrium:

$$D = E_s \frac{(\alpha-1)(\rho+\phi)}{(\alpha-1)(\rho+\phi)+\theta\phi} \tag{8}$$

Note that the demand in the steady state depends on the demand elasticity for natural resources θ, the price elasticity of demand α, the subjective intertemporal substitution ρ , the speed of recovering of the natural resources ϕ and finally the quality of natural resources.

The quality of natural resources

In stationary state, there is a fraction of the quality of the natural resources that is used by tourists. This proportion Ω of natural resources employed is given by:

$$\Omega = 1 - \frac{E^\star}{E_s} = \frac{(\alpha-1)(\rho+\phi)}{(\alpha-1)(\rho+\phi)+\theta\phi} \tag{9}$$

Where $E^\star$ is the quality of the natural resources in the stationary state.

It is interesting to study how the price and the proportion of natural resources change, as the parameters of the model vary. Consider the case when the price elasticity if higher than one. In the first place, when the price elasticity of demand increases, in order to compensate this change

the social planner has to decreases the price (see equation 7). Then, tourists' demand increases, and so the use of natural resources. In the second place, an increase of the demand elasticity for natural resources, leads to an increase of tourists' demand which is compensated with a higher price. Thus, a decrease in the use of natural resources is produced. In the third place, if the speed of recovering of natural resources increases, the price also increases (see equation 7) and then, the use of the natural stock decreases. Finally, when local agents valuate more the present period respects to future periods (that is, when ρ grows), then since the tourists' demand price elasticity is higher than 1, the social planner will decrease the price in order to attract more tourists. This situation produces a higher level of employed natural resources. These results allow us to cast some light on the different ways that the price and tourists' demand are expected to change with the parameters of the model. We summarize this analysis in the following Proposition.

Proposition 1: When the price elasticity is higher than one (i.e. $\alpha > 1$), the proportion of natural resources used in steady state changes according to the demand elasticity respect to natural resources θ, the price elasticity of demand α, the subjective intertemporal substitution ρ and the speed of recovering of the natural resources ϕ, in the following way:

      a) When the price elasticity of demand increases, the proportion of the natural resources employed increases.

      b) When the elasticity of demand to the quality of natural resources increases, the proportion of the natural resources employed decreases.

      c) When the speed of recovering of natural resources increases, the proportion of the natural resources employed decreases.

      d) When the discount rate increases, the proportion of the natural resources employed increases.

Proof: The proof of proposition comes from the signs of the derivatives in each case.

Item a) When α increases the sign of the change in Ω is given by:

$$\frac{\partial \Omega}{\partial \alpha} = \frac{\theta \phi (\rho + \phi)}{((\alpha - 1)(\rho + \phi) + \theta \phi)^2} > 0 \tag{10}$$

The higher is the elasticity of demand to the price (α), the larger will be the gap between the maximum optimal environment and the actual one.

Item b) When θ increases the sign of the change in Ω is given by:

$$\frac{\partial \Omega}{\partial \theta} = -\frac{(\alpha - 1)\phi(\rho + \phi)}{((\alpha - 1)(\rho + \phi) + \theta\phi)^2} < 0 \tag{11}$$

When the utility that people enjoy from an increase in the environmental quality is elastically related to demand, the index of proportional environmental quality is close to E_s. Notice that the price in stationary state will be higher, as the tourists demand more quality and are willing to pay for such an increase in quality. Examples of this situation are exclusive places where people enjoy the quality and they are willing to pay for it.

Item c) When ϕ increases the sign of the change in Ω is given by:

$$\frac{\partial \Omega}{\partial \phi} = -\frac{(\alpha - 1)\phi\rho}{((\alpha - 1)(\rho + \phi) + \theta\phi)^2} < 0 \tag{12}$$

Item d) Finally, when ρ increases the sign of the change in Ω is given by:

$$\frac{\partial \Omega}{\partial \rho} = \frac{(\alpha - 1)\phi\theta}{((\alpha - 1)(\rho + \phi) + \theta\phi)^2} < 0 \tag{13}$$

The previous proposition shows the expected changes in the proportion of natural resources used by the tourist sector, when the main parameters of our model vary. An interesting application of these results would be to test their predictions with real data about different tourism markets.

FINAL REMARKS

In this paper we developed an intertemporal model in which the price index of a tourist destination is used for assessing the short and long term tradeoff offered by natural resources. In particular, we present a mechanism based on the employment of a market signal suitable for reaching environmental sustainability in the destination.

Within this framework we show that there is a relationship between the demand price elasticity and the natural resources deployment. More precisely, if it is higher than one, then we have a tradeoff between the use of environmental resources and the development of the tourism industry in the destination. In particular, an increase of either the price elasticity of demand or the discount rate, leads to a growth in the proportion of employed natural resources. Moreover, when there is an increase of the demand elasticity respect to the quality of environmental resources or the speed of recovering of natural resources increases, the proportion of natural resources employed decreases.

It would be interesting to introduce taxes on the price index of the destination. With this tool, the central planner will be able to influence the demand for natural resources in order to decrease the share of natural resources deployed so as to increase long run sustainability.

APPENDIX

The appendix section shows the two analytical developments of the paper.

The benevolent social planner solves the following problem:

$$\max_{P} U(P) = \int_{t=0}^{t=\infty} e^{\rho t} log(\Pi) dt$$

Subject to:

$$\dot{E} = \phi(E_s - E) - \beta D(E, P)$$

Where $\Pi = PD(E, P)$ and $D(E, P) = E^{\theta} P^{-\alpha}$.
Thus, the Hamiltonian of the problem is:

$$H = \theta Log E + (1 - \alpha) Log P + \mu\big(\phi(E_s - E) - \beta E^{\theta} P^{\alpha}\big)$$

And the first order conditions are:

$$\frac{\partial H}{\partial P} = \frac{1 - \alpha}{P} + E^{\theta} P^{-1-\alpha} \alpha \beta \mu = 0 \tag{14}$$

$$\frac{\partial \mu}{\partial t} = \rho\mu - \frac{\partial H}{\partial E} = -\frac{\theta}{E} + \mu\rho - \mu(-E^{-1+\theta}P^{-\alpha}\beta\theta \quad (15)$$
$$- \phi)$$

$$\frac{\partial H}{\partial \mu} = \frac{\partial E}{\partial t} = (E_s - E)\phi - \beta E^\theta P^{-\alpha} \quad (16)$$

Using (14), P can be expressed as:

$$P = \left[\frac{E^{-\theta}(\alpha - 1)}{\alpha\beta\mu}\right]^{-1/\alpha}$$

After some computations, the following dynamical system is obtained:

$$\dot{\mu} = \mu(\rho + \phi) - \frac{\theta}{E\alpha} \quad (17)$$
$$\dot{E} = \phi(E_s - E) + \frac{1 - \alpha}{\mu\alpha} \quad (18)$$

The system has three different regimes according to the price elasticity of demand α. The qualitative behavior of the system is presented for the cases of inelastic and elastic demand, i.e. $\alpha < 1$ and $\alpha > 1$, in Figure 1.

When the demand is perfectly elastic, i.e. $\alpha = 1$, the qualitative behavior is similar to the case of inelastic demand $\alpha < 1$, although the coupling between the two state variable bears a cleavage (See Section 3 for the case $\alpha=1$).

Figure 1 Qualitative Analysis of the Optimal Solution
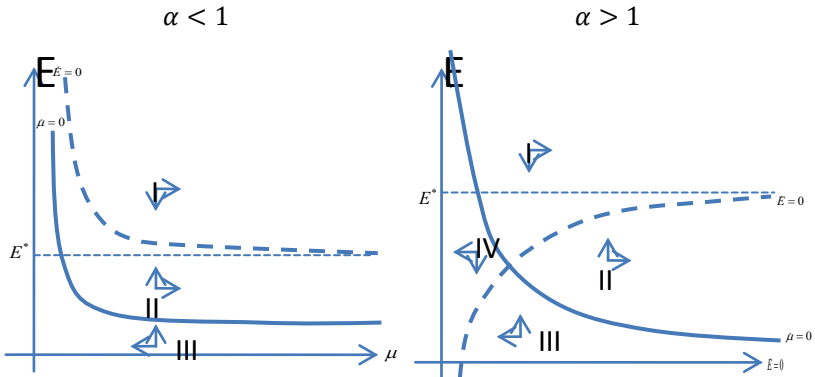
The steady state of this system is:

$$\mu^{\star} = \frac{(\alpha - 1)(\rho + \phi) + \theta\phi}{E_s \alpha\phi(\rho + \phi)}$$

$$E^{\star} = \frac{E_s \theta\phi}{(\alpha - 1)(\rho + \phi) + \theta\phi}$$

(19)

The local stability of the system it is analyzed from the Jacobian:

$$J = \begin{bmatrix} \dfrac{\partial\dot\mu}{\partial\mu} & \dfrac{\partial\dot\mu}{\partial E} \\[2mm] \dfrac{\partial\dot E}{\partial\mu} & \dfrac{\partial\dot E}{\partial E} \end{bmatrix} =$$

(20)

$$\begin{bmatrix} \rho + \phi & \dfrac{((-1+\alpha)\rho + (-1+\alpha+\theta)\phi)^2}{E_s{}^2\alpha\theta\phi^2} \\[3mm] \dfrac{E_s{}^2(1-\alpha)\alpha\phi^2(\rho+\phi)^2}{((-1+\alpha)\rho + (-1+\alpha+\theta)\phi)^2} & -\phi \end{bmatrix}$$

Where the determinant is:

$$|J| = \frac{(\rho + \phi)^2(1 - \alpha) + (\rho + \phi)\theta\phi}{\theta}$$

(21)

And the trace of the Jacobian is ρ.

ENDNOTES

1. Butler (1980), page 12.
2. See also (Brida and Pereyra, 2009) and (Accinelli et al. 2007).
3. All variables in our model are defined at each time t. However, in order to make the notation lighter, we will not use the subscript t.

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REFERENCES

Accinelli, E., Brida, J.G., Carrera, E. & Pereyra, J.S. (2007). The effects on environmental investment of changes in tourism demand. *TOURISMOS: An International Multidisciplinary Journal of Tourism*, Vol. 2, No.2, pp.129-140.

Andriotis, K. (2002). Scale of hospitality firms and local economic development evidence from Crete. *Tourism Management,* Vol. 23, No.4, pp.333-341.

Ayong Le Kama, A.D. (2001). Sustainable growth, renewable resources and pollution. *Journal of Economic Dynamic & Control,* Vol. 25, pp.1191-1918.

Balaguer, J. & Cantavella-Jordà, M. (2002) Tourism as a long-run economic growth factor: the Spanish case. *Applied Economics,* Vol. 34, pp.877-884.

Beltratti A., Chichilnisky, G. & Geoffrey, H. (1993).Sustainable Growth and the Green Golden Rule. *NBER Working Papers* 4430, National Bureau of Economic Research, Inc.

Brida, J.G., Carrera, E. & Risso, W.A. (2008). A Long-Run Equilibrium Demand Function: The Mexican Tourism. *TOURISMOS: an International Multidisciplinary Journal of Tourism,* Vol. 3, No.1, pp.66-82.

Brida, J.G., Lanzilotta, B., Lionetti, S. & Risso, W.A. (2010). The tourism-led-growth hypothesis for Uruguay. *Tourism Economics* Vol. 16, No.3, pp.765-771.

Brida, J.G. & Pereyra, J.S. (2009). Tourism taxation and environmental quality: a model with vertical differentiation of the accommodation industry.

TOURISMOS: an International Multidisciplinary Journal of Tourism, Vol. 4, No.1, pp.45-62.

Brida, J.G., Risso, W.A., Such, M.J., Pereyra, J.S. & Zapata Aguirre, S. (2009). The tourism-led growth hypothesis: empirical evidence from Colombia. *TOURISMOS: An International Multidisciplinary Journal of Tourism*, Vol. 4, No.2, pp.13-27.

Brida, J.G. & Risso, W.A. (2010). Tourism as a determinant of long run economic growth. *Journal of Policy Research in Tourism, Leisure and Events,* Vol. 2, No.1, pp.14-28.

Brida, J.G., Risso, W.A. & Barquet, A. (2010b). Causality between economic growth and tourism expansion: empirical evidence from Trentino-Alto Adige. *TOURISMOS: An International Multidisciplinary Journal of Tourism,* Vol. 5, No.2, pp.87-98.

Butler, R. (1980). The Concept of a Tourist Area Cycle of Evolution: Implications for Management of Resources. *The Canadian Geographer* Vol. 24, No.1, pp.5-12.

Cerina, F. (2007). Tourism specialization and environmental sustainability in a dynamic economy. *Tourism Economics,* Vol. 13, No.4, pp.553-582.

Croes, R.R. (2006). A Paradigm Shift to a New Strategy for Small Island Economies: Embracing Demand Side Economics for Value Enhancement and Long Term Economic Stability. *Tourism Management,* Vol. 27, pp.453-465.

Davies, T. & Cahill, S. (2000). Environmental Implications of the Tourism Industry. *Resource for the Future.* Washington, USA.

Fagance, M. (1999). Tourism as a feasible option for sustainable development in small island developing states (SIDS): Nauru as a case study. *Pacific Tourism Review,* Vol. 3, pp.133-142.

Hazari, B.R. & Sgro, P.M. (1995). Tourism and Growth in a Dynamic Model of Trade. *Journal of International Trade and Economic Development*, Vol. 4, pp.243-252.

Hazari, B.R. and Ng, A. (1993). An analysis of tourists' consumption of non-traded goods and services on the welfare of the domestic consumers. *International Review of Economics and Finance,* Vol. 2, pp.3-58

Hernández, J. & Leon, C. (2004). Sustainable Environmental Degradation in Ecotourism Development. *University of Las Palmas de Gran Canaria*. Las Palmas.

León, C., Hernández, J. & González, M. (2007). Economic welfare, the environment and the tourist product life cycle. *Tourism Economics* Vol. 13, No.4, pp.583-602.

Lin, B.H. & Liu, H.H. (2000). A study of economies of scale and economies of scope in Taiwan international tourist hotels. *Asia Pacific Journal of Tourism Research,* Vol. 5, pp.21-28.

Lozano Ibáñez, J., Gomez, C. & J. Rey-Maquieira (2005). An Analysis of the Evolution of Tourism Destinations from the Point of View of the Economic Growth Theory. *FEEM Working Paper* No. 146.05.

Shan, J. & Wilson, K. (2001) Causality between trade and tourism: empirical evidence from China. *Applied Economics Letters*, Vol. 8, pp.279-283.

Schubert, S.F., Brida, J.G. & Risso, W.A. (2011). The impacts of international tourism demand on economic growth of small economies dependent on tourism. *Tourism Management,* Vol. 32, pp.377-385.

Wirl, F. (2003). Sustainable growth, renewable resources and pollution: Thresholds and cycles. *Journal of Economic Dynamic & Control,* Vol. 28, pp.1149-1157.

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THE EFFECTS OF SUPPLY CHAIN MANAGEMENT APPLICATIONS ON THE PERFORMANCES OF ACCOMMODATION ESTABLISHMENT OPERATING IN TOURISM INDUSTRY

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The fierce global competition in the 21st century is focused on supply chains rather than on individual companies. From a macro perspective, supply chain is a network of enterprises which are engaged in different functions ranging from the supply of the raw materials through the production and delivery of the end-product to the target customers. In this study, an investigation on large scale accommodation enterprises has been conducted that aims to find out the impact of supply chain practices on business performance.

INTRODUCTION

Today, integrating and managing the services that are provided and the operational and non-operational activities during the period that passes from the source to the end users, turns into a must in order to attain a safer place in international markets. Depending on the developments and changes at accommodation establishments, this process is called as supply chain management. Although supply chain management is addressed particularly for production industry, its importance in service industry, in terms of effective and productive usage of sources, is getting well-understood day by day. Because the way to get the most efficient

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supply for the clients and operating activities of accommodation establishments, has notable effects on the performances of the establishment as well as the purposes and objectives of it.

LITERATURE REVIEW

Supply Chain & Supply Chain Management

Briefly, supply chain is the integrated overall activities that secure the delivery of final products to the user (Davis et al., 1999; Tütüncü & Küçükusta, 2008). Supply chain is a network constituted by producers and distributors, who obtain raw material, turn them into intermediate good and final products, and who distribute the final products to the customers (Lee and Billington, 1992; Özdemir, 2004). In broader terms, supply chain is a process that covers supplying, product design, production planning, materials management, fulfilling orders, inventory management, shipping, storage, and customer services (Arshinder & Desmukh, 2008). The term supply chain management, is the integration of business processes, suppliers, producers, distribution centers and retailers who are interdependent with the aim of reducing the costs system-wide while securing the required level of service to improve flow of goods, services and information from the original suppliers to the final customers (Simchi-Levi et al., 2000; Su & Yang, 2010). In other words, Supply Chain Management is an integrated approach related to the control and planning of material flow from suppliers to the end users (Cavlak, 2009).

Supply Chain Management is defined as the applications of activities that integrate suppliers, producers, storages and point of sales effectively for minimizing system costs and that are directed to increase customer service quality with determining production and distribution quantity to be the right amount, on the right time and at the right place by Waters (1999), (Çaka, 2012).

Generally the basic goals of supply chain management are: cost, speed, quality, and customer service (Arnold et al., 2003). The principal benefits that Supply Chain Management provide to the establishments are; specialization and common interest, long-term planning, less stock, and disappearance of uncertainties (Lambert et al., 1998). Supply Chain Management is process-oriented and aims to reduce costs while increasing the quality. Due to this reason, the steps composing supply chain management have critical importance on behalf of the success of the process.

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Previous Studies on the Relation between Tourism Industry and Supply Chain Management

Tourism is an important driver for global development (Costa & Carvalho, 2011). Because, tourism has become a very competitive business and has a significant impact on local economies directly and indirectly (Psillakis et al., 2009). With its economic aspects, tourism is one of the fastest growing sectors together with telecommunication and information technologies in the twenty-first century's global economy. (Diamond, 1977; Britton, 1982; Copeland, 1991; Hao et al., 2003; Güngör, 2011). Also, tourism can enable public authorities to achieve a variety of social objectives, such as improving employment (Commission of the European Communities, 2005; Marino, 2010; Polat, 2013). Finally, tourism can be seen as the "engine" of employment creation and poverty eradication (Korres, 2008). Even though tourism has so great contributions to general economy, there are only a limited number of scientific studies intended for supply chain in tourism industry in literature (Piboonrungroj & Disney, 2009):

- In one of the first studies about establishments carrying on a business at service industry and supply chain management, Armistead and Clark (1993) analysed Porter's "Value Chain Employment" as a strategic tool for the mentioned establishments. Method consists of eight variables and source schedule that is used in service process. These variables in question are respectively: people, service area, information systems, materials, equipment, configuration, cost, and income.
- Hellman (1995) analysed the mergers in service industry with using the data obtained from insurance companies. Author discovered that cooperative relations are more important for service establishments in comparison with production companies, and that mergers have significant results for service establishments.
- Youngdahl and Loomba (2000) used the concept of service factory and extend service factory to global supply chains.
- Sampson (2000) searched the structure of supply chains in service industry with focusing on the issue of consumer-supplier duality.
- In their study on customizing service supply chain concept to service industry, Kathawala and Abdou (2003) focused on the exchange between cost reduction and improving service quality

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in supply chain. They came to the conclusion that the central objective in reaching service quality is made up of physically effective processes and market reactive processes, and they defined how the conventional supply chain management processes – in an inventory and production focused way – can be adopted to obtain them.

- Thereby proposing a general framework adopted from production oriented supply chain management literature, Ellram, et al. (2004) set down the key service processes as; information flow, capacity and skill management, demand management, supplier relations management, customer relations management, management of service distribution, and cash flow (Baltacıoğlu et al., 2006).

In a study by Walton (1996) it is stated that supply chain management corporation has five basic aspects. These are stated as planning, sharing of interests and costs, asset specificity, operational information exchange, and extendedness. Donlon (1996) brought forward a definition that includes supplier cooperation, outsourcing, cycle time compression, continuity of flow of the processes, and sharing information technology. Alvarado and Kotzab (2001) state the reasons of supply chain development of an organization as; avoiding duplication effects with focusing on basic skills, usage of inter-organization systems like Electronic Data Interchange (EDI), elimination of redundant inventory levels with postponing individualization towards the end of supply chain. Tan (2001) sets forth that a well-integrated supply chain covers organization of materials and information flow among suppliers, producers and customers, and implementation of mass individualization to supply chain (Li, 2002:45). Table 1 lists these aspects with explanations and supporting literature:

Table 1 Factors Related to SCM and Literature

Concepts	Definitions	Literature
Strategic Supplier Partner	Long-term relations designed for increasing strategic and operative capabilities of individually participating organizations in order that each side can achieve important and continuous benefits.	Monczka et al., 1998; Sheridan, 1998; Stuart, 1997; Balsmeier and Voisin, 1996; Tompkins, 1998; Lamming, 1993.
Customer	Applications for managing customer	Tan et al., 1998;

Relations	complaints, establishing long-term relations with customers, and developing customer satisfaction.	Claycomb et al., 1999; Aggarwal, 1997; Bommer et al., 2001; Magretta, 1998a; 1998b; Noble, 1997; Wines, 1996.
Sharing Information	The scope where critical and special information is delivered to establishment's trading partner.	Novack, et al., 1995; Balsmeier & Voisin, 1996; Towill, 1997; Jones, 1998; Lalonde, 1998; Stein&Sweat,1998; Monczka et al.,1998; Ballou et al.,2000; Lancioni et al., 2000; Vokurka&Lummus, 2000;
Quality of Information	Being truly timed, sufficient and credible of the interchanged information	Alvarez, 1994; Berry et al., 1994; Metters, 1997; Lee et al., 1997; Mason-Jones and Towill, 1997; Monczka et al., 1998; Chizzo, 1998; Holmberg, 2000; Jarrel, 1998.
System	The application of eliminating redundant costs, time and other wastes from whole supply chain.	McIvor, 2001; Taylor, 1999; Womack and Jones, 1996; Mason-Jones and Towill, 1997; Handfield and Nichols, 1999; Burgess, 1998.
Support of Senior Management	Senior management's awareness of benefits of cooperation with partners	Lee and Kim, 1999; Mentzer, 1999; Balsmeier and Voisin, 1996; Dale, 1999.
Supply Strategy	The arranging of supply chain applications in a way to let them develop continuously.	Sheridan, 1998; Towell, 1997; Ayers, 1999; Lummus and Vokurka, 2000; Stuart, 1997.
Performance	The level of approaching of an enterprise to the market share and its financial goals.	Vickery et al., 1999a; Stock et al., 2000; Tan et al., 1998.

METHOD

Research Instrument

This study is done for confirming to what extent the supply chain practices and customer relations data of 4 and 5 star accommodation establishments, which are operating in the Aegean Region of Turkey, are effective on performances of management. In this study data is gathered via survey technique. Usal and Kuşluvan (1998) argue that the survey technique is the most convenient way for attitude scaling; it presents statistical data and it facilitates easiness not only for the person being surveyed but also the researcher (Kutanis, et al., 2012). First of all, a pilot test has been carried out in order that survey results can be more valid. After that, the questionnaire has been finalized and it is conducted to the managers of sales and supply departments at 4 and 5 star accommodation establishments and at first class holiday resorts in the Aegean Region. The questionnaire consists of three parts. At the first part, there are 53 statements under 9 main headings intended for determining aspects composing supply chain management. Questions at this part are aimed at determining information about supply chain management that the managers of supply and sales departments of 4 and 5 star accommodation establishments in Aegean Region use in their establishments. At the second part, there are 7 statements about performance of management which is used as dependent variable. At the third part, there are 7 questions for determining demographic information of managers who respond to the questionnaire. During the application of the survey five point Likert scale was used. Answerers were asked to mark the level of statements as "strongly agree", "agree", "neither", "disagree", and "strongly disagree".

HYPOTESIS

H1: Customer relations affect the general performance of accommodation establishments.

H2: The support of senior management affects general performance of accommodation establishments in supply chain management.

H3: Usage of technology is effective in supply chain management of accommodation establishments.

H4: Usage of information and quality of information in supply chain management is effective in sales.

H5: Within the context of supply chain management, strategic supplier partnership in accommodation establishments affects net profit.

H6: Supply strategy is effective on profit margin of accommodation establishments.

H7: As part of supply chain management, supply strategy is effective on customer satisfaction.

H8: In accommodation establishments, the usage of technology within the scope of supply chain management affects customer satisfaction.

RESULTS

After gathering survey data, firstly to determine reliability of questionnaire, a reliability analysis was done with SPSS 18.0. According to this reliability analysis, the reliability of totally 53 statements turned out to be 95.3%. This results shows that the questionnaire is highly reliable. The reliability, which was 92.4% according to the results observed in the pilot test, improved further in the final analysis due to the clarifications of the statements.

Demographic Findings and Evaluation

According to the survey results, it is seen that among the age groups of supplier and sales directors in 4 and 5 star hotels and first class holiday resorts in Aegean Region, people of 31-40 age group are at a higher rate with 62.7%. Generally it is possible to say that the directors in these departments are in a younger age group. When gender statuses of supplier and sales directors are taken into account, it can be seen that men dominate with 99 people and 78.6%. The results of analysis with regard to level of education of the participants shows that university graduates are 73 people with 57.9% and that they form the biggest group in total. It is possible to see that the number of people who received education other than tourism and who managed to become directors at these departments is considerable. This situation can be seen as seen as a challenging issue to be investigated. When this is taken into consideration together with age groups and when it is thought that generally age groups consist of middle and young age groups, it is possible to conclude that people in this group of 17, start working in tourism sector at very young ages. The other remarkable point is that 2 of these directors are working as department managers at the hotels in this region although they stated that they have less than 1 year of experience.

Table 2 General Characteristics of Directors Who Attended the Study

Group of Age (n=125)	Number (N)	Percent Value (%)
Aged 30 and below	21	
31-35	41	
36-40	38	
41-45	14	
Aged 46 and above	11	
Total	125	100
Gender (n=125)		
Male	99	
Female	26	
Total	125	100
Level of Education (n=125)		
Primary Education	4	
Secondary Education	24	
Associate Degree	18	
Bachelor's Degree	73	
Postgraduate Degree	6	
Total	125	100
Field of Education (n=118)		
Tourism	64	
Other	54	
Total	118	100
Duty (n=123)		
Employer	3	
General Director	15	
Vice General Director	9	
Department Manager	96	
Total	123	100

When Table 16 is looked in respect to duties of respondent directors, it is seen that with 76.2% and 96 people department managers create the biggest group. Others are arranged as 15 general directors, 9 vice general directors and 3 employers.

Results of Factor Analysis and Their Evaluation

As a result of factor analysis 9 variables appear to affect supply chain management. These are stated as: customer relations management, quality of information, support of senior management, supply strategy, usage of technology, strategic supplier partnership, sharing information, usage of information, and system. From the data gathered by the application of the scale and from factor analysis done to determine the factor structure of the scale, it is possible to clarify 72.3% of the changings observed in data gathered from the scale with 9 factors independent of each other.

Results of Regression Analysis and Their Evaluation

In this study, multiple regression model is applied with the thought that more than one independent variable are going to explain dependent variable.

As a result of regression analysis done in order to determine the relation between dependent variable of general performance and factors of supply chain management, R2 value came out as 341. As the sig. value (p) appears to be 0.001 at Analysis of Variance (ANOVA) table, regression results are significant.

It was seen that among the generated factors, factors called customer relations, quality of information, support of senior management, supply strategy and usage of information have statistically significant effects on dependent variable named general performance.

As a result of regression analysis done in order to determine the relation between dependent variable of market share and factors of supply chain management, R^2 value came out as 303. As the sig. value (p) appears to be 0.001 at Analysis of Variance (ANOVA) table, regression results are significant

In regard to the regression results, as the sig. (p) value of customer relations, quality of information, supply strategy, sharing information and usage of information factors of supply chain management, it was inferred that they are influential on market share dependent variable. On the hand, it is set that support of senior management, usage of technology, system and strategic supplier partnership factors have no relations with the dependent variable of market share of accommodation establishments.

In consequence of regression analysis done in order to determine the relation between dependent variable of sales and factors of supply chain management, R2 value came out as 318. As the sig. value (p) appears to be 0.001 at Analysis of Variance (ANOVA) table, general regression results are significant. From the survey results it was seen that customer relations, quality of information, supply strategy, and usage of

information factors of supply chain management factors have influence upon sales dependent variable.

Table 3 Results of Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Standard Error	Beta	t	Sig.
1 (Constant)	1.738	.062		27.855	.000
Customer relations	.150	.063	.181	2.401	.018
Quality of information	.153	.063	.184	2.438	.016
Support of senior management	.145	.063	.174	2.314	.022
Supply strategy	.135	.063	.162	2.149	.034
Usage of technology	.113	.063	.136	1.808	.073
Strategic supplier partnership	.020	.063	.024	.321	.749
Sharing information	.067	.063	.081	1.072	.286
Usage of information	.351	.063	.422	5.600	.000
System	-.098	.063	-.118	-1.568	.120

Dependent Variable: General Performance
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As a result of regression analysis done in order to determine the relation between dependent variable of net profit and factors of supply chain management, R2 value came out as 137. As the sig. value (p) appears to be 0.001 at Analysis of Variance (ANOVA) table, general regression results are significant. In accordance with regression results it was seen that usage of technology and usage of information factors of supply chain management factors are effective on net profit dependent variable.

As a result of regression analysis done in order to determine the relation between dependent variable of profit margin and factors of supply chain management, R2 value came out as 195. As the sig. value (p) appears to be 0.001 at Analysis of Variance (ANOVA) table, general regression results are significant.

Table 4 Results of Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Standard Error	Beta		
1 (Constant)	1.818	.069		26.534	.000
Customer relations	.151	.069	.171	2.193	.030
Quality of information	.157	.069	.178	2.282	.024
Support of senior management	.073	.069	.082	1.059	.292
Supply strategy	.210	.069	.236	3.023	.003
Usage of technology	.085	.069	.095	1.224	.224
Strategic supplier partnership	.002	.069	.002	.025	.980
Sharing information	.160	.069	.179	2.299	.023
Usage of information	.320	.069	.365	4.684	.000
System	.050	.069	.057	.729	.468

Dependent Variable: Market Share

According to the data of analysis only usage of information factor among supply chain management factors is effective on profit margin dependent variable. As the sig. value of other supply chain management factors appears higher than 0.05, the result that there isn't any significant relation in between is inferred. The beta value of usage of information factor explains profit margin at the rate of 35.4%.

As a result of regression analysis done in order to determine the relation between dependent variable of customer satisfaction and factors of supply chain management, R2 value came out as 175. As the sig. value (p) appears to be 0.001 at Analysis of Variance (ANOVA) table, general regression results are significant.

Table 5 Results of Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Standard Error	Beta	t	Sig.
1 (Constant)	1.857	.065		28.748	.000
Customer relations	.158	.065	.187	2.440	.016
Quality of information	.191	.065	.225	2.937	.004
Support of senior management	.122	.065	.145	1.888	.062
Supply strategy	.132	.065	.156	2.038	.044
Usage of technology	.092	.065	.108	1.412	.161
Strategic supplier partnership	-.009	.065	-.010	-.134	.894
Sharing information	.112	.065	.132	1.723	.088
Usage of information	.331	.065	.391	5.104	.000
System	-.056	.065	-.066	-.866	.338

Dependent Variable: Sales

In accordance with the regression data, quality of information, supply strategy, and usage of information factors have significant influence on customer satisfaction dependent variable. There is no relation among quality of information, support of senior management, usage of technology, strategic supplier partnership, sharing information, and system factors and customer satisfaction dependent variable. Whether there is any relation between customer satisfaction factor and supply strategy dependent variable is tested and sig. value appears to be 0.022. As sig. value comes out lower than 0.05, it is inferred that there is a significant relation between supply strategy factor and customer satisfaction dependent variable. In accordance with the information obtained in consequence of research data, while some of the research hypotheses are supported, some are rejected.

Table 6 Results of Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Standard Error	Beta		
1 (Constant)	2.098	0.77		27.261	.000
Customer relations	.080	.077	.090	1.037	.302
Quality of information	.052	.077	.059	.682	.497
Support of senior management	.045	.077	.051	.588	.558
Supply strategy	.073	.077	.083	.954	.342
Usage of technology	.159	.077	.180	2.074	.040
Strategic supplier partnership	-.135	.077	-.153	-1.756	.082
Sharing information	.038	.081	.041	.468	.641
Usage of information	.212	.077	.241	2.769	.007
System	-.001	.077	-.001	-.014	.989

Dependent Variable: Net Profit

Table 7 Results of Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Standard Error	Beta		
1 (Constant)	2.205	0.78		28.393	.000
Customer relations	.065	.078	.071	.840	.402
Quality of information	.149	.077	.161	1.921	.057
Support of senior management	.045	.078	.048	.577	.565
Supply strategy	.102	.077	.110	1.315	.191
Usage of technology	.133	.077	.145	1.723	.088
Strategic supplier partnership	-.060	.078	-.065	-.770	.443
Sharing	.033	.077	.035	.420	.675

information					
Usage of information	.329	.078	.354	4.212	.000
System	.020	.078	.021	.255	.799

Dependent Variable: Profit Margin

Table 8 Results of Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients		
Model	**B**	**Standard Error**	**Beta**	**t**	**Sig.**
1 (Constant)	2.508	.090		27.930	.000
Customer relations	.051	.092	.047	.547	.585
Quality of information	.228	.092	.215	2.474	.015
Support of senior management	.080	.097	.072	.823	.412
Supply strategy	.216	.093	.201	2.326	.022
Usage of technology	-.031	.090	-.030	-.346	.730
Strategic supplier partnership	-.018	.092	-.016	-.190	.850
Sharing information	.012	.089	.012	.140	.889
Usage of information	.261	.090	.250	2.903	.004
System	-.124	.091	-.118	-1.365	.175

Dependent Variable: Customer Satisfaction

The results of hypotheses can be summarized as follows as a result of statistical analyses done:

H1: *Accepted.*
H2: *Accepted.*
H3: *Rejected.*
H4: *Accepted.*
H5: *Rejected.*
H6: *Rejected.*

H7: *Accepted.*
H8: *Rejected.*

The summary of the relations among dependent variables and supply chain management factors according to the results of regression analyses is given at Table 9.

Table 9 Relations among Dependent Variables and SCM Factors

		Customer Relations	Quality of Inf.	Support of Senior Manag.	Supply Strategies	Usage of Tech.	Str. Supplier Partner.	Sharing Inf.	Usage of Inf.
FACTORS									
DEPENDENT VARIABLES	General Performance	X	X	X	X				X
	Market Share	X	X		X			X	X
	Sales	X	X		X				X
	Net Profit					X			X
	Profit Margin								X
	Customer Satisfaction		X		X				X

CONCLUSIONS

It is known that establishments avoid from cooperative enterprises in tourism industry owing to the rivalry. Tourism supply chain aims effective management of every process needed from source markets to every single ring of the chain so as to provide tourists' needs at a certain destination and to reach enterprise goals. Such a method requires all partners to be in close and well-supported relations.

It is seen that the primary factors effecting customer satisfaction are quality of information, supply strategy, and usage of technology when the findings obtained from data are analysed. Another attracting finding here is that there is no significant relation between usage of technology and customer satisfaction. In fact, an information network that an establishment can set up with its customers may increase the competitive capacity of firms with providing advantages like hearing about the market and following developments. At this point it is possible to say that those accommodation establishments which follow current developments in information technologies cannot comprehend totally how to use the

customer data they obtain yet. It is a necessity to use the software which is used today by almost every accommodation establishments as a database in order to maintain continuity of both supply and relationships with customers. In this way waste of resources, which is one of the common problems at this sector, can be prevented and customer loyalty can be secured.

Another of the findings obtained is that those establishments attended to the survey do not correlate system factor, which means strategic management of supply chain management, with performance of management. The fact that system variable, which contains improvement programs, business to business and internal integration, and time to prepare service for serving, is not related to performance of management in tourism industry where service quality is the most indicative element for the continuity of the establishment is thought-provoking. The main cause of this might be that continuity of the systems wanted to be formed cannot be provided as the worker turnover rate is high and it is one of the problems of the sector.

The setting and leadership required for improving service quality should be provided by the senior management. The first requirement is the acceptance of supply chain management by senior management. In this sense, senior management has to play a leading role. Thanks to developing computer and data processing methods, establishments are now enable to fix any kind of negations that are possible to emerge and take precautions against them by immediate interference with transforming daily, monthly or annual historical data into information. The results obtained from the study also shows that establishments are aware of the effects of information quality and the way it is used on supply chain management. At this point, waste of resources, which is one of the fundamentals of supply chain management, can be prevented by founding a central databank for accommodation establishments and by forming a system, where both customer and supplier information is stored, and from which any establishment can reach any information it needs.

The essential points to be taken into account by the accommodation establishments to plan and apply supply chain management successfully can be listed as follows:

- Generating a supply chain strategy by the coordination of supply chain activities with management activities, and paralleling this to management strategy,

- Comprehension of the importance of supply chain management by senior management, and their continuous support with determination of strategies proper to the goals and objectives,
- Developing a system that can follow market demands and changings continuously and rapidly, and perpetual observation of these changings,
- Properly and on time sharing of information with every single ring of the chain (public or private sector),
- Extending usage of customer relations management systems that focus on customer demands and expectations,
- Effective management of supply resources by getting into partnerships with suppliers so as to reduce material costs,
- Measuring supply chain performance at general and functional levels, and attempting to improve it.
- Developing information systems supporting decision-making about activities that form basics of supply chain,
- Generating plans to obtain the utmost added value from each ring and element in supply chain.

Consequently, it will be beneficial to the accommodation establishments to adopt supply chain management, a modern approach, in order to prevent waste of resources, which has an important place in the industry apart from staff related problems, and to use available resources in a way to get the most possible profit. As the chains potential is determined with the weakest link, every element in the chain – tour operator, travel agency, local authorities, transportation services supplier, and factors depending on political will, accommodation establishments and suppliers – is needed to be in continuous and complete touch and coordination. It may be proper for accommodation establishments to act in accordance with academicians and authorities about making technological and managerial investments for providing this.

REFERENCES

Alvarado, U.Y. & Kotzab, H. (2001). Supply chain management: The integration of logistics in marketing. *Industrial Marketing Management*, Vol. 30, No.2, pp.183-198.
Armistead, C.G. & Clark, G. (1993). Resource activity mapping: The value chain in service operations strategy. *The Services Industries Journal*, Vol. 13, No.4, pp. 221-239.
Arnold, T., Chapman, J.R. & Stephen, N. (2003). *Introduction to materials*

management, New Jersey, Prentice Hall.

Arshinder, K.A. & Desmukh, S.G. (2008). Supply chain coordination: Perspectives, empirical studies and research directions. *International Journal of Production Economics,* Vol. 115, No.2, pp. 316-335.

Baltacıoğlu, T., Ada, E., Yurt, Ö. & Kaplan, M.D. (2006). Service supply chains: A new framework. *Paper presented at the 4th international logistics and supply chain congress.* İzmir, Turkey: 29-30 November 2006.

Britton, S.G. (1982). The political economy of tourism in the third world. *Annals of Tourism Research*, Vol. 9, pp.331-358.

Cavlak, E.B. (2009). Design and optimization at production/distribution planning decision process in supply chain management. *Unpublished Master's Thesis*. Konya, Turkey: Selçuk University Institute of Social Sciences.

Commission of the European Communities. (2005). *The tourism sector of the community: a study of concentration, competition and competitiveness*. Office for Official Publications of the European Communities, Bruxelles.

Copeland, B.R. (1991). Tourism, welfare and de-industrialization in a small open economy. *Economica,* Vol. 58, pp.515-529.

Costa, M.T.G. & Carvalho, L.M.C. (2011). The sustainability of tourism supply chain: A case study research. *Tourismos: An International Multidisciplinary Journal of Tourism,* Vol. 6, No.2, pp. 393-404.

Çaka, E. (2012). Warehouse location selection in supply chain management with choquet integral. *Unpublished Master's Thesis*. Istanbul, Turkey: Istanbul Technical University Institute of Science Engineering and Technology.

Davis, M.M., Aquailiano, N.J. & Chase, R.B. (1999). *Fundamentals of operations management*. New York, Mc Grawhill.

Diamond, J. (1977). Tourism's role in economic development: The case reexamined. *Economic Development and Cultural Change*, Vol. 25, No.3, pp.539-553.

Donlon, J.P. (1996). Maximizing Value in the Supply Chain. *Chief Executive,* Vol. 117, pp.54-63.

Ellram, L.M., Tate, W.L. & Billington, C. (2004). Understanding and managing the service supply chain. *Journal of Supply Chain Management*, Vol. 40, No.3, pp.17-32.

Güngör, A. (2011). Economic circle in international tourism. In I. Pırnar (Eds.) *International Tourism Management,* Ankara: Nobel Publishing.

Hao, J., Var, T. & Chon, J. (2003). A forecasting model of tourist arrivals from major markets to Thailand. *Tourism Analysis*, Vol. 8, pp.33-45.

Hellman, P. (1995). Service sector alliances - empirical evidence from the insurance industry. *Journal of Professional Services Marketing*, Vol. 12, No.2, pp.81-94.

Kathawala, Y. & Abdou, K. (2003). Supply chain evaluation in the service industry: A framework development compared to manufacturing. *Managerial Auditing Journal*, Vol. 18, No.2, pp.140-149.

Korres, G.M. (2008). The role of innovation activities in tourism and regional growth in Europe. *Tourismos: An International Multidisciplinary Journal of Tourism,* Vol.3, No.1, pp.135-152.

Kutanis, R.O., Mesci, M., Comlekci, I. & Sahin, O. (2012). Investigating hotel employee involvement in strategic human resources management. *Tourismos: An International Multidisciplinary Journal of Tourism,* Vol. 7, No.1, pp.117-134.

Lambert, D.M., Cooper, M.C. & Pagh, J.D. (1998). Supply chain management: Implementation issues and research opportunities. *The International Journal of Logistics Management,* Vol. 9, No.2, pp.1-19.

Lee, H.L. & Billington, C. (1992). Managing supply chain inventory: pitfalls and opportunities. *Sloan e-Management Review,* Vol. 33, No.3, pp.65-73.

Li, S. (2002). An integrated model for supply chain management practice, performance and competitive advantage. *Unpublished PhD*, Toledo*,* USA: The University of Toledo.

Marino, A. (2010). The tourist sector: Italian experience. *Tourismos: An International Multidisciplinary Journal of Tourism.* Vol. 5, No.2, pp.15-27.

Özdemir, A.İ. (2004). Development, processes and benefits of supply chain management. *Erciyes University Journal of Faculty of Economics and Administrative Sciences,* Vol. 23, No.1, pp.87-96.

Piboonrungroj, P. & Disney, S.M. (2009). Tourism supply chains: A conceptual framework. Http://www.tourismlogistics.com/images/stories/Tourism Supply Chains- A Conceptual Framework Final('l).pdf. Accessed the 1st of August 2009, at 23:48.

Polat, N. (2013). Impact of tourism projects of development agencies on social peace in Turkey. *Tourismos,* Vol. 8, No.1, pp.233-245.

Psillakis, Z., Panagopoulos, A. & Kanellopoulos, D. (2009). Low cost inferential forecasting and tourism demand in accommodation industry. *Tourismos: An International Multidisciplinary Journal of Tourısm,* Vol. 4, No.2, pp.47-68.

Sampson, S.E. (2000). Customer-supplier duality and bidirectional supply chains in service organizations. *International Journal of Service Industry Management*, Vol. 11, No.4, pp.348-364.

Simchi-Levi, D., Kaminsky, P. & Simchi-Levi, E. (2000). *Designing and managing the supply chain.* New York, Irwin McGraw-Hill.

Su, Y.F. & Yang, C. (2010). Why are enterprise resource planning systems indispensable to supply chain management. *European Journal of Operational Research,* Vol. 203, No.1, pp.81-94.

Tan, K.C. (2001). A framework of supply chain management literature. *European Journal of Purchasing & Supply Management,* Vol. 7, No.1, pp.39-48.

Tütüncü, Ö. & Küçükusta, D. (2008). Analysis of relation of Supply chain integration with patient safety. *Dokuz Eylül University Journal of Faculty of Management*, Vol. 9, No.1, pp.93-106.

Usal, A. & Kuşluvan, Z. (1998). *Behavioral sciences social psychology*, İzmir,

Barış Publications.

Walton, L.W. (1996). Partnership satisfaction: using the underlying dimensions of supply chain partnership to measure current and expected levels of satisfaction. *Journal of Business Logistics*, Vol. 17, No.2, pp.57-75.

Waters, D. (1999). *Global logistics and distribution planning: Strategies for management*. London, Kogan Page.

Youngdahl, W.E. & Loomba, A.P.S. (2000). Service-driven global supply chains. *International Journal of Service Industry Management*, Vol. 11, No.4, pp.329-347.

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THE PRO LOCO ITALIAN VOLUNTEERS INVOLVED IN THE PROMOTION OF TOURIST EVENTS

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The purpose of this study was describing who are the volunteers involved in the Pro Loco association; analysing how the sense of identification is strong in the participants; identifying the functions of motivations and the sense of self-efficacy and collective efficacy in the participants. Participants were 222 Italian volunteers. The 49% of them were members of the Pro Loco for more than 6 years. They show a strong identification with the group. The main reasons for their involvement and commitment in Pro Loco are community function and understanding function; on the other hand the career function is not a linked motivation. Volunteers show good levels of self-efficacy and collective efficacy and a positive association between function, identification and sense of self-efficacy and collective efficacy. Regressions show that the motivation to community function and understanding function are predictors of identification and sense of self-efficacy and collective efficacy.

INTRODUCTION

The Pro Loco associations are non-profit organizations made up of volunteers who are engaged in the promotion of local traditions and in improving culture, education and the quality of life. This is pursued through the organization of events, festivals and researches of local history (like a tourist office). Their main purpose is to promote the local

products, the beauty of the area and organize pleasant visits for tourists. L'UNPLI (National Union of the Italian Pro Loco) was founded in 1962 and coordinates more than 6.000 Pro Loco. They play a key role in promoting local tourism and developing community awareness about the importance of maintaining cultures, traditions and relationships. So, the Unpli is the association that all the Pro Loco refer to, or rather the basic association which joins the protection and the safeguard of the local specificity and represents a great immaterial patrimony and a great resource for the Nation. Made up of passion and longing of staying together and within a banner of free voluntary work, the association aims at organizing events, researching and studying the local history, maintaining the local cultural traditions, co-operating with the relevant Municipal Administrations, promoting one own "campanile" in the whole of the larger Regional picture with its food & wine specialities.

In Italy research concerning the phenomenon of the Pro Loco is rare, especially in the context of social psychology. Hence the attempt to bridge the gap through a research which describes the volunteers of the Pro Loco, their motivations, their group identification and their sense of self-efficacy and collective efficacy.

THE HISTORY OF PRO LOCO

In its long past, tourism has had different historical moments with three very important protagonists: entrepreneurship, associations and public institutions. In fact, in addition to the state and the local authorities, the associations are another subject of great importance. In Italy, for example, we can say that the Italian Touring Club and the Italian Alpine Club play an extraordinary role .

The history of Pro loco begins at the end of the nineteenth century when some committees of citizens decided to use the preposition "pro" before the name of the locality where they operated; the term "pro" indicated the willingness to work in favor of the country. The first Italian Pro loco, that one of Pieve Tesino, was born in 1881. Today, we can define the Pro loco as the main tour operator about the culture of a specific area and its testimonials (Tomasello, 2009).

Until last century the Italian State took no interest regarding the tourism sector, in opposition to the situation of France and Switzerland. In Italy the first attempts to create a tourist organization were at a private level; finally, following the example of France, the first Pro loco was created.

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In 1919, the first World War and social difficulties related to it showed that tourism could be useful for the state budget. In the same year the Italian National Agency for Tourism (ENIT) was established. Afterwards, the ENIT began to think of specialized subjects in tourism activities that could work with local governments: the so-called ‹‹Aziende autonome di soggiorno e turismo››. In the most important touristic resorts, these structures replaced the Pro loco associations. Instead, the so-called ‹‹Enti provinciali per il turismo›› were established in 1935.

It is possible to mention an anecdote about the origins of Pro loco associations: in the past, they were noble, since the roles of president and secretary were, in most cases, covered by some nobles and notables of the local area. The terrible years of World War II did not bring luck to tourism and Pro loco associations, but after the end of the war and the following reconstruction, these associations regained strength and courage.

An important signal came from the law of 4 March 1958 which dictated the rules for the financing of the Pro loco associations (tourist tax used to finance the Pro loco), but on the 1st January 1989 this tax was cancelled, together with one of the few forms of public funding aimed at Pro loco associations. The above law also provided the establishment of a national register of the Pro loco associations, which was created in 1965.

A central date was 1962, the year of the birth of UNPLI (National Union of the Italian Pro Loco), which had the task to unite and to assist all the associations that are located on the Italian territory. Another set of rules for the Pro loco associations was the law of 1983, which proposed a first and important affirmation of the role of the Pro loco on the national territory, but only with the new law of 2001 new indications and a specific recognition of the Pro loco associations have been made.

Generally the Pro loco are called non-profit organizations. However the term non-profit refers only to the absolute prohibition to divide any profits among the members of the management, as the profits should only be used to achieve the aims of the association.

As far as the laws of volunteering, in 2000 we finally have a law which regulates the associations operating in the socio-cultural, leisure and sports areas: these types of associations, including the Pro loco, are called associations of social promotion (Nardocci, 2007).

The Pro loco associations in Italy are coordinated by UNPLI. One of the main purpose of this national association is to promote and to protect the local features of their members, in order to achieve greater well-being and to develop a more and more active management. The UNPLI unites

6000 Pro loco operating in Italy for about 600,000 members. Through its regional and provincial structures, it has now reached a maturity and succeeds every day in creating important projects in the cultural, environmental and social fields. Besides, it has created an important network of relationships with institutions and entrepreneurs and also with the most important voluntary associations in Italy.

Thanks to the website (www.unpliproloco.it), you can find the location and the contact details of all the Pro loco associations. Inside the website one of central arguments shown is characterized by the idea of a solid group of associations, which represents a great resource for the country.

Finally, the UNPLI is also involved in many projects that represent its commitment in several areas: protection of villages and traditions of their identity (project: Open for Holidays); training and updating of the volunteers' skills (project: The Pro loco associations towards a future of quality - the new frontiers of volunteer tourism); promotion of environmental and cultural features of our country (project: SOS Intangible Cultural Heritage); recognition of the social role of older people and a correct management and development of the local cultural heritage (project: Embrace Italy); planning of a law for the promotion, development and recognition of the Pro loco associations and popular culture (project: We guard our history); defense and revaluation of intangible heritages for a better quality of life and greater social welfare (project: We balance the future); establishment of a multimedia library containing both various productions of the UNPLI association and contributions made by all the Pro loco associations and by other associations of our country (project: Multimedia library of Civitella d'Agliano).

TRADITIONS OF RESEARCH IN SOCIAL PSYCHOLOGY: THE VOLUNTEER PROCESS MODEL

Recent research reports show that the membership to associations - especially in the fields of entertainment and culture - is rising. Marzana (2011) argues that this could be a useful signal in order to understand the level of participation in public life and people's civilian vibrancy.

National surveys indicate that in the United States a percentage between 45% and 55% of adults spend at least some of their time as unpaid volunteers for service organizations (Penner and Finkelstein, 1998). About 64.3 million Americans, or 26.8% of the adult population,

gave 7.9 billion hours of volunteer service worth \$171 billion in 2011 (www.independentsector.org).

In Italy more than 1 million volunteers are involved in associations: 54, 4% are males and 45.6% are females. We have nearly 900,000 people of all ages: 22.1% is under 29 years; 41.1%; is between 30 and 54 years; 23.3% is between 55 and 64 years and 13.5% is over 64.

As a result of the Study on Volunteering in the European Union, the level of participation in Europe in 2010 is as follows:

Level	% Population	Countries
Very high	Over 40%	Austria, Nederland, Sweden, United Kingdom
High	30%-39%	Denmark, Germany, Finland, Luxembourg
Medium	20%-29%	Estonia, France, Latvia
Relatively low	10%-19%	Belgium, Cyprus, Czech Republic, Ireland, Malta, Poland, Portugal, Slovakia, Romania, Slovenia, Spain
Low	Under 10%	Bulgaria, Greece, Lithuania

If the trend towards fewer government services for disadvantaged people goes on, although these are impressive figures, the need for unpaid volunteers will increase. Therefore, from an applied perspective, it is important to learn about the factors that lead people to voluntary work and drive them to continue it for extended periods of time.

It is interesting that, although there is a large theoretical literature on the causes of short-term individual acts of helping (Schroeder, Penner, Dovidio and Piliavin, 1995), there is a relative dearth of theoretical models which attempt to explain volunteerism. Indeed, we are aware of only two well-developed models: the social psychology model worked out by Omoto and Snyder and the more sociological model by Callero and coll. (1987). This last one de-emphasizes the available variables and uses the role theory and the social structure within which volunteerism

occurs to explain this behaviour. In essence, the role identity model argues that as people continue in their voluntary work, commitment to the organization increases.

In this article, we briefly discuss only the Volunteer Process Model by Omoto and Snyder (1995, 2010) with particular regard to the motivations, because the second model is not directly relevant for the present study. About the first model, it has been used by a large network of researchers who have examined volunteers in a variety of roles working on behalf of a range of causes, as well as to understand different forms of social action (for a review, see Snyder and Omoto, 2007). The Authors do not mean to reduce the role of environmental, situational, and socialization influences in promoting involvement in social action, or even to suggest that personality factors are not relevant to all stages of the volunteering.

The Volunteer Process Model specifies psychological and behavioural features associated with each of three sequential and interactive stages (i.e., antecedents, experiences, consequences) and speaks of activity at multiple levels of analysis (i.e., the individual, the interpersonal, the organizational, and the social system). This model considers both the antecedents of volunteering and what happens to volunteers over time. Volunteerism represents a distinctive form of helping. According to these authors, some forms of volunteerism imply a commitment that extends over considerable periods of time and also remarkable personal costs. Volunteerism raises questions of personality, of motivation, and of mechanisms for sustaining it. Omoto and Snyder believe that as there are usually few situational constraints on the initial decision to undertake activities of volunteering, the available variables play a major role in this decision. Thus, among the important antecedent variables there are the volunteer's prior personal experiences, current circumstances, current personal reasons and social needs. This model gives special emphasis to such reasons and needs; such conceptualization is based on Clary and Snyder's (1991) functional analysis of prosocial behaviours. This functional analysis proposes that volunteering serves different functions for different people (and perhaps multiple functions for the same person). Particularly, concerning the motivations scale, the resulting inventory produced five scale scores, each created by summing over the responses to its five items and each measuring a specific motivation for AIDS volunteerism. The five scales, named in agreement with the items defining them, are: Values, Understanding, Personal Development, Community Concern, and Esteem Enhancement.

In order to understand why a person offers help, it is necessary to understand what particular function helping serves for her or him. Therefore, at the antecedent stage, research guided by this model has identified personality characteristics and motivational tendencies, as well as aspects of people's life circumstances, that lead people to get involved as volunteers and that predict who will become more effective and satisfied in his work. When it comes to starting volunteerism, people are particularly likely to get involved when circumstances suggest that doing so will serve their own motivations. Moreover, once in service, volunteers are likely to continue their involvement when they perceive that their own motivations are being fulfilled.

In conclusion, we can affirm that such a model, especially its specification of the initial stages of the construct, has potential utility for understanding a wide range of types of social action.

THE PRESENT STUDY

The main purpose of the present study was to examine, in general, who are the volunteers involved in the Pro Loco, their background in order to social-anagraphic situation and their commitment in Pro Loco. Secondly, we analysed how the sense of identification, the functions/motivation of the involvement in Pro Loco, the sense of self-efficacy and collective efficacy were strong in the participants and we compared these factors across gender and age.

Thirdly, thanks to the regression, we tested whether the correlates in terms of functions are comparable with ingroup Identification, Collective efficacy and Self-efficacy. We further investigated the associations between sense of identification or Collective efficacy and Self-efficacy.

METHOD

Participants

The Italian sample consisted of 222 (130 males, 92 females) volunteers and ranged in age from 15 to 79 years (*M age* =45.8 years; *SD*= 15,1). Four age groups were represented in this sample: a middle-adolescent group (15-17 year-old) composed of 9 adolescents; a young group (aged 18-29 years) of 34 young people; an adult group (aged 30- 59 years) of 133 adults and another over 60 years group (aged 60-79 years) of 46 adults.

The 49% of them were members of the Pro Loco for more than 6

years and the sample is involved about 20 hours a month in the association. The 56% work and about the 27% are retired or unoccupied. Only 14% have a degree, 42% have a high school diploma, 35% a middle school one and 5% only primary school. Volunteers declare that they were not affected (60%) or they have entered the association thanks to their friends' influence (40%).

Procedure

Before starting our study, we obtained permission to administer questionnaires from the Pro Loco's presidents. In a first step the Pro Loco were contacted via e-mail; as in most cases we did not receive an answer, we followed and achieved the associations personally or by telephone. After we received the president's permission, participants were informed about the study and asked if they wished to participate. Approximately 99% of the sample approached chose to participate. Interviewers visited the Pro Loco and asked participants to fill out the questionnaire packet.

Measures

Identification. We employed the short version of Identification Scale (Kreiner and Ashforth, 2004) to assess positive identification processes in group. The measure was translated from English to Italian by a bilingual psychologist. The Identification Scale consists of 6 items with a response scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items include: the success of my group (Pro Loco) is also my success. Reliability of the Identification scale, in terms of Cronbach's alphas, was found to be adequate with values of .70.

Voluntary Function Inventory. This construct was measured using the Voluntary Function Inventory Scale (Omoto and Snyder, 1995; Italian adaptation by Barbaranelli, Caprara, Capanna and Imbimbo, 2003). The VFI consists of 30 items scored on a five-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Specifically 5 items measure ‹‹Career function›› (α = .83; sample items include: to offer the opportunity to have success in my future work); 5 items measure ‹‹Social function›› (α = .68; e.g. because my friends are involved in voluntary action); 5 items assess ‹‹Enhancement function/Esteem Enhancement›› (α = .76; e.g. to feel better about myself); 5 items assess ‹‹Protective function›› (α = .83; e.g. to feel less alone); 5 items tap ‹‹Understanding function›› (α = .76; e.g. to learn more through direct experience); and 5

items measure ‹‹Community function›› (α = .86; e.g. to help members of the my community).

Self- efficacy. The Scala di Efficacia Personale Percepita (Self-efficacy Scale; Barbaranelli and Capanna, 2001) was used to assess the sense of Self-efficacy in participants, as the volunteers feel able to deal problematic events personally and with success, and consists of 19 items, scored on a five point scale: from 1 (not able) to 5 (quite able). A sample item is: I am able to maintain positive morale in the face of difficulties. Cronbach's alphas were 87.

Collective efficacy. Scala di Efficacia Collettiva Percepita (Collective Efficacy Scale; Barbaranelli and Capanna, 2001) was used to assess the sense of collective efficacy about ingroup, as the volunteers consider the organization able to manage stressful events, and consists of 5 items; scored on a five point scale: from 1 (strongly disagree) to 5 (strongly agree). A sample item is: the ingroup is able to stimulate the active participation of all members. Cronbach's alphas were 78.

RESULTS

The first aim of this study was to analyse how the sense of identification was strong in the participants.

Graphic 1 Mean-levels of identification in middle adolescent (15-17), young (18-29), adult (30-59) and over 60 males and females
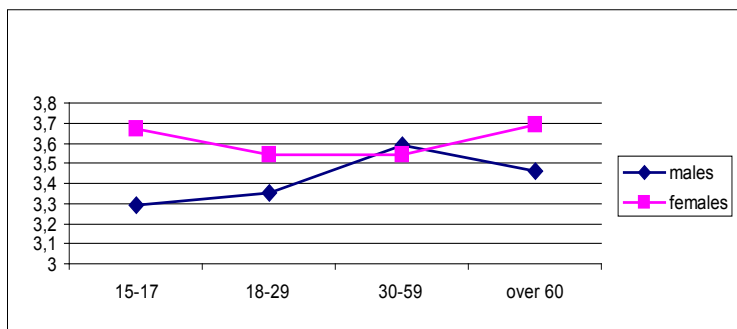
Sex differences within age were inspected with a Multivariate Analysis Of Variance (MANOVA). In these analyses we accounted for age differences, as we examined sex differences within age cohorts (i.e., middle adolescent boys (15-17) versus middle adolescent girls (15-17);

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over 60 males versus over 60 females etc…). The results of these analyses appear in Graphic 1.

Within the sample, no age and no sex differences were found with regard to Identification (see Graphic 1); however, participants showed a strong identification with the in-group.

We assessed mean-level differences across volunteers motivations of choice to act in Pro Loco by comparing similar sex and age groups across motivations (e.g., middle adolescent boys versus middle adolescent girls etc…) with a MANOVA.

It has to be noted that these comparisons should be interpreted very cautiously, because we did not establish scalar measurement equivalence. Descriptive statistics for these mean-level comparisons are displayed in Table 1.

Table 1 Mean (Std Deviation) and Volunteers' Motivations

Functions	Age				F (3, 222)	η^2
	15-17 ($n = 9$)	18-29 ($n = 34$)	30-59 ($n = 133$)	Over 60 ($n = 46$)		
Career function	3.04[a] (.79)	2.87[a] (.68)	1.93[b] (.82)	2.01[b] (.88)	6.69***	.08
Social function	3.22 (.51)	2.86 (.68)	2.93 (.59)	3.16 (.70)	2.31	.03
Enhanc. function	3.19 (.38)	2.95 (.61)	3.05 (.59)	3.34 (.74)	3.07	.04
Protect. function	2.50 (.71)	2.23 (.89)	2.25 (.89)	2.76 (.91)	2.45	.03
Underst. function	3.80 (.32)	3.34 (.70)	3.51 (.58)	3.57 (.65)	1.64	.02
Comm. function	3.36[a] (.89)	3.31[a] (.85)	3.64[b] (.74)	4.08[b] (.77)	7.22***	.09

Note.   Tukey Test   *p<.05. **p<.01. ***p<.001.

Table 1 suggests that young people (15-17 and 18-29) were more motivated by career function than their adult counterparts (30-59 and over

60), on the other hand for Community function, adults (30-59 and over 60) exhibited higher mean-levels than young people (15-17 and 18-29).

Relating to gender, the results suggest that female volunteers were more motivated by Enhancement function (mean = 3.28; F (1, 222) = 4.85, p < .05, η^2 .02) and Community function (mean = 3.79; F (1, 222) = 5.70, p < .05, η^2 .03) compared to males (mean = 3.11 for Enhancement function and 3.58 for Community function). In general, the means show that the more motivating factors were functions as Understanding function and Community function. We did not find a significant multivariate interaction effect of age by sex.

As a final mean-level analysis, we compared the magnitude of sex differences and age across Self- efficacy and Collective efficacy.

The results about the Self-efficacy analyses appear in Graphic 2.

Graphic 2 Mean-levels of Self-efficacy in middle adolescent (15-17), young (18-29), adult (30-59) and over 60 males and females
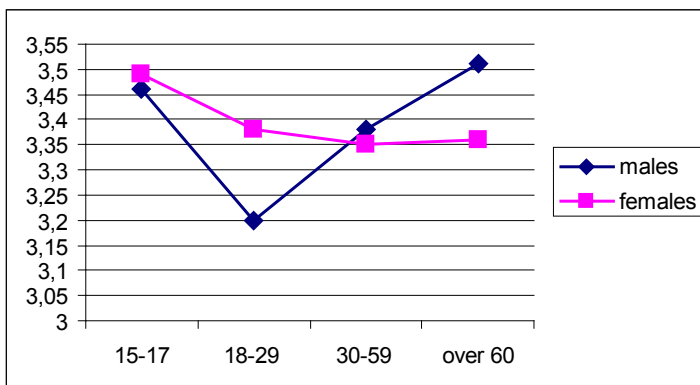
Within the sample, no age and no sex differences were found with regard to Self-efficacy, however, participants showed higher means levels of Self-efficacy (see Graphic 2 above). We did not find a significant interaction effect of age by sex.

With regard to Collective efficacy analyses appear in Graphic 3.

Specifically, univariate test (ANOVA) indicated that when age increased also the Collective efficacy increased (see graphic 3; F (3, 222) = 3.57, p < .01, η^2 .05). These analyses also showed no significant differences neither sex nor interactions.

At a glance, volunteers showed good levels of self-efficacy and collective efficacy. With increasing age, the self-efficacy increases while the collective efficacy decreases.

Graphic 3 Mean-levels of Collective efficacy in middle adolescent (15-17), young (18-29), adult (30-59) and over 60 males and females
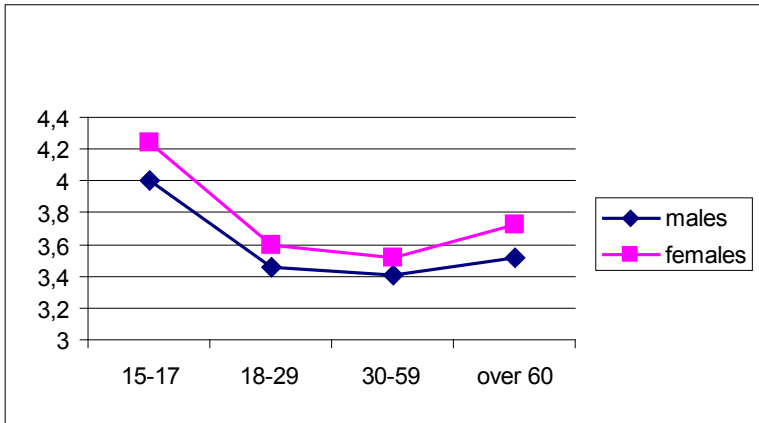
On the other hand, about the time spent in association, results showed that volunteers who were involved for longer perceived greater sense of Self-efficacy (after 1-2 years of involvement increases the average perceived Self-efficacy: mean= 2.60 and 2.72 respectively for 1-6 months and 7-12 months; statistically different means to the Post Hoc Test = 3.43, 3.52 and 3.61 respectively for 1-2 years, 2-5 years and over 6 years). We did not find the same results for Collective-efficacy or Identification).

A further aim of the present study was to examine the associations between volunteer functions (see Table 2 below) and relevant correlates (i.e., Identification, Self-efficacy and Collective efficacy) and the associations in linear regressions between Identification or Collective efficacy and Self-efficacy (see table 3 below).

Results reported in Table 2 indicated that Social function was positively associated with Collective efficacy; Understanding function and Community function were positively associated with perceived Identification, Self-efficacy and Collective efficacy.

Table 2 Standardized Betas and Proportion Explained Variance for the Regression Analyses of Identification, Self-efficacy and Collective efficacy on volunteer functions as predictors

Functions	Identification	Self-efficacy	Collective efficacy
Career function	.10	.08	.13
Social function	-.06	.05	.18*
Enhancement function	.15	.11	.12
Protective function	-.01	.12	-.05
Understanding function	.22**	.18***	.19*
Community function	.20**	.22*	.13*
R^2	23.***	.31***	.29***

Furthermore, regression showed positive associations between Self-efficacy on Identification and Collective efficacy as predictors (see table 3 below).

Table 3 Standardized Betas and Proportion Explained Variance for the Regression Analyses of Self efficacy on Identification and Collective efficacy as predictors

Functions	Self-efficacy
Identification	.28
Collective efficacy	.35*
R^2	.26***

Note. *p<.05. **p<.01. ***p<.001.

DISCUSSION AND CONCLUSION

According to Omoto and Snyder (1995), the study of helping has long been a mainstay of theoretical and empirical inquiry in the social and behavioural sciences. The conceptual framework of the volunteer process that has guided our investigations is informed by psychological theory and research, identifying relevant constructs at each stage of the volunteer process, and that grounds these constructs in different theoretical and empirical contexts in personality and social psychology. However, even though the role of volunteer process and of group memberships has been studied, the relations among forms of pro-social behaviour, identification, motivations, Self-efficacy and Collective efficacy in particularly tourism group membership have been relatively neglected. In Italy researches concerning the phenomenon of the Pro Loco are very rare, especially in the context of social psychology. However, in particular through the organization of events, festivals and researches of local history, the Pro loco play a key role in promoting local tourism and developing community awareness about the importance of maintaining cultures, traditions and relationships. Jepson, Wiltshire and Clarke (2008) say that festivals achieve a sense of community and well-being by renewing the life stream of a community is only possible if the life stream is inclusive of local communities' cultures, fed by the internal tributaries and which are recognisable to those communities when they are re-presented in the festival itself.

In our research we tested that within the sample, no age and no sex differences were found with regard to ingroup identification, but participants showed a strong identification with the ingroup. In agreement with the authors cited above, the perception of the identification is critical to the success of the personal and collective goals.

About the volunteers' motivations, Pro Loco's females were more motivated by Enhancement function and Community function compared to males. In Penner's and Finkelstein's study (1998) small but consistent gender effects were found. Men and women did not differ in how much they worked for an organization, but they did appear to differ somewhat in the reason why they engaged in such efforts. The highly active and involved female volunteers scored lower than the highly active and involved males on the measures of altruistic motives and on the Other-Oriented Empathy. In other words, the impact of altruistic motives and other-oriented dispositions on volunteer activities was confined primarily to the male volunteers. For Penner and Finkelstein these gender effects are probably unique to being an AIDS volunteer; recall that almost 90%

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of the male volunteers were homosexual. As such, it may have been easier for some of them to identify and empathize with the primary beneficiaries of this service organization. We believe these gender effects are determined by the type of organization in which you are involved.

On the other hand young people were more motivated by career function than their adult counterparts, while for Community function, adult exhibited higher mean-levels than young people. We think that these results are explained in the Pro Loco because you can meet many influential people (entrepreneurs, administrators, etc...) and these associations are often a way to enter politics. In general, the means show that factors more motivating were functions as Understanding function, good reason to know your territory, and other oriented function as Community.

In every healthy organization management has the responsibility to create, develop and maintain a positive environment in which individual employees are able to motivate themselves (Zopiatis and Constanti, 2007). Volunteers showed good levels of Self-efficacy and Collective efficacy. With increasing age, the Self-efficacy increases while the collective efficacy decreases. About the time spent in association, results showed that volunteers who were involved for longer perceived greater sense of Self-efficacy. We do not found the same results for Collective efficacy or Identification. With the passage of time, the volunteers showed a bit of fatigue, as if the individual loses the perception of Collective efficacy or of Identification and thought of having to achieve the aims alone. In a little qualitative study (Fermani and Castellano, 2013) with Pro Loco stakeholders, the volunteers more involved in the leadership functions said to be very tired from continual fighting with other partner or member of a council.

On the other hand, Social function was positively associated with Collective efficacy; Understanding function and Community function were positively associated with perceived Identification, Self-efficacy and Collective efficacy. Furthermore, regression showed positive associations between Self-efficacy on Identification and Collective efficacy as predictors.

This is a critical point because, although people are identified in the group, driven by motives other-oriented and love for the land, with a good sense of self-efficacy and collective efficacy, volunteers do not negotiate the conflict. Due to the low cultural background and to jealousies, in volunteering there are no team work or network with other associations (e.g. often within a few kilometres, on the same day, are more festivals organized simultaneously).

As shown in our study, the low generational change is another problem. Although the Civil Service is looking to fill this gap, the Pro Loco associations are still for old people with good will, but little preparation. For example, some Pro Loco do not reply to e-mails because the volunteers do not know the use of Internet, have not scientific knowledge about their city and their knowledge of the language is limited. Just think that the national UNPLI website (www.unpliproloco.it) has not an English version. Technological innovation is considered as a major force in tourism industry (Korres, 2008; Chan, 2012).

We believe that showing the commitment of the Pro Loco, since primary school, can bring great improvements to both these associations and in general for tourism.

The present study has several limitations and a first limitation concerns the fact that we only collected quantitative data. Future investigations could integrate the present findings with qualitative data to provide a more comprehensive account of the volunteers' views.

Our findings have potential implications for new leaders interested in fostering civil society and in more fully engaging people in volunteer process. For instance, learning programs and best communication may not only encourage greater community engagement and awareness but also may have the added benefit of increasing student involvement in volunteer activities (Nassar and Talaat, 2009). In short, these activities may serve triple duty in helping the community in which they are hosted, in promoting development and growth among participants, and in offering a pathway to broad civic engagement that does not depend on traditional civic education, knowledge of personality types, or a motivational intervention. Students may not start out civically minded, but nonetheless end up with greater political awareness and a propensity for civic engagement by virtue of their involvement in service activities.

In conclusion, and on the basis of results of the present research, we wish to emphasize and encourage further theoretical and empirical integration of research on characteristics of personality (Yildiz, Üngüren and Polat, 2009) and research on intergroup processes, especially in attempting to explain helping behaviour in specific context as tourism.

ACKNOWLEDGMENTS

REFERENCES

Barbaranelli, C. & Capanna, C. (2001). Efficacia personale e collettiva delle associazioni di volontariato socio-assistenziale. In G.V. Caprara (Eds.) *La valutazione dell'autoefficacia. Costrutti e strumenti* (pp. 147-156), Trento: Centro studi Erickson.

Barbaranelli, C., Caprara, G.V., Capanna, C. & Imbimbo, A. (2003). Le ragioni del volontariato: un contributo empirico. *Giornale Italiano di Psicologia*, Vol. 30, No.2, pp.369-384.

Callero, P.L., Howard, J.A. & Piliavin, J.A. (1987). Helping behavior as a role behavior: Disclosing social structure and history on the analysis of prosocial action. *Social Psychology Quarterly*, No.50, pp.247-256.

Chan, J.K.L. (2012). The key determinants of and barriers to internet adoption in small and medium-sized hotels. *Tourismos*, Vol. 6, No.2, pp.55-73.

Clary, E.G. & Snyder, M. (1991). A functional analysis of altruism and prosocial behavior: The case of volunteerism. In M. Clark (Eds.) *Prosocial behavior. Review of personality and social psychology* (pp. 119-148), Newbury Park, CA: Sage.

Fermani, A. & Castellano, S. (2013). *La promozione turistica del territorio: uno studio con i volontari delle pro loco marchigiane*. Macerata: EUM. *In press.*

Jepson, A., Wiltshire, P. & Clarke, A. (2008). Community Festivals: Involvement and Inclusion. *Paper presented at the Council for Hospitality Management Education: Int. Research Conf.* Glasgow, United Kingdom: 14-16 May 2004.

Korres, G.M. (2008). The role of innovation activities in tourism and regional growth in Europe. *Tourismos*. Vol. 3, No.1, pp.135-152.

Kreiner, G.E. & Ashforth, B.E. (2004). Evidence toward an expanded model of organizational identification. *Journal of Organizational Behavior*. No.25, pp.1–27.

Yıldız, S., Üngüren, E. & Polat, C. (2009). The relationship between personality, gender and hotel departments: application of 16 personality factor questionnaire in the Alanya region in Turkey. *Tourismos*. Vol. 4, No.1, pp.29-43.

Marzana, D. (2011). *Volontari si diventa: conoscere e promuovere l'impegno nel volontariato e nella politica dei giovani italiani*. Milano, Vita e Pensiero.

Mathou, C. (2010). Volunteering in the European Union, 17 February 2010. http://ec.europa.eu/citizenship/pdf/doc1018_en.pdf. Accessed the 16 th of May 2013, at 8:00.

Nardocci, C. (2007). *Romantici Guerrieri*. Roma: Le guide dell'Arcobaleno.

Nassar, N.O. & Talaat, N.M. (2009). Motivations of Young volunteers in special events. *Tourismos*, Vol. 4, No.1, pp.145-152.

Omoto, A.M. & Snyder, M. (1995). Sustained helping without obligation: Motivation, longevity of service, and perceived attitude change among

AIDS volunteers. *Journal of Personality and Social Psychology*, Vol. 68, No.4, pp.671–686.

Omoto, A.M., Snyder M. & Hackett, J. D. (2010). Personality and Motivational Antecedents of Activism and Civic Engagement. *Journal of Personality*, Vol. 78, No.6, pp.1703-1734.

Penner, L.A. & Finkelstein, M.A. (1998). Dispositional and Structural Determinants of Volunteerism. *Journal of Personality and Social Psychology*, Vol. 74, No.2, pp. 25-537.

Schroeder, D.A., Penner, L.A., Dovidio, J.F. & Piliavin, J.A. (1995). *The psychology of helping and altruism.* New York: McGraw-Hill.

Snyder, M. & Omoto A.M. (2007). Social Action. In A.W. Kruglansky and E.T. Higgins (Eds.) *Social Psychology: a handbook of basic principles* (pp. 940-961), New York: Guilford.

Tomasello, F. (2009). Quanto cultura e territorio si coniugano nel fare turismo: l'esperienza dell'Unpli, *Arcobaleno d'Italia*. Vol. 6, No.22, pp.16-18.

Zopiatis, A. & Constanti, P (2007). Mission impossible? Motivating hospitality managers in Cyprus, *Tourismos*, Vol. 2, No.1, pp.31-46.

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IMPACT OF GREEN MARKETING ON PERCEIVED IMAGE AND BEHAVIOURAL INTENTIONS OF CONSUMERS: EMPIRICAL EVIDENCE FROM RESTAURANT PRACTICES

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The detrimental effects of global environmental turbulence have influenced consumers' preferences towards consuming eco-safe products/services, more popularly nomenclated as 'green products/services'. Industries have also identified this shift and are not only redesigning their products/offers but also projecting themselves as 'green firms'. This study empirically attempts to investigate the possible causal impact of green marketing initiatives on the perceived image of restaurants and its subsequent influence on the behavioural intentions of the consumers. Four tourist destinations in West Bengal, India, were identified for the study and eight restaurants were surveyed. Appropriate statistical procedures and structural equation modeling were applied. The results revealed a significant correlation between the variables under study with perceived consumer effectiveness playing a critical role in segmenting consumers on the basis of their affinity to greenness as an element to perceive restaurant image. The study has future scopes where demographical effects and price-sensitivity may be tested.

Keywords: *green marketing, restaurant, image, behavioural intention*

INTRODUCTION

Global climatic changes and environmental hazards not only started to affect our immediate acclimatization process but also triggered redefining marketing processes. The traditional marketing mix elements

are giving way to a new set of 4Ps : planet, people, profits and progress compelling the firms to re-prioritize their objectives. Awareness campaigns across all the cross-sections of social hierarchy has been instrumental in changing the perception of product and service quality amongst the consumers. Contemporary consumers have started to prefer products/services which environmentally sustainable. The consumers' perspective for green products/services includes the basic characteristics, which are functional performance and non-essential characteristics that convey secondary benefits namely environmental performance (Manaktola and Jjauhari, 2007). Green marketing initiatives which started as a trend has been converted to a way of doing business, so much so, that green marketing initiatives were highlighted in corporate communications and in many occasions this has been used as a unique selling proposition or a differentiator. Hospitality and tourism industry adopted green marketing as a potential tool to detangibilize their offers when it comes to perception of service quality. However, Driessen (2005), in a study, found that an optimum level of green-adopted must be found to avoid being perceived as a niche-green marketer and loosing competitive advantage in the long run. Therefore while designing their green offers, particularly the service sector namely the hospitality and tourism firms, must evaluate the inclination of their consumers towards greenness by analysing their values and beliefs as they lead to pro-environmental behaviours (Reser and Bentrupperbaumer, 2005; Stern, 2000). Pooley and O'Connor (2000) observed that mere advertisements, highlighting green initiatives by a firm, do not foster pro-environmental behaviours. Therefore, for sustainable image development based on green marketing initiatives, a profound environmental education requires to be disseminated.

The objective of this study were (a) to examine possible cause and effect linkages between perceived green practices by the restaurants, perceived green image of the same by the consumers and behavioural manifestation of the consumers, (b) to identify the mediating effects of perceived consumer effectiveness on the aforesaid link and (c) to justify the research model framework (Fig.1). The layout of this paper following the introduction is displayed as review of literature with hypotheses formulation and research model framework, methodology, data analysis and interpretation and conclusion.

REVIEW OF LITERATURE

In the latter half of the 1980s the concept of environmental marketing or green marketing surfaced for the first time (Peattie and Crane, 2005,

D'Souza, Taghian, Lamb and Peretiatkos, 2006). The hospitality sector realized that overlooking environmental issues will accelerate environmental decline, thereby, limiting sustainable growth (Amposta, 2008). With the deterioration of global ecological balance and increase in awareness to restore the same, the consumption pattern of the consumers gradually started to favour products and services which promised to be less damage-causing on environment. Richins and Scarinci (2009) confirmed the notion of environmental damage being caused by the emission of green house gases by resorts in Florida, USA and affirmed the issue of green consumption. Researchers explored the hospitality industry, which covers a broad spectrum of services namely hotel and restaurant, tourism, logistic support provider etc., to understand the changing decision making pattern of the consumers with regard to consumption of green products and services (Choi and Parsa, 2006, Han et al., 2009). Sustainable tourism has emerged as a new paradigm in response to destination vulnerability under tourism pressure. Baros and David (2007) proposed a sustainable value map as a pavement towards sustainable tourism development. In a study conducted by Han et al. (2009), it was revealed that the intention of customers to visit a green hotel is stimulated by predictors' attitude, subjective norm and perceived behavioural control. Dutta, Umashankar, Choi and Parsa (2008) in a comparative study on restaurants in India and USA found different reasons for customers willing to pay higher price for green practices. As green marketing practices became a compulsive strategic initiatives of the hospitality industry, researchers pondered over the impact of green practices on consumer behaviour. Jeong and Jang (2010) observed that customers' perceived ecological image of a restaurant positively affects customers' ecological behavioural intention. Hoteliers have started deploying environmental management system (EMS) with an objective to ensure greener services and to suit the behavioural pattern of the consumers. Specific measures were taken up to address the issues regarding energy consumption by the hoteliers and restaurant operators following analysis of consumption pattern of the same (Kasim, 2007, Deng, 2003, Dascalaki and Balaras, 2004, Becken et al., 2001), nature and gamut of water consumption (Bohdanowicz, 2005, Alexander, 2002), waste management (Kazim, 2007) and overall sustainable environmental management (Bohdanowicz and Martinac, 2003, Revilla, Dodd and Hoover, 2001). Tinsley and Pillai (2006) pointed out that growing environmental concern has considerably resulted in an increase in concern of the firm towards ensuring environmental risk minimization. Based on the notion put forward by Khairat and Maher (2012) that environmental

tourism lacks adequate strategic implementation from the perspective of tour operators. Sandalidou et al. (2000) pointed out to the preference of the consumers towards foodstuffs that are produced and processed by natural methods. In addition, Gavruchenku et al. (2003) considered that nowadays consumers are interested in ecologically clean products due to health and environmental reasons as well as the increasing concern of safe and quality food. Shubert, (2008) was also of the opinion that consumption of healthy food is a growing demand for the consumers in the face of degrading environment owing to pollution. As health promotion has evolved from a major focus on individual change toward a greater focus on the environments in which people live, work and recreate, restaurants are now being targeted as appropriate organizations for change (Sebally, 2011). Potter and Williams, (1996) studied the Australian consumers attitudes towards green and healthy restaurants which are known to provide healthy food choices, smoke free dining areas and good standards of food hygiene in order to estimate the consumers' views about using restaurants as a setting for health promotion and, specifically, for providing low-fat healthy food choices. The results of the study indicated that consumers showed interest in green restaurants, specifically females consumers, people concerned with fitness, overweight people, people on dietary constraints for health reasons, and finally the image-conscious consumers. Moreover, Shubert (2008) found that with the increasing awareness of global climate change and natural disasters, environmental protection is an issue of high topicality and relevance and this is also true for the hospitality and tourism industry where businesses often rely on the integrity of the environment. Employing and marketing green practices, could help restaurants to establish a new niche for environmentally concerned customers, and therefore increase sales and long-term profits. In fact, restaurants who exhibit strong interest in environmental issues and actively participate in eco-friendly practices could distinct themselves from other businesses, hence creating a significant competitive advantage.

The consumer decision related to selection of hotels and restaurants also has been influenced by this novel marketing domain. Gustin and Weaver (1996), in a study, observed that consumers' interest to stay in a hotel and avail its allied services, namely restaurant and dining facilities was influenced by the pro-environmental policies adopted and executed by the hoteliers. A study conducted by Hines, Hungerfor and Tomera (1987) in the hospitality industry revealed that consumers' intent to purchase the services offered by hotels is predominantly influenced by the factors of environmental behavioural model namely consumers'

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awareness level about environmental issues, consumers' attitudes towards environmental strategy and their perceived self efficacy. Vieregge et al (2007) explored consumer perception of green restaurant chain in Switzerland and found that consumers appreciate the initiatives taken up by the chain to promote green marketing. Being green and offering green has emerged as an image-building tool for the hospitality industry.

Researchers indicated that a good corporate image helps companies establish and maintain loyal relationship with customers (Andreassen & Lindestad, 1998; Nguyen & Leblanc, 2001; Robertson, 1993). However, the past studies on green product consumption are mainly focused on demographical and psychological characteristics of green consumers or investigated the relationship between consumers' behavioral intentions and other antecedents of green purchasing in the decision-making process (Chan & Lau, 2000; D'Souza, Taghian, & Khosla, 2007; Straughan & Roberts, 1999). Perceived image of a restaurant and its impact on consumers is considered to be of utmost significance as the services of restaurant cannot be evaluated before dining experience (Jeong and Jang, 2010) due to its inherent intangibility and heterogeneity. Therefore in alignment with consumers' gradual shift towards greenness, perceived green image can act as a significant differentiator of services. A number of researchers in hospitality industry explored the eco- friendly decision-making processes of hotel customers (Choi & Parsa, 2006; Han et al., 2009). The perceived green image of a restaurant can be influenced by the green practices and can serve as an evaluative criteria (Bloemer and Ruyter, 1998; Ryu et al., 2008). A number of studies conducted by the researchers found that the behavioural pattern of the consumers having inclination towards green purchases is mostly influenced by perceived consumer effectiveness (PCE) towards solving environmental problems and that higher the PCE greater will be the probability of the consumers investing in green products and services (Chan and Lau, 2000; do Paco, Arminda, Raposo and Lino, 2009; Gilg et al., 2005; Gustin and Weaver, 1996; Straughan and Robberts, 1999). Researchers also tried to correlate consumers' desire to adopt green products and services with the cost of adoption. In their study on Indian hotels, Manaktola and Jauhari (2007) found that although consumers' are behaviourally inclined towards green products/services, only 15% are willing to bear the hike in cost due to integration of environmental initiatives by the firms while the rest of the consumers feel that it should be either borne by the hotel or be shared. While identifying the impact of tourist demand in hotel rooms on the investment of hotel chains on environmental quality, Accinelli, Brida and Carrera (2007), observed that the hotel chains must increase the

investment towards maintaining environmental quality in the face of increased tourist activity.

Review of literature revealed a dearth in study concerning green initiatives by the restaurants and the subsequent impact of the same on consumer perception of firm image and behavioural manifestation. Literature has also remained inconclusive with respect to studies conducted on restaurants of Indian origin. This study empirically attempts to explore the link between green initiatives adopted and communicated by the restaurants, perceived image of the same by its consumers and the possible impact of firm-image (restaurant) based on green marketing, on consumers' behavioural manifestation. Additionally, the researchers aim to test a conceptual framework exploring the causal relationship between the major variables namely perceived green practices by the restaurants, perceived green image and behavioural manifestation of consumers (attitudinal loyalty, propensity to switch, will to pay more, external response and internal response). As a concluding effort the researchers seek to identify the difference, if any, between the high PCE and low PCE consumers in perceiving restaurant image on the basis of green offers and their subsequent behavioural intention.

Formulation of hypothesis and research model framework

Apropos to the literature reviewed, the following hypotheses were formulated:

H_1: *Perception of green practices adopted by the restaurants will have an impact on perceived image of the consumers regarding the same*

H_2: *Perceived image of the consumers will have an effect on the manifestation of their behavioural intention.*

H_3: *Consumers with higher perceived consumer effectiveness (PCE) will have greater impact on perceived green practices-perceived image-behavioural link.*

H_4: *Consumers with lower perceived consumer effectiveness (PCE) will have lesser impact on perceived green practices-perceived image-behavioural link.*

Based on the literature reviewed and hypotheses framed, the following model framework was proposed (Fig.1):

Figure 1 Proposed research model framework
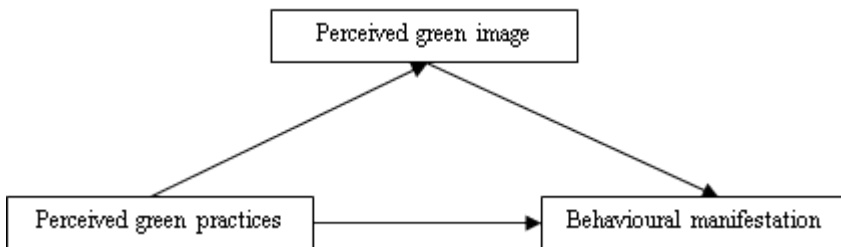
METHODOLOGY

The objective of the study were (a) to examine possible cause and effect linkages between perceived green practices by the restaurants, perceived green image of the same by the consumers and behavioural manifestation of the consumers, (b) to identify the mediating effects of perceived consumer effectiveness on the aforesaid link and (c) to justify the research model framework (Fig.1). To conduct the study eight (8) restaurants were identified in four distinct tourist destinations in West Bengal namely S.K. restaurant and Salbithi (Santiniketan), Keventers and Cake Lady (Darjeeling), The Palm Resort and Hotel Sea Coast (Digha), Sundarban Mangrove Retreat and Tiger View Point Resort (Sundarbans). The study was comprised of two phases. Phase-I involved a pilot study to refine the test instrument with rectification of question ambiguity, refinement of research protocol and confirmation of scale reliability was given special emphasis (Teijlingen and Hundley, 2001). FGI was administered. Cronbach's α coefficient (>0.7) established scale reliability (Nunnally and Bernstein, 1994). The structured questionnaire thus obtained after refinement contained four sections. Section-I asked the respondents to rate the importance of green practices adopted by the restaurants, section-II asked the respondents (customers) about their perception of green practices adopted by the restaurants where they dine frequently, section-III was intended to generate response from the respondents with regard to their level of perceived green-image about the restaurants where they dine frequently , section-IV was designed to understand their behavioural intention as an output to perceived green image of the restaurant, section-V was designed to assess the respondents' attitudes and beliefs which may positively influence the out-come of ecological problems (perceived consumer effectiveness) and section-VI

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focused on demographic data of the respondents. The second phase of the cross-sectional study was conducted by using the structured questionnaire. Systematic simple random sampling technique was administered as every fifth customer coming out of the restaurant was requested to fill-up the questionnaire. A total number of 1000 questionnaires was used which generated 589 usable responses with a response rate of 58.90%.

Factor constructs measurement

To develop a measure for perception of significance of green practices 12 items used by Jeong and Jang (2010) were used, to measure perceived green practices 12 items were identified following the literature reviewed and adopted by Jeong and Jang (2010). The study used four 'perceived green image' items based on the studies conducted by Jeong and Jang (2010), Schwaiger (2004) and LeBlanc and Nguyen (1996). To obtain response with regard to behavioural intentions of customers, the Behavioural Intention Battery (BIB) developed by Zeithaml et al (1996) was used consisting of 13 items. Finally, to develop the constructs for perceived consumer effectiveness (PCE), 3 items were used (Jeong and Jang, 2010, Straughan and Roberts, 1999). A 7 point Likert scale (Alkibisi and Lind, 2011) was used to generate response, with '1' indicating extremely unimportant/strongly disagree and '7' indicating extremely important/strongly agree.

Reliability and validity test

Exploratory factor analysis (EFA) was deployed using principal axis factoring procedure with orthogonal rotation through VARIMAX process with an objective to assess the reliability and validity of all factor constructs. Secondly confirmatory factor analysis (CFA) was used to understand the convergence, discriminant validity and dimensionality for each construct to determine whether all the items measure the construct adequately as they had been assigned for. Finally, LISREL 8.80 programme was used to conduct the Structural Equation Modeling (SEM) and Maximum Likelihood Estimation (MLE) was applied to estimate the CFA models.

DATA ANALYSIS AND INTERPRETATIONS

The demographic data collected from the respondents were presented in Table 1.

Table 1 Demographic data of the respondents

Demographic Variables	Factors	Frequency	%
Gender	Male	402	68.25%
	Female	187	31.75%
Age	≤ 21 years	7	1.19%
	22-32 years	309	52.46%
	33-43 years	172	29.20%
	44-54 years	69	11.71%
	≥ 55 years	32	5.44%
Income	≤ Rs. 14999.00	9	1.53%
	Rs. 15000-Rs. 24999.00	211	35.82%
	Rs. 25000-Rs. 44999.00	249	42.27%
	≥ Rs. 45000.00	120	20.38%
Occupation	Service [govt./prv]	382	64.85%
	Self employed	131	22.24%
	Professionals	18	3.05%
	Student	12	2.03%
	Housewives	46	7.83%
Educational qualification	High school	8	1.37%
	Graduate	410	69.60%
	Postgraduate	149	25.30%
	Doctorate & others (CA, fellow etc)	22	3.73%

The results of Exploratory factor analysis (EFA) (Table-2) revealed that the Cronbach's Coefficient alpha was adequate for the measure

justifying the internal consistency of the constructs. Each construct displayed an acceptable construct reliability with estimates well over .6 (Hair, Anderson, Tatham and William, 1998). Further to this the average variance extracted (AVE) surpassed minimum requirement of .5 (Haier et al., 1998). The KMO measure of sample adequacy (0.908) indicated a high-shared variance and a relatively low uniqueness in variance (Kaiser and Cerny, 1979). Barlett's sphericity test (Chi-square=1082.315, p<0.001) indicated that the distribution is ellipsoid and amenable to data reduction (Cooper and Schindler, 1998).

Items with very low factor loadings/cross loadings (<0.500) and poor reliability (Cronbach's' alpha) were discarded. Thus the perceived green practices were reduced to 8 items and the BIB items were reduced to 7.

Table 2 Measurement of reliability and validity of the variables

Items	Factor loadings	t-value	Cronbach's α	Composite reliability	Average variance extracted
Perceived green practices					
My restaurant offers recycling bins for disposing plastic and paper cups (PGP1)	0.854	-	0.911	0.911	0.791
My restaurant has take-out containers which are recyclable (PGP2)	0.799	27.875	0.911	0.911	0.791
My restaurant uses energy-efficient lights in the seating areas (PGP3)	0.801	25.356	0.911	0.911	0.791
My restaurant uses eco-friendly cleaners for the furniture and floors (PGP4)	0.816	28.187	0.911	0.911	0.791
My restaurant uses eco-friendly cleaners for the utensils (PGP5)	0.786	21.019	0.911	0.911	0.791
My restaurant maintains greenery in its premises both indoor & outdoor (PGP6)	0.821	29.709	0.911	0.911	0.791

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My restaurant uses energy-saving and eco-friendly cooling & ventilation system (PGP7)	0.823	30.321	0.911	0.911	0.791
My restaurant serves organic food on demand (PGP8)	0.798	22.298	0.911	0.911	0.791
Perceived green image					
My restaurant indulges in corporate social responsibility	0.775	-	0.907	0.907	0.787
My restaurant address the environmental issues seriously	0.776	19.216	0.907	0.907	0.787
My restaurant is concerned about environmental preservation	0.812	23.081	0.907	0.907	0.787
I perceive my restaurant to be a socially and enviromentally responsible organization rather than solely profit-oriented.	0.824	26.117	0.907	0.907	0.787
Behavioural intentions					
I shall talk positive things about my restaurant	0.765	-	0.923	0.923	0.769
I shall advice to avail the dining service of my restaurant	0.798	23.327	0.923	0.923	0.769
I shall increase the frequency of availing dining services from my restaurant	0.759	22.091	0.923	0.923	0.769
I shall do less business with my restaurant in next few years	0.801	27.265	0.923	0.923	0.769
I shall pay more to avail	0.812	28.106	0.923	0.923	0.769

enhanced services offered by my restaurant					
I shall complain to the service provider in case of any problem	0.798	23.327	0.923	0.923	0.769
I shall complain to an external agency in case of any problem	0.776	25.189	0.923	0.923	0.769
Perceived consumer effectiveness					
Green initiatives by restaurants will address environmental issues	0.875	-	0.914	0.914	0.799
I believe to invest and consume green products/services to arrest ecological degradation	0.849	29.401	0.914	0.914	0.799
I recommend others to invest and consume green products/services as I believe that it will arrest ecological problems.	0.854	31.009	0.914	0.914	0.799
KMO	0.908				
Barlett's sphericity	Chi-square=1082.315				

Bivariate correlations were obtained to assess the relationship between the variables. The results were displayed in Table-3. Correlation results revealed a positive and significant relationship between perceived green practice and perceived green image (r=.206**, p<0.01), perceived green practice shared positive and significant relationship between attitudinal loyalty (r=.143**, p<0.01), customer advocacy (r=.213**, p<0.01) and perceived consumer effectiveness (r=.426**, p<0.01), and exhibited a negative and significant relationship with propensity to switch (r=-.089*, p<0.05). Perceived green image demonstrated strong and positive relationship with attitudinal loyalty (r=.117**, p<0.01), customer advocacy (r=.227**, p<0.01), perceived consumer effectiveness (r=.329**, p<0.01), while it revealed a negative and significant relationship with propensity to switch (r= -.101*, p<0.05). Based on the results of bivariate correlation H1 and H2 were accepted.

Confirmatory factor analysis (CFA) was deployed to understand the convergence, discriminant validity and dimensionality for each construct to determine whether all the 22 items (Table-2) measure the construct adequately as they had been assigned for. LISREL 8.80 programme was used to conduct the Structural Equation Modeling (SEM) and Maximum Likelihood Estimation (MLE) was applied to estimate the CFA models. A number of fit-statistics (Table-7) were obtained. The GFI (0.987) and AGFI (0.975) scores for all the constructs were found to be consistently >.900 indicating that a significant proportion of the variance in the sample variance-covariance matrix is accounted for by the model and a good fit has been achieved (Baumgartner and Homburg, 1996; Hair et al, 1998, 2006; Hulland, Chow and Lam, 1996; Kline, 1998; Holmes-Smith, 2002, Byrne, 2001).

Table 3 Bivariate correlation between the variables

Variables	Perceived green practice (PGP)	Perceived green image (PGI)	Attitudinal loyalty (AL)	Propensity to switch (P2S)	Customer advocacy (CA)	Perceived consumer effectiveness (PCE)
Perceived green practice (PGP)	1					
Perceived green image (PGI)	0.206**	1				
Attitudinal loyalty (AL)	0.143**	0.117**	1			
Propensity to switch (P2S)	-0.089*	-0.101*	-0.176**	1		
Customer advocacy (CA)	0.213**	0.227**	0.314**	-0.309**	1	
Perceived consumer effectiveness (PCE)	0.426**	0.329**	0.243**	-0.076*	0.321**	1

**Correlation significant at 0.01 level (2-tailed), *Correlation significant at 0.05 level (2-tailed),

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The CFI value (0.979) for all the constructs were obtained as > .900 which indicated an acceptable fit to the data (Bentler, 1992). The RMSEA value obtained (0.056) is < 0.08 for an adequate model fit (Hu and Bentler, 1999). The probability value of Chi-square is more than the conventional 0.05 level (P=0.20) indicating an absolute fit of the models to the data.

Table 7 Summary of fit indices

Fit indices	χ^2	df	P	GFI	AGFI	CFI	RMR	RMSEA
Values	189.09	83	0.000	0.987	0.975	0.979	0.049	0.056

Structural Equation Modeling (SEM) was used to test the relationship among the constructs. All the 18 paths drawn were found to be significant at p<0.05. The research model holds well (Fig.2) as the fit-indices supported adequately the model fit to the data. The double-curved arrows indicate co-variability of the latent variables. The residual variables (error variances) are indicated by Є1, Є2, Є3, etc. The regression weights are represented by λ. The co-variances are represented by β. To provide the latent factors an interpretable scale; one factor loading is fixed to 1 (Hox & Bechger).

Figure 2 Structural model for the proposed research model framework
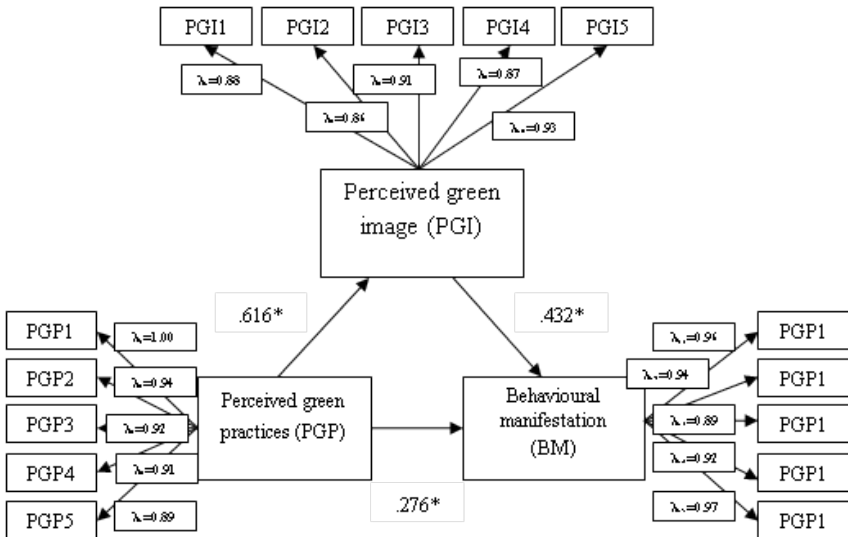
A multiple group analysis (Jeong & Jang, 2010) was conducted to understand and estimate the moderating effects of perceived consumer effectiveness (PCE) on perception of green practices-perceived green image-behavioural intention link. The median value of PCE (5.08) was used to segment the respondents into three groups with >5.08 (n=197) (termed as pro-greens), with =5.08 (n=239) (termed as neutra-greens) and <5.08 (n=153) (termed as anti-greens). Three structural results were obtained. Fig.2 represented the structural model for pro-greens with PCE median value >5.08. All the three paths representing relationship between perceived green practices and perceived green image, between perceived green image and behavioural intention and between perceived green practices and behavioural intention were found to be significant at p< 0.01. Fig.3 is the structural model for anti-greens with PCE median value <5.08. Although path relationship between perceived green practices and perceived green image was found to be significant at p< 0.001, the path relationships between perceived green image and behavioural intention and perceived green practices and behavioural intention were found insignificant. Fig.4 is the structural manifestation for neutra-greens where all the three paths were found to be significant at p< 0.01.

Figure 3 Structural model for pro-greens with PCE median value
>5.08
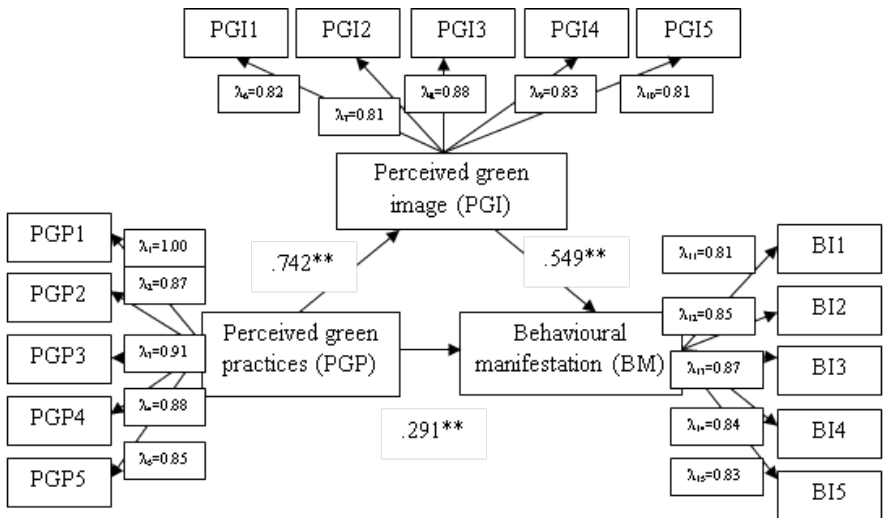
Figure 4 Structural model for anti-greens with PCE median value <5.08
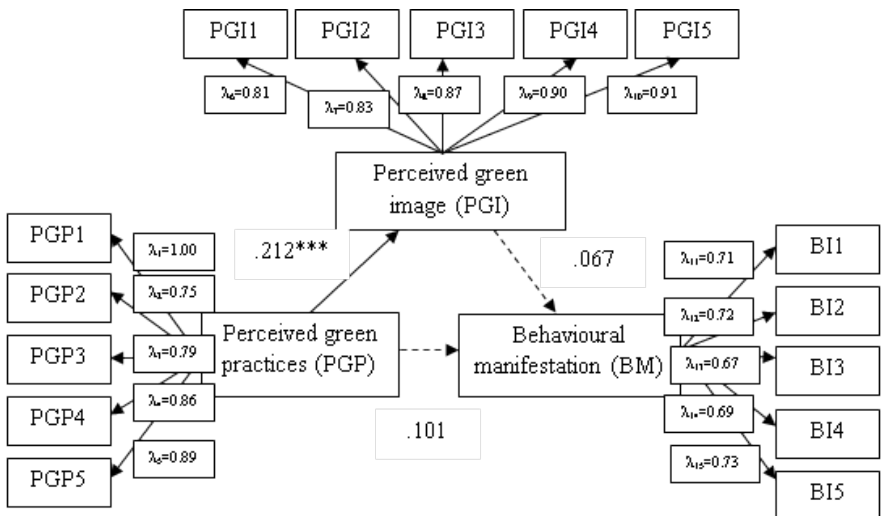
Figure 5 Structural model for neutra-greens with PCE median value =5.08
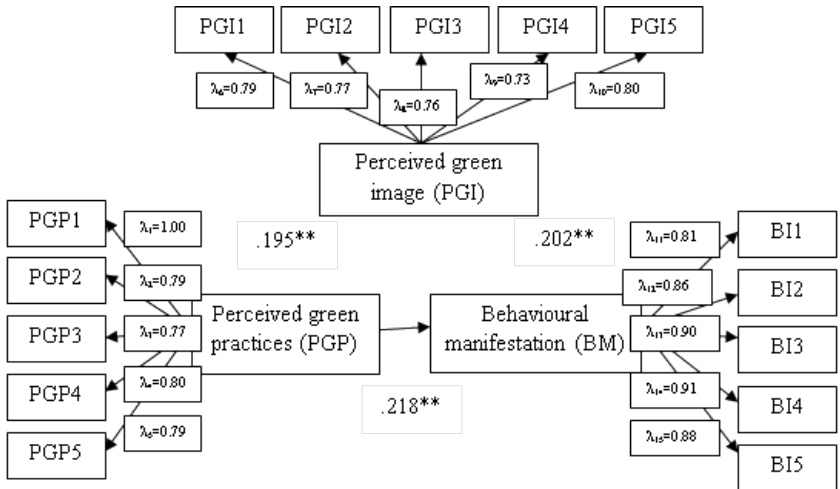
The total effect of perceived green practices (PGP) on behavioural intention was calculated for all the three segments of customers. The total effect of PGP on BI for the pro-greens were calculated to be 0.698 (.742 x .549 + .291). The total effect of PGP on BI for the anti-greens was same as the relation coefficient between PGP and PGI (.212***) as the other two paths namely between PGI and BI and between PGP and BI were found to be insignificant. The total effect of PGP on BI for the neutra-greens were calculated to be 0.257 (.195 x .202 + .218). The comparative study between the three groups indicated that the consumers with high PCE are better correlated with behavioural intention via direct and indirect routes through perceived green practices and perceived green image.

Table 8a Regression coefficients and Collinearity statistics for pro-greens (PCP>.508)

Independent variable: PGP, dependent variable: PGI											
Model	ANOVA					Unstd. Coeff.		Std. C	t	Sig.	Collinearity
	Sum	df	Mean	F	Sig.	B	Std.E	β			Tol	VIF
Regr	54.	6	9.0	462	.0							
Resi	1.3	5	.00									
Total	55.	5										
(Con						.1	.0		6.3	.0		
1 PGP1						.2	.0	.4	58.	.0	.8	1
PGP2						.0	2.	.0	12.	.0	.9	1
PGP3						.1	.0	.3	26.	.0	.9	1
PGP4						.1	.0	.1	14.	.0	.8	1
PGP5						.0	1.	.0	5.4	.1	.6	1
PGP6						.1	.0	.3	52.	.0	.9	1
PGP7						.1	.0	.4	11.	.0	.7	1
PGP8						.0	.1	.0	2.0	.6	.8	1

Multiple regression analysis were conducted to contrast high (pro-greens) with low (anti-greens) consumer group (according to PCE) to understand the probable difference in strength of association between perceived green practices (PGP) (as an independent variable) with perceived green image (PGI) and behavioural intention (BI) (dependent variables) between the same. The results of the multiple regression analysis were displayed in Table-8a & 8b and Table-9. To determine the degree of multi-collinearity, the variance inflation factor (VIF) was computed for each independent variable in regression equation. The results suggested that the 'Structural Model for Path Analysis' was worth pursuing as the 'tolerance' value is over 0.200 for each of the independent variable suggesting absence of correlation. The VIF values also did not reveal a considerably high value to 1 confirming non-collinearity as VIF values considerably greater than 1 are indicative of multi-collinearity (Netter et al, 1996) and greater than 2.5 are cause of concern (Allison, 1999) (VIF=1/tolerance). The results showed that while the pro-greens perceived image of their restaurant strongly on the basis of green

practices adopted namely usage of recycle bins (β = .414, t=58.488, p<.01), usage of energy-efficient illumination system (β = .324, t=26.075, p<.01) , maintenance of greenery (β = .319, t=52.477, p<.01) and moderately on the basis of usage of eco friendly cleaners for furniture and floors (β = .121, t=14.056, p<.05) and usage of energy-saving cooling and ventilation system (β = .469, t=11.007, p<.05), while the anti-greens only framed green-image of their restaurant on the basis of usage of recycle bins (β = .565, t=17.839, p<.01) and maintenance of greenery (β = .619, t=32.651, p<.01). Probably lack of awareness amongst the anti-greens about the impact level of the measures can be a possible reason for absence of significant association with other green initiatives.

Table 8b Regression coefficients and Collinearity statistics for pro-greens (PCP>.508)

Independent variable: PGP, dependent variable: BI												
Model	ANOVA					Unstd. Coeff.		Std.	t	Sig.	Collinearity	
	Sum	df	Mean	F	Sig.	B	Std. d.	β			Tol	VIF
	Regr	54.	6	9.0	462	.0							
	Resi	1.3	5	.00									
	Total	55.	5										
1	(Con						.2	.0		9.3	.0		
	PGP1						.6	.0	.5	75.	.0	.6	1
	PGP2						.0	3.	.0	17.	.0	.7	1
	PGP3						.2	.0	.3	14.	.0	.9	1
	PGP4						.1	.0	.3	12.	.0	.8	1
	PGP5						.0	1.	.0	5.4	.1	.6	1
	PGP6						.2	.1	.5	48.	.0	.8	1
	PGP7						.0	.1	.0	4.7	.5	.6	1
	PGP8						.0	.2	.0	3.1	.3	.6	1

Table 9 Regression coefficients and Collinearity statistics for anti-greens (PCP<.508)

Model	ANOVA					Unstd. Coeff.		Std. β	t	Sig.	Collinearity	
	Sum	df	Mean	F	Sig.	B	Std.	β			Tol	VIF
Independent variable: PGP, dependent variable: PGI												
1 Regr	63.	1	63.	318	.00							
Resi	136	5	.20									
Total	200	5										
(Con						.5	.2		1.9	.0		
PGP1						1.	.0	.5	17.	.0	.8	1
PGP2						.0	3.	.0	3.1	.3	.6	1
PGP3						.0	1.	.0	5.0	.2	.5	1
PGP4						.0	.0	.0	3.0	.2	.7	1
PGP5						.0	1.	.1	8.4	.0	.6	1
PGP6						.2	.0	.6	32.	.0	.9	1
PGP7						.0	.0	.0	2.0	.4	.7	1
PGP8						.1	.1	.0	1.0	.2	.5	1

Table 8b displayed the results between the associationship and dependability of perceived green practices (PGP) and behavioural intention (BI) for the pro-greens. The results revealed that behavioural intention of the consumers with high level of PCE is influenced by the perceived green practices of their restaurants namely usage of recyclable bins (β = .549, t=75.488, p<.01), usage of energy efficient lighting (β = .367, t=14.005, p<.05), usage of environment friendly floor and furniture cleaners (β = .321, t=12.056, p<.05) and maintenance of greenery (β = .542, t=48.477, p<.01). The results indicated that perceived green practices can be an useful predictor towards formation of image of the restaurants as well as behavioural attitude of the customers. Regression analysis for the low PCE group (anti-greens) was not carried out as the structural model did not indicate a significant path relationship between perceived green practices (PGP) and behavioural intention. The results on structural path analysis and multiple analysis supported H3 and H4.

CONCLUSIONS

The study entered into a relatively unexplored area in the context of India market and tried to empirically investigate the impact green marketing-as a relatively novel business trend on consumer behaviour, specifically, on consumer perception of firm image and subsequent behavioural intention of the consumers. The study was carried out on some selected restaurants in southern part of West Bengal which are projecting themselves to be carrying out eco-friendly operations while running their business and offering products/services to their customers.

The study revealed that consumers availing restaurant services can be categorized into segments on the basis of criteria called perceived consumer effectiveness (PCE) which reflects their attitude and beliefs that might positively influence environmental issues. The study reflected that consumers with high PCE are more enlightened and concerned about environmental hazards and considers pro-environmental practices as an important element to perceive image of firms and their subsequent behavioural intention is also influenced by their firm image perception. It was revealed that consumers with high PCE level and with better green-image perception of their firms tend to be more loyal and displayed lesser propensity to switch and increased positive customer advocacy. The study also brought forward that organic food consumption is still not considered to be an important perceived green practice of restaurants. Probably cost is a potential factor to explain the issue.

The study had major managerial implications. As perception of green practices emerged as a potential factor to perceive green image, employees of firms pursuing eco-friendly marketing should initiate communication with the consumers explaining the green initiatives adopted by them and stating what triggered them to adopt such strategy.

Future expansion of the study can be made by incorporating demographic influence on perceived image and vis-à-vis behavioural intention. In addition, price-sensitivity study may be conducted as a measure towards adoption of green services. A longitudinal study should be done to identify the gradual shift in perception and adoption of pro-environmental consumer behaviour.

REFERENCES

Accinelli, E., Brida, J.G. & Carrera, E. (2007). The effects on environmental investment of changes in tourism demand. *Tourismos,* Vol. 2, No.2, pp.129-140.

Alexander, S. (2002). Green hotels: Opportunities and resources for success. Zero Waste Alliance, 2-9.

Alkibsi, S. & Lind, M. (2011). Customer perceptions of technology-based banking service quality provided by banks operating in Yemen. *Paper presented at the* European, Mediterranean & Middle Eastern Conference on Information Systems 2011 (EMCIS2011) May 30-31 2011, Athens, Greece.

Amposta, J.B. (2008) Looking for environmental excellence in tourist destinations. *Tourismos,* Vol. 4, No.2, pp.91-106.

Andreassen, T.W. & Lindestad, B. (1998). The antecedents and consequences of customer satisfaction for firms. *Marketing Science*, Vol. 2, pp.125-143

Baros, Z. & David, L.D. (2007) Environmentalism and sustainable development from the point of view of tourism. *Tourismos,* Vol. 2, No.2, pp.141-152

Baumgartner, H. & Homburg, C. (1996). Applications of structural equation modeling in marketing and consumer research: A review. *International Journal of Research in Marketing*, Vol. 13, pp.139-161.

Becken, S. & Simmons, D.G. (2002). Understanding energy consumption pattern of tourist attractions and activites in New Zealand. *Tourism Management*, Vol. 23, pp.343-354.

Bentler, P.M. (1992). On the f i t of models to covariances and methodology to the Bulletin. *Psychological Bulletin*, Vol. 112, No.3, pp.400-404.

Bloemer, J. & de Ruyter, K. (1998). On the relationship between store image, store satisfaction and store loyalty. *European Journal of Marketing*, Vol. 32, No.5/6, pp.499-513.

Bohdanowicz, P. (2005). European hoteliers' environmental attitudes: greening the business. *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 46, No.2, pp.188-213.

Bohdanowicz, P. & Martinac, I. (2003). Attitudes towards sustainability in chain hotels- Results of a European survey. *Presented in International conference on smart and sustainable built environment*, 27th-29th June, Sao Paolo, Brazil, Vol. 19, No.21, pp. 1-10.

Chan, R.Y.K. & Lau, L.B.Y. (2000). Antecedents of green purchases: A survey in China. *Journal of Consumer Marketing,* Vol. 17, No.4, pp.338-357.

Choi, G. & Parsa, H.G. (2006). Green Practices II: Measuring restaurant managers' psychological attributes and their willingness to charge for the "Green Practices". *Journal of Foodservice Business Research*, Vol. 9, No.4, pp.41-50.

Cooper D.R. & Schindler P.S. (1998) *Business research methods.* Boston, McGraw Hill.

Dascalaki, E. & Balaras, C.A. (2004). Xenios-a methodology for assessing refurbishment scenarios and the potential of application of RES and RUE in hotels. *Energy and Buildings*, Vol. 36, pp.1091-1105.

Deng, S. (2003). Energy and water uses and their performance explanatory indicators in hotels in Hong Kong. *Energy and Buildings*, Vol. 35, pp.775-784.

do Paco, F., Arminda, M., Raposo, B. & Lino, M. (2009). Identifying the green consumer: A segmentation study. *Journal of Targeting, Measurement and Analysis for Marketing*, Vol. 17, No.1, pp.17-25.

D'Souza, C., Taghian, M. & Khosla, R. (2007). Examination of environmental beliefs and its impact on the influence of price, quality and demographic characteristics with respect to green purchase intention. *Journal of Targeting, Measurement and Analysis for Marketing*, Vol. 15, No.2, pp.69-78.

Dutta, K., Umashankar, V., Choi, G. & Parsa, H.G. (2008). A Comparative study of consumers' green practice orientation in India and the United States: A study from the restaurant industry. *Journal of Foodservice Business Research,* Vol. 11, No.3, pp.269-285.

Gavruchenko T., Baltas G., Chatzitheodoridis F. & Hadjidakis S. (2003). Comparative marketing strategies for organic olive oil: The case of Greece and Holland, "The Market for Organic Products in the Mediterranean Region". IAMC, Chania, pp. 247-255. Cahiers Options Mediterannéenes, Vol 61. http://ressources.ciheam.org/om/pdf/c61/00800167.pdf. Accessed the 12 th of July 2012, at 18:25 pm.

Gilg, A., Barr, S. & Ford, N. (2005). Green consumption or sustainable lifestyles? Identifying the sustainable consumer. *Futures,* Vol. 37, No.6, pp.481-504.

Gustin, M.E. & Weaver, A.P. (1996). Are hotels prepared for the environmental consumer? The Council on Hotel. *Restaurant and Institutional Education*, Vol. 20, No.2, pp.1-14.

Hair, J.F., Anderson, R.E., Tatham, R.L. & William, C.B. (1998). *Multivariate data analysis*, 5th ed. New Jersey, Upper Saddle River, Prentice Hall.

Han, H., Hsu, L.T. & Sheu, C. (2010). Application of the Theory of Planned Behavior to green hotel choice: Testing the effect of environmental friendly activities. *Tourism Management*, Vol. 31, No.3, pp.325-334.

Hines. J., Hungerfor, H. & Tomera, A. (1987). Analysis and synthesis of research on responsible environmental behavior. *Journal of Research in Environmental Education*, Vol. 18, No.2, pp.1-8.

Hulland J, Chow Y.H. & Lam, S. (1996). Use of causal models in marketing research: A review. *International Journal of Research in Management,* Vol. 13, No.2, pp.181-197

Holmes-Smith, P. (2002). *Applied Structural Equation Modeling using AMOS*. School Research Measurement & Evaluation Services, Australia, Canberra.

Hox, J.J. & Bechger, T.M. (1998). An introduction to structural equation modeling. *Family Science Review,* Vol. 11, pp.354-373.

Hu, L. & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling,* Vol. 6, No.1, pp.1-55.

Jeong, E.H. & Jang, S.C., (2010). Effects of restaurant green practices: Which practices are important and effective? *Emerging Issues and Trends in*

Hospitality and Tourism Research, Caesars Hospitality Research Summit, 2010.

Kaiser, H.F. & Cerny, B.A. (1979). Factor analysis of the image correlation matrix. *Educational and Psychological Measurement*, Vol. 39, No.4, pp.711–714.

Kasim, A. (2007). Corporate Environmentalism in the Hotel Sector: Evidence of Drivers and Barriers in Penang, Malaysia. *Journal of Sustainable Tourism,* Vol. 15, No.6, pp.680-699

Khairat, G. & Maher, A. (2012). Integrating sustainability into tour operator business: An innovative approach in sustainable tourism. Tourismos, Vol. 7, No.1, pp.213-233.

LeBlanc, G. & Nguyen, N. (1996). Cues used by customers evaluating corporate image in service firms: an empirical study in financial institutions. *Corporate Communication*, Vol. 1, No.2, pp.30-57.

Manaktola, K. & Jauhari, V. (2007), Exploring consumer attitude and behaviour towards green practices in the lodging industry in India. *International Journal of Contemporary Hospitality Management,* Vol. 19, No.5, pp.364-377.

Nguyen, N. & Leblanc, G. (2001). Corporate image and corporate reputation in customers' retention decisions in services. *Journal of Retailing and Consumer Services*, Vol. 8, pp.227-236.

Peattie, K. & Crane, A. (2005) Green Marketing: Legend, Myth, Farce or Prophesy? *Qualitative Market Research: An International Journal,* Vol. 8, No.4, pp.357-370

Potter J. & Williams P. (1996). Consumer attitudes to Healthy restaurant. *Journal of consumer studies and home economic,* Vol. 20, pp.43-51.

Revilla, G., Dodd, T.H. & C.Hoover, L. (2001). Environmental tactics used by hotel companies in Mexico. *International Journal of Hospitality & Tourism Administration*, Vol. 1, No.3, pp.111-127.

Richins, H. & Scarinci, J. (2009) Climate change and sustainable practices: A case study of the resort industry in Florida. *Tourismos,* Vol. 4, No.2, pp.107-128.

Robertson, T.S. (1993). How to reduce market penetration cycle times. *Sloan Management Review*, Vol. 35, No.1, pp.87-92.

Ryu, K., Han, H. & Kim, T.H (2008). The relationships among overall quick-casual restaurant image, perceived value, customer satisfaction, and behavioral intentions. *International Journal of Hospitality Management,* Vol. 27, pp.459-469.

Sandalidou E., George B., Grigoroudis E. & Siskos Y. (2000). Organic and conventional olive oil consumers: A comparative analysis using a customer satisfaction evaluation approach. *MAIC, Chania, Greece. Cahiers Options Mediterannéenes,* pp. 261-271. Http://ressources.ciheam.org/om/pdf/c61/00800169.pdf. Accessed the 12 th July 2012, at 20:17)

Schubert F. (2008). Exploring and predicting consumers' attitudes and behaviors towards green restaurants. *The Ohio State University. Master of Science*.

Schwaiger, M. (2004). Components and parameters of corporate reputation: an empirical study. *Schmalenbach Business Review.* Vol. 56, pp.46-71.

Straughan, R.D. & Roberts, J.A. (1999). Environmental segmentation alternatives: a look at green consumer behavior in the new millennium. *Journal of Consumer Marketing*, Vol. 16, No.6, pp.558-575.

Teijlingen & Hundley (2001). The Importance of Pilot Studies. University of Surrey. Http://www.soc.surrey.ac.uk/sru/SRU35.html Accessed on the 21 st July 2012.

Tinsley, S. & Pillai, I. (2006). *Environmental management systems: Understanding organisational drivers and barriers.* London, Earthscan.

Vieregge, M., Scanlon, N. & Huss, J.(2007) Marketing locally grown food products in globally branded restaurants: Do customers care? *Journal of Food Service Business Research*, Vol. 10, No.2, pp.67-82 .

Zeithaml, V., Berry, L. & Parasuraman, S. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing,* Vol. 6, No.2, pp.31-46.

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EXAMINING THE IMAGE OF A TOURISM DESTINATION: EVIDENCE FROM CRETE

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The empirical work reported here was aimed at investigating Crete's fundamental attraction elements; six factors related to Crete's image were identified and examined in terms of their significance in predicting and explaining its overall image. While analysing the factors, 'seaside activities' was determined to be the most significant factor in identifying Crete's overall destination image. Through relevant factor analysis and subsequent multiple regression analysis, it was established that highly rated destination image dimensions may be among the most important ones influencing the destination's overall tourism image. Management implications are discussed and recommended.

INTRODUCTION

Researchers in tourism marketing have recognized the critical role of destination image in potential visitors' behaviour (Chon, 1991; Gartner, 1993; Selwyn, 1996; Gallarza, Saura and Garcia, 2001). This construct is particularly important in developing and maintaining a loyalty on the part of customers (Dick and Basu, 1994; Shoemaker and Lewis, 1999), especially in the tourism sector (Opperman, 1996; Bowen and Shoemaker, 1998). Destination image is a socially constructed entity (Crompton and Seong-Seop, 2001) and derived essentially from the visitor's perception of a tourist destination. Image is the most important aspect of a tourist attraction from a marketing point of view. An accurate assessment of product image is a prerequisite to designing an effective marketing strategy. Hence, managing this image is a major priority for destination marketers and researchers. To remain competitive, destination

marketers must be able to understand how tourists perceive the products and services of the destination. Gartner (1996) pointed out that understanding images held by target markets is essential to avoid moving the image into a position held by an able and strong competitor. Destinations need to project their distinctive images in order to enhance tourism appeal.

Many tourism destinations compete mainly on the images held in the minds of potential tourists (Baloglu and McCleary 1999; Naidoo et al., 2012). Developing a distinct position among tourism destinations is often achieved by establishing a favourable image to potential visitors in target markets (Gartner 1993). Available literature (Christou, 2003) indicates that destination studies have rarely discussed about the image of Crete especially from the perspective of international travel, albeit such an understanding should be a prerequisite in designing Crete's tourism market positioning strategies. Hence, prior to developing marketing activities in the international tourism market, it is essential for Crete to analyse its destination image.

The purpose of this study is to explore Crete's image as an international tourist destination. and in particular:

a) to explore Crete's fundamental image elements as perceived by international tourists;

b) to identify the important destination elements in determining Crete's overall image.

THEORETICAL BACKGROUND

Destination image is described as the overall impression made on the minds of the public about a geographical area (Kotler, Haider and Rein, 1993; Sigala et al., 2012; Bertan and Altintas, 2013). It is related to the various physical, psychological and behavioural attributes of the tourist destination, such as name or brand, architecture of buildings, landscape, heritage attractions, myths and legends, quality of general and tourist infrastructure, tradition, ideology and local culture, and to the impression of quality communicated by each employee of local tourist enterprises with the destination's visitors. As such, destination image has two principal components: the functional or realistic and the emotional (Dolnicar, Grabler and Mazanec, 1999; Sigala, 2010). The functional component is related to tangible characteristics, which can be easily measured, while the emotional component is associated with psychological traits, which are subjectively perceived from visitors and manifested by feelings and attitudes towards a specific destination.

Gunn (1972) defined images as being formed either on an induced or organic level; while little can be done to influence organic image, marketers can induce an image by investment in promotion (Gunn 1988; Polat, 2013). Crompton (1979) defined image as the sum of beliefs, impressions, ideas, and perceptions that people hold of objects, behaviour, and events. Fakeye and Crompton (1991) argued that destination image is conceptualised as evolving from an organic image, through an induced image, to a complex image. Gartner (1996) explained that destination image is made up of three different but hierarchical interrelated components: cognitive, affective, and conative. Echtner and Ritchie (1993) suggested that various items must be captured in order to measure destination image; these include attribute-based images, holistic impressions, and functional, psychological, unique, and common characteristics.

Chen and Hsu (2000) examined the impact of destination attractions on overall destination attractiveness and suggested that, 'although previous studies have developed critical attributes tied to tourists' destination images, leading attributes that would help tourism scholars and practitioners measure the total attractiveness of a destination are still unknown'(p.411). Chen and Hsu (2000) suggested that the most important factors influencing the overall destination attractiveness might not be those highly rated image attributes, thus argued that 'agreement ratings of destination image attributes might not be an accurate measurement of the overall attractiveness of a destination' (p.412). In practical terms, if their argument is correct, then tourism marketers should not confine their marketing communications activities just on important attractions, because those attractions may not be tourists' main concern in perceiving and assessing its overall image and attractiveness (Farmaki, 2012); however, empirical research is required to examine this further (Christou, 2005; Chatzigeorgiou et al., 2009; Sigala, 2012). In this vein, a null hypothesis is developed for the present study:

H_0: The most important factors predicting the overall destination image are consistent with highly rated attraction elements;

H_1: The most important factors predicting the overall destination image are not consistent with highly rated attraction elements.

RESEARCH METHODOLOGY

The aim of the present study was to explore and identify the image elements of Crete as perceived by international visitors. The research instrument used was a structured questionnaire; respondents were asked

to state their level of agreement to destination attraction statements using a five-point Likert scale ranging from "strongly disagree" to "strongly agree".

To create a list of destination attributes for the survey, previous destination image studies (Echtner and Ritchie, 1991; Phelps, 1986; Gartner 1989; Christou, 2011a; David, 2012; Sigala, 2013) were examined. In addition, relevant publications and brochures on Crete's tourism attractions were studied. At the end, 27 items were selected to depict Crete's destination attractions. In terms of Crete's overall image, two items with 5-point Likert-scale were used as indicators of the overall attractiveness. Content validity and reliability of the questionnaire was examined through a pilot test - no significant improvements were required for the final questionnaire. The initial questionnaire was written in English, and then translated into Greek, German and Italian.

The research instrument used was a structured questionnaire; respondents were asked to state their level of agreement to destination attraction statements using a five-point Likert scale ranging from "strongly disagree" to "strongly agree". A convenience sampling was employed with 216 usable questionnaires. Factor analysis was performed in order to group the destination into a smaller set of elements.

A convenience sampling was employed to collect the data, as it was practically not realistic to adopt a probability sampling approach. The survey was performed during August and September 2013. Out of 256 questionnaires completed, just 216 were usable. Data was analysed by using the Statistical Package for Social Sciences (SPSS) program. Factor analysis was performed in order to group the destination into a smaller set of elements. The oblique principal-component method was adopted, while multiple regression analyses were performed to determine the impact of destination elements on the overall destination image. Destination elements, which were extracted from factor analysis, are used as independent variables, while South Tyrol's overall image was adopted as the dependent variable.

MAJOR FINDINGS

Respondents' demographic profile shows that the majority of respondents are female (61.4%), with males representing 39.6% of the sample. In terms of age, the main age groups are those between 31-40 years (34%), 51-60 years (16%), and 41 and 50 (27%). The majority of respondents were first time visitors (54.8%). Most of the visitors were pleasure tourists (68.4) and VFR (visiting friends and relatives - 21.2%).

Destination's Fundamental Elements

The findings of factor analysis are described in Table 1. Six elements comprising 26 saliently loaded items emerge from the analysis which, accordingly, are labelled as 'cultural attractions'(F1), 'travelling and access'(F2), 'Island activities'(F3), 'mountain landscape'(F4), 'local people'(F5), and 'lodging and leisure'(F6). The factors explained 68.20% of the variance with eigenvalues ranging from 1.36 to 9.10. The Cronbach's alphas for the six factors range from 0.720 to 0.890, all above the minimum value of 0.50, which is considered acceptable for research in its exploratory stages (Nunnally 1978).

Table 1 Factor analysis results (n=216)

Factor 1 -Cultural Attractions	Loadings	c15-lots of recreational facilities/activities	0.662
c4-beautiful town/city centres	0.892	c18-skiing slopes and facilities	0.657
c3-interesting museums and heritage sites	0.844	c10-attractive unspoiled forests	0.622
c1-interesting Island history	0.794	c11-beautiful national parks	0.604
c2-a taste of the Mediterranean life and culture	0.698	*Factor 4 – Mountain Landscape*	Loadings
c7-interesting festivals and culture activities	0.642	c8-magnificent Alpine scenery	0.788
c6-appealing archaeological attractions	0.587	c9-diverse landscape	0.764
c5-attractive local music	0.532	c12-well-preserved natural environment	0.622
Factor 2 – Travelling & Access	Loadings	*Factor 5 – Local People*	
c27-moderate prices	0.806	c16-friendly locals	0.944
c26-convenient	0.787	c17-helpful locals	0.836

local transportation							
c25-easy accessibility	0.763	**Factor 6 –Lodging & leisure**					Loadings
c13-moderate climate	0.622	c22- accommodation options					.722
Factor 3 – Sea Activities	**Loadings**	c21-active nightlife and entertainment					.700
c19-sea-based activities	0.862	c24-positive shopping experience					.635
c20-other adventurous activities	0.766	c23-local food and drinks					.607

	F1	*F2*	*F3*	*F4*	*F5*	*F6*
Eigenvalue	9.10	2.66	1.78	1.62	1.34	1.36
Variance (percent)	39.54	10.16	6.72	6.20	4.32	4.39
Cronbach's alpha	0.847	0.834	0.852	0.720	0.897	0.726
Summated Mean	3.90	3.24	4.12	3.42	3.38	3.31
Number of items (total=26)	7	4	6	3	2	4

Overall Destination Image

Two determinants were used as a converging indicator of Crete's overall image: a) respondents' intention to revisit Crete, and b) respondents' behaviour for attracting new visitors. Reliability analysis was used to test these two determinants' internal consistency which is 0.786. The average mean of these two items is 4.8, indicating that respondents perceive fairly positive about Crete's overall image. The result of multiple regression analysis of the destination elements against the dependent variable of 'overall image' using backward method is illustrated in Table 2.

Table 2 Multiple regression results

	Sum of Squares	df	Mean Square	F	Sig.
Regression	48.514	9	8.840	48.888	0.000
Residual	32.054	138	0.164		
Total	80.568	147			
$R^2 = 0.624$, Adjusted $R^2 = 0.588$					

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Variables in the equation:

Variable	B	Beta	t	P	VIF	Condition Index
Constant	0.323		1.685	0.200		
Sea Activities	0.702	0.638	9.037	0.000	2.217	1.000
Travelling & Access	-0.312	-0.316	-4.786	0.000	2.066	17.555
Cultural Attractions	0.342	0.266	4.214	0.000	1812	19.050
Mountain Landscape	0.324	0.346	4.942	0.000	1.528	21.535

The standardised regression coefficient 'beta' is used to indicate the relative importance of each element contributing to the overall image of Crete. Based on the Beta, the most important element is 'Sea activities' (Beta = 0.638), followed by 'travelling & access' (-0.316, which has a negative effect on the dependent variable), 'mountain landscape' (0.346), and 'cultural attractions' (0.266). Hence, 'Sea activities' is the most significant predictor, especially when compared with the beta of the other three elements.

FURTHER DISCUSSION, IMPLICATIONS & CONCLUSION

Six fundamental elements were identified and used to outline Crete's destination images. The element of 'Sea activities' got the highest ratings (summated mean of 4.12). The 'cultural attractions' element was second in terms of summated mean ratings (3.90) and is close to 4.0, indicating visitors' positive agreement on its significance, even though it was initially expected that this element would obtain a higher mean rating. Perhaps this was due to the fact that the attributes representing 'cultural attractions' are not the most significant or distinguishing characteristics representing Crete's image, or they may not be solely associated to Crete but also to other destinations. Hence, it would be interesting to perform a comparison study with other Mediterranean destinations in terms of sea attractions. Stabler (1988), Gregory (1989), Shaw and Williams (1994) and Lange-Faria and Elliot (2012) provided evidence that destinations may project distinguishing images as a reflection of the distinctiveness of their particular natural environment, culture, heritage and economy. However, visitors seem to prefer tourist destinations with powerful and prominent images (Woodside and Lysonski 1989; Christou, 2011b).

Other elements' summated scales are just a little bit higher than the neutral point of 3, showing that the visitors have not projected a greatly affirmative consideration of the attractiveness of other elements. In terms of Crete's natural attractions, it is a surprise that a nature-related element which is considered by Creatans as its major attraction ('mountain landscape') was not ranked very positively by the visitors. However, it is suggested that Crete marketers should not isolate the assessment of the destination elements or attractions, but rather to compare these attractions with those offered by other Mediteranenean destinations.

It is interesting to note that two particular elements ('local people' and 'lodging & leisure') were not included in the predicting model (Table 2). 'Local people', was excluded from the predicting model because there was no significant relationship found with the dependent variable. However, this does not necessarily mean that this element has absolutely no importance in shaping a destination's overall image; past research provides evidence that in a number of cases the characteristics of local people pose an essential dimension for tourists' attraction. According to Pearce (1980) and Vitouladiti (2013) locals' negative attitude towards tourists could lead to reduced visitors' satisfaction and eventually pose a threat to destination's image. However, Knox (1982), Christou and Nella (2010) and Ihamaki (2012) empirically established that locals' behaviour may in some cases improve or alternatively ruin visitors' experiences. Hence, the function of the element 'local people' should be taken into consideration when developing and maintaining the overall image o a tourist destination, even though this element was excluded from the predicting model reported in the present survey. Finally, regarding 'lodging & leisure', even though it shows a noteworthy relationship with the dependent variable, its partial relationship is not significant hence it was decided to exclude it from the predicting model.

Based on the empirical evidence of the present study, the most important determinant Crete's overall destination images is 'Sea activities', which also has the highest summated scale and is included in the predicting model; therefore, the null hypothesis has to be accepted. However, this finding is not consistent with the findings of Chen and Hsu (2000), as well as Anderson (2012) who argued that the leading factors assessing the overall destination attractiveness were not those highly rated destination attributes. On the other hand, the findings reported in the present study provide empirical evidence that agreement ratings of destination attributes or elements may be a valid and reliable approach to measuring tourist destination's overall images. Hence, it is advisable for destination tourism marketers to primarily focus their marketing

communication efforts on exploiting favourably and promoting the highly rated destination elements. At the same time, destination marketers also should try to explore other potential factors that may be equally important in forming the tourist destination's overall images.

In the past, Crete has infrequently caught researchers' attention in studying its destination image as perceived by tourists. This exploratory survey presented here can be used as a basis for further research on: a) examining in greater extent its tourist destination image attractions and attributes; and, b) developing integrated marketing communication for the effective positioning of Crete in the international tourist market.

This survey can be used as basis for further research on: a) examining in greater extent tourist destination image attractions and attributes; b) developing marketing communication for positioning of Crete in the tourist market.

One limitation of the work reported here is that, it was not possible to perform an image difference analysis for the major market segments visiting Crete (Germans, British, Greeks, Austrians, Italians, etc.). However, taking into account that visitors from different backgrounds, nationalities and cultures may express diversified perceptions, it becomes evident that further research could focus on examining different homogenous groups of visitors and on exploring their perceptions and attitudes towards Crete's image as a tourist destination.

REFERENCES

Anderson, W. (2012) Analysis of "all-inclusive" tourism mode in the Balearic islands. *Tourismos,* Vol. 7, No.1, pp.309-323.

Baloglu, S. & McCleary, K.W. (1999, November). U. S. international pleasure travelers' images of four Mediterranean destinations: A comparison of tourists and nontourists. *Journal of Travel Resarch,* Vol. 38, pp.144-152.

Belsley, D.A. (1991). *Conditioning diagnostics: Collinearity and weak data in regression.* New York, John Wiley and Sons.

Bertan, S. & Altintas, V. (2013). Visitors' perception of a tourism destination: The case of Pamukkale. *Tourismos,* Vol. 8, No.1, pp.115-132.

Bowen, J. & Shoemaker, S. (1998). Antecedents & consequences of loyalty. *Cornell Hotel & Restaurant Administration Quarterly*, Vol. 39, No.1, pp.12-25.

Chatzigeorgiou, C., Christou, E., Kassianidis, P. & Sigala, M. (2009). Examining the Relationship Between Emotions, Customer Satisfaction and Future Behavioural Intentions in Agrotourism. *Tourismos,* Vol. 4, No.4, pp.145-161.

Chen, J.S. & Hsu C.H.C. (2000, May). Measurement of Korean tourists' perceived images of overseas destinations. *Journal of Travel Research*, Vol. 38, pp.411-416.

Christou, E. (2003). Guest loyalty likelihood in relation to hotels' corporate image and reputation: A study of three countries in Europe. *Journal of Hospitality & Leisure Marketing*, Vol. 10, No.1, pp.88-99.

Christou, E. (2005). Heritage and cultural tourism: A marketing-focused approach. *International cultural tourism: Management, implications and cases*, pp.3-16.

Christou, E. (2011a). Exploring the impact of visitor satisfaction on loyalty towards a specific destination. *Acta Turistica,* Vol. 23, No.1, pp.7-25.

Christou, E. (2011b). Exploring online sales promotions in the hospitality industry. *Journal of Hospitality Marketing & Management,* Vol. 20, No.7, pp.814–829.

Christou, E. & Nella, A. (2010). A review of wine tourism research from 1995 to 2010: Analysis of 110 contributions. *Journal of Hospitality and Tourism,* Vol. 8, No.1, pp.112-123.

Chon, K.S. (2012). Tourism destination image modification process: marketing implications. *Tourism Management,* Vol. 32, No.1, pp.68-72.

Crompton, J.L. (1979, Spring). An assessment of the image of Mexico as a vacation destination and the influence of geographical location upon that image. *Journal of Travel Research,* Vol. 17, pp.18-23.

Crompton, J.L. & Seong-Seop, K. (2001). The influence of cognitive distance in vacation choice. *Annals of Tourism Research,* Vol. 28, No.2, pp.512-515.

David, L. (2012). Competitiveness of tourism regions in Hungary. *Tourismos,* Vol. 7, No.2, pp.495-502.

Dick, A. & Basu, K. (1994). Customer loyalty: towards an integrated framework. *Journal of Academy of Marketing Science,* Vol. 22, No.2, pp.99-113.

Dolnicar, S., Grabler K. & Mazanec, J. (1999). Analyzing destination images: A perceptual charting approach. *Journal of Travel & Tourism Marketing,* Vol. 8, No.4, pp.43-57.

Echtner, C.M., & Ritchie, J.R.B. (1991). The meaning and measurement of destination image. *The Journal of Tourism Studies,* Vol. 2, No.2, pp.2-12.

Echtner, C.M. & Ritchie J.R.B. (1993, Spring). The measurement of destination image: An empirical assessment. *Journal of Travel Research,* Vol. 6, pp.3-13.

Fakeye, P.C. & Crompton, J.L. (1991, Fall). Image differences between prospective, first-time, and repeat tourists to the lower Rio Grande valley. *Journal of Travel Research,* Vol. 6, pp.10-16.

Farmaki, A. (2012). A comparison of the projected and the perceived image of Cyprus. *Tourismos,* Vol. 7, No.2, pp.95-119.

Ihamaki, P. (2012). Fare tale orienteering: Developing art word by letterboxing event. *Tourismos,* Vol. 7, No.1, pp.253-268.

Gallarza, M.G., Saura, I.G. & Garcia, H.C. (2001). Destination image: towards a conceptual framework. *Annals of Tourism Research,* Vol. 29, No.1, pp.56-78.

Gartner, W.C. (1989). Tourism image: Attribute measurement of state tourism products using multidimensional scaling techniques. *Journal of Travel Research,* Vol. 28, No.2, pp.16-20.

Gartner, W.C. (1993). Image formation process. In M. Uysal & D.R. Fesenmaier (Eds.), *Communication and channel systems in tourism marketing* (pp. 191-215), New York: Haworth Press.

Gartner, W.C. (1996). *Tourism development - principles, processes and policies.* New York, Van Nostrand Reinhold.

Gregory, D. (1989). Area differentiation and post-modern human geography. In D. Gregory & R. Walford (Eds.), *Horizons in human geography* (pp. 67-96), New Jersey: Barnes and Noble.

Gunn, C.A. (1972). *Vacationscape: Designing tourist regions.* Austin: Bureau of Business Research, University of Texas.

Gunn C.A. (1988). *Tourism planning.* New York, Taylor & Francis.

Kotler, P., Haider, D.H. & Rein, Y. (1993). *Marketing places: Attracting investment, industry and tourism to cities, states and nations*. New York, The Free Press.

Knox, J.M. (1982). Resident - visitor interaction: A review of the literature and general policy alternatives in the impact of tourism development in the Pacific. Petterborough, Ontario: Environmental Resources Study Program, Trent University.

Lange-Faria, W. & Elliot, S. (2012). Understanding the role of social media in destination marketing. *Tourismos,* Vol. 7, No.1, pp.193-211.

Naidoo, O., Ramseook-Munhurrun, P. & Durbarry, R. (2012). The brand image of a small island destination. *Tourismos,* Vol. 7, No.2, pp.261-278.

Oppermann, M. (1996). Convention destination images: analysis of association meeting planners' perceptions. *Tourism Management,* Vol. 17, No.1, pp.175–182.

Pearce, P.L. (1980). Perceived changes in holiday destinations. *Annals of Tourism Research,* Vol. 9, No.1, pp.145-164.

Phelps, A. (1986). Holiday destination image - the problem of assessment: An example developed in Menorca. *Tourism Management,* Vol. 7, No.3, pp.168-180.

Polat, N. (2013). Impact of tourism projects of development agencies on social peace in Turkey. *Tourismos,* Vol. 8, No.1, pp.233-245.

Selwyn, T. (1996). *The tourist image: Myths and myth making in tourism.* Chichester, Wiley & Sons.

Shaw, G. & Williams, A.M. (1994). *Critical issues in tourism: A geographical perspective.* Oxford: Blackwell.

Shoemaker, S. & Lewis, R. (1999). Customer loyalty: the future of hospitality marketing. *International Journal of Hospitality Management,* Vol. 18, No.3, pp.345-370.

Sigala, M., Christou, E. & Gretzel, U. (2012). Web 2.0 in Travel, Tourism and Hospitality: Theory, practice and cases. Ashgate Publishers.

Sigala, M. (2010). Measuring Customer Value in Online Collaborative Trip Planning Processes. *Marketing Intelligence and Planning,* Vol. 28, No.4, pp.418-443.

Sigala, M. (2012). Exploiting web 2.0 for New Service Development: findings and implications from the Greek tourism industry. *International Journal of Tourism Research,* Vol. 14, pp.551-566.

Sigala, M. (2013). Examining the adoption of Destination Management Systems: an Inter-Organizational Information Systems approach. *Management Decision,* Vol. 51, No.5, pp.1011-1036.

Stabler, M. J. (1988). The image of destination regions: Theoretical and empirical aspects. In B. Goodall and G. Ashworth (Eds.), *Marketing in the tourism industry: The promotion of destination regions*, (pp. 133-161). London: Croom Helm.

Vitouladiti, O. (2013). The comparison of secondary and primary tourism destination image: Serving as a bridge between expectation and experience and guiding effective marketing and management strategies. *Tourismos,* Vol. 8, No.1, pp.53-91.

Woodside, A.G. & Lysonski, S. (1989). A general model of traveler destination choice. *Journal of Travel Research,* Vol. 17, No.2, pp.8-14.

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FACTORS AFFECTING MUSEUM VISITORS' SATISFACTION: THE CASE OF GREEK MUSEUMS

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Greek museums, in the new era of economic recession, face the agony of surviving and at the same time chase the challenges for sustainable development. The scope of this survey is to define the groups of tourists who visited Greek public museums and their evaluations of the museums' services. The cluster analysis, forms different groups of tourists, and the principal component analysis reveals the factors that represent museum's quality characteristics. The analysis of variance follows, to correlate the already defined clusters per factors and to answer the research questions. The quantitative research reveals that, there are three different groups of tourists, and confirms that visitors behave according to the group they belong. Therefore, in formulating a strategy to attract and satisfy the cultural tourists, the improvement in the provision of educational services and the better training of the personnel are needed, since most problems are noticed on these aspects.

INTRODUCTION

In the age of economic crisis, companies and organizations should rethink the strategies that they follow, in order to remain competitive in this new, economic environment. Cultural tourism is a form of tourism that can be developed according to the principles of sustainable development and contributes to the sustainable development of the region (Constantin and Mitrut, 2007). According to Gilmore, Carson, & Ascencao, (2007), the concept of sustainability was developed in the late

1980s, early 1990s. The sustainable development of a tourist destination could be safeguarded by providing quality services to tourists, who seek for sui generis and unique experiences, like the ones that cultural tourism provides.

The tourism industry contributes significant to the national gross domestic product and is among the most dynamically growing industries in the world. The fast growing tourism sector increases the number of visitors to cultural sites. This has notably implications to the managers of the monuments and sites and arises the need for sustainable tourism marketing, in order to preserve the monuments for future generations (Gilmore et al., 2007).

Greek museums, in the new era of economic recession, face the agony of surviving and at the same time, chase the challenges for sustainable development. Cultural tourists could empower decisively the museums, the archaeological sites and the Greek tourist destinations, reinforcing their sustainable development. The cultural monuments are often lacking in marketing strategy and fail to realize the necessity of sustainable tourism marketing. The strategic marketing can enhance viability, increasing revenue from the influx of tourists and ensure the future development of the destination (Gilmore et al., 2007). In addition, an effective marketing strategy increases the public interest and revenue, helps museums to fulfil their mission and enhance sustainable development in the region (Chhabra, 2009).

LITERATURE REVIEW

The role of heritage and culture in motivating tourists is decisive. In a sample of 30.000 interviews, the holiday motivation for up to 26% of the sample was to visit historic places and sites (Middleton & Hawkins, 1998). According to Middleton and Hawkins (1998), the sustainable development of tourism has two dimensions; to protect the natural, social and cultural environment from the adverse effects of tourism and to develop appropriate business activities, which will enhance the sustainable development of the regions, through tourism and travel. Sustainability could be supported with attractive destination images, quality tourist products, value for money services, efficient segmentation of market niches, and repeated visits that enhance the existing quality of the destinations (Middleton & Hawkins, 1998).

Sustainable development of Greek tourism destinations could be related to the satisfaction of tourists and visitors of museums and archaeological sites, since they constitute dominant features of Greek

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destinations and at the same time, the level of visitor's satisfaction is crucial for their sustainability. Sustainable development implies that the needs of this generation are covered, without compromising the ability of future generations to meet their needs. When an activity is characterized as sustainable, could theoretically continue forever, without causing problems in the future.

In the literature, there is not a holistic marketing strategy which strengthens the sustainable development of cultural tourism (Chhabra, 2009). The concept of using marketing for sustainable tourism development has been studied more in forms of tourism, for example the ecological rather than cultural (Chhabra, 2009). Chhabra (2009) presents a model of sustainable cultural tourism marketing, Sustainable Heritage Tourism Marketing Model (SHTM) that consists of a mission statement, along with a communication plan. Since tourist destinations constitute key factors of the tourism demand, is absolutely necessary to design a local marketing program or different tourist destinations in the country. The role of the museums and the historical monuments to the enforcement of the image and the development of the city, is decisive in the context of designing a strategic marketing plan (Deffner et al., 2009).

Cultural tourism constitutes a strategy of sustainable development and achieving local quality of life (Sdrali and Chazapi, 2007), and is growing worldwide, thus must follow the challenges posed, in order to remain a competitive form of tourism, since the challenges arising are many (Phaswana-Mafuya & Haydam, 2005). According to Phaswana-Mafuya and Haydam (2005), tourism organizations must broaden their offerings to meet the growing needs of increasingly discerning tourists, without lowering the quality of the services and the culture of the region. The profile of tourists, the needs, the expectations, and their desires and perceptions, should be clearly defined in order to ensure their satisfaction and repeated visits in the future.

Consumer satisfaction has been studied extensively in the literature (Rojas & Camarero, 2008). Whatever the nature of the service is, customer satisfaction is the most important goal that should be set (Eraqi, 2006). The study of museum visitors' satisfaction is mainly focused on the relationship between quality and satisfaction (Caldwell, 2002; De Ruyter, Bloemer, & Peeters, 1997; Harrison & Shaw, 2004), while there is limited research on the experience of museum visitors (Rowley, 1999) and its relationship with satisfaction.

From the literature comes out a link between satisfaction and the willing of dissemination of the service (Parasuraman, Zeithaml, & Berry, 1988; File, Cermak, & Prince, 1994; Shemwell, 1998; Soderlund, 1998;

Hennig- Thurau, Gwinner, & Gremler, 2002; Ennew, Banerjee, & Li, 2000). Although the relationship between customer satisfaction and service quality has been studied, the relationship between satisfaction, by providing quality services and positive word of mouth at the same time, has not been investigated yet (Chaniotakis & Lymperopoulos, 2009). This underlines the importance of the personnel, not only in providing adequate services but also in promoting the organization through the influence they exert on shaping the opinion of visitors and consequently the word of mouth.

Satisfied visitors are those that affect the long-term survival of an organization, through repeated purchase and through the word of mouth communication, (Huo & Miller, 2007). The directors of museums recognize as an essential element of the museum visit, the visitors' satisfaction and are interested in factors affecting visitors to revisit the site and recommend to others (Harrison & Shaw, 2004; Kawashima, 1998; Mclean, 1994).

According to Rojas and Camarero (2008), satisfaction is achieved when the expectations of visitors are met or exceeded. The expectations of visitors, from various sources for example advertisements, opinions, friends and previous experience, affect the evaluation of their perceived service (Rojas & Camarero, 2008; Zeithaml, Berry, & Parasuraman, 1993). Thereupon the expectations of visitors influence the perceived service quality; therefore the perceived quality influences satisfaction ratings (DeRuyter et al., 1998; Oliver, 1999; Rojas & Camarero, 2008).

CONCEPTUAL FRAMEWORK

Visitors choose a service to gain some utility. They evaluate the satisfaction they receive from the services by comparing their expectations, with the perceived quality of the service (Tse & Wilton, 1988; Rojas, & Camarero, 2008). When the perceived quality is superior to visitor's expectations, a visitor can be satisfied. From the literature comes out that the service satisfaction is a key factor for future behaviour and the intention to repeat the visit (Fornell, 1992; Oliver, 1999; Zeithaml, Berry, & Parasuraman, 1996). The higher the satisfaction is, the stronger the intention of the visitor-consumer is (Rojas et al., 2008), to visit again the site in the future and recommend to friends and relatives.

The adoption of marketing philosophy in the museum operation will result in higher satisfaction ratings, and satisfied visitors will become the best ambassadors of the organization, spreading its fame through the word of mouth (Tobelem, 1998). It is important to underline that creating a

strong brand, is essential in developing a positive word of mouth (WOM), (Kotler, Kotler & Kotler, 2008; Rentschler, 2007).

The basic literature on tourism development and visitor satisfaction argues that tourists choose their destination based on their experience. Their positive or negative experiences form their satisfaction or their tourist trip. According to the research of Lee, Lee, & Wicks, (2004), the motivation of the visit and the type of visitor, affect their overall satisfaction. The demographic characteristics of tourists, according to Huo and Miller (2007), often affect their satisfaction, especially for museums' visits. Huo and Miller (2007), based on previous surveys, they define a theoretical model exploring the relationship between visitor satisfaction, the characteristics of the service and their future intentions on behaviour.

Huo and Miller (2007) define three assumptions of the relationship between visitor satisfaction and tourism development that lead to increased museum visits:

- The greater the satisfaction of the visitor experience is, more likely is to revisit the museum.
- Visitor's satisfaction depends on the characteristics of the visit, the staff and the overall perceived experience.
- Satisfaction varies, depending on the demographic characteristics of each group of visitors.

The research results of Huo and Miller (2007), confirm the three cases. More likely to visit again the site in the future is, when the satisfaction is higher. The museum's personnel is crucial in evaluating the services offered by the visitor, as well as the level of satisfaction varies according to the country of origin, especially among Americans and Asians.

The quality of services can be assessed by using rating scale (service quality measurement), (Albacete-Saez, Fuentes-Fuentes, & Montes-Llorens, 2007). The service quality is the result of comparing the expected quality and the perceived quality of the service. One of the most widely used rating scales in services is the SERVQUAL of Parasuraman, Zeithaml and Berry (1988, 1991), which assesses customers' expectations and the perceived quality of service. This method influences many researchers but receives also many critical reviews (Buttle, 1996; Ekinci & Riley, 2001).

The theoretical model SERVQUAL, developed by Parasuraman et al. (1988), is a useful tool for studying the quality of service and customer satisfaction (Eraqi, 2006). Nowacki (2005) uses this model in the evaluation of the museum as a tourism product and Eraqi (2006), for the tourist services. The assessment of the service quality, because of its

intangible nature, is much more difficult than evaluating the quality of products. To achieve this Nowacki (2005) conducted a survey among museum visitors to identify what are the expectations of visitors and what is the level of perceived quality, using the model SERVQUAL, in assessing the quality of the museum.

Apart from the technical support and the design of museums by specialists, the study of the expectations of visitors and the ultimately perceived service, is needed (Nowacki, 2005). This method is used in recreational areas (Taylor, Sharland, Cronin, & Bullard, 1993), historical sites, historic houses (Frochot & Huges, 2000), tourist agencies (Luk, de Leon, Leong, & Li, 1993), tourism offices (Ryan & Cliff, 1997), theme parks (O'Neill & Palmer, 2003) and other forms of entertainment and tourism.

Based on the theoretical model of SERVQUAL by Parasuraman et al. (1988), two (2) research questions are formed and investigated in the present paper:

- Research Question 1: Are the preferences and interests of the tourists-visitors, differentiated according to the characteristics of the group they belong (Lee et al., 2004)?
- Research Question 2: Which are the main factors that constitute the dimensions of the service quality in the Greek public museums (Nowacki, 2005; Lam & Hsu, 2006)?

METHODOLOGY

The present survey, researches the impact of cultural tourism to the development of tourist destinations, using three statistical methods; the cluster analysis, the principal component analysis and the ANOVA. The survey took place from January 2009 to July 2009 with 535 questionnaires, filled by tourists, visitors of five different museums, in five tourist destinations in Greece. The quantitative research was carried out in five Greek, archaeological museums, which were: the Delphi Museum, the Mycenae Museum, the Ancient Olympia Museum, the Ancient Corinth Museum and the Epidaurus Museum. Those public museums represent about the 15% of the total museum visits, including their archaeological sites (http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p_param=A1802).

The scope of the survey was to define the groups of tourists who visited the Greek museums and their evaluations of the museums' services offered to them. In order to achieve this scope, the questionnaires

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are designed according to the literature and investigate the factors that represent the data quality and the visitors' satisfaction elements of the services offered. The cluster analysis, forms different groups of tourists with different interests and evaluations and the principal component analysis, forms the factors that represent museum's quality characteristics. Thereupon, the analysis of variance follows the two previous methods, to correlate the already defined clusters per factors, by ANOVA (Lymperopoulos & Eeckels, 2003).

ANALYSIS OF RESULTS

The cluster analysis is based on the evaluation of certain features of the services offered and reveals the presence of three (3) distinct groups of tourists, with different interests and preferences. The first group of tourists has special cultural interest and its name is the Cultural Oriented group. They value higher the cultural attractions and assess lower the natural attractions, the infrastructure, the accommodation, the food, the entertainment and the quality of the service offered in relation to its cost (Diagram 1).

The second group shows a modest interest for both cultural and natural attractions and its name is the Intermediate. They rate lower the natural attractions, the infrastructure, the accommodation, the food, the entertainment and the quality of the service offered, while they assess slightly more emphasis on cultural attractions (Diagram 1).

The third group shows more interest in natural beauty and natural attractions and thus its name is the Natural Oriented group. They evaluate high the natural attractions, lower the cultural attractions and even lower the infrastructure, the accommodation, the food, the entertainment and the service quality (Diagram 1).

The six (6) characteristics of visitors that derive from the questionnaire (nationality, age, sex, education, income, family status), are compared with the group, the cluster the tourists belong and are presented at the Table 1. The survey shows that, those interested more in cultural attractions, the Cultural Oriented, are about one third of the visitors (32%). Canadians have the highest percentage in this group. They are mostly at the age of 46-55, men with higher education, with income less than 1000 euros, married with independent children. They evaluate positive the value for money of the services offered, the image of the museum they visited, the facilities and exhibits and the stores and cafes. Negative they evaluate the educational aspects and the personnel, while neutral the price (Table 1).

The second group, the Intermediate constitute 50% of the sample. Asians have the highest percentage in the sample. They are mostly older than 65 years, men with basic education and income 1501-2000 €, widow and widower. They evaluate the value of the service offered in relation to its costs negative but they have a positive image for the museum. They evaluate negative the facilities and exhibits and the price of the museum. At the same time, they evaluate positive the educational aspects and the staff, while neutral the stores and cafes (Table 1).

Diagram 1 Three (3) Clusters.

The second group, the Intermediate constitute 50% of the sample.
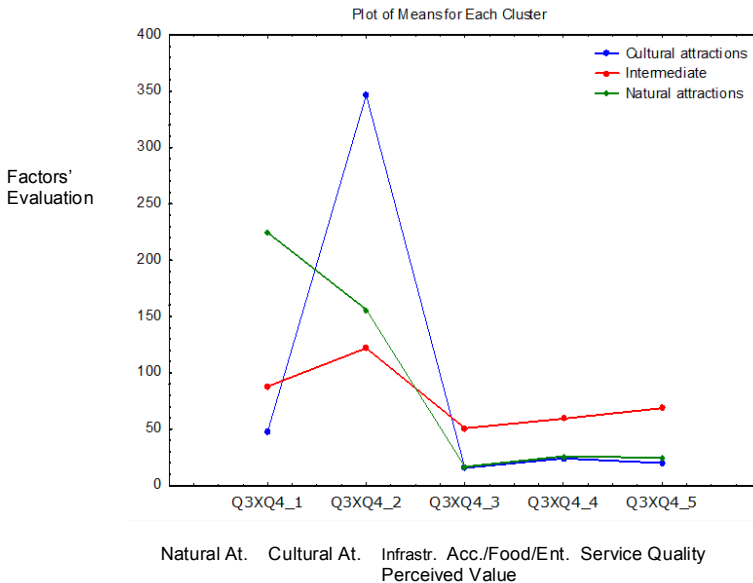
Finally, the third group, the Natural Oriented, consists the 18% of the sample. The Americans have the highest percentage in the sample. They mostly are at the age of 56-65 years, women with secondary education, with income 1001-1500 euros and single. They evaluate as not good the value for money of the services offered, they have negative image for the museum and they evaluate neutral the facilities and the exhibits. Positive they evaluate the educational aspects, the price and the personnel but negative the stores and cafes of the museum (Table1).

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Table 1 Clusters and their characteristics.

Clusters Characteristics	Cultural Oriented	Intermediate	Natural Oriented
Size	32%	50%	18%
Nationality	Canadians	Asians	Americans
Age	46-55	Older than 65	56-65
Gender	Men	Men	Women
Education	Higher	Optional	Secondary
Income	Less than 1000	1501-2000	1001-1500
Family Status	Married with independent children	Widow, widower	Single
Value for Money	Very good	Bad	Not good
Image	Positive	Positive	Negative
Facilities and Exhibits	Positive	Negative	Neutral
Educational Aspects	Negative	Positive	Positive
Price	Neutral	Negative	Positive
Store, Cafe	Positive	Neutral	Negative
Personnel	Negative	Positive	Positive

The Principal Components Analysis, extracts five (5) factors out of the 27 characteristics of the museum services. The principal component analysis of five (5) museums explains 60% of the total variance. This method leads to grouping the questions of the questionnaire into five (5) factors and describes the services' characteristics, as assessed by the respondents. The five (5) factors that came out are; Facilities and Exhibits, Educational Aspects, Price and Expected Quality, Store and Café, Personnel (Table 2).

Therefore, this analysis reveals that there are different factors that lead to the satisfaction of visiting a museum and visitors' satisfaction depends on the characteristics of the quality of the services.

Table 2 Loadings of 27 characteristics and variances of 5 factors.

0,57	The building, the architecture
0,72	The internal area, the exhibits
0,62	The structure of the exhibitions
0,55	The lighting of the exhibitions that show the exhibits
0,51	Labels with enough information
0,59	The beauty of the exhibits
0,68	The important, uniqueness of the exhibits
0,68	The variety of the exhibitions
0,61	Completeness of the exhibits

Expl. Var 5.10 → Facilities and Exhibits

0,80	PC for searching information
0,86	Virtual Reality
0,87	PC games with historical theme
0,87	Special routes and exhibitions for families and kids
0,81	Educational program, special leaflet for families
0,63	Ease of access for elderly and disable people

Expl. Var 5.64 → Educational Aspects

0,54	Ticket price compared to the service quality offered

Expl. Var 3.49 → Price and Expected Quality

0,68	Quality and variety of the goods at the café-restaurant
0,69	Quality and variety of the selling goods at the store
0,68	Attractive presentation of the goods at the store
0,63	Café-restaurant prices compared to the service quality
0,69	Store prices compared to the service quality

Expl. Var 4.31 → Store and Cafe

0,57	Personnel appearance
0,70	Personnel attitude in the entrance
0,69	Personnel attitude in the exhibitions
0,66	Enough personnel
0,74	Knowledgeable personnel
0,64	Communication in foreign languages adequacy of the personnel

Expl. Var 4.86 → Personnel

Total variance explained=0.60%

These are in accordance to the literature (Nowacki, 2005; Lam & Hsu, 2006), that visitors are affected by specific factors which constitute the dimensions of the service quality. Taking into account the variables and the factors extracted from the Principal Components Analysis, the following model is created (Table 2), depicting the loadings of twenty-seven (27) characteristics and the variance of each of the five (5) factors (Table 2).

The Diagram 2, illustrates how the three (3) groups of tourists, the clusters, they assess the five (5) factors. The vertical axis shows the Factor Scores and the horizontal the 5 Factors. When every factor gets the average, the value is zero and gets either negative or positive values. The statistics of this diagram are shown on Table 3.

Diagram 2 Clusters per factors.
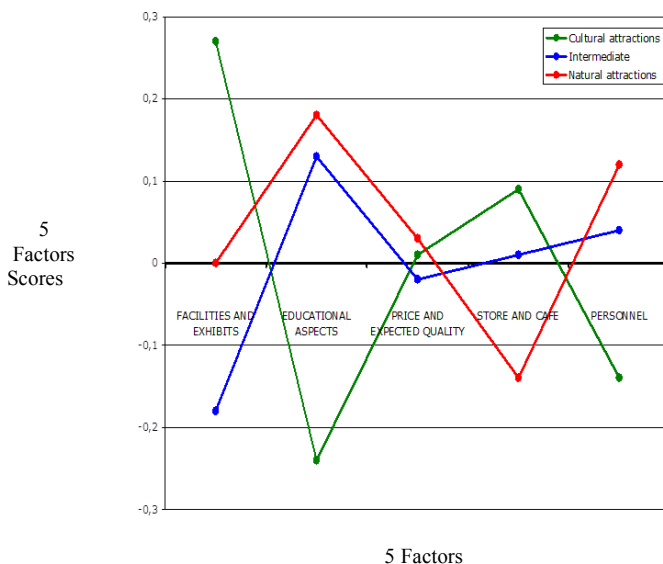
5 Factors

According to ANOVA (cluster per factor), the Cultural Oriented tourists are satisfied with the facilities and the exhibits, the museum cafes and the stores (Table 3). The price does not affect them much and are dissatisfied with the educational aspects and the personnel of the museum (Diagram 2). The Natural Oriented tourists, assess very negative the store and cafes, neutral the facilities and exhibits, as well as neutral the price and the expected quality. The educational aspects and the staff are

evaluated positive (Table 3). The Intermediate tourists evaluate very negative the facilities and exhibits, but positive the educational aspects. Regarding the stores and cafes, are evaluated as neutral, while the personnel as positive (Table 3).

Table 3. Three (3) clusters and their factors's scores.

	Facilities and Exhibits	Educational Aspects	Price and Expected Quality	Store and Cafe	Personnel
Cultural Oriented	0,27	-0,24	0,01	0,09	-0,14
Intermediate	-0,18	0,13	-0,02	0,01	0,04
Natural Oriented	0,0	0,18	0,03	-0,14	0,12

CONCLUSIONS AND IMPLICATIONS

As the International Council of Museums (ICOM) defines, the museums are non-profit organizations, open to the public interest. Visitors expect different services depending on their visit motivations and get satisfaction, when are treated according to their needs (McLean, 1994). McLean (1994) points out that museums, are still not adopting a clear marketing strategy, despite the effort that has been done in this field. For museums, the need for long-term strategies and public education has now emerged, combined with sustainable development strategies. The museums have to set an attempt for sustainable tourism development, providing innovative opportunities for cooperation with the local community.

An important opportunity for sustainable development in the region and the simultaneous strengthening of museums is to develop a strong relationship between the museum and the local community (Cole, 2008). The locals are likely to contribute to the activities of the museum and visit the place with their friends and relatives, constituting the future audience (Cole, 2008). Attracting cultural tourists is a major strategy. This can be achieved by developing cooperation with cultural and tourist agencies and by creating a network to attract tourists, both at national and international level. When museums cooperate with travel agencies that organize tours and visits, they attract more audience (Runyard & French, 1999).

The museum café and stores, can enhance the income of the organization, enrich the educational role and attract new visitors (Kotler et al., 2008; Rentschler, 2007; Cole, 2008, McPherson, 2006). In cooperation with the local community they can offer goods from native producers and artists and thus enhance the income of the local community. Social media, used by destination marketing organizations (DMOs), could influence a growing number of travelers and offer a number of challenges and opportunities to DMOs (Lange-Faria and Elliot, 2012), museums and cultural sites.

As defined by the International Council of Museums (ICOM), the museums are open for the public interest (non-profit organizations). Therefore, the success of marketing is measured by fulfilling their mission statement, providing quality services and offering unforgettable experiences. Customers expect different services depending on their motivations and become satisfied when are treated according to their needs (McLean, 1994). It is of high importance, the museum services offered to visitors, to be improved and the factors of dissatisfaction to be minimized, in order the very important group of cultural tourists, to become satisfied, thus to revisit and to recommend the museum to friends and relatives, via positive word of mouth.

The quantitative research of visitors-tourists of Greek museums reveals that, there are three different groups of tourists, three segments and confirms that visitors behave according to the group they belong. The survey confirms also the existence of five different factors that lead the groups of museum visitors to satisfaction. Therefore, in formulating a strategy to attract and satisfy the cultural tourists, the improvement in the provision of educational services and the better selection and training of the personnel are needed, since most problems are noticed on these aspects. The museum price and the expected quality do not affect visitors much on their satisfaction, although they need the retrieval of the services and goods at their stores and cafes.

Those responsible for the operation of museums may take under serious account these factors, in order to improve their organization and to design a clear strategy in accordance to visitors' demands, as well as satisfying each target groups' needs. The segmentation of the market and the targeting of specific groups with different offerings and packages, will meet the needs and the demands of each tourism segment. The increase of satisfied cultural tourists, could contribute to the possibility of revisit and positive word of mouth, and consist main factors for the sustainable tourism development of Greek destinations.

REFERENCES

Albacete-Saez, C.A., Fuentes-Fuentes, M.M. & Montes-Llorens, J.F. (2007). Service quality measurement in rural accommodation. *Annals of Tourism Research,* Vol. 34, No.1, pp.45-65.

Buttle, F. (1996). SERVQUAL: Review, Critique, Research agenda. *European Journal of Marketing,* Vol. 30, No.1, pp.8-25.

Caldwell, N. & Coshall, J. (2002). Measuring brand associations for museums and galleries using repertory analysis. *Journal of Management Decision,* Vol. 40, No.4, pp.7383-7392.

Chaniotakis, I.E. & Lymperopoulos, C. (2009). Service quality effect on satisfaction and word of mouth in the health care industry. *Managing Service Quality,* Vol. 19, No.2, pp.229-242.

Chhabra, D. (2009). Proposing a sustainable marketing framework for heritage tourism. *Journal of Sustainable Tourism,* Vol. 17, No.3, pp.303-320.

Cole, D. (2008). Museum marketing as a tool for survival and creativity: the mining museum perspective. *Museum Management and Curatorship*, Vol. 23, No.2, pp.177-192.

Constantin, D.L. & Mitrut, C. (2007). *Strategies for Cultural Tourism, Sustainability and Regional Development. A Case Study in Romania.* Paper presented to the 47th Congress of European Regional Science Association, Paris.

Deffner, A, Metaxas, T., Syrakoulis, K. & Papatheochari, T. (2009). Museums, marketing and tourism development: The case of the tobacco museum of Kavala. *Tourismos: An International Multidisciplinary Journal of Tourism,* Vol. 4, No.7, pp.57-76.

De Ruyter, K., Bloemer, J. & Peeters, P. (1997). Merging service quality and service satisfaction. An empirical test of an integrative model. *Journal of Economic Psychology*, Vol. 18, pp.387-406.

Ekinci, Y. & Riley, M. (2001). Validating Quality Dimensions. *Annals of Tourism Research*, Vol. 28, pp.202-223.

Ennew, C., Banerjee, A. & Li, D. (2000). Managing word of mouth communication: empirical evidence from India. *International Journal of Bank Marketing,* Vol. 18, No.2, pp.75-83.

Eraqi, M. I. (2006). Tourism services quality (TourServQual) in Egypt. The viewpoints of external and internal customers. *Benchmarking: An International Journal*, Vol.13, No.4, pp.469-492.

File, K.M., Cermak, D.S.P. & Prince, R.A. (1994). Word-of-mouth effects in professional services buyer behaviour. *Service Industries Journal*, Vol. 14, pp.301-314.

Fornell, C. (1992). A National Customer Satisfaction Barometer: The Swedish Experience. *Journal of Marketing*, Vol. 56, pp.6-21.

Frochot, I. & Hughes, H. (2000). Histoqual: The Development of a Historic Houses Assessment Scale. *Tourism Management*, Vol. 21, pp.157-167.

Harrison, P. & Shaw, R. (2004). Consumer Satisfaction and Post-purchase intentions: An exploratory Study of Museum Visitors. *International Journal of Arts Management*, Vol. 6, No.2, pp.23-32.

Hennig- Thurau, T., Gwinner, K.P. & Gremler, D. (2002). Understanding relationship marketing outcomes: an integration of relational benefits and relationship quality. *Journal of Service Research,* Vol. 4, pp.230-247.

Huo, Y. & Miller, D. (2007). Satisfaction Measurement of Small Tourism Sector (Museum): Samoa. *Asia Pacific Journal of Tourism Research,* Vol. 12, No.2, pp.103-117.

Gilmore, A., Carson, D. & Ascencao, M. (2007). Sustainable tourism marketing at a World Heritage site. *Journal of Strategic Marketing,* Vol.15, pp.253-264.

Kawashima, N. (1998). Knowing the Public. A Review of Museum Marketing Literature and Research. *Journal of Museum Management and Curatorship,* Vol. 17, No.1, pp.21-39.

Kotler, G.N., Kotler Ph. & Kotler I.W. (2008). *Museum marketing and strategy: designing missions, building audiences, generating revenue and resources*. San Francisco, Jossey-Bass.

Lam, T. & Hsu C.H.C. (2006). Predicting behavioral intention of choosing a travel destination. *Tourism Management,* Vol. 27, pp.589-599.

Lang-Faria, W. & Elliot, S. (2012). Understanding the role of social media in destination marketing. *Tourismos: An International Multidisciplinary Journal of Tourism,* Vol. 7, No.1, pp.193-211.

Lee, C.-K., Lee, Y.-K. & Wicks, B. (2004). Segmentation of festival motivation by nationality and satisfaction. *Tourism Management,* Vol. 25, pp.61-70.

Luk, S. T. K., de Leon, C. T., Leong, F. & Li, E. (1993). Value segmentation of tourists' expectations of service quality. *Journal of Travel and Tourism Marketing*, Vol. 2, No.4, pp.23-38.

Lymperopoulos, C. & Eeckels, B. (2003), Tourists' satisfaction level: Expectations and degree of realization. *Tourism Today,* Vol. 3, pp.68-94.

McLean, F. C. (1994). Marketing in Museums: A Contextual Analysis. *Journal of Museum Management and Curatorship,* Vol. 12, pp.11-27.

McPherson, G. (2006). Public memories and private tastes: The shifting definitions of museums and their visitors in the UK. *Journal of Museum Management and Curatorship,* Vol. 21, pp.44-57.

Middleton, V.T.C. & Hawkins, R. (1998). *Sustainable Tourism. A Marketing Perspective*. Butterworth-Heinemann, Great Britain.

Nowacki, M.M. (2005). Evaluating a museum as a tourist product using the servqual method. *Journal of Museum Management and Curatorship,* Vol. 20, pp.235-250.

Oliver, R.L. (1999). Whence consumer loyalty. *Journal of Marketing*, Vol. 63, No.4, pp.33-44.

O'Neill, M., Palmer, A. & Beggs, R. (1998). The effects of survey timing on perceptions of service quality. *Managing Service Quality*, Vol. 8, No.2, pp.126-132.

Parasuraman, P.A., Zeithaml, V.A. & Berry, L.L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, Vol. 64 No.1, pp.14-40.

Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1991). Refinement and Reassessing of the SERVQUAL Scale. *Journal of Retailing,* Vol. 67, pp.420-450.

Phaswana-Mafuga, N. & Haydam, N. (2005), Tourists' expectations and perceptions of the Robben Island Museum- a world heritage site. *Journal of Museum Management and Curatorship*, Vol. 20, pp.149-169.

Rentschler, R. (2007). National marketing strategies in international travel tourism. *European Journal of Marketing*, Vol. 34, No.11/12, pp.1290-1305.

Rojas, C. & Camarero, C. (2008), Visitors' experience, mood and satisfaction in the heritage context: Evidence from an interpretation center. *Tourism Management,* Vol. 29, pp.525-537.

Rowley, J. (1999). Measuring total customer experience in museums. *International Journal of Contemporary Hospitality Management,* Vol. 11, No.6, pp.303-308.

Runyard, S. & French, Y. (1999). *Marketing & Public Relations Handbook.* The Stationery Office, London, UK.

Ryan, C. & Cliff, A. (1997). Do travel agencies measure up to customer expectation? An empirical investigation of travel agencies' service quality as measured by SERVQUAL. *Journal of Travel and Tourism Marketing*, Vol. 6, No.2, pp.1-27.

Sdrali, D. & Chazapi, K. (2007). Cultural tourism in a Greek insular community: The residents' perspective. *Tourismos: An International Multidisciplinary Journal of Tourism,* Vol. 2, No.2, pp.61-75.

Shemwell, D. (1998). Customer-service provider relationships: an empirical test of a model of a service quality, satisfaction, and relationship-oriented outcomes. *International Journal of Service Industry Management*, Vol. 9, No.2, pp.155-168.

Soderlund, M. (2008). Customer satisfaction and its consequences on customer behavior revisited- the impact of different levels of satisfaction on word-of-mouth, feedback to the supplier and loyalty. *International Journal of Service Industry Management,* Vol. 9, No.2, pp.169-188.

Taylor, S.A., Sharland, A., Cronin, J.J. & Bullard, W. (1993). Recreational service quality in the international setting. *International Journal of Service Industry Management*, Vol. 4, pp.68-86.

Tobelem, J.-M. (1998). The Marketing Approach in Museums. *Journal of Museum Management and Curatorship,* Vol. 16, No.4, pp.337-354.

Tse, D.K. & Wilton, P.C. (1988). Models of consumer satisfaction formation. An extension. *Journal of Marketing Research,* Vol. 25, No.2, pp.204-212.

Zeithaml, V., Berry, L. & Parasuraman, A. (1993). The nature and determinants of customer expectations of services. *Journal of the Academy Marketing Service,* Vol. 21, pp.1-12.

Zeithaml, V., Berry, L. & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing,* Vol. 60, pp.31-46.

Http://www.statistics.gr/portal/page/portal/ESYE/BUCKET/A1802/PressReleases /A1802_SCI21_DT_MM_12_2009_01_F_GR.pdf. Accessed the 20 th of July 2011, at 16:30.

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ATTITUDES OF LOCAL RESIDENTS TOWARD THE DEVELOPMENT OF TOURISM IN A DEVELOPING SOCIETY: THE CASE OF TORQABEH, IRAN

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The purpose of this paper is to explore the attitude and perception of local residents toward tourism impacts and development in Torqabeh, one of the most popular tourism resort located in northeast of Iran. Two hundred and fifty households were randomly chosen as a sample of study and data were collected and analyzed with quantitative methods. The results of analysis revealed that local residents generally expressed a positive attitude toward tourism development in Torqabeh. There was evidence that Tourism-related job, community involvement in making decisions about tourism development, community attachment and length of residence are significant determinants of perceived tourism impacts and development. Furthermore, the study reinforces the need for inclusion of local people during future preliminary process of tourism planning in area.

Keywords: Tourism Development, Attitude, Perception, Torqabeh, Local residents.

INTRODUCTION

Despite this fact that , tourism has turned into a principal activity in most societies , predominantly a key driver of growth and a supplementary source of income for developing economies , however as Jafari, Smith and Brent (2001) advocated , tourism development bore

both positive and negative impacts on host destination. According to Látková and Vogt (2011), although tourism has increasingly been regarded as a vehicle of development in developing countries and has taken a dominant role in most countries, however it may threaten the indigenous culture and incur enormous costs on the host community. During the last decades, growing attention has been drawn to the impacts of tourism perceived by local residents of host communities. For instance , Andereck and Vogt (2000) claimed that understanding the local residents' perception of tourism impacts could be taken into account as an effective factor to engage them actively in the planning stage of sustainable tourism development in order to achieve sustainable tourism development. Moreover, according to Vargas-Sanchez, Porras-Bueno and Plaza-Mejia (2009), understanding residents' attitude toward tourism development leads to minimize the negative impacts in addition to maximizing the support for tourism initiatives. Furthermore, Nunkoo and Ramkissoon (2011) claimed that local population's perception of tourism impacts are required to be considered during preliminary process of tourism policy making and planning in the host community. Thus, sustainable tourism planning inevitably requires host community participation and support at all stages of development and one way to engage them at the beginning stages of the planning process is to understand their attitudes toward tourism development and their perceptions of tourism impacts.

Accordingly, Sebele (2010) reinforced previous opinions and stated that community-based tourism development coincides with ongoing sustainable community development. However, despite growing interest in the subject, only a few studies have been carried out from a developing world perspective.

Due to its proximity to Mashhad, as the religious capital and the second metropolis of Iran, Torqabeh receives millions of tourists annually (ICHTO, 2005), however, no research has been conducted within Torqabeh' context so far. Therefore, in an attempt to fill this gap, the current study was undertaken with the purpose of exploring how host residents shape their attitudes toward tourism development and impacts in Torqabeh.

LITERATURE REVIEW

The issue of residents' attitude and perception toward impacts of tourism development has received increasing attention in recent decades from tourism academics and scholars (Albalate & bel, 2010).

During last two decades, increasing number of studies and research utilized in the study of residents' attitude and a number of researchers identified a vast range of positive and negative impacts of tourism that may affect residents' attitude toward tourism development (Harill,2004 ; Lepp,2007; Spanou, 2007 ; Zamani-Farahani & Musa,2008; Nicholas et al,2009; Sebele , 2010 ; Rastegar, 2010; Vargas-Sanchez et al, 2011 ; Nunkoo & Ramkissoon,2011; Nunkoo & Gursoy , 2012; Lee , 2012). Furthermore several theoretical frameworks such as Doxey's Irridex's Model, Social Exchange Theory, Butler's Life Cycle and Ap and Crompton's Framework have been developed in order to help study tourism impacts perceived by host community.

Irridex's Model of Doxey (1975) one of the first models of residents attitude toward tourism, suggested that host population' attitude change over time, becoming more negative as tourism development and tourism flux increase and move forward through four stages: enthusiasm , apathy, annoyance and antagonism.

Butler (1980) developed the "tourism area life cycle" model which is a universal life cycle tourism model that explains the evolution of tourist area through the stages of exploration, involvement, development, consolidation/stabilization, decline or rejuvenation

Based on Ap and Crompton's framework (1993), residents' reaction to tourism development could be placed on a continuum comprised of four strategies: embracement, tolerance, adjustment and withdrawal.

According to the Social exchange theory (SET) suggested by Ap (1992), individuals will evaluate an exchange based on the cost and benefits that have incurred as a result of that exchange. This implies that residents weigh the costs and benefits of the exchange before forming their attitude and opinion toward tourism development. SET remains one of the most widely used frameworks by researchers attempting to study community attitudes. For instance, Varges-Sanchez et al (2011) concluded that residents, who obtain personal benefits of tourism, show a more favorable attitude toward the development of tourism. Similarly, in their model of community support based on the social exchange theory, Nunkoo and Ramkissoon (2011) suggested that perceived benefits, perceived costs, and community satisfaction influence residents' support of tourism development. Accordingly, Lee (2012) claimed that the benefits perceived by host residents are consistent with their support for sustainable tourism development. However, most studies have been conducted in the context of the developed world; very little research on this topic has been carried out in the developing world. In addition, The present study was the first attempt focused on host community reactions

to tourism development in Torqabeh. Therefore, the findings of current study can be a valuable and effective information source for decision makers and policy makers in attracting local people to tourism development.

STUDY AREA

Mashhad is the second largest city in Iran which is located at the northeast of country , at the center of the Razavi Khorasan Province close to the borders of Afghanistan and Turkmenistan. With population of 2,427,316 (SCI, 2011) , Mashhad attracts more than 20 million tourists and pilgrims every year, many of whom come to pay homage to the Imam Reza shrine (the eighth Shiite Imam) (ICHTO, 2005) . Torqabeh as a very popular tourism resort is located 13 kilometers northwest of Mashhad. Mild climate, unique sceneries and landscapers, and traditional handicrafts are distinctive features of this area. At the 2011 census (SCI, 2011) its population was 13,158, in 3,668 families. Furthermore, its proximity to Mashhad provides an opportunity that the tourists and local residents of Mashhad visit it. For the last two decades, tourism has been the largest industry in Torqabeh and it was developed as a major tourism destination first in 2004 and hence, the government and private sectors have launched several projects for the development of infrastructure and public facilities in the area. Although its economy has historically been influenced by farming and gardening, tourism has emerged as an important dimension of the local economy in recent decade. (Aryanezhad, 2010)

METHODOLOGY

The study population included local residents of Torqabeh and households were chosen as study's sample through the Cochran sampling method (n=$\frac{Nz^2pq}{Nd^2 + z^2pq}$) in which confidence level of 95%, accuracy of 0.06 and variance of 0.5 were considered. In addition, in this study, cluster sampling method was chosen due to fewer travel expenses, administration costs and cheaper than other methods and was employed for dividing the total population into groups based on the list provided by the city council and a random sample of these clusters are selected. The data collection was performed from October 2012 to December 2012 by researchers. The questionnaire designed was in Farsi (Persian), Iran's

official language, as all respondents only speak Farsi. It comprised three sections to investigate residents' attitude toward tourism impacts and development in Torqabeh. 26 statements were derived by researchers from various relevant works of literature to fit within the Torqabeh's context appropriately. The first section is designed to ask the respondents to state their level of agreement or disagreement with economical, socio-cultural and environmental impacts relating to tourism development on a Five-point Likert scale ranging from 1 strongly agree to 5 strongly disagree. Five-point Likert scale has been chosen particularly as respondents can express themselves better The purpose of second section is to explore the community participation in process of making decisions about tourism in the area, the community attachment, in addition to studying whether the respondents are going to support tourism development in the future as well and finally the last section gathered demographic characteristics of respondents in Torqabeh. In addition, Bartlett's test of sphericity was significant (2150/699 and sig‹ 0/000), indicating that the data was acceptable for factor analysis. The factor analysis was used to assess the validity of questionnaire .Moreover, The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.829 and it implied that sampling was appropriate. To measure internal consistency, Cronbach's alpha coefficient of reliability for tourism impacts variables was 0.855, which is appropriate. Data analysis was conducted using the statistical Package for Social Sciences (SPSS Version 20) and Descriptive statistics, Factor Analysis, Pearson correlation analysis, Tb Kendall correlation and T-test were conducted to analyze data.

RESULTS ANS DISCUSSION

In this study, 250 households were chosen as a sample of study. The majority of respondents were male (62 %) and married (72.5%). An absolute majority of the respondents (79.2%) were born in Torqabeh. The mean age of respondents in this study was 36.5 years and 50% of respondents have completed a high school education. In terms of income, insufficient data was received. 50% of households did not mention their income due to privacy , etc .Consequently researchers were unable to analyze this section of data. Moreover, an absolute majority of the respondents (83.2%) prefer living in Torqabeh rather than elsewhere. In other words, they have sense of belonging to their hometown. Only 30% of the respondents were involved in tourism related businesses or

activities, whereas the majority of residents were involved in farming or gardening sectors. Furthermore, Only 12% of respondents reported that they were involved with process of making decisions and management of tourism in Torqabeh.

To measure the economical, socio-cultural and environmental impacts of tourism in the study area, 26 items were derived from various tourism related literature. Of those, fourteen items are related to socio-cultural impacts of tourism (mean: 39.62% - range: 13-65), eight items are related to economical impacts of tourism(mean :24/41 , range:8-40) and four items are related to environmental impacts(mean:8/70 , range : 4-20). t-Test was conducted in order to examine the influence of tourism-related jobs on local residents' perception of tourism development .The value for those who were involved in tourism-related job was 78/15, whereas the value for those residents who were not associated with tourism-related job was 70/38. The results of the research showed up those respondents with tourism related job had significantly perceived tourism development in Torqabeh more positively than those who were not involved in the tourism industry. (t=3.844, sig=0/000).Tb Kendall correlation was carried out to examine the relationship between local community involvement in making decisions about tourism development in area and attitude towards tourism. The findings of data analysis reported a significant and positive relation between community involvement in making decision about tourism and impacts of tourism in area. The Pearson correlation coefficient for relationship between local community involvement in making descion decision and socio-cultural impacts was 0/128, for economic impacts was 0/191 and for environmental impact was 0/123. (P Value ≤ 0/05).

The results of Pearson correlation test demonstrated a negative significant relationship between length of residence in Torqabeh and socio-cultural and environmental impacts of tourism. The value of Pearson coefficient for relationship between length of residence and socio cultural impacts was -0/197 and for environmental impacts was -0/233. (P Value ≤ 0/05).This finding showed that those residents living in Torqabeh for a long time perceived socio-cultural and environmental impacts of tourism negatively.

Tb Kendall correlation was employed to examine the relationship between local community's attachment to Torqabeh and perception toward tourism development. A significant relationship was found between community attachment and perceived costs. The finding showed a positive and significant relation between local residents' attachment to Torqabeh and economical impacts of tourism (value = 0/114,

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Significance= 0/026). The results of analyzing data revealed that those residents with a sense of belonging to Torqabeh, perceived economical impacts positively.

Stepwise regression analysis was carried out to assess the influence of all independent variables on dependent variable (perception towards tourism). The finding demonstrated that three variables (length of residence, tourism-related occupation and community involvement in making decisions about tourism development) simultaneously influenced local residents' perception of tourism development. The multiple correlation coefficients for factor effecting perception toward tourism were 0/394, the R square is 0/155 and the adjusted R square was 0/129. Accordingly about 13 percent of residents' perception of tourism development variably was explained by three variables mentioned.

CONCLUSION

The current study examined local residents' perception of tourism impacts and development in Torqabeh, famous tourist resort in the northeast of Iran. The result of analyzing data revealed that generally, respondents had a positive attitude toward tourism impacts and development.

Firstly, the finding of study demonstrated that long-term residents of Torqabeh had a less favorable perception of tourism than newer residents. This finding confirms the claim of Harrill (2004) who found that long-term residents of Montana & Virginia held less favorable perception than newer residents toward tourism development.

Secondly, the current study's results indicated that there is a strong relationship between respondents' job and their perception on the impacts of tourism. Those residents who had a business related to tourism and had benefited from tourism, had more positive attitude than those who were not involved in or associated with the tourism industry. The result supports the social exchange theory(SET) and reinforces previous research findings in which SET have been used as theoretical framework for understanding the perception of host residents towards tourism (Nunkoo & Ramkissoon, 2011; Zamani Farahani & Musa, 2012 ; Nunkoo &Gursoy, 2012).

Thirdly, another important conclusion is that local people, who were involved with the decision-making and management of tourism in Torqabeh, strongly had supported tourism development in the area. In other words, as the host residents' level of community involvement increases, the residents' support for sustainable tourism development also

increases. This finding is in line with the finding of some previous studies (Lepp, 2007, Lee, 2012, Sebele, 2010, Rastegar, 2010). In addition, the finding found that most of the residents in area were not involved in processes of making decision and management of tourism development. Moreover, a little synergy was found between local tourism authority and host population in sharing ideas in process of making decision about tourism development in Torqabeh. However, as the increased involvement of host residents in sustainable tourism is vital for the support of sustainable tourism development; hence, future sustainability in tourism development will inevitably require more involvement among local residents in the planning and management of tourism in Torqabeh.

Finally, the findings revealed that the residents who had greater community attachment were more favorable of sustainable tourism development. This finding is in consistent with claims by some researchers who have advocated that community attachment directly and significantly affects support for tourism development (Nicholas, Thapa & Ko, 2009; Nunkoo & Ramkissoon, 2011, Lee, 2012).

The findings of the present study can be helpful for local government officials and tourism authorities. Results suggested that these authorities and particularly local government officials should increase awareness of local residents of tourism, its potential benefits through local exhibition, workshop, advertisement via mass media, seminars, etc. Thus it is recommended that policy makers and tourism planners conduct more workshops for local residents in order for them to participate in the tourism management and planning of Torghabeh. Moreover, the managers should provide opportunities for residents in Torqabeh to become involved in the planning and management of sustainable tourism development within their communities. Moreover as tourism is still an emerging industry in developing societies such as Iran, therefore it is strongly recommended that basic principles of sustainability be considered during preliminary planning of tourism. As the current study was the first study of its type in Torqabeh, therefore results suggested the need for further research into this important issue in order to examine the reaction of local residents of Torqabeh toward impacts of tourism development in the region and to compare and contrast the experiences of Torqabeh with other tourism destinations in Iran as well.

REFERENCES

Albalate, D. & Bel, G. (2010). Tourism and urban public transport: Holding demand pressure under supply constraints. *Tourism Management,* Vol. 31, No.3, pp.425-433.

Andereck, K.L. & Vogt, C.A. (2000). The relationship between residents' attitudes toward tourism and tourism development options. *Journal of Travel research, V*ol. 39, No.1, pp.27-36.

Ap, J. (1992). Residents' Perceptions on Tourism Impacts. *Annals of Tourism Research,* Vol. 19, No.1, pp.665-690.

Ap, J. & Crompton, J.L. (1993). Residents' strategies for responding to tourism impacts. *Journal of Travel Research,* Vol. 32, No.1, pp.47-50.

Aryanezhad , M .(2010). Travel Guide of Torqabeh-Shandiz. Mashhad, Research House Press.

Butler, R.W. (1980). The concept of a tourist area cycle of evolution: implications for management of resources. *The Canadian Geographer/Le Géographe canadien,* Vol. 24, No.1, pp.5-12.

Doxey, G. (1975). A Causation Theory of Visitor Residents Irritants: Methodology and Research Inferences. The Impact of Tourism, 6th Annual Conference Proceedings of the Travel Research Association. San Diego, pp.195-198.

Harrill, R. (2004). Residents' attitudes toward tourism development: A literature review with implications for tourism planning. *Journal of Planning Literature,* Vol. 18, No.3, pp.251-266.

ICHTO (2005). An Introduction to Torqabeh, Khorasan Razavi Province: Iran cultural heritage & Tourism office.

Jafari, J. Smith, V.L. & Brent, M. (2001). The scientification of tourism. Hosts and guests revisited: Tourism issues of the 21st century, pp.28-41.

Lee, T.H. (2013). Influence analysis of community resident support for sustainable tourism development. *Tourism Management,* Vol. 34, No.1, pp.37-46.

Lepp, A. (2007). Residents' attitudes towards tourism in Bigodi village, Uganda. *Tourism Management,* Vol. 28, No.3, pp.876-885.

Nicholas, L., Thapa, B., & Ko, Y. (2009). Residents' perspectives of a world heritage site e the Pitons Management Area, St. Lucia. *Annals of Tourism Research,* Vol. 36, No.3, pp.390-412.

Nunkoo, R., & Gursoy, D. (2012). Residents' support for tourism: An identity perspective. *Annals of Tourism Research,* Vol.39, No.1, pp.243-268.

Nunkoo, R. & Ramkissoon, H. (2011). Residents' satisfaction with community attributes and support for tourism. *Journal of Hospitality & Tourism Research,* Vol. 35, No.2, pp.171-190.

Nunkoo, R., & Ramkissoon, H. (2011). Developing a community support model for tourism. *Annals of Tourism Research,* Vol. 38, No.3, pp.964-988.

Pavlína, L.A. & Vogt, C. (2011). Residents' Attitudes toward, Existing and Future Tourism Development in Rural Communities. *Journal of Travel Research,* Vol. 51, No.1, pp.50-67.

Rastegar, H. (2010). Tourism Development and Residents' Attitude: A case study of Yazd, Iran. *Tourismos: An International Multidisciplinary Journal of Tourism,* Vol. 5, No.2, pp.203-211.

Sebele, L.S. (2010). Community-based tourism ventures, benefits and challenges: Khama rhino sanctuary trust, central district, Botswana. *Tourism Management,* Vol. 31, No.1, pp.136-146.

Spanou, E. (2007). The Impact of Tourism on the Sociocultural Structure of Cyprus. *Tourismos: An International Multidisciplinary Journal of Tourism,* Vol. 2, No.1, pp.145-162.

Statistics Center of Iran, Population and Housing Census (SCI). (2011). Retrieved September 2012 from Http://www.amar.org.ir/census/Population and housing. Accessed the 15 th of September, at 16:18

Vargas-Sánchez, A., Porras-Bueno, N. & Plaza-Mejía, M.D.L.Á. (2011). Explaining residents' attitudes to tourism: Is a universal model possible? *Annals of tourism research,* Vol.3 8, No.2, pp.460-480.

Zamani-Farahani, H. & Musa, G. (2008). Residents' attitudes and perception towards tourism development: A case study of Masooleh, Iran. *Tourism Management,* Vol. 29, No.6, pp.1233-1236.

Zamani-Farahani, H. & Musa, G. (2012).The relationship between Islamic religiosity and residents' perceptions of socio-cultural impacts of tourism in Iran: Case studies of Sare'in and Masooleh. *Tourism Management,* Vol. 33, No.4, pp.802-814.

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THE EFFECTS OF TOURISM DEVELOPMENT TOWARDS LIVELIHOOD SUSTAINABILITY OF THE ORANG ASLI AT THE KG.SG. RUIL, CAMERON HIGHLANDS

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The main objective of this study is to measure the level of livelihood sustainability of indigenous people at Kg. Sg. Ruil located at a tourist destination of Cameron Highlands, Malaysia. Several indicators measuring livelihood sustainability as developed by the United Nations Development Program are employed in this study. Among the indicators measured are human assets, financial assets, physical assets, social assets and the disruption or threat to the livelihood of indigenous people (Orang Asli). Face-to-face interviews involving a total of 110 respondents were conducted from October to December 2011. The results indicate that the development of tourism in Cameron Highlands positively impact the indigenous people in terms of increment in their human assets, financial assets, physical and social assets. They also managed to handle the threats that may disrupt their livelihood sustainability.

Keywords: *Sustainable livelihood, Orang Asli, tourism, Cameron Highlands.*

JEL Classification: *L83, M1, O1*

INTRODUCTION

The development of tourism industry impacts the communities in various ways including the indigenous people (Orang Asli for the case of Malaysia). Even though their involvement is too minimal and quite remote, the effects are felt by them. They are exposed to the numerous opportunities presented as a result of the development of tourism industry.

The effects are felt by indigenous people as some of the tourism areas developed, especially at remote locations are nature-based products and these locations are inhibited by them. For example, the Pahang National Park, Malaysia is an area inhibited by the Orang Asli community of Batek descent (Zanisah et al., 2009); while the Cameron Highlands, Pahang tourism area is of Semai descent. At international level, as reported by Dyer et al., (2003), the impacts of tourism development and the native communities are inseparable. This community benefits in terms of job opportunities as well as improvements in cultural understanding and assets.

The development of tourism industry and its impacts to local community have been frequently discussed by researchers. This is because positive and negative impacts are synonymous with any kind of development. Thus, researchers who study the impact of development introduced the sustainable development and sustainable tourism approaches in analyzing the impacts of a development on the local community hoping that the negative effects can be minimized; especially if the development directly affects the local community. It is hoped that tourism development will exhibit positive effects; may they be to the socio-economic and culture, physical or even the surrounding communities' environment (Amposta, 2009; Richins & Scarini, 2009).

One of the important impacts is the socio-economic impact whereby it is hoped that tourism industry development will be able to reduce the local community's poverty rate including the Orang Asli in Malaysia. Generally, this community has high poverty rate and limited access to education as reported by studies done by Caroline (2008).

In Malaysia, according to the Department of Orang Asli Affairs (JHEOA), the Orang Asli's achievement in community development is still unsatisfactory despite various programs undertaken for the past 40 years. Poverty level and destitution among the Orang Asli households are still high with almost 80 percent are living below the poverty line[2]. In fact 50 percent of them are still categorized as hardcore poor[3]. This situation may not be completely solved but being marginalized from development should be minimized. Even though they are involved in economic activities, their participation level is still low. However, the influence of modernity and their market oriented economic structure can be observed from assets owned by some community members such as radios,

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[2] Earning less than RM750, Economic Planning Unit, Malaysia
[3] Earning less than RM440, Economic Planning Unit, Malaysia

televisions, refrigerators, communication equipment and others as a study conducted by Dyer, et. al. (2003).

This impact is also enjoyed by the Orang Asli community at the Cameron Highlands where they have been long exposed to tourism and have been taking part in economic activities by selling jungle/forest products along the road leading to Cameron Highlands. In other words, they are starting to exhibit openness and accept tourism development into their lives. However, there are still others who reject development as reported by other researchers. They refused or limit the acceptance of tourism activities (Ryan, 1991; David, 2012). This rejection is related to the disruption of their social life (Mercer, 1994). Besides, there are worries that tourist arrivals will alter and destroy their culture especially when their homes become tourist attractions (Greenwood, 1989; Moowforth & Munt, 1998).

Despite these negative views, they need to recognize that tourism development especially at the indigenous communities' locations can help to reduce poverty level by the business opportunity available as a result of this economic development. This will ensure their livelihood sustainability. Realizing this fact, this paper intends to study the extent of tourism development in Cameron Highlands on livelihood sustainability of the Orang Asli community at Kg. Sg. Ruil; the only Orang Asli village situated at the centre of tourism development in Cameron Highlands, Malaysia.

This observation utilized several indicators for the livelihood sustainability framework of United Nation Development Programmed (UNDP, 2005). Discussion on study results is organized as follows: ii) study framework, iii) past studies, iv) methodology and study location, v) study results and vi) conclusion and implications.

RESEARCH FRAMEWORK

To live, various needs are to be fulfilled. According to Maslow theory (Maslow, 1943), each man will work to fulfill and will prioritize in their basic needs such as food, clothes and shelter before moving on to more complex needs. As such, various aspects/assets must be collaborated so that a man may live his life decently. The said assets are as shown in Table 1.

These assets and energy are used in generating income for living. Nonetheless, each individual may encounter problems in utilizing these assets. These problems may limit their ability in generating income. If these obstacles are handled with care, the community may be successful

in achieving sustainable livelihood; otherwise, it may worsen the community's living condition. These obstacles include natural disasters and disease outbreaks (Malleret & Simbua, 2004; Claire, 2010). The sustainable concept framework discussed above is as described in Figure 1 (Allison & Horemans, 2006).

Table 1 Livelihood Indicator

Element	Details of the Element
Human	Education, training, work experience, knowledge, skills
Social	Family relationship, relationship within community
Natural	Land, water source, forest product, biodiversity
Physical	Transportation, road infrastructure, technology
Financial	Savings, credit and borrowings/debts.

Source: Harrison (2005)

From Figure 1, the availability of policies, institutions and processes as well as their accessibility do influence the community's ability in owning assets which do eventually impact their livelihood sustainability. All these three items are found to be related to the thread aspect that will threaten a community's sustainability, as well as the ability to generate strategies to achieve life goals (e.g. increased income, increased welfare, freedom or able to manage life threats, sufficient food and increased empowerment and social inclusion).

This discussed framework is often used in researches that deal with island community's sustainable livelihood such as by Harrison (2005), Claire (2004), Bruce et al. (2007), Bennett (2005), Teresa (2008) and Cinner et al., (2010).

Figure 1 Sustainability Livelihood Framework
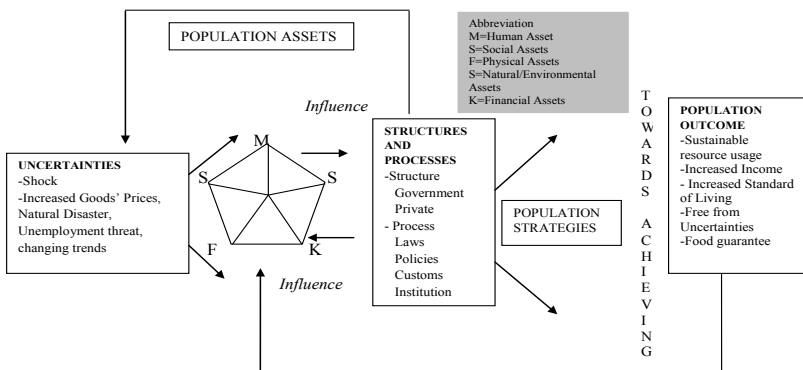
Figure 1. Sustainability Livelihood Framework

Source :Allison and Horemans (2006)

RESEARCH REVIEW

The aboriginal community related researches involve various aspects such as culture, socio-economic and their beliefs. Monk (1974) in his study on the Australian aborigines compares the ecology of six aborigines groups. The study finds that the characteristics of the people, available economic opportunities and the extent of government's intervention are important factors influencing the socio-economic polarity and the differences in the primitive community's main characteristics.

Study on the indigenous people has also being conducted when Malaysia was previously known as Malaya. Skeat and Blagden (1906) are among the earlier researchers who studied Orang Asli in Malaya. They briefly discuss on the Orang Asli communities in Peninsular Malaysia. The research discusses on the Orang Asli's cultures, physical characteristics and livelihoods.

Kayoko (2012) shows that ethnic tourism provides source of income to the local minority community. However, the income earnings of the youth and women are higher than that of their elders causing gaps that disrupt their patriarch social system.

Alison (2004) finds that with the discovery of indigenous people in Thailand, tourists are becoming more appreciative of their culture based on five core dimensions, namely observing their way of life, environment, authenticity, personal interaction and informal education.

Ryan (2002) reports the results of his study on tourists visiting Central Australia. He finds that knowing the Australian aboriginal culture is less attractive compared to other activities. These results confirmed that only researchers, i.e. a minority group of tourists visiting Australia, show high level of interest in the aboriginal culture.

Dyer et al., (2003) shows the positive effects of tourism which include the revival of the Djabugay culture, job opportunity, ability of working within own community, cross cultural understanding and better welfare. Nonetheless, there are also weaknesses such as declining of the Djabugay culture, exploitation of the Djabugay, tourist-Djabugay minimum interaction and limited resources are also discovered.

Buultjen et al., (2010) observes the involvement of the indigenous people in tourism at the Weipa, north-west of Queensland and the role of Comalco's bauxite mining, currently known as Rio Tinto Aluminum. However, this mine is indirectly involved; only as a facilitator working with some regional indigenous organizations.

Thus, clearly from past researches, the livelihood of indigenous people including in Malaysia are experiencing changes especially from the economic aspect as a result of the said country's economic growth. Economic development projects have directly helped in increasing their living standard and livelihood sustainability. As discussed earlier, this study intends to look into the effects of development especially tourism development on the Orang Asli livelihood sustainability at Kg. Sg. Ruil, Cameron Highlands.

METHODOLOGY AND STUDY LOCATION

Methodology and Data Collection

The main method used in this study is field survey/questionnaire. The survey is divided into seven sub-sections, where five of the subsections are pertaining to the main items discussed above. The other two subsections deal with threats/uncertainties and respondent profile. 110 respondents are selected for this study and they are 10 percent of the study location's population. The information obtained is analyzed by using a statistical package for Social Science (SPSS). The analysis employed in this study is the frequency distribution analysis. This

analysis is based on the respondents' perception in regard to the items and uncertainties previously discussed. Additionally, the mean analysis method is also employed.

Background of Study Location and the Cameron Highlands' Orang Asli (OA)

This study concentrates on the Orang Asli village at SgRuil. This place is located about 3 kilometres from the town of Brinchang; and is the nearest OA community's settlement to town centre, please refer Figure 2. It is located approximately 500 meters from the main road leading to Brinchang. This village is inhabited by about 1,140 people with 146 families. It is headed by a *batin*, Encik Kadir a/l Latif.

Figure 2 Study Locations and Border of Cameron Highlands
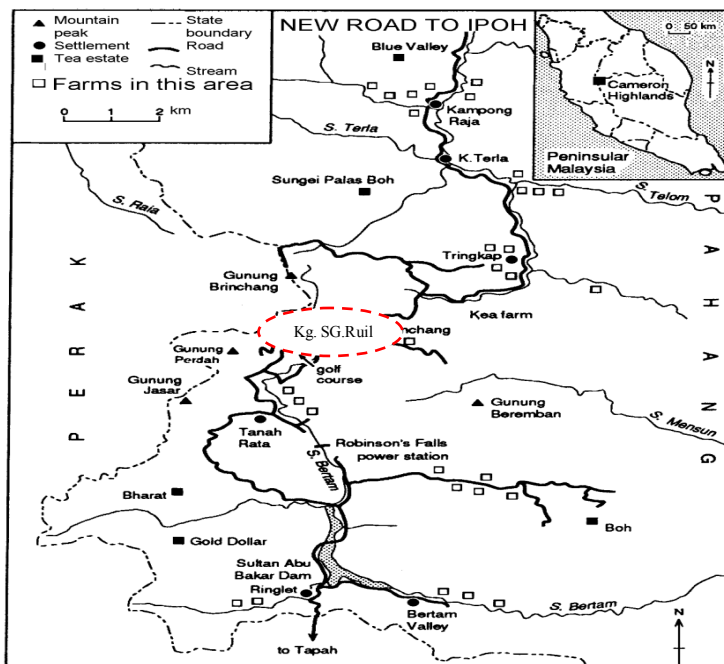
Location wise, the Kg. Sg. Ruil is located near to the town centre and the community is anticipated to be directly affected with positive outcomes as a result of development especially from the tourism sector. These positive impacts are expected to alleviate their standard of living even though they do not embrace all the important elements in the livelihood sustainability indicators as adopted by UNDP (2005), Harrison (2005); Claire (2004); Bruce (2007); and Cinner et al., (2010). This is because the community is not wealth driven. Their emphasis is on families, cultures and happiness/pleasure (Kadir, 2011).

The location of the village which is next to the Cameron Highlands Orang Asli Development Department (JAKOA, previously known as JHEOA) brings in more benefits to the village as compared to other OA's villages such as Kg. Sg. Ubi, Kg. Boh, Kg. Sg. Susu and others. Generally, there are 27 OA villages in Cameron Highlands with a population of approximately 6,100 people (JAKOA, 2011).

STUDY RESULTS ON THE LIVELIHOOD SUSTAINABILITY

This section discusses in detail the assets that echo the livelihood sustainability of the Orang Asli's community at Kg. Sg. Ruil, Cameron Highlands. We will begin with brief discussion on the respondents' background.

Background of Respondents at the Kg Sg Ruil, Cameron Highlands

The respondent profile of this study is as depicted in Table 2. Based on the table, it is found that the number of respondents in terms of gender is almost balance with male at 42.7 percent and female at 57.3 percent.

From the total respondents, 26.1 percent are heads of household (KIR) and 73.9 percent are members of household (AIR). However, in obtaining accurate information, the selected AIR are those who represent that household. Majority of them aged between 21 and 30 (59.9 percent), 31-40 (20.0 percent) and above 41 years old (20.0 percent).

In terms of marital status, the respondents are quite balance with singles at 46.6 percent and 45.6 percent are married. The rests are in the widow/widower and divorced category.

About 54.3 percent of respondents are from nuclear families while 45.7 percent are of extended families. From these statuses, it shows that

more than half of married family members are still living with their families.

Table 2 Respondent Profile

Respondent Profile	Percentage
Gender	
Male	42.7
Female	57.3
KIR/AIR Status	
KIR	26.1
AIR	73.9
Age	
21-30	59.9
31-40	20.0
41-50	10.0
61 and above	10.0
Marital status	
Single	46.6
Married	45.8
Widow/widower	2.3
Divorced	1.5
No response	3.8
Family type	
Nuclear family	54.3
Extended family	45.7
Original villagers	
Yes	87.6
No	12.4
Reason for moving	
Marriage	8.1
Employment	4.3
Religion	
Ancestor	14.5
Islam	33.6
Christian	35.1
Hindu	0.8
Others	16.0

Majority of the population (87.6 percent) are original settlers/villagers while the rests are outsiders settling in Kg. Sg. Ruil. The reasons for this migration are marriage (8.1 percent) and employment (4.3 percent).

Majority are Christians (35.1 percent), Muslims (33.6 percent), ancestor religion (14.5 percent), Hinduism (0.8 percent), and others (16.0 percent).

Human Assets

Human assets comprise the aspects of education, work experience and skills as well as knowledge possessed.

From Table 3, it is found that majority of the Orang Asli community received some types of education may it be a formal education (67.8 percent) and informal education (19.2 percent). Meanwhile, 13 percent of the respondents have never attended school before. Nonetheless, only 1.5 percent of respondents have higher education level.

Out of 67.8 percent who received formal education, 11.5 percent received primary school education, 54 percent with secondary school education and only 0.8 percent received higher secondary education level. From these statistics, it can be concluded that even though this community receives education, their education level is still low.

Out of 67.8 percent who have formal education, only 64.1 percent provided responses on the factors that preventing them from furthering their studies. Among the main factors are financial (25.5 percent), not interested (21.4 percent), unsatisfactory academic performance (9.9 percent) and family pressure/inability (7.6 percent).

From the aspect of work experience, it is found that majority of respondents (59.6 percent) have permanent jobs. Most of them are in the tourism sector (29.0 percent), followed by private sector (16.8 percent) and government (9.2 percent). Only 4.6 percent of total respondents are self-employed.

It is found that for those who are employed, 15.9 percent of them are with income of around RM500 and below, 31.3 percent with income between RM501 and 1,000, 10.7 percent with income between RM1,001 - 1,500 and 1.5 percent with income between RM1,500-2,000. Generally, those without permanent jobs have income below RM440, which may be classified as hard core poor.

Even though substantial number of the Orang Asli are without permanent jobs and have low income, many efforts toward improving their income can be done. This is because they have many skills that be combined in developing the community. Among the skills are reading and writing, proficient in English, aborigines and Malay languages as well as cooking skills; it is found that more than 50 percent of the community members are good at them.

The Orang Asli also have other skills such as arts (36.6 percent), crafts (28.3 percent), farming (47.3 percent), livestock-rearing (39 percent), hunting (31 percent), tracking (26.7 percent), recreational sports (43.6 percent), technical skills and traditional medicine (25.2 percent) and others.

Table 3 Summary of Education Level, Work Experience and
Skills as Well as Knowledge Possessed by
the Orang Asli Respondents

a) Education

Education	Percentage
Education Level	
Never schooled	13.0
Informal education	19.2
Primary school	11.5
Secondary school	54.8
University/college	1.5
Highest Certificate	
None	13.0
Primary school	11.5
LCE/SRP/PMR	29.8
MCE/SPM/SPMA	15.2
SPM	9.0
STPM/Matriculation	0.8
Skill certificate	19.2
Reason for not furthering studies	
Financial difficulty	25.2
No interest	21.4
Unsatisfied academic performance	9.9
Family pressure	7.6

b) Work Experience

	Percentage
Primary Occupation	
Permanent	59.6
Temporary	40.4
Type of Permanent Job	
Private	16.8
Government	9.2
Tourism sector worker	29.0
Self employed	4.6
Estimated Average Salary	
Below 440	40.6*
Below 500	15.9
501-1000	31.3
1001-1500	10.7
1501-2000	1.5

c) Knowledge and Skills

Skills	Highly un-skilled	Un-skilled	Skilled	Skillful	Highly skillful	No. of response	Percent of response
Reading and writing	9.9	16.0	9.9	19.1	39.7	94.6	68.7
Proficient in Malay language	6.1	5.3	9.2	32.1	46.6	99.3	87.9
Proficient in English	27.5	25.3	21.4	20.6	10.7	100	52.7
Proficient in Mandarin/Tamil	58.8	7.6	6.1	3.1	16.0	91.6	25.2
Proficient in Indegenous language	15.3	3.8	0.0	8.4	66.4	93.9	74.8
Art	34.4	3.8	6.9	9.9	19.8	74.8	36.6
Craft	36.6	3.8	6.9	8.4	13.0	68.7	28.3
Agriculture/farming	42.0	2.3	13.7	11.5	22.1	91.6	47.3
Livestock-rearing	48.1	3.8	12.2	9.2	17.6	90.9	39.0
Hunting	53.4	6.9	9.2	5.3	16.8	91.6	31.3
Tracking	56.5	5.3	6.1	4.6	16.0	88.5	26.7
Technical/vocational (radio, house, motor repairs)	55.0	7.6	9.2	6.1	9.9	87.8	25.2
Traditional medicine	60.3	3.1	4.6	7.6	13	88.6	25.2
Entrepreneurship (business)	49.6	5.3	12.2	7.6	12.2	86.9	32
Tourism related matters (jungle tracking, caddy)	46.6	4.6	9.2	6.1	18.3	84.8	33.6
Sports/recreational activities	36.6	6.1	9.2	15.3	19.1	86.3	43.6
Cooking skill	26.0	4.6	7.6	16.8	27.5	82.5	51.9

Social Assets

From the social assets perspective (Table 4a-c), this study looks into family relationship and relationship within the community. To the Orang Asli community, relationships among families and community members are strong despite prevailing problems. For instance, for health problem, majority of them find that parents, siblings and relatives are persons who support and help them (around 50 percent). For financial problem, parents and spouse (34-36 percent) are their place of reference; and so does for emotional problem (40-42 percent). Among the members of community, neighbours and friends are the persons to tell about their health, financial and emotional problems.

The close family and community relationships among the Orang Asli community are more prevalent when it is found they are very active in communal activities. Around 76-83 percent of the community members state that they attend the various functions organized by their community such as weddings, religious activities, community cooperation activities, visiting the sick as well as attending funerals. Social activities and public speeches are also attended by the community (61-65 percent). Generally they also trust their neighbours and family members in taking care of their material assets (homes).

They frequently visit each other (Table 4d). Relatives, siblings and parents are among family members who are frequently visiting them, i.e. at about 8-16 times annually. Meanwhile, parents, grandchildren and relatives are among family members frequently visited. On the average, in a year they make between 10-15 times of such visits. Among community members, community leaders are the person who always visits or being visited by them. The numbers of such visit are between 16-20 visits annually. This information clearly indicates that the Orang Asli community members are very close to each other.

Table 4 Family Relationship, Relationship within Community

a) Those who are concern on your on health, financial and emotional problems

Family members	Health	Financial	Emotional
Spouse	39.7	36.6	40.5
Children	42.7	31.3	32.1
Parents	50.4	45.8	42.0
Grand-children	18.3	14.5	11.5
Siblings	49.6	31.3	37.4
Relatives	54.2	26.7	33.7
Community members			
Friends	51.1	31.3	42.7
Neighbours	59.5	34.3	36.6
Community leader	22.1	23.7	14.5

b) Community activities participate

Community activities	%
Weddings	80.9
Religious activities	76.3
Participate in community cooperation activities	82.4
Visiting the sick/attending funeral	83.2
Social activities/entertainment	61.8
Attend public speeches	64.9

c) House Guarding : Trusted

Concern	%
Neighbors	49.6
Family members (non-neighbors)	50.4

d) Those make visits and being visited and the frequency

Family members	Visiting You					You visit				
	Daily	Weekly	Monthly	No. in a year	Never	Daily	Weekly	Monthly	No. in a year	Never
Parents	19.8	15.3	5.3	8.4	3.8	25.2	3.8	11.5	10.7	5.3
Children	31.3	3.8	4.6	3.1	3.8	26.0	3.1	4.6	4.6	4.6
Grand-children	13.0	6.9	2.3	5.3	6.1	21.4	14.5	14.5	15.3	2.3
Siblings	26.0	6.1	9.2	11.5	1.5	13.7	4.6	4.6	6.9	5.3
Relatives	20.6	13.7	15.3	16.0	1.5	28.2	7.6	6.9	12.2	3.1
Community members										
Friends	36.6	15.3	4.6	9.2	3.1	36.6	16.0	7.6	9.2	4.6
Neighbours	34.4	16.8	6.9	8.4	3.8	35.1	17.6	6.9	10.7	4.6
Community leaders	0.8	4.6	7.6	20.6	16.0	2.3	2.3	3.1	16.8	22.1

Physical Assets

In terms of physical assets, the Orang Asli community at Sg. Ruil is provided with various basic physical facilities such as water, electricity, roads, public phones, transportation, hospitals/clinics, sundry shops, Muslim prayer place (*surau*) and community hall.

More than 50 percent of the community states that the facilities provided are improving. Only between 0.8-7 percent of the respondents say that they are deteriorating and the rests say that there are no changes.

Even though the facilities are available, improvements are still needed and can be further upgraded per the respondents' suggestions on roads and public phones. Please refer Table 5a and 5b.

Table 5 Supply of Physical Infrastructure Facilities

a) Level of Basic facilities

Basic Facility	Percentage	Changes		
		Improving	No changes	Deteriorating
Water supply	95.4	60.3	26.7	6.9
Electricity	89.3	64.9	22.9	3.1
Roads	90.1	48.9	24.4	19.8
Public phones	83.2	40.5	30.5	14.5
Transportation	80.2	45.8	28.2	6.1
Hospital/clinics	72.5	52.7	21.4	0.8
Sundry shops	87.8	55.7	32.8	1.5
Surau (Muslim prayer place)	85.5	64.1	19.1	0.8
Community hall	82.4	66.4	20.6	0.8

b) Suggestion to improve basic facilities

Facilities	Percentage
Roads	19.8
Water supply	6.1
Field/playground	9.2
Public phones	11.5
Community hall	1.5
Homes	7.6
Public toilets	1.5
Drainage	0.8

Financial Assets

In terms of financial assets, only 45 percent of the respondents answer the question. Most of them have little savings. Only 13 percent of them have savings of around RM1,000. The rests have less than RM1,000 in their savings. These show that the community livelihood is quite fragile especially if they were to face with unexpected events such as chronic illnesses and accidents.

From debt perspective, only 12.5 percent of the respondents have debts. The purposes of borrowings are to build homes (3.8 percent) and purchase of vehicles (6.1 percent). This low amount of borrowing prevails as the Orang Asli community dislike having debts (Kadir, 2011); besides

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there is high level of support among themselves. Thus, the concept of debt/borrowing does not exist among them. This is further proven when family is one of the sources of borrowings. Besides, there are also borrowings from financial institutions (9.9 percent) and neighbors (0.8 percent). Majority have installments as their repayment method, refer Table 6.

Table 6 Savings, Credit and Debts/Borrowings

a) Savings

Savings	%
below 100	8.4
101-500	13.7
501-1000	8.4
1001-1500	3.1
1501-2000	5.3
2501-3000	2.3
3001 above	2.3

b) Credit and Debt

Debt	%
Borrowers	12.5
Purpose	
Built homes	3.8
Purchase of vehicles	6.1
Borrowing source	
Family	1.5
Neighbors	0.8
Financial inst.	9.9
Repayment method	
Monthly installment	10.7
Lump sum payment	0.8
Debt payment problem	0.8

Natural Assets

From the natural assets perspective, that is land ownership, majority of them are without land. This is because there is no individual land ownership but instead their land is gazzetted by the government to the community. The purpose of gazetting is to avoid their community land being sold by them.

Meanwhile, for natural assets ownership, forests products are their main source of income. Generally, they are allowed to procure forests products as their income source. There is no restriction imposed on them in procuring forest products such as rattan, stink bean (petai), bamboo and others. Nonetheless, cutting down of forest vegetation is allowed (Kadir, 2011).

Threats to Orang Asli Community

Table 7 explains study results on the community's threat aspect. It is found that majority of the dwellers are facing flood threat (51.6 percent), prolonged drought (52.6 percent), landslides (76.4 percent) and disease outbreaks (52.1 percent). However, they state that these threats seldom happened.

Table 7 Threats to Orang Asli Community

Threats	Existence of Threats		Seldom
	Yes	No	
Flood	51.6	48.4	51.6
Prolonged drought	52.6	47.4	52.6
Landslides	76.4	23.6	76.4
Disease outbreaks	52.1	47.9	52.1

CONCLUSION AND STUDY IMPLICATIONS

Overall, the various developments undertaken by the government do impact the Orang Asli community livelihood at Sg. Ruil village. This is clearly seen through the assets owned by them. In this study, observations on 5 assets are conducted namely human assets, natural assets, financial assets, physical assets and natural assets. However, it cannot be denied that adequacy on the mentioned assets are still lacking. This means that the government and responsible bodies must play roles in developing the sustainable livelihood of Orang Asli community. Summary and proposals are as below.

Indicator	Results of Study and Proposal	
	Result	Proposal
Human Assets	• In terms of education there is progress. Around 67.8 percent of respondents have received formal education and 19.2 percent of informal education. However, the percentage of higher education is still low at 1.5 percent.	Improve on the attainment of higher education should become an agenda. This allows them to be redeployed to their original community and together with the government develop the Orang Asli community. Skills acquired by the community are to be utilized in the development of tourism industry.

Natural Assets	• No private land • May freely utilize forest resources but the yield is declining due to various factors.	Joint development between developer and Orang Asli community must be undertaken and supervised by the parties responsible on this community. Supervision by the JAKOA is still relevant and needed.
Social Assets	• Relationship within the community is good may it be among friends, neighbors and others.	Closeness that brings about economic stimulation must be considered. This relationship can be the community's strength in developing their economy.
Physical Assets	• Public facilities are improving even though the quality and accessibility need further upgrading. However, there are existing physical facilities as the village is within town area.	Several facilities requested by the community must be looked into. This may improve the community's sustainable livelihood. Among which are roads leading to the community, supply of clean water, children playground/field, public phones, community hall, houses, public toilets and drainage.
Financial Assets	• The community's income is still quite low. Around 15.9 percent of respondents have income of RM500 and below, 31.3 percent with income between RM501-1,000, 10.7 percent with income between RM1,001-1,500 and 1.5 percent with income RM1,500-2,000. Those without permanent jobs are generally with income below RM440 and may be classified as hardcore poor.	Having permanent jobs should be the agenda in developing this community. Savings habit must be instilled among them.
Threats	• Safe from uncertainties or threats such as flood, drought, landslides and disease outbreaks.	Improve on health and disease control aspects, provide a more organize clean water distribution system; and safer and organized homes redevelopment especially near the landslide prone areas.

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Economic development which is mainly related to tourism development at Cameron Highlands have generated various benefits directly or indirectly to the settlement of Orang Asli at Sungai Ruil. Direct benefit is mainly in the form of availability of new employment opportunities whereas indirect benefit is more accessibility to better infrastructure and public amenities. Thus, any development project at tourism destination in Cameron Highlands such as development of hotels and other tourism products are highly welcomed in order to improve the living standard and quality of life of the minority group of Orang Asli within this area. However, priority should be given to projects that incorporate the concept of sustainable development in a way the negative impacts on the environment must be minimized. At the same time such projects must be well planned and properly administered to ensure their positive impacts are significantly received by the Orang Asli.

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REFERENCES

Alison, J.M. (2004). Tourists' appreciation of Maori culture in New Zealand. *Tourism Management*, Vol. 25, pp.1-15.

Allison, H. & Horemans, E. (2006). Putting the principles of the Sustainable Livelihoods Approach into fisheries development policy and practice. *Marine policy*, Vol. 30, No.6, pp757-766.

Amposta, J.B. (2009). Looking for environmental excellence in tourist destinations. *Tourismos*, Vol. 4, No.2, pp.91-106.

Bennett, E. (2005). Gender, fisheries and development. *Marine policy*, Vol. 29, No.5, pp.451-459.

Bruce C. Glavovica. (2007). Confronting Coastal Poverty: Building Sustainable Coastal Livelihoods In South Africa. *Ocean & Coastal Management*, Vol. 50, pp.1-23.

Buultjens, J., Brereton, D., Memmott, P., Reser, J., Thomson, L. & O'Rourke, T. (2010). The mining sector and indigenous tourism development in Weipa, Queensland. *Tourism Management*, Vol. 31, pp.597-606.

Caroline, U. (2008). Social Capital, Collective Action and Group Formation: Developmental Trajectories in Post-socialist Mongolia. *Human ecology*, Vol. 36, No.2, pp.175-188.

Cinner, J.E., McClanahan, T.R. & Wamukota, A. (2010). Differences in livelihoods, socioeconomic characteristics, and knowledge about the sea between fishers and non-fishers living near and far from marine parks on the Kenyan coast. *Marine Policy*, Vol. 34, No.1, pp.22-28.

Claire, I. (2004). *Alternative Sustainable Livelihoods For Coastal Communities- A Review Of Experience and Guide to Best Practice*. The World Conservation Union.

Claire, I. (2010). Alternative sustainable live-lihoods for coastal communities: A review of experience and guide to best practice. The World Conservation Union 2004. Retrieved at http://mpra.ub.uni-muenchen.de/22680/1/The_Impact_of_Marine_ParkGazettement.pdf.

David, L. (2012). Competitiveness of tourism regions in Hungary. *Tourismos,* Vol. 7, No.2, pp.495-502.

Dyer, P., Aberdeen, L. & Schuler, S. (2003). Tourism impacts on an Australian indigenous community: a Djabugay case study. *Tourism Management*, Vol. 24, No.1, pp.83-95.

Greenwood, D.J. (1989).Culture by the pound: an anthropological perspective on tourism as cultural commoditization. *The anthropology of tourism*, Vol. 2, pp.171-185.

Harrison, P. (2005). A Socio-economic Assessment of Sustainable Livelihoods Regimes for Communities of Mnazi Bay Ruvuna Estuary Marine Park, Tanzania. The World Conservation Union.

JAKOA (2011). Unpublished Information: The Orang Asli Welfare Department, Kuala Lumpur.

Kadir (2011). Interview with Kg SgRuil'sTok Batin (Village Head) at Cameron Highlands, Pahang, in October 2011.

Kayoko, I. (2012). The impact of ethnic tourism on hill tribes in Thailand. *Annals of Tourism Research*, Vol. 39, No.1, pp.290-310.

Malleret, D. & Simbua, J. (2004). *The occupational structure of the Mnazi Bay Ruvuma Estuary Marine Park communities*. Nairobi, IUCN.

Maslow, A.H. (1943). A theory of human motivation. *Psychological Review*, Vol. 50, No.4, pp.370-396.

Mercer, D. (1994). Native peoples and tourism: conflict and compromise. In W.F Theobald (Eds.), *Global tourism: The next decade* (pp. 124-145), Oxford: Butterworth-Heinemann.

Moowforth, M. & Munt, I. (1998). *Tourism and sustainability: New tourism in the third world*. Routledge, London.

Monk, J.J. (1974). Australian Aboriginal Social and Economic Life: Some Community Differences and Their Causes. In L.J. Evenden and F.F. Cunningham (Eds.), *Cultural Discord in the Modern World, B.C. Geographical Series* (pp. 157-174)*,* Vancouver: Tantalus Press,.

Richins, H. & Scarinci, J. (2009). Climate change and sustainable practices: A case study of the resort industry in Florida, *Tourismos*, Vol. 4, No.2, pp.107-128.

Ryan, C. (1991). *Recreational Tourism : A Social Science Perspective*. London, Routledge.

Ryan, C. & Huyton, J. (2002). Tourists and aboriginal people. *Annals of Tourism Research*, Vol. 29, No.3, pp.631-647.

Teresa C.H. Tao. (2008). Tourism as a sustainable livelihood strategy. Department of Geography.

United Nations Development Programmed (UNDP). (2005). Sustainable Livelihoods Approaches. Guidance Note 10. Http://www.eldis.org/vfile/upload/1/ document/0901/section2.pdf.

Skeat, W.W. & Blagden, C.O. (1906). *Pagan races of the Malay Peninsula* (Vol. 1). Macmillan and Company, limited.

Man, Z., Zahari, N.F. & Omar, M. (2009). Kesan ekonomi pelancongan terhadap komuniti batek di Kuala Tahan, Pahang/Effects of Tourism Economy on Batek community at Kuala Tahan, Pahang. *Jurnal Sains Sosial dan Kemanusiaan*, Vol. 4, No.1, pp.1-12.

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SPATIAL STRUCTURE OF TOURISM: AN APPLICATION OF NEW ECONOMIC GEOGRAPHY IN SELECTED COUNTRIES

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Assessing the spatial structure of tourism in selected countries during the period 1995-2010 is the main purpose of current paper. To reach this, through applying new economic geography, some spatial factors affecting on tourism agglomeration have been evaluated using panel data. The results of model estimation indicated that the economies of scale and the tourism cost are the most important factors in determining tourism agglomeration in selected countries. In addition, growth and development level of countries increase the tourism agglomeration in these countries. Also, based on this study results, maintain credibility in satisfaction of tourists increase the tourism agglomeration.Overall, the results of this study indicate the confirmation of new economic geography factors in determining tourism agglomeration, while previous studies are just considered the economic factors affecting on tourism agglomeration

Keywords: *Tourism, New Economic Geography, Panel Data.*

JEL Classification: *L83, M1, O1*

INTRODUCTION

Rapid growth of tourism industry after 1950s is one of the main and important characteristic of tourism industry. So, according to statistics of World Tourism Organization (WTO, 2012), the number of tourists across the world was 25.3 million in 1950 which increased into a noticeable number 940 million individuals in 2010. This represents about 38 times increasing of tourists during mentioned time. Figure (1) presents the trend of the number of international tourists in the world during 1995-2010.

Figure 1 The trend of the number of international tourists in the world during 1995-2010
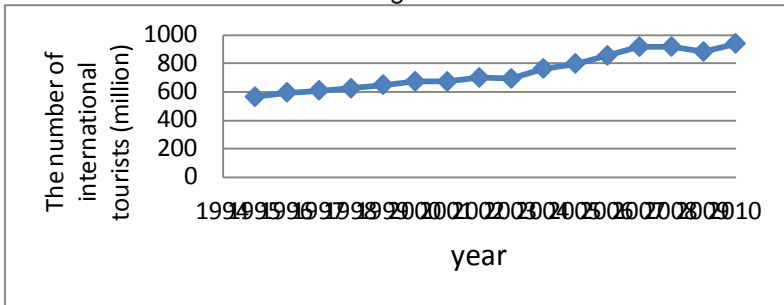
As can be seen figure (1) generally indicates the upward trend of international tourist numbers. While according to the statistics of World Tourism Organization, tourism activities and its incomes are not distributed equally across the world. Certainly we can say that the share of developed countries in tourism income is higher than the developing countries (WTO, 2012). For more reviews, figure (2) presents spatial structure of tourism activities for 2010.

Figure 2 Spatial Structure of tourism activities for 2010
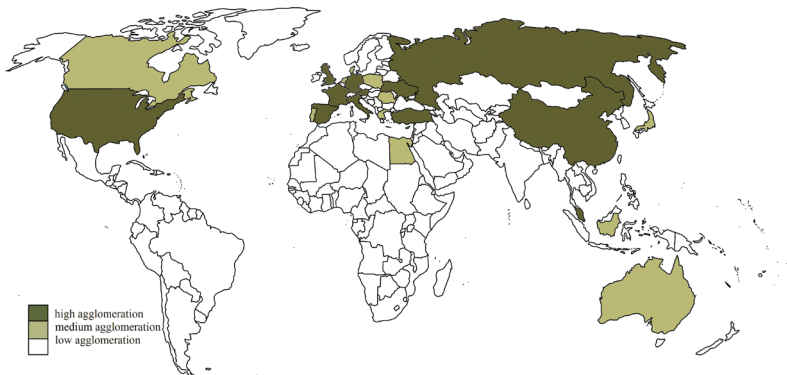
In figure (2), numbers of tourists higher than 15 million is considered as high tourism agglomeration, 5 to 15 million as medium agglomeration and lower than 5 million tourists as lower agglomeration.
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As observed in this figure, developed countries like France, United States, Italia, Spain, Canada, Austria and Portugal are in the category of high and medium tourism agglomeration in 2010.

Table 1 The number of international tourists, based on market size during the period 1995-2010

GDP (milliard dollars)	Time	Number of tourists (persons)
Low income (lower than 100)	1995- 2000	15333 - 7420333
	2000- 2005	8333 - 11982667
	2005-2010	30000 - 8479833
Medium income (100-500)	1995- 2000	916166 - 20010500
	2000- 2005	681500 - 22143167
	2005-2010	224166 - 21189833
High income (higher than 500)	1995- 2000	3790833 - 68246000
	2000- 2005	2949333 - 75645500
	2005-2010	4945833 - 77897833

Source: Present research

A Noticeable point about spatial structure of world economic activities is that some countries without any natural advantages have high economic activities and some other has poor economic activities despite higher natural advantages. So it seems some factors other than natural advantages can also determine the extent of economic activities in an area (Cirannek, 2009). Geographical variables are the factors among these which Krugman (1991) investigated them in the context of New Economic Geography (NEG). In framework of new economic geography (NEG), location has a close relationship with firm' profitability and in this regard the firms are trying to place near the markets (Krugman, 1999). Obviously, proximity to consumer markets increases economic activity (Farmanesh, 2009). In terms of spatial distribution of tourism activities, it seems that in addition to factors like accessing to sea, appropriate climate, historical works in countries with high tourism agglomeration, accessing to larger markets, economies of scale, tourism costs and level of development are important. In this regard, tables (1) and (2) present the

number of international tourists, respectively, based on market size and development level during 1995-2010.

As can be seen in table (1), during time period of 1995-2010, the number of tourists is higher in countries with larger market (GDP). So it seems that economies of scale have positive effect on spatial distribution of tourism activities. Also, according to table (2), tourism agglomeration in higher developed countries is higher which indicates the decisive role of development level on tourism activities distribution.

Table 2 The number of international tourists, based on development level during the period 1995-2010

Level of development (HDI)	Time	Number of tourists (persons)
Low development (lower than 0.45)	1995- 2000	15333 - 891000
	2000- 2005	8333 - 1017167
	2005-2010	30000 - 1425333
Medium development (0.45-0.65)	1995- 2000	22166 - 24986333
	2000- 2005	20000 - 37123167
	2005-2010	11833 - 10960167
High development (higher than 0.65)	1995- 2000	77663 - 68246000
	2000- 2005	67833 - 75645500
	2005-2010	98833 - 77897833

Source: Present research

Regarding to the lack of equal distribution of tourism activities in the world, assessing the spatial structure of this important activity is essential. Specifically the question is that why the tourism activities are unequally distributed? To reply this question, some new economic geography factors along with economic factors are also considered and tourism agglomeration function in selected countries during the time series of 1995-2010 is estimated based on new economic geography model by using Panel model.

It is necessary to mention this important issue that a study which considers the spatial structure of world tourism is not yet observed. But there are several studies about the estimation of tourism demand. An example can be Akis (1998) pointed out who examined the relationship

between Turkey tourism demand and national income of origin countries and also the relative prices by using the time period information of 1930-1980. The results of this research indicate the existence of a negative relationship between Turkey tourism demand and relative prices and also a positive relationship between the demand and national income of origin countries. Furthermore, through using Ordinary Least Square (OLS), Halicioglu (2004) estimated Turkey tourism demand function through time series data of 1960-2002 by using Autoregressive distributed lag model (ARDL) and indicated that income is a significant variable in explaining the number of tourists' arrival into Turkey. Garin (2007) estimated Spain tourism demand function by using Panel data of 17 Spain destinations during time series of 1991-2003 and reached this conclusion that tourism demand has high dependency to the former period demand, relative prices and transportation cost to travel between the origin and the destination. Chaiboonsri and Chaitip (2009), by using the cointegration and unit root methods in Panel data, modeled the tourism demand in Thailand during 1986-2007 and indicated that Gross Domestic Product (GDP) growth in Asian markets increases the tourism demand for Thailand. Yang (2012) evaluated the relationship between agglomeration and development of tourism for 31 provinces of China during 2000-2009. Through using Panel data, Yang concluded that tourism industry agglomeration has a positive effect on tourism development. Villalobos-Céspedes, et al. (2012) analyzed the influence of socio demographic and travel indicators on international demand for natural-based tourism in Costa Rica. The results obtained from this research show the favourable influence on demand of variables such as family, country of origin, providing orientation for policies and strategies of the nature-based tourism in Costa Rica, as well as indicators for other countries interested in developing this sector. Petrevska (2013) estimated tourism demand by using two methods including the method of exponential smoothing and the Box-Jenkins methodology. The result of the research is a medium-term estimation of foreign tourism demand for destinations in the Former Yugoslav Republic of Macedonia (FYROM) by the end of 2014.

In the rest of the paper and after the introduction, in the second part, a theoretical background is presented. Third section is devoted to specify and estimate the model and analyze the results. Fourth part presents the summery and conclusion. Resources and references are presented in the final.

LITERATURE REVIEW

During two last decades, economic activities distribution in space was considered as New Economic Geography (NEG). Economic new geography has been developed by neoclassical economists (krugman, 1991) and its topic is unequal distribution of economic activities as the outcome of universal processes of agglomeration (Boschma and Frenken, 2006). Generally, causes of agglomeration has two natures; in primary nature, it means relative advantageous (natural advantageous, resources, supplies, infrastructures, climate and so on) and in secondary nature of agglomeration which is developed by New Economic Geography models (Fujita and Mory, 2005), pecuniary externalities (like Market Size) and non-pecuniary externalities (like knowledge) are discussed (Marques, 2004). So agglomeration cumulative causation is formed by using NEG elements. In context of new trade models and also new economic geography, main infrastructure and assumptions of agglomeration cumulative causation include: 1.Increasing Returns of Scale (IRS), 2.Imperfect competition market structure, 3.Trade costs, 4.Firm endogenous location and 5.Demand endogenous location. These four assumptions create home-market effect (HME) of Krugman (1980) which have an important role in creating the agglomeration. In summary, we can say that areas with higher demand for industries are tended to larger industrial section because of home-market effect. Therefore, agglomeration by Circular Causation causes agencies place near the big markets.

Also, Cluster Theory can provide a conceptual framework for a better understanding of the complex agglomeration (Porter, 1998). Porter (1998) defines a cluster as: "a geographic concentration of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition." the larger the number of firms in one region, the more the firms can benefit from easy access to raw materials and local markets; therefore, firms tend to cluster geographically (Chen et. al, 2008). Also, Firms tend to agglomerate where the regional market size is large (Chen et. al, 2008).

Tourism industry is a combination of activities, services and different industries which leads to a trip experiment. This industry includes transformation, accommodation, feeding, retailing, tour operators, travel agents, entertainment, attractions and hospitality services which are under the control of different individuals or groups who are traveling outside of their home country. According to Porter's (1998) definition, tourism agglomeration can be defined as "geographic concentrations of

interconnected tourism enterprises, firms in related industries, and associated institutions in related fields that cooperate but also compete". (Yang, 2012).

So, scale economies are considered, according to the "new economic geography", as the incentives of agglomeration (Yang, 2012). Regarding to new economic geography framework, countries with larger market size, have higher ability to produce productions with feature of increasing returns to scale (IRS) (Krugman, 1980) and are able to produce more different products (Kenon, 1994). Increasing Returns to Scale (IRS) leads to a decrease in average cost, making the tourism industry more competitive. (Shi and Smyth, 2012). Therefore, market size has direct effect on economies of scale thus makes agglomeration. However, economies of Scale exist in the investment of infrastructure and reception facilities, marketing, and tourism resource protection of the destinations can attract more tourists (Jin and zhong2007).

Also, according to the theoretical basis of microeconomics, tourism demand function can be obtain through maximizing utility function regarding to budget restriction. To ease the discussion, we assume that in a condition of two goods, consumer uses tourism item $q_t^{tourism}$ and another item q_t^0 as the representative of other items and services. So tourism demand function will be obtained through maximizing utility function of consumer (which is a function of using two items of $q_t^{tourism}$ and q_t^0) and budget constraint as follows:

$$MAX : U = U(q_t^{tourism}, q_t^0) \qquad (1)$$
$$s.t : Y_t^0 = p_t^{tourism} . q_t^{tourism} + p_t^0 . q_t^0$$

After the formation of Lagrange function and the first order differentiation of Lagrange function to q_t^0 and $q_t^{tourism}$, tourism demand function can be obtained as follows:

$$q_t^{tourism} = f(Y_t^0, p_t^{tourism}, p_t^0) \qquad (2)$$

Based on demand law in microeconomics, negative $p_t^{tourism}$ coefficient is expected. Therefore, tourism demand which commonly is calculated based on the number of arrival tourists or exchange revenue obtained from the tourism in destination country, is a function of tourism

price level in destination, price of other goods and income level (Mervar, 2007).

Economic development is also affective on tourism agglomeration. This variable is meant not only economic growth, but also reflects the structural, economic, social and cultural changes of community. Obviously, Development of demand-side reflects the potential demand of most of the countries for differentiated products (Balassa, Bauwens, 1997). Also, developed countries despite the slightly high demand for different products, are able to use economies of scale (Loertscher and Wolter, 1980). On supply- side, also, development level indicates the ability of supplying different products and the degree of economies of scale. The multiple and instant product supply for tourists' diverse demand leads to the satisfaction and a visitor's repetition behaviour (Petrick, 2002).

SPECIFYING AND ESTIMATING THE MODEL AND DATA ANALYZING

In this research, to examine the hypothesis and estimate the model, econometric method for panel data is used for 108 selected countries (Based on data availability) for time series of 1995-2010[2]. Current research econometric model is as follows:

$$\ln DEN_s = \alpha + \beta_1 \ln ES_s + \beta_2 \ln EX_s + \beta_3 \ln DVP_s + \beta_4 \ln HB_s + \varepsilon \quad (3)$$

Where, DEN_s is tourism agglomeration (The number of tourists in studied country to the total global tourists), ES_s is the relative economies of scale (market relative size), EX_s is the tourism cost (real Exchange rate), DVP_s is the relative development level (relative human development index) and HB_s is the behavioural expectations and habits (Previous time tourism agglomeration), all in s country.

Before estimating the model, it is necessary to examine the stationary of all variables used in estimations because non-stationary variables cause the problem of spurious regression. This research focused on four types of panel unit root tests such as Levin, Lin and Chu (LLC), Im, Pesaran and

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[2] . The names of the selected countries are presented in the Appendix.

shin (IPS), Phillips-Peron (PP) and Fisher-ADF. The results are presented in table (3).

Table 3 The unit root test of variables used in estimating the spatial structure of tourism in selected countries during the period 1995-2010

Tests / Variables	LLC	IPS	ADF-FISHER	PP-FISHER
Tourism agglomeration (First differencing)	-33.72 (0.00)	-24.75 (0.00)	908.98 (0.00)	1096.49 (0.00)
Economies of scale (First differencing)	-24.13 (0.00)	-17.27 (0.00)	677.16 (0.00)	724.50 (0.00)
Tourism cost (First differencing)	-21.16 (0.00)	-14.52 (0.00)	581.94 (0.00)	611.23 (0.00)
Development (First differencing)	-18.25 (0.00)	-15.22 (0.00)	626.90 (0.00)	694.99 (0.00)

Source: Present research (Numbers in parentheses are the P-value).

The results in table (3) indicated that none of studied variables are non stationary level and all of them will be stationary through making one time difference. But, based on Kao-Cointegration Test presented in table (4), H_0 based on lack of agglomeration is rejected and non-spurious regression is approved.

Table 4 The cointegration test between variables used in research

Test	Statistic	P-value	Result
Kao- Co integration	-17.67	0.00	H_0 is rejected and the Co integration is approved

Source: Present research

Now in the following and to evaluate Panel model, first, according to the statistics of F-Limer, a selection performs between Panel data and Pooled data methods. H_0 of this statistic reflects the selection of Pooled

data method and its priority than Panel data. Regarding to the value of reported F in table (5), H_0 is rejected; therefore Panel data can be use in evaluating process. After making sure that model evaluating performed as Panel data, for selection fixed effects or fixed random is used Hausman test which its H_0 indicates the existence of random effects in model. According to the Hausman test statistic in table (5), H_0 is rejected and fixed effects model to evaluate the model is accepted.

Regarding to the results obtained from F-Limer and Hausman tests, model (3) is estimated by using fixed effects to evaluate the affective factors on tourism spatial structure in selected countries which results are presented in table (5).

Table 5 The spatial structure of tourism in selected countries during the period 1995-2010

variables	Coefficients	Statistic	P-Value
Constant	-0.3168	-4.3515	0.0000
$\ln ES_s$	0.0503	2.0537	0.0402
$\ln EX_s$	-0.0133	-1.9869	0.0471
$\ln DVP_s$	0.3257	2.3910	0.0169
$\ln HB_s$	0.8094	64.3889	0.0000
R^2	0.99		
F- Statistic	1738.09		
F-Limer	3.47	--	0.00
Hausman	181.48	--	0.00

Source: Present research

According to table (5), regression adjusted determination coefficient is equal with %99 thus, independent variables describe %99 of dependent variables changes. Also, common F test reflects that all of regression is

meaningful. According to the obtained results from this table, coefficient of market size is obtained positive and meaningful which is in accordance with new economic geography model. Also, the negative and meaningful effect of tourism cost on tourism agglomeration is in accordance with theory. According to this, high living costs in destination country performs as a deterrent factor for arrival of tourists. Therefore, we can say that economic, social and cultural development causes the attracting and increasing of tourism agglomeration in selected countries. Finally, the coefficient of expectations and behavioural habits variable, also, is evaluated according to positive and meaningful expectation, so maintain credibility causes tourism agglomeration.

SUMMARY AND CONCLUSIONS

The main purpose of this research is evaluating the affective factors on tourism spatial structure in selected countries by using Panel data method during time series of 1995-2010. Through review of past experimental studies, it can be observed that many of these studies evaluated tourism demand function by concentrating on demand part. Current research is one of small number researches which assess tourism agglomeration from both sides of supply and demand and uses and examines the new economic geography model.

According to the results of this research, economics of scale, tourism costs and development is effective on the spatial structure of tourism. Clearly, a relative amount of economics of scale has a direct and meaningful relationship with tourism agglomeration. Also, relative costs of tourism have a negative and meaningful effect on tourism agglomeration. In addition, development and also expectations and behavioural habits have positive and meaningful effect on tourism agglomeration in selected countries. Totally and regarding to the results of this study, it can be mentioned that:

- Increasing the productivity, economic growth and reaching to the economies of scales in tourism industry lead to providing various and different products of tourism with lower prices.

- Reaching to an appropriate level of economic development to provide the needs of this industry such as economic infrastructure includes roads, ports, terminals, air, see and land transportation facilities and providing other related elements to this industry like hotels, motels and restaurants can be the underlying of a sustainable development.

- In addition to diversifying and products differentiation, increasing human development scales, interaction between cultures and protecting

the environment, help country to reach to the goal of tourism sustainable development.

REFERENCES

Akis, S. (1998). A Compact Econometric Model of Tourism Demand for Turkey. *Tourism Management*, Vol. 19, No.1, pp.99-102.

Balassa, B. & Bauwens, L. (1987). Intra-industry Specialization in A Multi-country and Multi-industry Framework. *The Economic Journal,* Vol. 97, pp.923-939.

Boschma, R.A. & Frenken, K. (2006). Applications of Evolutionary Economic Geography. *DRUID Working Paper*, No.06-26.

Chaiboonsri, C. & Chaitip, P. (2009). A Panel Cointegration Analysis: Thailand's International Tourism Demand Model. *Annals of the University of Petroşani*, Economics, Vol. 9, No.1, pp.129-142.

Chen, Z. & Jin, Y. & Lu, M. (2008). Economic Opening and Industrial Agglomeration in China. *China Center for Economic Studies*, Fudan University, Shanghai.

Cirannek, V. (2009). From Trade and Spatial Theory to the New Economic Geography (NEG). *Working Paper Series*, No.974.

Farmanesh, A. (2009). Regional Dimension of Economic Development in Iran: A New Economic Geography Approach. Http://mpra.ub.uni-muenchen.de/16942/MPRA Paper No. 16942, posted 26. Accessed on August 2009, at 00:19.

Fujita, M. & Mori, T. (2005). Frontiers of the New Economic Geography. *Regional Science Association International*, No. 27, pp.378-405.

Garin, T. (2007). German Demand for Tourism in Spain. *Tourism Management*, Vol. 28, pp.12-22.

Halicioglu, F. (2004). An ARDL Model of International Tourist Flows to Turkey. *Global Business and Economics Review*, Anthology, pp.614-624.

Im, K.S. & Pesaran, M.H. & Shin, Y. (2003). Testing for Unit Roots in Heterogeneous Panels. *Journal of Econometrics*, No. 115, pp.53-74.

Jin, W. & Zhong, Y. (2007). Spatial Structure of Tourism System. *Systems Engineering- theory & practice,* Vol. 27, No.2, pp.76-82.

Kao, C. (1999). Spurious Regression and Residual-Based Tests for Cointegration in Panel Data. *Journal of Econometrics*, No. 90, pp.1-44.

Krugman, P. (1980). Scale Economies, Product Differentiation, and The Pattern of trade. *American Economic Review*, Vol. 70, No.5, pp.950-959.

Krugman, P. (1991). Increasing Returns and Economic Geography. *Journal of Political Economy*, Vol. 99, No.3, pp.483-499.

Krugman, P. (1999). The Role of Geography in Development. *International Regional Science Review*, Vol. 22, pp.142-161.

Levin, A. & Lin, C.F. (2002). Unit Roots Tests in Panel Data: Asymptotic and Finite Sample Properties. *Journal of Econometrics*, Vol. 108, pp.1-24.

Loertscher, R. & Wolter, F. (1980). Determinants of Intra industry Trade: Among Countries and Across Industries. *Weltwirtschaftliches Archiv*, Vol. 116, pp.280-293.

Marques, H. (2004). The New Economic Theories, *Working papers of the Department of Economics*. United Kingdom, University of Newcastle.

Mervar, A. & Payne, J.E. (2007). An Analysis of Foreign Tourism Demand for Croatian Destinations*:* Long-Run Elasticity Estimates. *Working Paper*, No.0701, pp.1-21.

Petrevska, B. (2013). Estimating Tourism Demand: the Case Study of Fyrom. *Tourismos*, Vol. 8, No.1, pp.199-212.

Petrick, J.F. & Backman, S.J. (2002). An examination of the determinants of golf travelers satisfaction. *Journal of Travel Research,* Vol. 40, No.3, pp.252-258.

Porter, M. E. (1998). Clusters and the new economics of competition. *Harvard Business Review*, Vol. 76, No.6, pp.77-90.

Shi, H. & Smyth, R. (2012). Economies of scale in the Australian tourism industry. *Applied Economics*, Vol. 44, pp.4355-4367.

Villalobos-Céspedes, D., Galdeano-Gómez, E. & Tolón-Becerra, A. (2012). International Demand for Natural-Based Tourism Costa Rica: Socio-Demographic and Travel Indicators. *Tourismos*, Vol. 7, Issue 1, pp.269-287.

Yang, Y. (2012). Agglomeration density and tourism development in China: An empirical research based on dynamic panel data model. *Tourism Management*, Vol. 33, No.6, pp.1347-1359.

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APPENDIX

The names of the selected countries

Albania	Dominican	Korea, Rep.	Philippines
Algeria	Ecuador	Kuwait	Poland
Argentina	Egypt, Arab	Kyrgyz Republic	Portugal
Armenia	El Salvador	Lao PDR	Qatar
Australia	Estonia	Latvia	Romania
Austria	Ethiopia	Lithuania	Russian
Bahrain	Fiji	Luxembourg	Samoa
Bangladesh	Finland	Madagascar	Slovak Republic
Belarus	France	Malawi	Slovenia
Belgium	Georgia	Malaysia	Spain
Benin	Germany	Mali	Sudan
Bolivia	Ghana	Malta	Swaziland
Botswana	Greece	Mauritius	Sweden
Brazil	Guatemala	Mexico	Switzerland
Bulgaria	Guyana	Moldova	Togo
Burkina Faso	Honduras	Mongolia	Tonga
Burundi	Iceland	Morocco	Trinidad and
Cambodia	India	Nepal	Tunisia
Canada	Indonesia	Netherlands	Turkey
Central African Republic	Iran, Islamic	New Zealand	Uganda
China	Ireland	Niger	Ukraine
Colombia	Israel	Nigeria	United Kingdom
Congo, Dem. Rep.	Italy	Norway	United States
Congo, Rep.	Jamaica	Pakistan	Uruguay
Costa Rica	Japan	Panama	Vietnam
Cyprus	Jordan	Paraguay	Zambia
Denmark	Kenya	Peru	

PRELIMINARY INSIGHTS ON BRITISH TRAVELLERS' ACCOUNTS OF SICILIAN ORANGES

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EC-labelled products, identified by PDO, PGI and TSG tags, are linked to a geographical area and to specific growing/manufacturing methods that guarantee quality and sustain local traditions. These features can promote local products by raising tourists' interest not only in local food but also in the place of origin of the same and in its history. This note wants to report ongoing research on a facet of cultural tourism that has not so far been studied: British Grand Tourists' accounts of local quality products. The selected item was the PGI Sicilian orange, whereas the literary evidence was taken from Brydone's travelogue and from Dennis' travel book. The result is a description of a PGI product where specialists from Food Science and English Studies work in team to offer a model to be used in cultural tourism.

Keywords: Tourism, Culture, British Travellers, Sicilian oranges.

JEL Classification: *L83, M1, O1*

INTRODUCTION

The appeal of tourist locations depends on several strands that define the countryside capital of a place and that concur to shape the travel experience in tourists' eyes. This capital consists of landscape (lakes, mountains, rivers), historic buildings (archaeological sites, churches, villas), local traditions (crafts, customs, folklore, festivals) and local food (Bessière, 1998; Cianflone, 2012; Garrod et al., 2006).

Food products are increasingly being viewed as one important layer of countryside capital. Foodstuffs, in fact, are the expression of local ways of consumption and of local growing or manufacturing praxis linked to the territory and to its history. As a consequence, local food items are considered the markers of a region and an important asset in the promotional activities of a location (Bessière, 1998; Du Rand and Heath, 2006; Tregear et al., 2007; Ridvan Yurtseven and Kaya, 2011) to support the cultural identity of a place (Bowen and De Master, 2011; Mak et al., 2012).

The added value of local food to promote tourism has been acknowledged by the European Community (EC) in two ways. First of all, the EC has made rural tourism the object of specific actions aimed at promoting sustainable development in rural areas (see, for example, EC LEADER+ and EC SPRITE projects); secondly, the EC has fostered the recognition of quality food by awarding Protected Designation of Origin (PDO), Protected Geographic Indication (PGI) and Traditional Specialty Guaranteed (TSG) trademarks[3].

To redress the role of local food in tourism, this note wants to discuss ongoing research to characterize the historical roots of Sicilian agricultural products and to report allusions to local food items in the travel accounts written by British travellers.

In this note preliminary findings on Sicilian PGI oranges and on evidence from two British travel accounts are reported. Oranges were selected because of the role they play in the economy of the Mediterranean island and because they are one of the iconic landmarks of the Sicilian landscape. The selected travel accounts were Brydone's (1806 Edition) and Dennis' (1864) books. Both works, examined to extrapolate reference to this citrus fruit, were selected because in travel literature they embody the taste and the travel interests of the time (Brilli, 1995). Following the most commonly accepted distinction of travel literature (Pfister, 1996) into travelogues and travel books, Brydone's work, can be considered the typical "travelogue", that is an account where autobiographical descriptions of the countries object of the tour are presented to readers, while Dennis' book can be seen as the typical travel guide since it embodies the answers to the requests of the then emerging mass tourism.

SICILIAN ORANGES

Citrus fruits are extensively grown in Italy, mainly in the Southern part of the country (Campania, Apulia, Basilicata, Calabria, Sicily,

Sardinia). Among the citrus fruit family, four play a leading role in the Sicilian economy: oranges, lemons, clementines and mandarins.

Sicilian oranges [*Citrus sinensis* (*L.*) *Osbek*] are classified as red, blond and navel. Red ones, also called blood oranges because of the reddish color of the rind and of the pulp, are a peculiar outcome of the Sicilian climate that intervenes in the production of anthocyanins, water-soluble pigments of the flavonoid family, responsible for the reddish colour.

Orange growing in Sicily contributes, together with vineyards and olive trees, to shape the rural image of the island, where 100.000 hectares are devoted to citrus fruit growing. Within the substantial Sicilian citrus production, oranges occupy the main niche, and play a leading role in the economy of the island as they, harvested from December to mid-June, are widely employed by the manufacturing industry (Caccioni, 2008). Today Sicilian oranges face the competition from other Mediterranean countries. For this reason, Sicilian oranges are object of promotional initiatives such as the awarding of the PGI label and the implementation of European-funded programmes (*Programme of Rural Development* 2007-*2013*) to enhance the image of the product's international competitiveness and to support the implementation of gastronomic routes such as the "Via dell'Arancia Rossa" [the Blood Orange Road] (Caccioni, 2008).

From a nutritional point of view oranges are rich in antioxidants (ascorbic and hydrossicynnamic acid, flavonoids, esperidin, narirutin and ferulic, cumaric, caffeic and sinapic acids), minerals (calcium, potassium, phosphorus, magnesium, iron and selenium) and vitamins (A, C, B1, B2 and PP). Epidemiological studies have shown how orange consumption boosts health benefits in a low caloric content. The manifold nutritional benefits of fresh orange intake range from the antioxidant to the antianaemic and to the antibacterial action; from the anti-tumoral effect to hypocholesterolizing and hypoglycemic properties.

Some beneficial effects are known in popular culture and orange consumption has long been recommended to stimulate the digestion, while orange intake is recommended to pregnant women for calcium intake and to strengthen hair and nails. The fruit is also employed as a beauty treatment or to extract essential oils used in perfumes.

In the food industry Sicilian oranges are used for the production of squashes and to make liqueurs. In gastronomy they are extensively employed in several recipes, such as salads, sweets and cakes.

SICILIAN ORANGES IN BRITISH TRAVELLERS' ACCOUNTS

The history of travel to Italy has a long tradition. In the middle ages travellers were pilgrims and churchmen *en route* to the Holy Land or to places of worship. In the age of Humanism and of the Renaissance, voyagers were students interested in attending Italian universities in pursue of the new ideas of classic scholarship. After the breach with Rome a different traveller crossed the Alps. He did not travel for religious or cultural matters; he roamed the peninsula to refine his education (Cianflone, 2012).

In the complex web of travelling circuits, Sicily was rarely included in the tour till the second half of the eighteenth century. As a consequence, few Britons headed to this country (Chaney, 1998). The main objection to travelling south of Naples was the lack of convenient means of transport and of lodgings, and the presence of banditti (Chaney, 1998; Towner, 1985). The eighteenth century visitors to the island traced routes and itineraries that were later followed by others. These travellers went south looking for archaeological sites and volcanic eruptions. As a consequence, they were interested in describing Sicilian ancient temples and ancient theatres or the volcanic phenomena of mount Aetna and of mount Stromboli, rather than paying attention to oranges. When direct reference was made, orange orchards were considered part of the landscape and little notice was given to the fruits' description.

In Brydone's travelogue, (1806 edition), a book in the form of letters sent to a friend, for example, the romantic taste of nature is well expressed. In this travel account, archaeological ruins are described in details, together with facts concerning local customs. Oranges were part of the countryside and reference to this fruit added a picturesque note to the scenery, as the quotation on the outskirts of Monreale (near Palermo) clearly shows (Brydone, 1806: 208):

The valley at the foot of the mountain is rich and beautiful. It appears one continued orange-garden for many miles and exhibits an elegant piece of scenery.

From mid-1850, as a result of railway and steam-boat facilities that paved the way to mass-tourism, a different traveller visited Sicily. This traveller did not belong to the *virtuoso/connoisseur* type exemplified by Brydone. He, ancestor of the modern package tourists, wanted to be informed on the main features of a country, namely the geography of the place, archaeological and architectural buildings, and, for the first time in travel literature, the agricultural products. To meet the needs of this novel type of traveller, the travel guide was the right piece of literature.

Therefore, the description given by Dennis (1864: xxviii) exemplifies the new trend in tourism. In this book, in fact, tourists are informed about local geography, about roads, about monuments and buildings, and about agricultural products, such as corn, wines and several fruits, citrus fruits included. In the section dealing with oranges, the fruits are classified according to the different cultivars available on the island, namely Blood or Maltese, as it was currently called in the past, and Seville orange, and reference to the average number of fruits yielded by a single tree and on packaging details.

An interesting information is found in the quotation below (1864: xxviii):

The choice fruits only are exported; these are gathered with great care, wrapped in paper manufactured for the purpose, and packed in light boxes containing each 20 or 30 dozens.

This short paragraph is important to define the historical roots of PGI oranges since it should be seen as the earliest reference to the packaging details that are part of the product specifications and of the notes of transport outlined by European regulations to make PGI–labeled orange identification easier.

CONCLUSION

The data discussed in this note, although of a preliminary type, concur to stress the historical roots of a typical Sicilian fruit: oranges. Findings can be used in cultural and gastronomic tourism to define the history of Sicilian oranges, thus re-calling the collective historical memories of a society (Bessière, 1998) in which the British travellers may have their share.

Further studies will extend the information by using a wider corpus, obtained from the match of available travel literature with historical and sociological information, to build a multi-faceted perspective of the Sicilian typical foodstuff.

ENDNOTES

1. This note is based on a poster presented at *ChimAlSi_2012*, the 9th Italian Congress of Food Chemistry, Ischia (Italy), June 03-07, 2012.
2. Although all authors conceived and approved the final paper, G. Di Bella and G. Dugo are responsible for the section entitled

Sicilian Oranges, whereas E. Cianflone is responsible for the remaining sections.

3. PDO labels those items produced, processed and prepared within a particular geographical environment that have characteristics exclusive to the area of production, natural and human factors included; PGI marks those products bearing the name of a particular geographical area, which are produced, processed or prepared in at least one of the different productive stages within that area, and which show certain qualities attributable to the same; TSG refers to the traditional character of a foodstuff or agricultural product by either its composition or by means of its production, rather than to its origin (Council Regulation No 2081/1992 on the Protection of Geographical Indications and Designations of Origin for Agricultural Products and Foodstuffs).

REFERENCES

Bessière, J. (1998). Local development and heritage: traditional food and cuisine as tourist attractions in rural areas. *Sociologia Ruralis*, Vol. 38, No.1, pp.21-34.

Brilli, A. (1995). *Quando viaggiare era un'arte: il romanzo del Grand Tour*. Bologna, Il Mulino.

Bowen, S. & De Master, K. (2011). New rural livelihoods or museums of production? Quality food initiatives in practice. *Journal of Rural Studies*, Vol. 27, No.1, pp.73-82.

Brydone, P. (1806). *A Tour through Malta and Sicily in a Series of Letters to William Beckford*. London,Cadell & Davies.

Caccioni, D. (2008). *Agrumi di Sicilia, Sicilian Citrus Fruits*. Cisano Bergamasco, F.lli Pozzoni.

Cianflone, E. (2012). Historical roots of quality products: A seventeenth century description of Mortadella di Bologna. *AlmaTourism*, Vol. 3, No.6, pp.91-98.

Chaney, E. (1998). *The Evolution of the Grand Tour: Anglo-Italian cultural Relations since the Renaissance*. London, Frank Cass.

Dennis, G. (1864). *A Handbook for Travellers in Sicily*. London, J. Murray.

Du Rand, G.E. & Heath, E. (2006). Towards a Framework for Food Tourism as an Element of Destination Marketing. *Current Issues in Tourism*, Vol. 9, No.3, pp.206-23.

Garrod, B., Wornell, R. & Youell, R. (2006). Re-conceptualising rural resources as countryside capital: The case of rural tourism. *Journal of Rural Studies*, Vol. 22, No.1, pp.117-128.

Mak A., Lumbers, M. & Eves, A. (2012). Globalization and food consumption in tourism. *Annals of Tourism Research*, Vol. 39, No.1, pp.171- 196.

Pfister M. (1996). *The fatal Gift of Beauty*. Amsterdam, Rodopi.

Ridvan Yurtseven H. & Kaya O. (2011). Local food in local menus: The case of Gokceada. Tourismos: *An international multidisciplinary Journal of Tourism*, Vol. 6, No.2, pp.263-275.

Tregear, A., Arfini, F., Belletti, C. & Marescotti, A. (2007). Regional foods and rural development: The role of product qualification. *Journal of Rural Studies*, Vol. 23, No.1, pp.12- 22.

Towner, J. (1985). The grand tour a key phase in the history of tourism. *Annals of Tourism Research*, Vol. 12, No.3, pp.297-333.

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AN OPTIMAL HUB SELECTION ALGORITHM IN MARITIME TRANSPORT SYSTEMS BASED ON THE HUB AND SPOKE MODEL

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This report presents a heuristic algorithm for the optimal hub selection in a maritime transport system which is based on the hub and spoke model. This model has been successfully tested in other maritime systems such as the USA aviation. Its implementation in the maritime transport and particularly in areas such as the Aegean Sea gave very good results with respect to resource savings, improvement of services and drastic reduction of the total time needed for traveling in favour of tourism and shipping companies.

Keywords: *optimization, algorithm, tourism, transport, hub and spoke*

JEL Classification: *L83, M1, O1*

INTRODUCTION

The Hub and Spoke model has numerous applications in many sectors of the economic activity. Networks of combined transports, Logistics and distributions' systems, transportation models and many other systems have at their core the Hub and Spoke model. One of the basic problems that the designers of systems based on the Hub and Spoke model face is the hub selection. In this report we will explore exactly this issue. The search of the optimal location for the transhipment hub. The algorithm presented in this section, investigates the parameters based on which we can choose the optimal location of the transhipment hub. The optimal hub location search algorithm was implemented for the selection of the optimal hubs in maritime transport and particularly in the area of Cyclades of Aegean Sea. Furthermore using the "NAYTILOS" algorithm (Chainas, 2012) we created new optimal itineraries based on the Hub and Spoke model. These models were compared to other bibliography

itineraries (Aifantopoulou, 2004) in respect of the total distance traveled as well as to the real itineraries carried out during summer 2009. The result of these comparisons is that the transportation cost for a shipping company that would utilize the hub and spoke system for the Cyclades area, is much lower compared to the cost nowadays to cover the same area with the classic linear itineraries. In essence, this report suggests a new network of Aegean maritime lines which will be based on the Hub and Spoke model and therefore we will be able to go beyond the default until today, indicative network as it is mentioned, which in fact is the same linear network which operates all these years with only a few changes (Chlomoudis et al, 2007).

FOR THE HUB AND SPOKE NETWORKS IN ECONOMY

In a network of n nodes, the number of all possible connections between all nodes is, $\dfrac{n(n-1)}{n}$ (Figure 1). However if we define one of the nodes as a hub then we may connects all other nodes with the hub and the number of connections is reduced to n-1 (Figure 2).
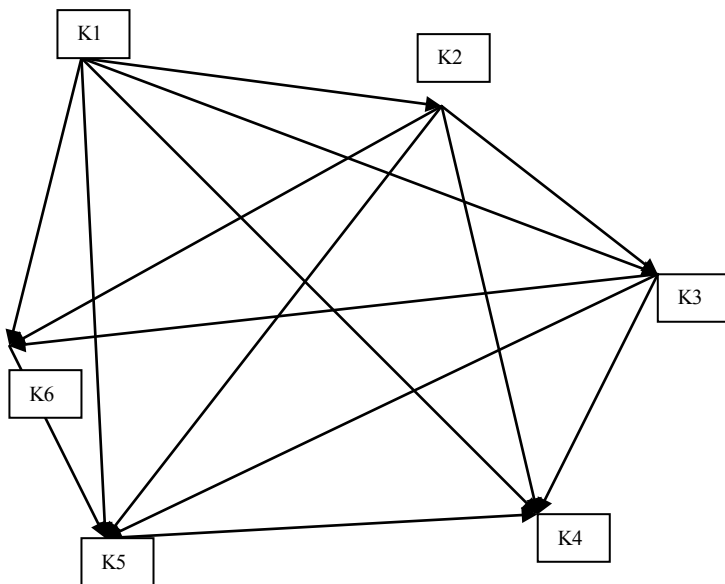
Therefore, the application of a hub and Spoke system in a connection network of n nodes, may create the conditions, in order to have significant cost reductions in the necessary resources. And we say that this may create the conditions since in a hub and spoke system we have to take into consideration all factors affecting the system and which may be connected to the various restrictions which may exist, such as the existence of the necessary infrastructure so as the Hub and Spoke system can operate effectively.

Studying the transportation and distribution systems the central position is possessed by the central storage area which is the beginning for the customer service routes of a company or even a group of companies. Nowadays, many companies outsource the distribution process of their products towards the final customers to intermediate distributors. These distributors have organized storage facilities (Logistics) and means of distribution in order to serve their clients fast and at the lowest possible cost. The most important issue for such a company is the selection of the storage hub in order to assure optimal distribution (demand coverage by delivery with the minimum possible delay and at the minimum possible cost). The selection of the main distribution hubs is of uttermost importance for its competitiveness, especially today with the rapid use of new technologies, where combined distribution systems are employed in

making the most of all the possible means and ways of transportation (road and railway, marine and aviation network). In most European countries, a transhipment system with central hubs is used for the collection and the final transportation of urban waste to the processing and final screening centres.

Figure 1 Number of possible connections in a set of n nodes

$$\frac{n(n-1)}{n}$$

The selection of the transhipment stations is again of strategic significance for resource saving and optimal system performance. The hub-and-spoke system is used in numerous transportation and distribution applications and also in other cases, such as network design of any kind. It also finds application in aviation transportation systems (Dobson and Lederer, 1993). In the shipping market, for the past forty years, we observe a tremendous increase in the growth of the maritime transportation. The extent and quality of the provided services are highly

correlated with this growth. (Papanastasiou et al., 2006). This report attempts to search for a general optimal selection method of the central transhipment station in a complete maritime transportation system in Aegean Sea, which might however find a more general use and applicability. In this way, a heuristic algorithm was designed and implemented for searching the optimal transhipping hub from a set of n hubs. The contribution of the report is the search of the optimal location of the transhipping station in any transportation problems we would like to use the hub-and-spoke model.

Figure 2 Number of possible connections in a set of n nodes with the hub and spoke network, n-1
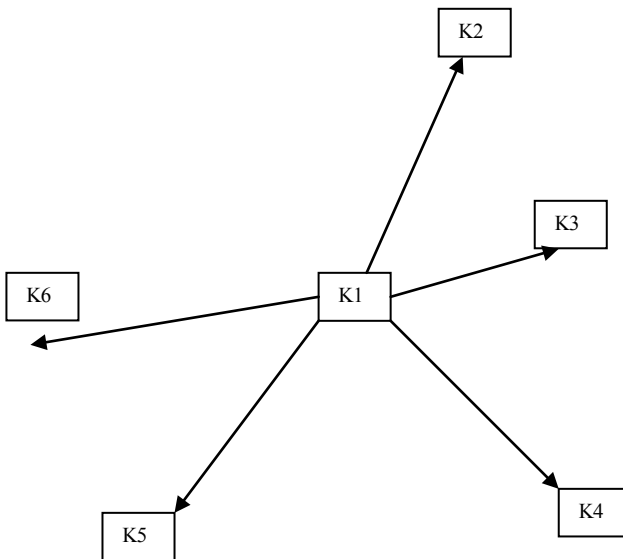
The parameters used by the algorithm are the relative position of each node with respect to the rest, within the search region of the optimal transhipment node selection, and the demand of each node at the specific transportation services of each problem. If we consider the region containing all the nodes, for which we are interested in selecting the

optimal transhipment node, as a single system, we can rename the problem as the search of the "centre of gravity" of the system, if we consider the demand of each node for transportation services to be its respective "weight". The optimization achieved is with respect to delivery time saving and resource utilization. It has been used and tested in the maritime transportation system of the Aegean Sea and compared against the already deployed system. The results of this comparison encourage the use of network application policies, which are based on the hub and spoke model, on the maritime transportation systems as well. Of course, the survey shows that the hub and spoke model is not appropriate for all transportation problems. Therefore, there are areas in shipping industry where the hub and spoke system misbehaves, especially in the cases of nodes where there is transportation not only of products and passengers but also of vehicles. Such issues might cause some additional delays, but they must be examined within the framework of the general advantages that a hub and spoke system might have. However, in any case, this system can assure improved timing, prices and services and under this perspective it can coexist with other routing systems. A typical example is the application of the hub and spoke method in the American aviation system by large aviation corporations, where the method competes successfully the aviation transportation systems that other companies have deployed. (Dobson and Lederer, 1993). A significant advantage of the transportation systems using the hub and spoke model is the fact that the itinerary creation process is much faster compared to other systems, as long as the transhipment nodes are selected through an optimized selection process. The liberalization of the maritime transportation has shaped a new competitive environment in the shipping market. An issue of strategic importance for any shipping company is the selection of the area to offer their shipping services, in order to achieve the best possible results. The heuristic algorithm that we propose in this report, for the selection of the optimal transhipping node in combination with the design of an itinerary schedule, based on the hub and spoke system, will allow any shipping company that wants to use this system to investigate and compare the resulting itineraries against those of other companies or against those currently in use, in order to make the appropriate decisions.

The objectives of a transportation system in a Hub and Spoke network

A transportation system based on the Hub and Spoke model consists of two subsystems:

α) The first subsystem corresponds to the itineraries from the central distribution point towards the transhipment nodes.

β) The second subsystem corresponds to the itineraries from the transhipment nodes towards the final destinations.

The intended objectives of the application of the Hub and Spoke model:

1. To minimize the total covered distance by all vehicles while serving the demand. In the first phase towards the transhipment nodes, the distance is a function of the itineraries necessary to cover the demand towards the transhipment nodes. Hence, during this phase the optimal selection of the transhipment node and the selection of the optimal vehicle type to cover the demand are of importance. In the second phase from the transhipment nodes towards the final destination points, the selection of the optimal itineraries to minimize the travelled distance to cover all the required nodes and the selection of the appropriate vehicle type to cover the demand of these nodes are of importance.
2. To minimize the total distribution time towards all the destinations. This is a function of the first objective regarding the total distance minimization, and the selection of the appropriate type of vehicles that can cover adequately well the demand in optimal and safe timing.
3. To minimize the number of vehicles for covering the demand while maximizing the vehicle occupancy.
4. To minimize the total cost of each route.

A GENERAL DESCRIPTION OF THE OPTIMAL HUB POSITION SELECTION ALGORITHM

The mathematic model

Let's consider a space of n_i $i=1,2,3,\ldots,k$ nodes for the optimal transhipment node position search.

We assume that each node has a demand for transportation services m_i, $i=1,2,3,\ldots k$

Each node is depicted in the figure as a circle whose diameter is proportional to the node's demand in transportation services.

In addition each node has Cartesian coordinates x_i, y_i , $i=1,2,3,\ldots k$

Figure 3 A k node space. The size of each node (diameter of the circular disk) represents the amount of its demand in transportation services.

So, if we assume that each node i has "weight" equal to the demand in transportation services (m_i), then the "centre of gravity" or "centre of mass" of the system has coordinates (assuming two dimensions):

$$x_k = \frac{\sum_{i=1}^{n} x_I m_i}{\sum_{i=1}^{n} m_i}, \quad (1)$$

$$y_k = \frac{\sum_{i=1}^{n} y_I m_i}{\sum_{i=1}^{n} m_i} \quad (2)$$

The demand of each node i (i=1,2,,…,n) in transportation services (m_i) is calculated as the mean of the demand from each other node in the search region towards this node. In other words:

$$m_i = \frac{\sum_{j=1}^{n} m_{ij}}{n} \quad (3)$$

Based on the coordinates of the position and the values of demand for transportation services, of each node, we calculate the coordinates of the required "centre of gravity" or else the optimal position of the transhipment node in a space consisted of n nodes.

One more main characteristic of the "centre of gravity" is its orbital radius, which is given by equations:

$$r_k = x_{ki} + y_{kj} \quad (4)$$

$$r_k = \frac{\sum\limits_{i=1}^{n} x_I m_i^i}{\sum\limits_{i=1}^{n} m_i} + \frac{\sum\limits_{i=1}^{n} y_I m_i^j}{\sum\limits_{i=1}^{n} m_i} \tag{5}$$

$$r_k = \frac{\sum\limits_{i=1}^{n} r_I m_i}{M_k} \tag{6}$$

If the number of nodes grows to a very large number (infinity) then equation (5) becomes:

$$r_k = \lim_{\Delta m_i \to 0} \frac{\sum\limits_{i=1}^{n} r_I \Delta m_i}{M} = \frac{1}{M}\int r dm \tag{7}$$

With this approach we can determine the optimal position of the transhipment node in an n node space and, in addition, the optimal "action region" of this transhipment node, which is the cyclic region created with the selected node at the hub in its centre and radius r_k.

Restrictions

In order that a node can operate as a transhipping node, it is necessary:
1. To have the necessary infrastructure depending on the subject of the transporting process for a smooth transhipping process.
2. To be able to accommodate the minimum number of vehicles necessary by the transhipping process in all situations foreseen by the timetable of the itineraries, without any delays or other problems.

Based on the aforementioned a transhipping port for maritime transportations must have the necessary infrastructure to accommodate all types of ships, for the transhipping of vehicles and passengers from one

ship to the other and in general to be able to serve the itineraries from and to the port-transhipping hub, within the defined timeframes according to the schedule of ship itineraries to cover a specific region.

Algorithm presentation

Step 1: Selection of the hub search region. Insertion of the demand for transportation services of each node n_i , i=1,2,3,…n and the coordinates of the nodes. Definition of the assumptions (infrastructure, access etc.) that must hold, so that the required node can operate seamlessly as an actual transhipping node (restrictions).

Step 2 : Calculation of the coordinates of the "centre of gravity" of all nodes in the search region based on equations (1) and (2) and the orbital radius or in other words the calculation of the coordinates of the ideal hub for that specific region.

Step 3 : Selection of the nearest node to the ideal hub of the node system based on the coordinates and the positive subtractions of abscissas and ordinates from the coordinates of the ideal hub.

Step 4 : Printing of the coordinates of the node that can operate as an optimal transhipping hub and the actual node that resides closest to the specific coordinates that we calculated based on the algorithm and satisfies the necessary preconditions (infrastructure etc.) that we set as restrictions.

Application of the algorithm in the area of Cyclades and the search for the optimal hub position

The weekly demand of each connection between ports in the area of the Aegean Sea is known (SETHAM,2001). Based on this information we calculate the average demand for each port node i of a specific region based on equation:

$$m_i = \frac{\sum_{i=1, j=1}^{n} m_{ij}}{n} , i,j=1,2,…n \tag{8}$$

where $\sum_{i=1, j=1}^{n} m_{ij}$ is the summation of the demand of all connections between the n nodes of the search region. The coordinates of all the nodes in this region are also known (SETHAM,2001).

We applied the optimal hub selection algorithm in the Cyclades area for 22 main ports. Having the coordinates of each port and the weekly demand in maritime passengers as inputs, the algorithm returned that the coordinates of the hub for the Cyclades area are :

Gis_x = 602960.71
Gis_y = 4109463,60

Table 1 Results of the optimal hub search algorithm for the Cyclades area

code	Port	GISX	GISY	Demand	Subtraction X	Subtraction Y
98	PAROS	602319,15	4104193,27	588,14	641,56	5270,33
101	TINOS	603858,68	4154866,71	331,96	897,97	45403,11
103	KYTHNOS	535208,06	4138839,36	41,42	67752,65	29375,76
104	ANDROS	564838,77	4193356,38	43,16	38121,94	83892,78
107	KIMOLOS	551738,82	4070839,64	5,14	51221,89	38623,96
108	MILOS	540069,11	4064348,72	80,82	62891,60	45114,88
109	SERIFOS	545998,32	4109378,39	50,00	56962,39	85,21
110	SIFNOS	559953,71	4093772,03	89,20	43007,00	15691,57
111	AMORGOS KATAPOLA	666435,17	4077544,05	42,34	63474,46	31919,55
112	AMORGOS AIGIALI	676386,32	4085886,49	10,85	73425,61	23577,11
113	DONOUSA	659209,26	4106819,22	3,72	56248,55	2644,38
114	IRAKLEIA	631014,29	4080798,99	2,98	28053,58	28664,61
115	KOUFONISI	641870,00	4088603,50	16,36	38909,29	20860,10
116	NAXOS	623022,18	4107010,29	263,00	20061,47	2453,31
117	SCHINOUSA	635994,57	4083160,53	1,84	33033,86	26303,07
118	ANAFI	658097,04	4023772,56	5,90	55136,33	85691,04
121	IOS	612782,15	4064512,12	147,20	9821,44	44951,48
122	SIKINOS	600408,59	4062045,84	6,08	2552,12	47417,76

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123	FOLEGANDROS	584896,49	4052209,75	12,88	18064,22	57253,85
124	MYKONOS	617571,11	4145437,14	291,04	14610,40	35973,54
125	SYROS	583581,18	4143910,93	165,48	19379,53	34447,33
171	THERA	627406,71	4032877,94	329,50	24446,00	76585,66

The port that resides very close to these coordinates is the port of Paros as shown by the absolute value of the subtractions from the coordinates of the ideal hub.

The resulting itineraries for the Cyclades area based on the hub and spoke system

We implemented the heuristic algorithm that we developed in this report for the search of the optimal hub location in Cyclades area and the algorithm returned the port of Paros. Then we implemented "NAUTILOS" algorithm (Chainas, 2012) for the search of the optimal routes for Cyclades area, where port of PAROS was the departure port (hub) and the target was to cover the demands of all the ports of the area. Table 2 shows all these itineraries and the total travelled distance. Image 1 shows the graphical display of all these routes. We compared these routes with the real ones for Cyclades area as well as with Aifantopoulou routes (Aifantopoulou, 2004) where PIRAEUS port was the departure port and the total distances and the corresponding time needed are drastically reduced. The total distance of Aifantopoulou routes based on the hub-and-spoke system for the same destinations was improved by 18.17% compared to Aifantopoulou itineraries and 14.67% compared to the real itineraries of a typical Sunday in August 2009 for the Cyclades area (Table 2).

Table 2 Optimal itineraries for Cyclades area produced by "NAUTILOS" algorithm with PARO as a hub

	Cyclades itineraries with PAROS as a hub		Miles
1	PAROS-NAXOS-DONOUSA		38.43
2	PAROS-IRAKLEIA-SCHINOUSA-KOUFONISI		33.75
3	PAROS-NAXOS-AMORGOS		51.10

4	PAROS-IOS-THERA-ANAFI		69.22
5	PAROS-IOS-SIKINOS-FOLEGANDROS-MILOS		75.10
6	PAROS-SIFNOS-KIMOLOS-MILOS		53.89
7	PAROS-SIFNOS-SERIFOS-KITHNOS-SIROS		96.73
8	PAROS-SIROS-TINOS-MYKONOS		45.11
9	PAROS-SIFNOS-SERIFOS-KYTHNOS-KEA-ANDROS-TINOS-MYKONOS		135.80
	Total		**599.14**
	PIRAEUS-PAROS (9 Itineraries HUB)		**821.81**
	Grand Total		**1,420.95**
	Aifantopoulou itineraries	**Total**	**Cyclades**
1	PIRAEUS-DONOUSA-AGIOS KIRIKOS-SAMOS VATHI-SAMOS KARLOVASI	207.00	118.76
2	PIRAEUS-MYKONOS-KIMOLOS-FOLEGANDROS-SIFNOS	195.00	195.00
3	PIRAEUS-KOUFONISI-IRAKLEIA-KATAPOLA-ASTIPALAIA-LEROS-FOURNOI	269.00	144.86
4	PIRAEUS-THERA-IOS-ANAFI	178.00	178.00
5	PIRAEUS-PAROS-NAXOS-SCHINOUSA-AIGIALI	147.00	147.00
6	PIRAEUS-TINOS-SIROS-KYTHNOS-GAURIO-LIMNOS MIRINA	287.00	169.64
7	PIRAEUS-MYKONOS-PAROS-KARPATHOS-AGIOS NIKOLAOS	353.00	117.05
8	PIRAEUS-TINOS-SIROS-SERIFOS-SIFNOS-SAMOS BATHY-SAMOS KARLOVASI	277.00	138.59
9	PIRAEUS-IOS-NAXOS-MILOS-THERA	249.00	248.44
10	PIRAEUS-THERA-KATAPOLA-PATMOS-LIPSI-KALIMNOS	252.00	163.39
11	PIRAEUS-PAROS-MYKONOS-LIMNOS MIRINA-THESSALONIKI	398.00	115.76

	Total		**1,736.49**
	Difference		**315.54**
	Improvement		**18.17%**
	Real Itineraries for Cyclades (August 2009)	**Total**	**Cyclades**
1	PIRAEUS-PAROS-NAXOS-LIPSI-LERO-KALYMNO	212.99	169.83
2	PIRAEUS-PAROS-NAXOS	106.38	106.38
3	PIRAEUS-FOLEGANDROS-THERA	127.84	127.84
4	PIRAEUS-IOS-THERA	128.12	128.12
5	PIRAEUS-SIROS-TINOS-MYKONOS	98.90	98.90
6	PIRAEUS-PAROS-MYKONOS-TINOS	137.12	137.12
7	PIRAEUS-KYTHNOS-SERIFOS-SIFNOS-MILOS-KIMOLOS	117.43	117.43
8	PIRAEUS-PAROS-NAXOS-THERA	150.01	150.01
9	PIRAEUS-SERIFOS-SIFNOS-MILOS	101.50	101.50
10	PIRAEUS-PAROS	91.31	91.31
11	PIRAEUS-SIFNOS-FOLEGANDROS-THERA-KATAPOLA	167.00	167.00
12	PIRAEUS-SIROS-MYKONOS-TINOS	104.99	104.99
13	PIRAEUS-SIROS-PAROS-NAXOS-IRAKLEIA-SCHINOUSA-KOUFONISI-KATAPOLA	164.85	164.85
	Total	**1,708.45**	**1,665.29**
	Difference		**244.34**
	Improvement		**14.67%**

CONCLUSIONS

The optimal transit hub search algorithm may be implemented in various problems of vehicle routing, transportation and distribution, where a transhipment hub is needed. A distribution company undertakes the delivery of the orders to the customers of a corporation, on a regular basis, who are within a city, a wider area or even within a country or a set of countries. The selection of the appropriate location of the transhipment storage area or areas is among the most serious logistics problems which a modern distribution company faces, in combination with the search for the optimal routes and the proper vehicle types which are necessary for each route, in order to achieve the best results. In the Aegean shipping we face respectively the following problems. For each marine area we seek for the appropriate port to play the role of the transhipment and transit hub, combined with the optimal itineraries and the appropriate vehicle type (ship), which are necessary for the coverage of demand in the particular area (Chainas, 2012). This report contributes to the search of the optimal transhipment-transit hub-port and was implemented in the Aegean area with very good results. Furthermore it could be implemented in the cruise sector for the search of the optimal homeport (Lekakou et al., 2009). A subject for further investigation is the transportation problem in a region, such as Aegean area, as a problem of holistic view, within the frame of a complete combined transportation system where the road, sea and air transport, will operate within the frame of a healthy competitive market, for complete and high quality transportation services.

REFERENCES

Aifantopoulou, G. (2004). Implementation of experienced technicians and systems optimum design of vehicle fleet distribution routes, Ph.D. dissertation, School of Civil Engineering, *Aristotle University of Thessaloniki*, Greece.

Chainas, K. (2012). The optimization of the Greek Coastal Shipping Transportation Network, *Tourismos,* Vol. 7, pp. 353-367

Chlomoudis, K., Lekakou, M., Panou, K., Papademetriou, E., Syriopoulos, Th. & Jannatos, E. (2007). *Transportations - Life arteries for the islands.* Athens, ITA Publications.

Dobson G. & Lederer P. (1993). Airline Scheduling and Routing in a Hub-and-Spoke System, *Transportation Science,* Vol. 3, pp.281-297

Lekakou, M., Pallis, A. & Vaggelas, G. (2009). Which homeport in Europe: the cruise industry's selection criteria. *Tourismos,* Vol. 4, No.4, pp.15-29.

Papanastasiou, J., Lazaridis I. & Noulas A. (2006). Tourists' preferences for
   quality of services: empirical investigation of Lesvos, Samos and Chios
   islands. *Tourismos,* Vol. 1, No.2, pp.95-101.

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BOOK REVIEW

Tourism and Sustainable Development: Reconsidering a Concept of Vague Policies
Jörn W. Mundt, editor (2011). Erich Schmidr Verlag

This is yet another book to add to the current corpus of knowledge on tourism and sustainable development. Hence, the question I asked myself when reviewing this book is how different can this book be in trying to move us away from today's political rhetoric in the use of the term "sustainability". The book is mainly targeted at seasoned researchers and also policy makers that has always struggled in operationalizing the model of sustainability due to the vagueness of the concept. Hence, the premise behind the book is simply that the concept of sustainable tourism has been used superficially by all stakeholders including researchers and practioners. The author, J.W. Mundt, has been critical and contemptuous is his view of the concept of sustainability.

The tourism industry's interest in appearing to be "green" or "sustainable" has increased in exponential proportions over the past few year. After the failed climate summit in Copenhagen in 2009, the hopeful Cancun conference in 2010 and the more successful Durban summit recently in 2011, Mankind has to face the following reality that the concept of sustainability has no significance if the following crisis cannot be resolved by the very reason why such concept was introduced in the first place:

1. Feeding a global population predicted to be half as big again as at the turn of this century.
2. Eliminating poverty and inequality whilst providing an acceptable quality of life for all.
3. Harnessing sufficient energy to power our economies without damaging environmental consequences.
4. Halting the decline in biodiversity and learning to leave in harmony with other species.

J.W. Mundt attempts to contribute to a deeper understanding of the concept of sustainability by providing a closer look at the original definition and reviewing its conceptual history which helps to untangle the terminological confusion that are used by many to their advantage or sometimes disadvantage. Nonetheless, this book gives us a fresh perspective in the sense it is little eclectic and certainly not the usual standard text in the area of tourism and sustainability. Thus, it is indeed a good read for all.

A multidisciplinary and inter-disciplinary approach is adopted by the author in discussing the complex interactions that surround sustainability. Only three out of the eight chapters elaborated in detail the links, in relation to tourism. Due to this, readers are exposed to the wider areas around the topic. Eight chapters are laid out with two "Excursus" in Chapter 3 and 5 [Note: *Ex·cur·sus (k-skûr s s).* n. pl. *ex·cur·sus·es* is a lengthy, appended exposition of a topic or point].

Chapter 1 acts to give an overview of the current state as an introduction or preface (which is visibly mission in this book). The evolution and interpretation across history is explored. Nonetheless, the chapter lacks discussion on the evolution of sustainability in the context of tourism. Interestingly, the chapter ends with a discussion on the academic market for sustainable tourism. In the 'publish or perish' paradigm that rules much of the academic world, the attractiveness of 'sustainability' related research topics appears to be fashionable rather than a manifestation of the perceived overall importance of the issue especially the on-going global debate on climate change.

Chapter 2 elaborates in detail the concept of sustainably successfully. This include discussions on the original concept of sustainability defined in the Brundtland Report (1987) in comparison with the modern understanding of the term, 'weak and strong sustainability rules' and the most interesting part of the chapter on 'development is not growth'. This discussion is continued into chapter 3 (Excursus 1) where a digression of the discussion is outlined on topics such as 'markets of violence', 'the dubious character of aid', 'pillarisation of society', and the end of the section with topics such as the popularised 'pro-poor tourism' which is seen as another 'green-washing' or marketing tool for development agencies and non-governmental organisation in order to gain more money using the issue of 'alleviating poverty via tourism'.

Moving on to the very academic chapter 4, sound discussion on the 'three pillars' approach of sustainability is well outlined in figures to

show the relationship between environment, society and economy. Nonetheless, the chapter appears to further focus on 'social sustainability' with lacking in discussion on the other two dimensions of sustainability (environment and economy). The understanding of the social sustainability concept is further debated here as it appears the term may or may not denote, "the social preconditions for sustainable development or the need to sustain specific social structures and customs". Against this background, the chapter make a plea for a more accurate utilisation of terms by going back to the basics to avoid the whole concept of sustainability in danger to be discredited and maybe even abandoned.

The second digression (Excuses II) of chapter 5 focusses the discussion to another popular terminology that has evolved from sustainability, 'corporate social responsibility (CSR)' and 'non-government organisation (NGO)'. The author has been critical on this two under researched areas. For NGOs, CSR is the means by which to demand higher standards of corporate behaviour with the fundamental of sustainability at the backdrop. At a glance, the plethora of NGOs actively promoting sustainability issues and demanding CSR give an impression of plurality of concepts and opinion. However, a closer look reveals pretty much the same rhetoric.

Chapter 6 highlights the current global debate in the very complex issue of 'climate change'. This is followed by Chapter 7 and 8 which provide us with some empirical and descriptive dialogue on the tourism industry and sustainability, which should have been the core of the book rather than "leaving the best (the essential) for the last". In these two chapters, the author has well contextualised the issues of sustainability that was well elaborated in the previous six chapters, to the tourism industry. As quoted, indeed "tourism is probably the most visible symbol of both globalisation and pollution". Chapter 7 also interesting discussed thought provoking topics such as, 'culture is culture because of change' and 'the same is different', where tourism is often seen as a "dynamic force homogenizing societies and commodifying cultures across the globe", with cultures generally open to continuous change.

Finally, an interesting way to conclude the book (Chapter 9) with rationalisation of the book structure and the sub-section on "Taylorisation" of Academia' where the focus of the discussion was on the German-speaking countries, seem out of place in the discussion of the book.

In summing up, the book is interesting but not what you expect to get looking at just the title, "Reconsidering a Concept of Vague Policies".

The book only focusses on the tourism scene in two chapters towards the end and lack projection of what to expect in the years to come. Nonetheless, the book is worth reading as it is written in not a typical book that you expect on 'sustainability'. Indeed it is an interdisciplinary and overarching critique of the modern concept of sustainability and its application in the globalised tourism industry.

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TOURISMOS

An International Multidisciplinary Journal of Tourism

AIMS & SCOPE

TOURISMOS is an international, multi-disciplinary, refereed (peer-reviewed) journal aiming to promote and enhance research in all fields of tourism, including travel, hospitality and leisure. The journal is published by the University of the Aegean (in Greece), and is intended for readers in the scholarly community who deal with different tourism sectors, both at macro and at micro level, as well as professionals in the industry. *TOURISMOS* provides a platform for debate and dissemination of research findings, new research areas and techniques, conceptual developments, and articles with practical application to any tourism segment. Besides research papers, the journal welcomes book reviews, conference reports, case studies, research notes and commentaries. *TOURISMOS* aims at:

- Disseminating and promoting research, good practice and innovation in all aspects of tourism to its prime audience including educators, researchers, post-graduate students, policy makers, and industry practitioners.
- Encouraging international scientific cooperation and understanding, and enhancing multi-disciplinary research across all tourism sectors.

The scope of the journal is international and all papers submitted are subject to strict blind peer review by its Editorial Board and by other anonymous international reviewers. The journal features conceptual and empirical papers, and editorial policy is to invite the submission of manuscripts from academics, researchers, post-graduate students, policy-makers and industry practitioners. The Editorial Board will be looking particularly for articles about new trends and developments within different sectors of tourism, and the application of new ideas and developments that are likely to affect tourism, travel, hospitality and leisure in the future. *TOURISMOS* also welcomes submission of manuscripts in areas that may not be directly tourism-related but cover a

topic that is of interest to researchers, educators, policy-makers and practitioners in various fields of tourism.

The material published in *TOURISMOS* covers all scientific, conceptual and applied disciplines related to tourism, travel, hospitality and leisure, including: economics, management, planning and development, marketing, human resources, sociology, psychology, geography, information and communication technologies, transportation, service quality, finance, food and beverage, and education. Manuscripts published in *TOURISMOS* should not have been published previously in any copyright form (print or electronic/online). The general criteria for the acceptance of articles are:

- Contribution to the promotion of scientific knowledge in the greater multi-disciplinary field of tourism.
- Adequate and relevant literature review.
- Scientifically valid and reliable methodology.
- Clarity of writing.
- Acceptable quality of English language.

TOURISMOS is published twice per year (in Spring and in Autumn). Each issue includes the following sections: editorial, research papers, research notes, case studies, book reviews, conference reports, industry viewpoints, and forthcoming events.

JOURNAL SECTIONS

Editorial
The Editorial addresses issues of contemporary interest and provides a detailed introduction and commentary to the articles in the current issue. The editorial may be written by the Editor, or by any other member(s) of the Editorial Board. When appropriate, a "Guest Editorial" may be presented. However, *TOURISMOS* does not accept unsolicited editorials.

Research Papers
For the Research Papers section, TOURISMOS invites full-length manuscripts (not longer than 6000 words and not shorter than 4000 words) from a variety of disciplines; these papers may be either empirical or conceptual, and will be subject to strict blind peer review (by at least three anonymous referees). The decision for the final acceptance of the paper will be taken unanimously by the Editor and by the Associate

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Editors. The manuscripts submitted should provide original and/or innovative ideas or approaches or findings that eventually push the frontiers of knowledge. Purely descriptive accounts are not considered suitable for this section. Each paper should have the following structure: a) abstract, b) introduction (including an overall presentation of the issue to be examined and the aims and objectives of the paper), c) main body (including, where appropriate, the review of literature, the development of hypotheses and/or models, research methodology, presentation of findings, and analysis and discussion), d) conclusions (including also, where appropriate, recommendations, practical implications, limitations, and suggestions for further research), e) bibliography, f) acknowledgements, and g) appendices.

Case Studies
Case Studies should be not longer than 3500 words and not shorter than 2500; these articles should be focusing on the detailed and critical presentation/review of real-life cases from the greater tourism sector, and must include - where appropriate - relevant references and bibliography. Case Studies should aim at disseminating information and/or good practices, combined with critical analysis of real examples. Purely descriptive accounts may be considered suitable for this section, provided that are well-justified and of interest to the readers of *TOURISMOS*. Each article should have the following structure: a) abstract, b) introduction (including an overall presentation of the case to be examined and the aims and objectives of the article), c) main body (including, where appropriate, the review of literature, the presentation of the case study, the critical review of the case and relevant discussion), d) conclusions (including also, where appropriate, recommendations, practical implications, and suggestions for further study), e) bibliography, f) acknowledgements, and g) appendices. All Case Studies are subject to blind peer review (by at least one anonymous referee). The decision for the final acceptance of the article will be taken unanimously by the Editor and by the Associate Editor.

Research Notes
Research Notes should be not longer than 2000 words and not shorter than 1000; these papers may be either empirical or conceptual, and will be subject to blind peer review (by at least two anonymous referees). The decision for the final acceptance of the paper will be taken unanimously by the Editor and by the Associate Editors. The manuscripts submitted may present research-in-progress or my focus on the conceptual

development of models and approaches that have not been proven yet through primary research. In all cases, the papers should provide original ideas, approaches or preliminary findings that are open to discussion. Purely descriptive accounts may be considered suitable for this section, provided that are well-justified and of interest to the readers of *TOURISMOS*. Each paper should have the following structure: a) abstract, b) introduction (including an overall presentation of the issue to be examined and the aims and objectives of the paper), c) main body (including, where appropriate, the review of literature, the development of hypotheses and/or models, research methodology, presentation of findings, and analysis and discussion), d) conclusions (including also, where appropriate, recommendations, practical implications, limitations, and suggestions for further research), e) bibliography, f) acknowledgements, and g) appendices.

Book Reviews

Book Reviews should be not longer than 1500 words and not shorter than 1000; these articles aim at presenting and critically reviewing books from the greater field of tourism. Most reviews should focus on new publications, but older books are also welcome for presentation. Book Reviews are not subject to blind peer review; the decision for the final acceptance of the article will be taken unanimously by the Editor and by the Book Reviews Editor. Where appropriate, these articles may include references and bibliography. Books to be reviewed may be assigned to potential authors by the Book Reviews Editor, though *TOURISMOS* is also open to unsolicited suggestions for book reviews from interested parties.

Conference Reports

Conference Reports should be not longer than 2000 words and not shorter than 1000; these articles aim at presenting and critically reviewing conferences from the greater field of tourism. Most reports should focus on recent conferences (i.e., conferences that took place not before than three months from the date of manuscript submission), but older conferences are also welcome for presentation if appropriate. Conference Reports are not subject to blind peer review; the decision for the final acceptance of the article will be taken unanimously by the Editor and by the Conference Reports Editor. Where appropriate, these articles may include references and bibliography. Conference reports may be assigned to potential authors by the Conference Reports Editor, though

TOURISMOS is also open to unsolicited suggestions for reports from interested parties.

Industry Viewpoints

Industry Viewpoints should be not longer than 1500 words and not shorter than 500; these articles may have a "commentary" form, and aim at presenting and discussing ideas, views and suggestions by practitioners (industry professionals, tourism planners, policy makers, other tourism stakeholders, etc.). Through these articles, *TOURISMOS* provides a platform for the exchange of ideas and for developing closer links between academics and practitioners. Most viewpoints should focus on contemporary issues, but other issues are also welcome for presentation if appropriate. Industry Viewpoints are not subject to blind peer review; the decision for the final acceptance of the article will be taken unanimously by the Editor and by the Associate Editors. These articles may be assigned to potential authors by the editor, though *TOURISMOS* is also open to unsolicited contributions from interested parties.

Forthcoming Events

Forthcoming Events should be not longer than 500 words; these articles may have the form of a "call of papers", related to a forthcoming conference or a special issue of a journal. Alternatively, forthcoming events may have the form of a press release informing readers of *TOURISMOS* about an event (conference or other) related to the tourism, travel, hospitality or leisure sectors. These articles should not aim at promoting sales of any products or services. The decision for the final acceptance of the article will be taken by the Editor.

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NOTES FOR CONTRIBUTORS

Manuscript Submission Procedure

Manuscripts should be written as understandably and concisely as possible with clarity and meaningfulness. Submission of a manuscript to *TOURISMOS* represents a certification on the part of the author(s) that it is an original work and has not been copyrighted elsewhere; manuscripts that are eventually published may not be reproduced in any other publication (print or electronic), as their copyright has been transferred to *TOURISMOS*. Submissions are accepted only in electronic form; authors are requested to submit one copy of each manuscript by email attachment. All manuscripts should be emailed to the appropriate Editor as follows:

- Conference reports should be emailed directly to the Conference Reports Editor (Dr. Vasiliki Galani-Moutafi), at v.moutafi@sa.aegean.gr.
- Book reviews should be emailed directly to the Book Reviews Editor (Dr. Marianna Sigala), at m.sigala@aegean.gr.
- Full papers and all other types of manuscripts should be emailed directly to the Editor (Prof. Evangelos Christou), at e.christou@aegean.gr.

Feedback regarding the submission of a manuscript (including the reviewers' comments) will be provided to the author(s) within six weeks of the receipt of the manuscript. Submission of a manuscript will be held to imply that it contains original unpublished work not being considered for publication elsewhere at the same time. Each author of a manuscript accepted for publication will receive three complimentary copies of the issue, and will also have to sign a "transfer of copyright" form. If appropriate, author(s) can correct first proofs. Manuscripts submitted to *TOURISMOS,* accepted for publication or not, cannot be returned to the author(s).

Manuscript Length

Research Papers should be not longer than 6000 words and not shorter than 4000. Research Notes should be not longer than 2000 words and not

shorter than 1000. Case Studies should be not longer than 3500 words and not shorter than 2500. Book Reviews should be not longer than 1500 words and not shorter than 1000. Conference Reports should be not longer than 2000 words and not shorter than 1000. Industry Viewpoints should be not longer than 1500 words and not shorter than 500. Forthcoming Events should be not longer than 500 words. Manuscripts that do not fully conform to the above word limits (according to the type of the article) will be automatically rejected and should not be entered into the reviewing process.

Manuscript Style & Preparation

- All submissions (research papers, research notes, case studies, book reviews, conference reports, industry viewpoints, and forthcoming events) must have a title of no more than 12 words.
- Manuscripts should be double-line spaced, and have at least 2,5 cm (one-inch) margin on all four sides. Pages should be numbered consecutively.
- The use of footnotes within the text is discouraged – use endnotes instead. Endnotes should be kept to a minimum, be used to provide additional comments and discussion, and should be numbered consecutively in the text and typed on a separate page at the end of the article.
- Quotations must be taken accurately from the original source. Alterations to the quotations must be noted. Quotation marks (" ") are to be used to denote direct quotes. Inverted commas (' ') should denote a quote within a quotation. If the quotation is less than 3 lines, then it should be included in the main text enclosed in quotation marks. If the quotation is more than 3 lines, then it should be separated from the main text and indented.
- The name(s) of any sponsor(s) of the research contained in the manuscript, or any other acknowledgements, should appear at the very end of the manuscript.
- Tables, figures and illustrations are to be included in the text and to be numbered consecutively (in Arabic numbers). Each table, figure or illustration must have a title.
- The text should be organized under appropriate section headings, which, ideally, should not be more than 500-700 words apart.
- The main body of the text should be written in Times New Roman letters, font size 12.

- Section headings should be written in Arial letters, font size 12, and should be marked as follows: primary headings should be centred and typed in bold capitals and underlined; secondary headings should be typed with italic bold capital letters; other headings should be typed in capital letters. Authors are urged to write as concisely as possible, but not at the expense of clarity.
- The preferred software for submission is Microsoft Word.
- Authors submitting papers for publication should specify which section of the journal they wish their paper to be considered for: research papers, research notes, case studies, book reviews, conference reports, industry viewpoints, and forthcoming events.
- Author(s) are responsible for preparing manuscripts which are clearly written in acceptable, scholarly English, and which contain no errors of spelling, grammar, or punctuation. Neither the Editorial Board nor the Publisher is responsible for correcting errors of spelling or grammar.
- Where acronyms are used, their full expression should be given initially.
- Authors are asked to ensure that there are no libellous implications in their work.

Manuscript Presentation

For submission, manuscripts of research papers, research notes and case studies should be arranged in the following order of presentation:
- *First page*: title, subtitle (if required), author's name and surname, affiliation, full postal address, telephone and fax numbers, and e-mail address. Respective names, affiliations and addresses of co-author(s) should be clearly indicated. Also, include an abstract of not more than 150 words and up to 6 keywords that identify article content. Also include a short biography of the author (about 50 words); in the case of co-author(s), the same details should also be included. All correspondence will be sent to the first named author, unless otherwise indicated.
- *Second page*: title, an abstract of not more than 150 words and up to 6 keywords that identify article content. Do *not* include the author(s) details, affiliation(s), and biographies in this page.
- *Subsequent pages*: the paper should begin on the third page and should not subsequently reveal the title or authors. In these pages should be included the main body of text (including tables, figures

and illustrations); list of references; appendixes; and endnotes (numbered consecutively).
- The author(s) should ensure that their names cannot be identified anywhere in the text.

Referencing Style

In the text, references should be cited with parentheses using the "author, date" style - for example for single citations (Ford, 2004), or for multiple citations (Isaac, 1998; Jackson, 2003). Page numbers for specific points or direct quotations must be given (i.e., Ford, 2004: 312-313). The Reference list, placed at the end of the manuscript, must be typed in alphabetical order of authors. The specific format is:

- *For journal papers:* Tribe, J. (2002). The philosophic practitioner. *Annals of Tourism Research*, Vol.29, No.2, pp.338-357.
- *For books and monographs:* Teare, R. & Ingram, H. (1993). *Strategic Management: A Resource-Based Approach for the Hospitality and Tourism Industries*. London, Cassell.
- *For chapters in edited books:* Sigala, M. and Christou, E. (2002). Use of Internet for enhancing tourism and hospitality education: lessons from Europe. In K.W. Wober, A.J. Frew and M. Hitz (Eds.) *Information and Communication Technologies in Tourism*, Wien: Springer-Verlag.
- *For papers presented in conferences:* Ford, B. (2004). Adoption of innovations on hospitality. *Paper presented at the 22nd EuroCHRIE Conference*. Bilkent University, Ankara, Turkey: 3-7 November 2004.
- *For unpublished works:* Gregoriades, M. (2004). The impact of trust in brand loyalty, *Unpublished PhD Tourismos*. Chios, Greece: University of the Aegean.
- *For Internet sources (if you know the author)*: Johns, D. (2003) The power of branding in tourism. Http://www.tourismabstracts.org/marketing/papers-authors/id3456. Accessed the 12th of January 2005, at 14:55. (note: always state clearly the <u>full</u> URL of your source).
- *For Internet sources (if you do not know the author)*: Tourism supply and demand. Http://www.tourismabstracts.org/marketing/papers-authors/id3456. Accessed the 30th of January 2004, at 12:35. (note: always state clearly the <u>full</u> URL of your source).

- *For reports:* Edelstein, L. G. & Benini, C. (1994). *Meetings and Conventions*. Meetings market report (August), 60-82.