



## Abstract Book



# 10<sup>th</sup> International Conference on Islands Tourism

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## **Observatory on Tourism for Islands Economy**

The Observatory on Tourism in the European Islands (OTIE), was founded in Palermo on 2 February 2007 by public institutions, Universities, Research Centres and other international organizations as a non-profit organization. It is the first observatory with the specific focus on island tourism and development and its main purpose is to draw up statistics surveys and realize researches in order to identify the current issues of Tourism in Islands. OTIE activities are all focused on updating the Databank on Insular Tourism, creating the Documentation Centre of the Islands, achieving studies and researches, organizing forums and seminars, and participating to the European projects of cooperation and social economic development. Thanks to the direct dialogue with the institutions, the companies and the centers of research on tourism, OTIE provides its support to the insular realities to devise strategic, operative and marketing plans on tourism by taking advantage of its wide network of contacts and a steady updated benchmark on insular tourism.

Since November 2017, The Observatory changes its nature, from an institution engaged in supporting the European islands to an institution aiming to support all the islands around the world, then becoming the Observatory on Tourism for Islands Economy (OTIE).

## **10th OTIE International Conference on Islands Tourism**

The aim of the conference is to promote the scientific and technical exchange between international academics and experts on insular contexts in order to address efficient strategies to insular development by promoting a wide cooperation. The conference is one of the working step of the Islands Economy Working Group created in Brussels the last November, 27th. The scope of the IEWG, as well as that one of this conference is to promote the creation of an International Network of Island Contexts.

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### Island vulnerability to Overtourism: Issues and Implications

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Overtourism (Goodwin 2016) has become a major issue of concern to many tourist destinations in recent years, although the phenomenon has been recorded in a variety of forms for many years as some destinations have been subjected to excessive numbers of tourists for considerable periods. Islands would seem to be particularly vulnerable to this phenomenon because they are often small in area, limited in their opportunity to engage in economic activities other than tourism, and therefore become heavily dependent on tourism (Alberts and Baldachinno 2017), and are often subject to external control, both political and economic. Such a situation would suggest that islands, more than most tourist destinations, are therefore liable to experience excessive development and tourist numbers often far beyond their capacity to control and manage.

The paper first examines the characteristics of islands potentially most vulnerable to overtourism in terms of their location, dimensions and pattern of tourism development. It then examines briefly the causes of, and forces creating overtourism and how these relate specifically to island destinations. The paper then discusses the means by which island destinations might be able to control, limit or mitigate the development of overtourism and how such controls might be implemented. The paper comments on the tendency for development on islands and other sensitive environments to take place under the guise of sustainable development, despite the fact that much of such development is not truly sustainable and rarely assessed in a holistic manner to provide a true measure of sustainability (Butler 2018).

The paper concludes that islands are potentially more vulnerable to overdevelopment than many other destinations but that many islands, in fact, have the means to at least mitigate and in some cases prevent overtourism if they act appropriately and at a suitably early stage of tourism development (Butler 1980). Effective leadership, strong local government and clear locally supported goals are important in helping to achieve such control.

**key words:** Overtourism, island development, controls, management, mitigation

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## Emerging cultural issues and policies for the islands

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Culture is important tool for the tourism development in any region to benefit with visitors to area. The cultural experiences can enhance tourism and attract tourist to local area. Tourists are attracted to the area for local products, heritage and local community experience as a motivational factor to local region.

The term 'culture' has been debated intensely over the last two decades and no clear definition of the concept has yet been accepted by the community as a whole. Culture, in modern day terms, is largely seen as a product of governments, large organisations and individuals who are aiming to develop their own standing in the given market (Raj et al, 2009). Culture is closely linked to our national identity and the importance that individual people place on local and national social organisations, such as local governments, education institutions, religious communities, work and leisure.

It could be argued that a catalytic effect ensues whereby an increase in investment additional monies are made available for local infrastructure and long term promotional benefits are created. Further to this other tangible benefits are; improved tax revenues and increased property prices, with subsequent connections to the community. Significant economic benefits provided by outdoor events to the host city can create the potential of high-status profiles and increased tourism potential and awareness for the future.

This paper therefore offers discussion points on the Emerging Cultural Issues and Policies for the Islands and the role of cultural tourism in the creation of opportunities and strategies for the region. It will also contest how local communities benefit from the cross-cultural festivals and increase the tourism in to the area.

**Keywords:** Emerging, Culture, Sustainability, Development, Community

### **Sustainable Tourism Development by Exploiting Underwater Cultural Heritage: The BLUEMED Approach**

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In spite of the growing interest in Underwater Cultural Heritage (UCH) worldwide, the difficulty in enjoying underwater archaeological assets is still remarkable; hence the need for innovative solutions that are suitable to raising public awareness and knowledge on the subject [1-3]. Addressing this need, this work aims to identify and evaluate the potential of UCH for supporting the development of economic and sustainable tourism in the Mediterranean. It focuses on supplying local/regional authorities and stakeholders with a multi-disciplinary plan for managing Underwater Museums and Knowledge centres, promoting innovation in the diving industry, and improving users/tourists experience through innovative services, experiences and technologies.

A main objective of this work is based on the design of exhibition and information centres, named KAC (Knowledge Awareness Centre), where advanced digital technologies (i.e. Virtual Reality, Mixed/Augmented Reality, immersive visualization techniques) merge with the traditional museum practice and the dissemination/communication activities of facilities, such as Visitor Centres and InfoPoints. Moreover, all activities linked to an underwater archaeological site (e.g. bookings, departure/arrival of diving excursions) will be managed by the relative KAC. Tourists visiting an UCH will enjoy the archaeological artifacts using the Virtual Diving systems deployed in the KAC, and take part to guided tours along dedicated underwater trails by using the AR Diving system developed in the context of this work.

KACs will prove to be very efficient facilities in enhancing traditional museum exhibitions. The combination of traditional and innovative management practices will considerably diversify the KACs' offer, and will contribute to their success. This approach makes KACs a valuable tool for providing a wider range of solutions to both local community/operators (i.e. diving, maritime and tourism industries) and incoming tourists. The KACs will be a key factor in defining a sustainable and responsible model for tourism development based on the management, protection and promotion of underwater sites.

This work is being developed within the BLUEMED project, which is being funded by the European Interreg MED Programme, with five major underwater pilot sites located in Italy, Greece and Croatia. The five sites have been selected as case studies with the aim of identifying and testing new methods for providing public access and managing UCH sites, while maintaining high standards of knowledge, protection and safeguard.

**Keywords:** Archaeology, Cultural Heritage, Diving, KAC, Underwater

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## **Walking tourism in Malaga: a pilot survey to explore tourism behaviours with a GPS approach**

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Walking tourism is considered one of the ways to experience communities and cities, and one of the most sustainable modes of movement in urban destinations because it represents an environmentally friendly solution. Thus, many destination managers would encourage walking in order to solve urban problems, like traffic congestion and air pollution, and to avoid conflicts with local residents. Walking tourism is a direct way to explore most of cultural attractions and immaterial heritage; it is a good occasion to come into contact with residents' lives and local behaviors. Moreover, planning pedestrian streets and designing specific walking routes for tourists can constitute opportune strategies to facilitate fruition of urban context by tourists. An improved knowledge of time-space behavior of walking tourists can be useful in order to forecast positive and negative impacts, to prevent overcrowding and in more general terms, to manage positively the tourism experience, the quality of tourists' stay and to enhance the host/guest relationship. Nonetheless, space-time mobility of walking tourists at destination is a rather poorly investigated phenomenon; however, the increasing availability of GPS-based technologies to collect and analyze information regarding movements of people is a relevant opportunity for researchers to assess the impact of tourism in urban destinations.

In this paper, we propose an integrated method of collecting data with the use of traditional questionnaire in addition to the GPS tracks. The experience gained in this pilot survey will be useful for explore the urban destination and the way tourists qualified the urban context and its attractions.

**Keywords:** Walking tourism; Tourism mobility; GPS-based technologies; urban tourism; Malaga

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## Climate Change Education tailored to Tourists' Interests through augmented reality

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This study attempts to demonstrate the extent at which the combination of the means of technology, particularly 3D animation and dramatic narration through film-making can prove to be supportive and innovative in the field of informal education of the environmental issue of climate change.

The purpose of this research is to highlight the importance of visualization tools on climate change education with the aim of raising public awareness and possibly influencing behaviors and attitudes of places where tourism is of prime importance, like the small greek islands.

Emerging visualization theory suggests that realistic landscape imagery can offer special benefits to bring the impact of climate change on people in an exciting and innovative way. Such methods could accelerate policy change and action, representing a powerful tool to create tourists' climate change awareness.

In this research, three-dimensional (3D) graphics objects are produced in order to visualize environmental impacts. These will be integrated with real footage. Additionally, a short film with an imaginary scenario will be presented in order to transmute the strong messages of climate change.

The scenario of the film deals with the proposal of a company to the municipality of the island for the construction of state-of-the-art facilities, buildings, etc. Although these actions will be ideal for the tourist and economic development of the island, they will not be ecologically friendly to the natural environment. In summary, the real impact on the island's environment will be shown by means of 3D graphics and film-making.

Finally, this research suggests possible avenues of research and innovative educational methods in order to train for climate change effects in the informal form of education and therefore promote actions that are environmentally friendly in the promotion of tourism industry.

**Keywords:** environmental awareness; climate change; three-dimension graphics; community response; visualization

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## **Re-inventing a tourism development model using competitive intelligence: the north sulawesi province case study**

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As one of the 34 provinces composing Indonesia, North Sulawesi (SULUT), located in the eastern part of the world largest archipelago has to compete to develop trade and industry, attract Indonesian and international tourists.

Less known, publicized or accessible than Bali, Java or Sumatra; SULUT is home of natural wonders both inland and underwater and rich of indigenous traditions or colonial heritage.

For decades, tourism was driven by the reputation of its main city, Manado, for offering spectacular dive spots and being home of rare species. Recent studies stressed the damages of tourism on fauna and flora. (Tangian, Djokosetiyanto, Kholil, & Munandar, 2015) Positive impacts for islanders are also not that obvious.

Supported by local airports modernization and the creation of new asian air routes, Manado's attractiveness keeps increasing. Large hotels, shopping malls are burgeoning. Tourists more consumption oriented than environment sensitive appeared.

A tendency than the integration of SULUT in the Chinese OBOR initiative may accentuate.

Other provincial regencies are also challenging Manado.

At a time Indonesia is at the crossroads (Fournié & Dou, 2017), the current paper explores the development perspectives of SULUT tourism. Besides diving other areas: ecotourism, sport, culture, religion, ...will be considered.

Tourism shall improve daily life and allow job creation. Environment, culture and traditions shall be explained, preserved and valued.

Our study advocates that tourism development shall be planned and organized using a Competitive Intelligence (CI) and Territorial Development approach at provincial (Dou & Manullang, 2004) level.

Projects, training and education, handicraft, small related industries and services shall instead take place at local level.

To avoid traps and conflicts between communities, proper studies shall be conducted. To do so and suggest the orientations of the regional strategy, obtaining complete and accurate data is mandatory.

Thus, Provincial authorities claim that tourism may bring back SULUT “glory days” may become a reality.

**Keywords:** Tourism, Competitive Intelligence, Territorial development, Island development, Indonesia, North Sulawesi

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## Skyros project: a paradigmatic ecovillage

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The search for sustainable lifestyle, combined with, the promotion of environmental protection, provide research interest on the concept of creative tourism [Andriopoulos et al, 2017]. This tourism type offers visitors the opportunity to develop their creative potential through active participation in learning experiences, characteristic of their chosen holiday destination [Richards & Raymond, 2000].

Skyros Island has been chosen for this study, due to its profile and port infrastructure. In 2015, the University of the Aegean collaborated with Skyros Port Authority on an environmental campaign, named “SKYROS Project”. The enthusiastic researchers through their daily environmental investment led the way to a permanently established remote training site [Antonopoulos et al, 2017]. The purpose of this study is to present as a paradigmatic way a proposed Skyros Ecovillage Project. The residents of the ecovillage will be provided the essentials for their needs. In order to assess their needs a questionnaire will be distributed to the ones who have served Skyros Project since its initiation. The results would guide us on the sketching of the proposed Skyros Ecovillage.

**Keywords:** Creative tourism; ecovillage; environmental responsible behavior



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## Linking the impact to visit to the visual aesthetic factors of the homepage of websites: An experimental study on Brittany islands

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The present study aims to investigate how the aesthetic homepage website characteristics are perceived and evaluated and how they impact users' intention to visit the islands. The importance of the visual aesthetics of the homepage of the website as identity expression of brands is more investigated for organizations (for example Tractinsky & al., 2000, 2006; Norman, 2002 ; Kim & al., 2003; Lavie & Tractinsky, 2004 ; Schenkman & Jonsson, 2000) than for place branding or islands. The application domain of the websites of the Brittany islands is justified by the strategic challenge that these places represent in terms of tourism attractiveness of the Brittany region, the awareness of web designers to increase professionalism expected by Internet users and therefore the need to develop academic research that is lacking to date. Based on a literature review, it is expected that the more the aesthetics factor design is well evaluated, specially on the expressive dimension, the more the user will be intended to visit the place. The theoretical framework is based on three main research questions: 1) the perceived aesthetics factor design or physical aesthetic characteristics - the structural design factors and the perceived global factor design - of a home page that reflect the identity of the place; 2) their impact of the perception of the aesthetics of the home page on the visitor's affective and behavioral responses; 3) the individual characteristics that could influence the users responses.

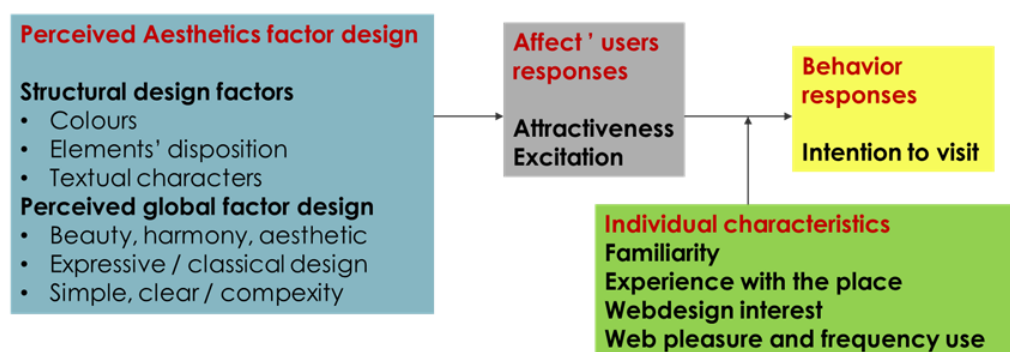


Figure 1. The conceptual framework

To justify our purpose, an exploratory study was conducted on a sample of 307 respondents, with an online questionnaire, and focuses on the perceptions of the aesthetics of the web pages of 8 Brittany islands and their Influences on attitudinal and behavioral responses. The main relationships between the variables (figure 1) are presented and the hypotheses are tested. Then, we conclude on the theoretical and managerial implications, the limits and future researches.

**Key words:** Aesthetics homepage website; Place branding; Tourism in Brittany Islands; Visitor attitude and behavior

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### The social costs of conservation programs in small island destinations

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The purpose of this study to determine the social costs that strict conservation programs may have on the quality of life for locals residing in a small island destination (SID). The Caribbean is a region that is primarily made up of SIDs (Croes, 2011). These destinations primarily depend upon the island's natural resources to enhance opportunities for their inhabitants. The most prevalent natural resources for SIDs in this region are lush tropical settings with immediate sea access. Thus, one instrument that has been commonly used to convert these natural resources into economic assets has been that of tourism development (McLeod and Croes, 2018). Literature is seemingly anchored with efforts to prevent the unabated use of natural resources that could result in the potential harm to the local residents and the environment. For this reason, SIDs are urged to develop natural conservation programs to avert the level of tourists that would exceed the island's carrying capacity (Connell, 2018).

One of the most successful Caribbean islands to adopt such conservation programs is the island of Bonaire. The conservation program was designed to specifically protect the island's coral reefs in the 1970's. Bonaire's conservation program has resulted in the island becoming one of the most pristine areas in the world. Thus, the island has withstood the pressures of aggressive tourism development. However, while this program has been beneficial to nature, the cost of this particular program has revealed itself in the dimension of human development. The assertive efforts to protect the island's natural resources has placed strict enforcements on policymakers to protect the environment at the cost of social and economic opportunities for local residents. A case study using mixed methods reveals the tolerance level amongst locals for the conservation program as well as the impacts the program has on Bonairians' quality of life.

**Keywords:** Small island destinations, Caribbean, Conservation, Natural resources, Social costs

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## Tourist perceptions of „green beach“ in Istria (Croatia)

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Preservation of natural and cultural heritage is one of the main goals in sustainable tourism development. Due to the increasing number of trips and tourist arrivals in destinations and therefore the increasing number of beach users in the coastal destinations, in order to preserve the natural and cultural heritage, it is important to manage the beaches in a sustainable and responsible way. Since most of the tourist arrivals in Croatia are on the coast the favourite activity of tourists is swimming / bathing (TOMAS, 2017). Managing the beach in sustainable way is a good policy for the future. It is well-known that further development of tourism depends on the resources the region has. For achieving sustainable tourism development the negative impacts of tourism must be limited as much as possible (Vehbi, 2012). In this process, besides of participation of all stakeholders (local communities, government and tourists) it is important to educate tourists/visitors about the importance of preserving natural resources in order to reduce and minimize the negative impacts of tourism and become responsible (Ng S.I. et al., 2017). Consumers perceive the concept of responsible tourism in different ways which are mostly not stable but rather fluid and variable (Caruana R. et al., 2014). The aim of the presented research was to determine tourists perceptions about “Green beach” and its sustainability and would they likely choose this kind of beach instead the usual one. For the research purpose a survey was created for the beach users in three destinations of Istria County: City of Poreč, City of Novigrad and City of Labin (Rabac area). The surveys were offered in the Croatian, English, German, Italian, Russian, Slovenian and Croatian languages. In total, from July until September, 1621 questionnaires were collected. The research was conducted within the project MITOMED+ and the results can be helpful for planning and creating strategies and innovating solutions for sustainable beach management in destinations/regions. The main goal is to avoid the negative impacts on biodiversity and to improve the quality of tourists and locals experience on the beaches.

**Keywords:** sustainable tourism, tourists’ perceptions, „Green beach“ model, Istria County, coastal and maritime tourism

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# Cycle Tourism and Sustainable mobility on islands. The case of Favignana, Egadi islands

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The analysis of the literature shows the interest of the study of tourism in island destinations. This interest is partly due to the attraction that tourists have for this type of destinations and the need to promote their sustainable management as tourism destinations (Parra-López, Martínez-González, 2018). Tourism in island destinations constitutes an opportunity for economic development and benefits both the local population and its visitors. Islands are a top destination for millions of tourists because their special geographical situation and their natural and cultural heritage richness make them unique for visitors (Baldacchino, 2015), but at the same time, confront them with a number of challenges and vulnerabilities. Much has been written on sustainable tourism and islands (Dodds, 2012) but less about cycling as a form of sustainable tourism and active travel on islands. Yet, deepening aims to look at sustainable mobility as “territorial” perspective (Privitera, 2013).

With this research we aim at contributing to the field by augmenting the catalogue of tourism destination studies and present the results of an investigation conducted in the Favignana Island (Egadi Islands), nominated bike-friendly island of 2017. The purpose of the study was to provide insights into the factors that build and enhance sustainable mobility in island destinations. These factors were studied in terms of how the governance system and the community at large responded to a series of elements link to cycle tourism. The research intends to explore the relational variables that can explain the attractiveness of place together sustainable mobility and the propensity of stakeholders and their role in cycle tourism practices. Data from a qualitative study is used to explore the difference that cultural meanings make to cycling practices in Italian island area. Methodology with interviewees fall into group of stakeholders identified as important within local cycling cultures. Specifically, the manuscript brings the debate on sustainable transport policy into direct confrontation with the embodied practice of cycling tourism in an environment as islands.

**Keywords:** cycling, island destination, stakeholders, sustainable governance, tourism

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# Developmental Models for Coastal Environments in the Philippines: Carles, Iloilo and Verde Island Passage, Batangas

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Two fragile eco-environments and tourism locations are showcased for development with different approaches.

Carles, Iloilo, Sicogon and Gigantes are in the Visayas Islands, centers for fishing with beautiful white sand beaches, limestone cliffs and colonial heritage structures from the 1800s. Townships and large master planned resort developments are only now being built in the area starting in 2015.

The Verde Island Passage covering Batangas and Mindoro in Luzon Islands, has been scientifically researched to be the center of marine biodiversity in the world. The tourism developments in the area comprise low-density boutique resorts for scuba and free-diving. The marine sanctuaries are protected by private groups.

This paper will present comparative methodologies for the following action points:

- community involvement to balance between commercial growth, environmental conservation and their fishing livelihood;
- creation of low impact businesses, local crafts, food products and non-displacement of people;
- programs in education, coastal stewardship and re-engagement of fishermen as dive assistants and boat masters;
- the role of local women to take on important tasks teaching their children and influencing their husbands;
- the drafting of guidelines for Coastal Design and Development to mitigate risks in climate change, disasters and ensure island preservation, showing perspectives and plans.

Our goal is to develop islands, to embrace the earth but not subdue it and preserve natural tropical underwater ecosystems.

Strategies for sustainability and planning must integrate the local community, government and private sectors. The future-proofing of these islands for generations is vital. Island Tourism is not just about the ambience, luxury resorts and amenities, but about the environment, the view underneath the seas and the empowerment of the native people.

**Keywords:** sustainability in design and construction, community empowerment, methodology of implementation, environmental preservation, future-proofing

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# Understanding the Ecological Footprint of Tourism on Mediterranean Islands: Environmental pressures, Local Contexts and Net Impacts

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Tourism is key economic sector in the Mediterranean, contributing to 11.4% of the regional GDP in 2016 [1] and making the region the most-visited tourist destination in the world. Although constituting a great leverage for local economic development, tourism also places environmental, and other pressures on territories, natural resources and residents, which risk outweighing the benefits. This is particularly true in the case of mass tourism, because of its spatial and seasonal concentration, especially in coastal areas and islands.

For these areas, ecotourism can be an alternative to mass tourism as it helps preserve local cultural values, provides economic opportunities for local people, and likely minimizes negative impacts on territories. Nonetheless, promoting additional tourist inflows – even if of eco-minded – requires a reflection on the trade-offs between economic gains and environmental and socio-cultural burdens. Building on an approach for monitoring the environmental impact of ecotourism [2] this paper assesses the environmental impact of ecotourism activities in two Mediterranean islands (Menorca and Crete).

The Ecological Footprint of ecotourism packages conceived through participatory processes by Local Ecotourism Clusters (LECs) in protected areas (PAs) is first assessed to account for the demand for natural resources and ecosystem services required for the provision of key services (Accommodation, Food & Drinks, Activity & Service, and Mobility & Transfer) to eco-tourists. Ecological balances [3] are then assessed to understand the overuse or underuse of natural resources and ecological services in the territories, thus providing an indication of the ecological context. Finally, Footprint intensity values for the 2 PA destinations are provided as initial proxy for the assessment of the net impact of tourists. Strengths and weaknesses of this approach and future research needs to achieve a more comprehensive and holistic net impact assessment of tourism are finally presented and debated.

**Key words:** Ecotourism, Ecological Footprint, protected areas, islands, environmental impact

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# ISLANDS ON THE BORDER: The Chafarinas Islands, maritime border and ecological treasure in the Mediterranean

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Within the set of Spanish enclaves which constitute the only one border of the European Union on North African soil, the archipelagos of small border islands territories located on the North African coast are of particular interest. These insular enclaves have a very suggestive profile, combining their character of historical maritime border (with a rich border trajectory full of events) on the one hand with the fact of being spaces of rich biodiversity as is the case of the Chafarinas Islands, true ecological treasures little anthropized, their access and presence being very restricted given the existing protection (Special Conservation Area of Natura 2000 Net).

In the negative outlook that the Mediterranean area currently presents in terms of the state of its natural environment, the Chafarinas Islands are a striking exception given the good state of conservation of the ecological environment and its original terrestrial and underwater communities. Hence, the controversy and debate surrounding the potential tourist uses of the territory that could constitute an instrument to overcome the current situation of border isolation. Situation, that paradoxically has enabled these high levels of conservation.

The present work describes the essential milestones of the past and present of Chafarinas Islands and explores its future lines, in particular the potential opening to the sustainable tourist use of the archipelago, hypothesis understood as a way to overcome the current situation of border impasse.

**Keywords:** Small Islands, Borderlands, Natura 2000 Net, Sustainable Tourism

### Tourism, Islandness and Governance

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Nissology - as proposed by McCall in 1994 - provides us with a useful framework to discuss the specificities of island peoples and places. There is much written about how the characteristics of islands have influenced their histories and development. In a tourism context, island attributes have mainly been presented in terms of their attractiveness to tourists, but also as influencing the development paths that islands have taken or have had imposed on them by external powers. However, the term 'nissology' - and the complementary concept of islandness - have so far received limited attention in the tourism governance literature (some examples are: Baldacchino, 2012 and Stratford, 2008). Island-specific opportunities and constraints have been formally recognised at the European Union level (European Union, 2007), and along with similar developments elsewhere which highlight the specific needs of islands, this may create opportunities for island tourism. But, conversely, this special status may also have created a discourse of exceptionalism that can hinder the application of governance and tourism development solutions. This paper critically reviews the literature on tourism and islandness and begins to explore in particular the role that islandness plays in influencing governance structures and decision-making for tourism.

**Keywords:** Tourism, Islands, Islandness, Governance, Decision-making

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# Tourism between sustainability and recession. The resilience of tourist destinations in Sicily

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Tourism is generally perceived as an economic driving force that allows a community to accelerate economic and social development processes. On the other hand it creates pressure and transforms the environment (both urban and natural), especially when the transformation is fast. Several studies analyze in depth the role of tourism in its contribution of the places' development. The effects are different and also depend on where the pressure manifests itself. In cities, in addition to the risk of overcoming sustainable loads in social and environmental terms, we are witnessing above all a loss of identity. In rural areas and in the mountains, pressure produces transformations marked by specialization in favors of the tourism industry's needs, with the inevitable risks that this entails (crowding out effect).

All this is even more true in the presence of economic shocks, where the reduction in tourist flows and the consequently need for cost containment for the tourism industry puts the sustainability of the tourist destination at risk. In this sense the case of Sicily is emblematic, which in recent years has grown in international tourist flows, with a growing appreciation for its natural and cultural elements. The aim of the paper is to describe, within the theoretical framework of resilience, the behavior of the main tourist destinations in Sicily compared to the economic shock in Italy in 2008, verifying if and how much this has influenced the quantity and the quality of the tourist flows entering the isle.

**Keyword:** Resilience; Sustainability; Sicily

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# Assessment of port infrastructure in the islands of Lesbos, Chios and Samos

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The geographical location of Greece is considered to be of the utmost importance, with its ports playing a decisive role as centres of economic activity. A key feature in the effectiveness of the port activities is the state of their infrastructure. The continuous improvement of the ports' image becomes imperative. Each port responds to the various activities on a comparable scale. The need for each port to be studied separately and the creation of a database, providing this way a complete picture of the current situation, is highlighted.

The present thesis has created a data bank for the port facilities of three islands of the North Aegean Region; the island of Lesbos, the island of Chios and the island of Samos. Initially, all the above mentioned ports were recorded by completing censuses, mainly through on-site visits per island and per port-port facility.

The listed ports - port facilities per island are: 66 for the island of Lesbos, 26 for the island of Chios and 15 for the island of Samos. Following the collection of the data, a description of their general characteristics (port type, distance from the capital, port density located on the individual shores, etc.) was presented per island. Subsequently, statistical analysis and processing of relevant data were carried out through x2 affinity and analysis tables for the ports of local significance for the deficiencies of the port infrastructures per island and then a comparative analysis of all three islands together.

Significant statistical parameters regarding the level of deficiencies of the port infrastructure as a whole have been identified: the distance of the ports from the capital, the existence of a designated land area and the existence of tourist infrastructure in the area of the port. Finally, tree analysis presents the classification of port benefits as to their degree of correlation with deficiencies in port infrastructures.

According to the resulting hierarchy, appropriate benefits could potentially be used as indicators in a decision model for hierarchy of future improvements, successfully integrating ports of local importance into a potential investment model.

**Keywords:** North Aegean Region Islands, port management, decision model, Greece

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## Smart Policy Measure Innovation: a case on Coastal Sustainability

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In this paper we present results obtained from the introduction of a smart policy measure that was put from theory to practice back in the summer of 2015, in the island of Cyprus in the context of the piloting phase of the FUPOL1 project concerning the litter problem that is so evident on the beaches of coastal municipalities. Specifically, one of the most common complaints discovered on social media using FUPOL tools, at Pegeia, Cyprus, involved the large amount of cigarette butts. A Fuzzy Cognitive Map on Sustainable Tourism was created based on stakeholder engagement from early on and from the subsequent scenario analysis by the municipal decision makers it became evident that the solution needed to be based on smart policy measure innovation. An environmentally friendly and cost-effective solution therefore was designed and pilot tested<sup>2</sup> in the form of an elegant wooden stand containing 100 eco-ashtrays to tackle the problem of cigarette butt litter on coastal areas. The solution scaled up soon after the FUPOL project finished and in three years it was embraced by the European Parliament Office on the island of Cyprus, by the Cyprus Tourism Organization, by the national Blue Flag association, by Cypriot regional administrations, by local coastal municipalities and communes. As of today more than 75 eco-stands can be found nation-wide on the whole island of Cyprus. This paper concludes by reporting quantified results (volume of collected cigarette butts), from theory and knowledge elicitation to pilot execution, and then to full island deployment<sup>3</sup> in a three-year period.

**Keywords:** Smart Policy Measure; Innovation; Coastal Sustainability Fuzzy Cognitive Maps, Decision Making

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- 3 <http://larnakaonline.com.cy/2018/06/07/epistrefoun-ta-oikologika-tasakia-stis-paralies-tis-larnakas>



# Slathering on sunscreen threatens the viability of small island Caribbean destinations

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This exploratory study reveals the economics of coral reef degradation, particularly coral reefs that are major tourism attractions in the Caribbean region. Small island destinations (SIDs) in the Caribbean are among the top 10 beneficiaries of tourism activities, which are mostly associated with sun, sand, and sea (SSS) tourism (Rivera et al, 2015). Among the most prevalent forms of SSS tourism are activities associated with on-reef tourism (diving, snorkeling, glass-bottom boating, reef fishing, etc.) or reef-adjacent tourism (fishing, wildlife interactions, etc.) The Nature Conservancy's Mapping Ocean Wealth Initiative (2013) determined that approximately 70 million tourist trips are booked specifically to participate in some form of coral reef tourism, generating approximately \$36 billion in global tourism value per year. Caribbean SIDS carve a substantial portion of that annual value (approximately \$870 million per year), making reefs a powerful economic engine for the regional tourism industry (Nature Conservancy's Mapping Wealth Initiative, 2013).

Unfortunately, marine ecosystems in the Caribbean show increasing signs of significant damage (Pandolfi et al, 2003). Nearly two-thirds of the region's reefs are directly threatened by human activity (e.g., overfishing, boat grounding, scuba diving and snorkeling, and marine pollutants) and most Caribbean coral reefs may disappear within the next 20 years (Hughes, 1994). Recent research reveals that sunscreen may be a major culprit of reef degradation (Downs et al., 2015). Most sunscreen contains two active ingredients (oxybenzone and octinoxate) that harm corals and other organisms. These chemicals are released into the water when tourists who apply sunscreen enter the water or through the waste-mist plume of spray-on sunscreen. The current study forwards a political and legislative plan for the island of Bonaire to ban the sale of sunscreens containing these chemicals. The research identifies the potential economic consequences that banning certain sunscreen products may have on a confined economy, such as that of a SID.

**Keywords:** Small island destination, Caribbean, sunscreen ban, oxybenzone, octinoxate

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### **Identification and mitigation of the effects of the seasonal variation of waste generation on Mediterranean islands driven by tourism: the INTERREG MED BLUEISLANDS project**

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Mass tourism is a recent phenomenon that leads to considerably high density of visitors within restricted spaces during the summer. This brings benefits to countries and local economies, but it may have detrimental effects on the environment (Davenport and Davenport, 2006), especially in terms of waste generated and influence on seawater quality. The BLUEISLANDS project - an EU-financed project within the 2014-2020 INTERREG MED program - aims to promote sustainable tourism patterns and fuels local loops of circular economy by improving knowledge about the waste generated in 9 Mediterranean islands as an effect of tourism. The project's action plan focuses on three points: monitoring marine litter pollution with special attention to micro and macroplastics found in beaches; monitoring wastewater input into coastal ecosystems through short-term macroalgae deployments used as bioindicators of human-derived nutrients; developing policies by proposing common guidelines to support the implementation of seasonal waste variation management plans, involving institutional partners, HORECA sector and other waste/sewage/water treatment operators. Results of the first year of monitoring of marine litter in tourist and reference beaches before, during and after the tourism peak showed an increase of 339% in cigarette butts, 74% in mesoplastics (0.5-2.5 cm) and 60% in microplastics (<0.5 cm) during the high season in the tourist beaches. Georeferenced color-scaled maps, generated to illustrate the occurrence and spatial distribution of anthropogenic nutrients into coastal waters, showed that the coastal strip represents the main source of input into tourist sites. However, no alarming nutrient enrichment affects the tourist season compared to reference sites and seasons. Overall, coastal tourism represents one of the main sources of both marine debris (Allsopp et al., 2006) and input of anthropogenic nutrients in coastal waters (Costanzo et al., 2001), therefore it is urgent to improve standards of tourist management, that should involve effective waste management practices.

**Keywords:** marine litter, wastewater, environmental impact, tourism seasonality, sustainable tourism

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## **Locals' perceptions about the environmental impacts of tourism: A pilot study at Linaria Port, Skyros Island, Greece**

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Tourism, a traditionally strong pillar of the Greek economy, holds a decisive role in the country's efforts to recover from the current debt crisis. Tourism is extremely important for Greek islands' survival, since it is an invariably significant part of their economic growth. Despite its crucial role in economic development, island tourism has negative environmental impacts as well. The high degree of concentration of summer activities in just a few months (seasonality), leads to strong pressures on the local environment, with high rates of waste generation to be quite a problem. More specifically, island communities are subject to greater threats because of dual inputs of marine plastics via ocean currents and locally thrown away plastics used for packaging and convenience. The problem becomes more difficult with the lack of recycling infrastructure and remoteness, leaving few options for appropriate waste management. Public awareness of residents and business owners is key to successful waste reduction and management. Making the shift to minimal waste and thinking differently about environmental protection will be a tremendous asset to the efforts to safeguard the quality of life at places where tourism flourishes. The purpose of this study is to design a tool in order to measure shop owners' environmental awareness and evaluate their perceptions about the environmental impacts of tourism. More specifically this pilot study aims to estimate the shop owners' willingness to participate in environmental actions and support campaigns to reduce plastic waste. A questionnaire-based survey supplemented with semi-structured, face-to-face interviews was administered to Linarias' port shop owners. Overall, this study aspires to provide an evaluation tool for assessing the way to ensure

that environmental protection comes first in our decision-making even when tourism could pose an environmental threat, like in the case of the Greek islands.

**Keywords:** island tourism, environmental impact, plastic waste management, environmental awareness

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## **Tourism development and subjective well-being: A small island residents' perspective**

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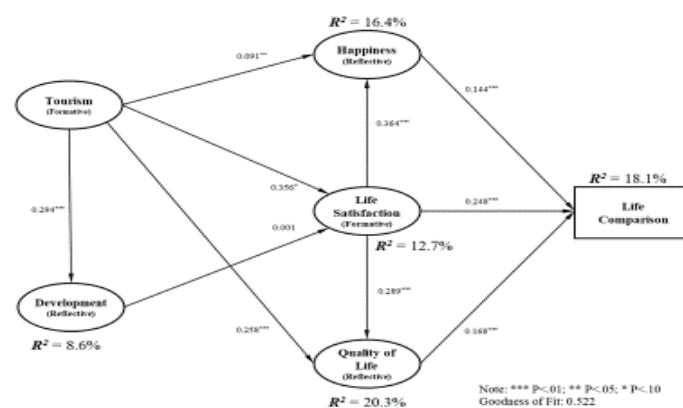
This case study examines how individuals in a small island destination internalize the impact of tourism development on their well-being. Tourism development may affect human capital (e.g. education, health, and quality of jobs), and shape social capital through social arrangements affecting distribution of costs and benefits as well as social ranking. Framed from this perspective, tourism, as a multidimensional concept, has as its ultimate purpose the well-being of the destination's residents. (Rivera, Croes and Lee, 2015). The impact on residents can be positive or negative. This impact may be measured via the subjective well-being construct. Subjective well-being is defined as people's experiences regarding tourism impact on their life conditions and how these experiences shape variations in individual well-being (Nawijn and Mitas, 2012; Rivera, Croes and Lee, 2016; Semrad and Rivera, 2018). Well-being is a construct consisting of three dimensions: the material foundation, opportunities and choices, and the third dimension is related to feelings about life domains (health, jobs, income, relationships, inclusion) (Croes, 2012).

The case study focuses on the island of Bonaire. The study does not seek to produce findings representative in a general sense, but rather seeks to articulate new ideas derived from the acquired evidence. Bonaire is a small island in the Caribbean with fewer than 20,000 inhabitants and is the first island in the Caribbean to formally embrace a sustainable development model as revealed in its marine park (1970) and its sustainable threshold policy. This policy, however, has strained economic growth and jobs to the detriment of residents' opportunities. This study problematizes the lack of opportunities as an outcome of the neglect of economic and social opportunities within the sustainability framework.

The study applies a cross sectional design to investigate the relationship between tourism development and well-being in Bonaire. A survey design stemmed from unstructured interviews and focus groups with multiple stakeholders regarding their experiences with tourism development. The survey consisted of 88 questions measured with demographics. The study anchored these questions on scales from well-known commentators in this field. The sample is represented by 682 residents. Data was collected during the spring and summer of 2017.

The results are depicted in the chart below.

**Keywords:** Small island destination, subjective well-being, tourism development, resident perspective, Caribbean



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## Expenditure-based segmentation of beach visitors

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The WWF (2015) defines a sustainable blue economy as the economic development of the ocean that "contributes to true prosperity and resilience, today and long into the future". The three core principles for a marine-based economy

to be a sustainable blue economy are: (i) current and future generations should benefit both socially and economically, (ii) the marine ecosystem should be restored and protected, (iii) clean technologies should be widely used. This paper addresses the first issue.

Coastal and marine tourism are among the oldest and largest segments of the tourism industry. Marine tourism can be defined as the intention to travel with the aim to participate and experience water based areas and/or activities (Saayman, 2017). It includes visits to aquariums, marine parks, marine events, beach activities (such as volleyball, sunbathing, walking), cruise ships and all water-based activities.

Beaches attract millions of visitors every year and this has an impact not only on the economy, the environment, the local community but also on current and future beachgoers. Worldwide, beaches are 'big business', attracting more tourists than any other environmental type (Tudor & Williams, 2006; Argardy, 1993). South Africa has a coastline of approximately 3,900km (including the islands) in the Indian and Atlantic Oceans, although little is known about the beachgoer to these beaches. This paper contributes to the quantification of the economic benefits stemming from beach tourism and in understanding the factors that drive beach visitation.

Therefore the aim of this paper is to apply expenditure-based segmentation to data obtained from beachgoers in order to gain a greater understanding of beach visitor spending patterns as well as to identify different markets. A review of the literature indicates that, in general, one finds high-, medium- and low-spending markets, although recent research by Saayman & Saayman (2017) on scuba diving tourists revealed that there may be more spending segments, than simply these three.

During 2017/18, beachgoers to eight beaches (both Indian and Atlantic ocean beaches) in South Africa were surveyed. The questionnaire assessed demographic, travel behavioural, spending and motivational factors of the beachgoers. Altogether 1,000 questionnaires were gathered. Using cluster analysis, various segments of beachgoers are identified and the differences between the different segments are explored using ANOVA. The results of such an analysis can assist destination managers in the effective and efficient positioning and marketing of their beaches.

**Key words:** marine tourism; segmentation; cluster analysis; South Africa

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## A study of residents' perceptions and attitudes towards the tourism impacts

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This research aims to analyze how the tourism's impact is perceived by a local community and which socio-cultural, economic, environmental and public services factors affect the relationship between tourism development and perceptions' formation.

A survey and multivariate analysis are used for the analysis. In particular, this paper focuses on residing families in small towns of historical interest (belonging to the "I Borghi più belli d'Italia" Club, located in Sicily, Italy) that have remained relatively isolated from tourism until fairly recently, and that are currently experiencing a boom of sustainable tourism that alters the way of life of local population.

The study showed that is widespread awareness that to belong to the Club has led and can continue to bring benefits to the territory and development of local tourist activity. The positive consequences are linked to economic reasons and to protection and preservation of the territory. In general, the residents who perceive positively tourism impacts are more disposed to support future development policies.

The model proposed can be applied to any destination to help manage residents' perceptions and attitudes and their support for tourism development.

**Keywords:** Residents' perception and attitudes, sustainable tourism, tourism development, segmentation.

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## Life Beyond Tourism Movement

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Since 1991, the Fondazione Romualdo Del Bianco started studying, publishing<sup>1</sup> and putting into practice the Life Beyond Tourism Movement<sup>2</sup>, an opportunity to build occasions of dialogue among cultures through travel for territories' sustainable development. Dialogue is strategic for the creation of peaceful coexistence and destinations, with the multiplicity of cultures voluntarily present on site, have the opportunity of stimulating the encounters among them. Heritage sites, including islands, that are geographically and historically places of encounters, have the great opportunity of becoming centers of dialogue among the different cultures that meet because of travel and therefore, need to shape their offer in order to maximize the dialogue on their territory. This process involves all the actors of the chain of tourism, that the Movement calls *Learning Communities*<sup>3</sup>. The International Institute Life Beyond Tourism provides to all the Movement members tools for the implementation of dialogue among cultures in territories.<sup>4</sup>

**Keywords:** intercultural dialogue, sustainable development, world heritage sites, environment, peaceful coexistence

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<sup>1</sup> The results of the research activity of the Foundation have been published since 2007 in over 32 publications. Publications are available in online download for all the Movement members.

<sup>2</sup> On [www.lifebeyondtourism.org](http://www.lifebeyondtourism.org), the complete 2018 Life Beyond Tourism Manifesto is published.

<sup>3</sup> *Learning communities* include residents and travellers, research centers and local operators, service providers, transports, institutions and local administrations etc. that take part to the Life Beyond Tourism Movement.

<sup>4</sup> Among these, courses for trainers and the Certification system for those who operate and act for the creation of opportunities of intercultural dialogue. The **Certification for Dialogue among Cultures DTC-LBT:2018** was released in 2018 and is available for businesses and institutions at two levels – self-certified and certified ones.



## Marketing anthropological assumptions of island tourism: the cases of the Portuguese continental islands

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This communication intends to highlight the anthropological and sociological assumptions underlying the interest and curiosity many people have for small islands. One based on conscious and unconscious, real or imaginary motivations, which often make us desire to visit islands while tourist destinations. It is just by reference to this desire based on historical and utopian roots that many marketing campaigns are developed in the field of island tourism. Projecting beyond historical time, the small island, following the model of the South Pacific islands, provides the construction of "metaphors of spirituality" and truly utopian paradisiacal images that attract tourists, including the craving for passage to the unknown provided by water. Thus, both isolation and withdrawal foster ideals of liberation and fulfillment in places protected from the inconveniences of a civilization which, in principle, is intended to be overcome by escaping from it. The power of the fantastic and the mythical presents a fundamental role that tourism marketing crystallizes and offers in images, slogans and texts promising the experience of paradise in the small islands.

**Keywords:** Small islands, motivations, utopia, liberation, fantastic

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## Connectedness to nature as a factor influencing well-being and the implications on nature-centered tourism

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The unblocked relationship that human beings had from the very start with nature has been disturbed the past years from the urbanization and modern lifestyle society and that decreases the emotional bond with the natural environment. Research has shown that the natural environment can maintain general mental health, psychological

well-being, increase self-esteem and other positive psychological and physiological reactions. Similar positive effects seem to be from the involvement of individuals in tourism. Furthermore, tourism seems to have a positive impact on individuals as well as on the acquisition of skills, knowledge and the improvement of the individual's life through social interaction and personal development. The goal of this research is to identify whether or not links exist between mental health and psychological well-being with connection to nature and to find out how the benefits of the connection with nature and tourism can be combined with the maximum positive results. 234 people from Athens both males and females, from 19 to 78 years old were asked to take part in the research through questionnaire. Our specimen is composed of people in different social classes, education, place of growth and place of residence. This questionnaire was created by: (1) The nature relatedness scale (a scale that assesses the affective, cognitive, and experiential aspects of individuals' connection to nature), (2) The Body Appreciation Scale (BAS) (a scale which estimates the person's image of his body), (3) The connectedness to nature scale (a new measure of individuals' trait levels of feeling emotionally connected to the natural world), (4) The Rosenberg self-esteem scale (a 10-item index of global self-esteem). The research aspires to emphasize the connection of individual and the environment in order to create new horizons of a more green and nature centered tourism and to identify its benefits.

**Keywords:** connectedness to nature, well-being, natural environment, tourism

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## Relational tourism challenges and opportunities: Therapeutic and Equine Tourism

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This study attempts to demonstrate the influence of Therapeutic Riding & Adaptive Riding assisted riding in the field of insular tourism. Through a critical review, the article aims to reflect the effects and impacts of offering aid through horse and equine assisted therapy in order to improve the behavior, the attitudes and condition of children with special needs. Areas known for species that are of small size, like the endangered species of Skyrian horses found at the Island of Skyros could become a tourist destiny for such therapy of the ones that need it.

“Equine Assisted Activities” is still considered an area based on anecdotal data and has a long way to go, concerning research. Also, the fact that equestrian events can uplift the economy of agricultural communities should be pointed out, both through providing employment and becoming a tourist attraction. Therefore, equine tourism could be considered as a new branch of innovational tourism. In this context, equestrian tourism can become a real economy, supporting the development of islands.

Equine tourism having a variety of activities, can be viewed as part of several subsectors of the tourism spectrum, including nature-based or outdoor tourism, adventure tourism, rural tourism, sports tourism, tradition and heritage tourism, event tourism and the subject under consideration, therapeutic tourism.

Conclusively, this research suggests that equestrian and therapeutic tourism have proven to be very effective methods in fulfilling their purpose. Other animal-assisted therapy methods are expanding all the time; they are not supported to a great extent however. Future research is of paramount importance, in order to strengthen equine-assisted activities, perhaps including the use of other animals, such as dolphins.

**Keywords:** Equine tourism, therapeutic tourism, Therapeutic Riding, Adaptive Riding, Skyrian horses

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# Tourism Destination Image, Tourism Discourse and UNESCO sites: a comparative study

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The purpose of this paper is to analyse the type of tourism discourse - i.e. English as specialised discourse in the tourism field - as it is applied on websites promoting UNESCO sites in Sicily and in Malta and the consequent Tourism Destination Image conveyed by the websites.

A mixed methodological approach, both qualitative and quantitative, has been adopted in order to examine discourse analysis in the field of tourism. In order to extract quantitative data and interpret them from a linguistic perspective, the Corpus Linguistics approach has been privileged, which belongs to the field of Applied Linguistics and whose aim is the application of theoretical studies to the language in use.

The websites considered in this study concern six UNESCO sites in Sicily and six UNESCO sites in Malta included in a comparative study; both corpora of websites use English for their online communication.

The websites of the UNESCO sites in Malta address both a national and an international audience; the Sicilian ones - besides their Italian webpages – present an English version of their website - namely: The Thinking Traveller - in which English is used as a lingua franca (i.e. English language used to communicate with non-native speakers of English) in order to reach a wider number of potential visitors.

Each website included in this work has been analysed according to some specific lexico-grammatical features applied – more specifically, nouns and attributive/qualifying adjectives.

The results of the analysis carried out emphasise the different Tourism Destination Image conveyed by the two groups of UNESCO sites in Malta on the one hand and in Sicily on the other, on the basis of the different linguistic choices adopted by the two sub-corpora.

**Keywords:** tourism discourse, UNESCO sites; comparative study, tourism destination image.

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## Emotional status affecting environmental decision making: the case of environmental video expose. Further implications on Tourism audiences

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The aim of this study is to see what the subjects' emotional condition and pro-environmental behavior was, before watching an environmental video and how this emotional condition and behavior changed after watching the video. We intent to investigate what effect the video has on the audience's willingness and intention to involve themselves on environmental issues and adopt pro-environmental behavior in the future. The sample of the research consisted of 36 students studying at the University of the Aegean. The results were calculated by measuring how each student perceives the importance of his/her actions related to environmental protection, by answering a questionnaire about their emotions, daily habits and whether they are willing to change their behavior, before and after viewing a video about climate change. The video used was the winner of the Film4Climate competition of 2016. After the video, the subjects were asked to answer questions for the emotions and attitude again, to measure the changes that occurred. The video has an effect on the emotions, but mainly a large effect on their intentions to partake in environmental decision-making. The statistical analysis of the data showed the influence of the video on the subjects' emotions as well as on the subjects' intention to adopt proenvironmental behavior in the future. However no statistically significant relationship was found between emotional change and intention for change confirming the up to now data that for the most part, only with the intervention of educational programs we can hope in behavioral change. This research can be used as a part of a methodology for environmental education and communication to change the willingness on changing behavior, daily habits and determine a better environmental decision-making. The results point out that beyond the exposure to stimuli like the video or relevant methodologies, there is the need of an intervention of tailor –made educational programs for the audiences in order that the intention can result in action. Important findings for the propulsion of responsible environmental behavior in tourists as well as in touristic destinations that function as places of environmental education

**Keywords:** emotions, environmental behaviour, environmental communication, tourism, decision making

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### Environmental education empowers travelers: choosing bottled water

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The research deals with the factors that influence tourists to choose bottled water instead of tap water which is safe, accessible, costs far less and has less environmental impacts. It is recorded that the overwhelming majority of travelers in Greece consume still water. In addition, a big variety of brands are available in the market. The aim of this study is to investigate the types of Greek mineral water, their trace elements, their cost and make a relation between them and the preferences of the travelers concerning these brands. In total, the criteria which tourists evaluate in order to select the brand of still water they consume are recognized. Particularly, different categories such as flavor, water hardness, quantity of chemical elements are noted down and the main factor that consumers pay attention to is predicted.

The data of this paper were collected through questionnaires within a project carried out by the University of Aegean in the small port of Skyros island. Results suggest what are the factors that play a role in water consumption choice. Convenience is the only contextual predictor. Finally, the paper concludes with future ways through which Environmental Education leads consumers to be more effectively influenced towards environmentally-friendly consumption.

**Keywords:** Environmental Education, mineral water, tourism, environmentally-friendly consumption

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# Circular Tourism Through Small Eco-Marinas

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Tourism is an important factor that offers many advantages to the economy and to the society of every country. Many countries rely on their tourism and this has the effect of their tourism being developed rampantly. On the other hand, as the years go by, we see that the earth is in risk with increase of temperature and climate change. Tourism planners increasingly have to take environmental issues into account. A large proportion of typical vacation activities are directly dependent on the natural resources at a destination (1).

As the years go by, tourism is directly linked to the environment and thus leads to sustainable tourism. Sustainable tourism development meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future (2). The concept therefore seeks to manage changes by 'striking a balance between protecting the environment, maintaining cultural integrity and promoting economic benefits' with the aim to satisfy the needs of tourists and to ensure long-term viability beneficial to both the tourist industry and the local host communities.(3).

In the last few years Circular Economy (CE) is receiving increasing attention worldwide as a way to overcome the current production and consumption model based on continuous growth and increasing resource throughput. By promoting the adoption of closing-the-loop production patterns within an economic system CE aims to increase the efficiency of resource use to achieve a better balance and harmony between economy, environment and society. But, CE is rarely in tourism. Greece is a country with various complexes of small islands, in which their small ports has great significance for local people, local economy and surrounding environment. This paper will concern the importance of circular tourism and practices which these small marinas will have to adopt through a sustainable lifestyle.

**Keywords:** circular tourism, eco-marinas, environmental responsible behavior

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# The role of sentiment analysis in the place brand

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In this paper the authors, analyzing Scalea case on the net, aim to show that the place brand has changed the role moving from static and unidirectional communication tool to a semantic and semiotic space in which company and numerous and heterogeneous social agents (consumer and/or individual) exchange several information to meet their relative needs. In this scenario, the active role that the digital marketing tools can play a constant condition of bidirectional relationship becomes important. This kind of relationship amount to some conditions: the place is a Complex Adaptive System (CAS) in which the boundaries are both tangible components and intangible, cultural values that allow to create and maintain relationship with relevant stakeholders. The low level of boundaries shows a territorial/systemic capability to create/stimulate the spontaneous and/or planned creation of subsystems/holons with inter-linkable behaviors/aims to create relations between other subsystem and with the relevant stakeholders. From these last relations emerge perceptions that, in this work, the authors are considering “place brand”. On this epistemological basis, authors will apply sentiment analysis (i.e. opinion mining) to study the emergence of the ‘place – as – brand’ idea through Scalea’s city positioning on Twitter, collecting by hashtags users’ feedback through their ‘sentiments’ and experiences as results of their relations with territorial and/or holonic agents, in order to evaluate the city-brand positioning on the net. The expected results are mainly twofold: on the one hand, an enough number of Tweets which will help understanding Scalea’s place - brand positioning on the net, mainly positive and increasing over time; on the other, that even negative experiences help to potentially improve Scalea city offer (implementing services, facilities etc.).

**Keywords:** participatory place marketing, systems and holonic theory, complex adaptive system, sentiment analysis, social media

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# Whale-watching and climate change in European islands: the application of a theoretical framework

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Whale-watching tourism has grown worldwide since the 80's and its now a USD \$2.1 billion industry (Hoyt, 2001; O'Connor et al., 2009). Beyond the activities' economic value, whale-watching offers other social, educational, cultural, scientific and recreational benefits. These are particularly relevant for many local communities in islands. Besides the potential impacts that directly result from the whale-watching activities (e.g. number of vessels and noise pollution) such as changes in species' short-term behavioural responses, a major threat to the maintenance and sustainability of the activity is climate change.

Climate change can have a series of biological, social and economic impacts in the whale watching activity. Changes in whale-watching activity can occur due to: 1) changes in species distribution range, occurrence and abundance; 2) changes in tourists' arrivals, willingness and preferences to undertake the activity and 3) changes in favourable weather conditions. These can result in lower number of trips and an overall loss of attractiveness (e.g. longer search time for animals) in the activity.

The SOCLIMPACT project aims to model downscaled effects of climate change and their socioeconomic and non-market impacts in 12 European islands (2030–2100) in the EU Blue Economy sectors. In the coastal and maritime tourism sector, a theoretical framework (Meynecke et al., 2017) will be applied to evaluate the resilience of the whale watching activity to climate change. The framework will be applied in different case studies with the following objectives: 1) to assess climate change impacts in cetacean species; 2) to assess the socio-economic impact including changes to tourists' decision making for undertaking the activity under climate change and 3) to assess climate adaptation and management options for whale-watching.

This study aims to propose adaptation policy pathways for the sustainability of the whale-watching activity and provide recommendations towards resilient ecotourism in islands considering the consequences of climate change.

**Keywords:** whale-watching, climate impacts, European islands, climate adaptation

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## Resident attitude and knowledge on circular economy practices: a case study of two mature island destinations<sup>5</sup>

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Nowadays, more resources are being defined as critical and resource depletion is getting more threatening (European Commission, 2014). The economic activity is still a linear model of production and consumption: extract-produce and consume-throw. In light of that, the concept of Circular Economy (CE) has received an increasing attention between policy makers and stakeholders worldwide. According to the MacArthur Foundation (2013): “A circular economy is an industrial system that is restorative or regenerative by intention and design. It replaces the ‘end-of-life’ concept with restoration, shifts towards the use of renewable energy, eliminates the use of toxic chemicals, which impair reuse, and aims for the elimination of waste through the superior design of materials, products, systems, and, within this, business models.” Within a CE society no waste for disposal should exist, instead waste should be viewed as a new resource within the economy (Geng and Doberstein, 2008).

The literature on CE was mainly developed for the manufacturing sector. However, the tourism sector is a sector where huge consumption of energy and water, food waste, congestion problems and CO<sub>2</sub> emissions and pollution take place. This can bring problems with resident population attitudes towards tourism because of these negative externalities generated in the destination.

Hence, many CE solutions can also be applied to tourism businesses and destinations to reverse the trend and reduce consumptions of natural resources, waste and CO<sub>2</sub> emissions.

This work aims to analyze the knowledge about CE concept and practices among the resident population of two well-known mature resort destinations (the Balearic Islands and the Canary Islands) with sustainability problems. The procedure used to obtain the information in both archipelagos was through an online survey which was administered from May to November, 2017. The survey collected information of 513 residents from both archipelagos, most of them (86.74%) from Gran Canaria island.

**Keywords:** circular economy; tourism; environment

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## Leaders in tourism destination

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Competition between different tourist destinations is not embodied in the mere competition between the enterprises that make it up but in the pursuit of the efficient development of the intangible resources found within them (culture of the territory; specific skills; relational skills). This has resulted in an effort to analyze networks within the tourism industry and to understand whether cooperation and trust between economic players leads to a better economic performance of the destinations.

This paper falls within this line of research and it draws insights from two key strategic theories: network theory and Destination theory . Under this approach, one way to reach a thorough understanding of Destination theory is to link this theory with social network analysis (SNA), which is concerned with the analysis of the structural patterns of behaviors instead of looking at the individual influences of each leaders. The pertinence of this study lies in the fact that social networks are a relevant phenomenon that has been given increasing attention in the small business literature, in particular, regarding the tourism destination and local community development (Saxena, 2005; Pavlovich, 2003;Tinsley & Lynch, 2001).

Tinsley and Lynch (2001) researched the networking process between the destination's small tourism businesses and found the important role of cooperation between local actors. In the same line, using the principles of the networks approach, Saxena (2005) examined the nature of the exchange structure. They analyzed different attitudes of actors toward partnership building and their perception of cross-sector networks. Pavlovich (2003) clarifies how the grouping of small firms within interdependent systems can be self-governing and demonstrates how this process assists the destination in building tacit knowledge for competitive advantage.

On the basis of this argument, this study aim is examining the patterns of relationships of the tourism network and analyze the role of leaders in the management of relationships in order to understand their impact on tourism activities.

**Keywords:** Social network analysis; Tourism destination; family relationships; cooperation

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## Elements involved in the territory brand from residents' perceptions: the city of Málaga

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The brand might create a position of the territory that could be useful for the development of geographical spaces. It could also become a solid basis upon which to make decisions about the tourism planning of a city. This paper deals with the features that are recognised by residents as those that are involved in the creation of Malaga brand.

In order to achieve the goals set in this research, a descriptive methodology has been used. This study has been carried out using a questionnaire in which 200 residents have participated. The findings have corroborated the hypotheses. Indeed, the results show that Malaga brand is being built under the concept of culture and that some places of the city are vital in the making of the territory image. This also encourages economic growth and hence employment. This paper offers important implications and tools to both public and private institutions insofar as they promote tourism promotion campaigns.

**Keywords:** territory brand, residents' perception, city brand identity, Malaga tourism.

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# Characterization of Senior Tourism in the Portuguese Islands of the Azores

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Tourism in the Portuguese islands of the Azores has grown by more than 20% in bed nights, since 2014 (Tourism Observatory of the Azores, 2017).

This increase translates into a major growth in the local economy. However, there are concerns about maintaining sustainability, the well-being of local populations and the island fragile ecosystems.

A large percentage of incoming tourists are senior tourists (age ≥ 55 years) - the baby boom generation - which will be responsible for profound changes in markets, especially in the tourist market (Losada, Alén, Domínguez, & Nicolau, 2016).

There is a change of paradigm in the dynamics, mentalities, habits and lifestyles of the elderly, who traditionally used to spent their income with their children and grandchildren and who started spending for their own benefit in leisure activities (Ashton, Cabral, Santos, & Kroetz, 2015; Vigolo, Simeoni, Cassia, & Ugolini, 2017) and to travel.

This descriptive study is part of the project "Tu Senior 55+", which is an ongoing EU funded project at the University of the Azores. The study is intended to analyze the profile of senior tourists who visited the archipelago of the Azores between May 2017 and April 2018, using a survey of 470 questionnaires, in order to draw a marketing plan for the Azores aimed at creating high quality experiences valued by senior tourists as well as by the local population.

The profile of senior tourists visiting the Azores has significant implications for the planning and sustainability of the Azores islands as a competitive senior tourism destination.

**Keywords:** Senior tourism; Sustainability; Characterization; Azores senior tourism destination.

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