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Impacts of tourism and the generation of employment in Mexico

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Abstract

Purpose – This paper aims to study the relationship between employment and tourism activities as well as economic variables for the 32 states of Mexico for the period 1999-2014.

Design/methodology/approach – To study the case of Mexico, the authors use panel data and cointegration panel data. They also use geographic information systems to observe changes over time between the variables, which is useful in the empirical evidence.

Findings – The main results obtained by the models are as following: domestic tourism is the variable with the greatest impact on the generation of direct employment in the tourism sector, a finding supported by both methodologies; economic growth (measured by state gross domestic product) also directly impacts the generation of employment; and the cointegration of the panels causes a long-term equilibrium among the states and some variables.

Research limitations/implications – The model used leaves out other variables that may influence the performance of the tourist activity. In addition, given the availability of official and homogeneous information, it only covers what has been documented up to 2014.

Social implications – The aim is to measure the impact of tourism on the variables at the state level, where the economic activities could be based on public policies, as well as the importance of tourism activities in generating employment. In this sense, the impact would be in channeling efforts to support the main economic activities and could serve as a starting point for the evaluation of programs to promote domestic tourism.

Originality/value – This paper reviews the relationship that exists between tourism activity and its effect on other variables, especially employment. It is the first time that these topics are studied for the Mexican economy.

Keywords Tourism, Panel data, Employment, Cointegration panel data

Paper type Research paper

Introduction

The rapid advance of tourism and its potential for growth has accelerated even further in recent years, particularly in developing countries, as is the case with Mexico. Tourism activities, in the widest sense of the term, are considered a key variable in local, regional,
national and international economic growth, due to the fact that they are based on foreign currency income, as well as generating employment and creating services and related activities.

According to the United Nations’ World Tourism Organization (UNWTO, 2013), tourism has undergone continuous expansion and diversification, becoming an important and growing economic sector on a global level. On an international level, in 2012, it contributed 9 per cent of gross domestic product (GDP), creating, on average, one out of every eleven jobs and generating income that represented around 6 per cent of world exports. In real terms, in the same year, income grew by 4 per cent, reaching a record US$1tn 75bn. In terms of this indicator, this growth is similar to the 4 per cent increase in visits by international tourists, making evident the strong correlation between the two indicators. The most recent data indicates that this activity contributes 10 per cent of global GDP, generating one out of 10 jobs and US$1.6tn in exports, which represents 7 per cent of global exports and 30 per cent of services (United Nations World Tourism Organization, 2017).

According to the Economic Census conducted in Mexico in 2014, the tourism sector represented 11.7 per cent of the economic units of the national total, generated approximately 6.5 per cent of GDP, comprised 12.7 per cent of formal national employment, and provided 7.9 per cent of the national total for wages (National Institute for Statistics, Geography and Information, INEGI, 2017). Moreover, in 2016, the tourism sector represented 8.7 per cent of GDP, employing approximately 10 million people (De la Madrid, 2017a). In fact, in the first half of 2017, approximately 19.2 million international tourists visited Mexico, generating an income of US$11,104bn for this period (De la Madrid, 2017b). According to the Travel and Tourism Competitiveness Report 2017[1] [World Economic Forum (WEF), 2017], Mexico had risen eight positions from its 22nd place in the 2015 rankings. According to this report, emerging economies, of which Mexico is one, are gaining on advanced economies.

In some countries, international tourism has acquired ever-greater importance, representing, in Mexico, at least the third largest source of international income, behind income from petroleum and remittances sent home by Mexican migrants. Furthermore, the Organization for Economic Cooperation and Development (OECD, 2017) has documented that, in Mexico, national tourism contributed 88 of every 100 pesos spent in the sector, having a direct impact on host communities. Compared to the flow of international tourists, which is concentrated in destinations such as Cancun or Los Cabos, national tourism is distributed across the entire national territory.

The positive evolution of tourism and its potential for growth have increased over recent years, establishing tourism as a source of growth (tourism-led growth hypothesis), especially in developing economies, as is the case with Mexico.

In general, it is thought that, like exports, the growth of tourism contributes positively to economic growth. However, despite the robust verification of the hypothesis postulating exports as a motor of growth, many studies have not found that exports contribute definitively to a country’s capacity to produce goods and services (Darrat, 1986; Dodaro, 1993; Hsiao, 1987). Given that tourism may play a similar role in the economy of every country, the question has been asked for years as to the contribution of national tourism to economic growth.

This relationship is important as it enables the private and public sectors to plan and manage tourism activities with the objective of maximizing the benefits they provide. The general thesis is that tourist areas will generate a sufficient flow of visitors to drive economic growth at a regional, state and, therefore, national level.
Highlighted among the effects considered for measuring the impact of tourist destinations are the increase in foreign currency income, the generation of sources of local income with the externality effects of driving increased activity in other economic sectors, and the growth in direct and indirect employment. In terms of this last effect, however, other studies have established that tourism activities have no effect on formal employment, given their seasonality.

A generalized idea of tourism, one proven in the literature, is that this sector, further to increasing resources via foreign currency income, is able to create employment opportunities. Although empirical research has been undertaken in this area, it should be noted that the use of the Granger causality test to study the causal relationship between tourism and economic growth could cause three relevant problems:

1. the question as to whether annual data are sufficient for representing the long-term relationship between both variables;
2. the inability of the annual data to eliminate the problems of short-term fluctuations due to economic cycles and structural changes; and
3. the inability to delineate economies with special characteristics in terms of distinct causal relationships.

An important advantage of tourism is its generally high level of income elasticity given the demand for tourist services (Baretje and Defert, 1972). A recognized disadvantage is that the concentration of tourist activities could lead to a more vulnerable economic structure, given the natural absence of relationships with the industrial and/or productive sector in general.

In terms of public policy, the promotion of balanced economic development requires a detailed analysis of the determinants and effects of tourism activity. Highlighted among the important variables to consider in the development of tourism at a national level are the growing demand for associated services and the affinity with the geographical, natural and cultural characteristics of the regions in which it is based. While it is certain that a high number of tourists represents a considerable source of income at a local level, negative impacts on natural capital and cultural resources are also often observed.

In both the short and long term, tourism (both local and domestic) may make a significant contribution to a nation's economic growth, while its potential generation of income and employment may be limited by its ability to offer the goods and services demanded by tourists. This may result, for example, from the fact that intermediate imports are commonly brought in from their countries of origin to meet tourists' consumption habits. Despite this, given the offer of tourism and the infrastructure available, the income from tourists has a considerable effect on well-being and economic activity in the host countries. At an international level, tourist exports, in terms of people, services and foreign currency, result from increased levels of income in the countries of origin, local labor policy, and the reduced cost of international, principally air, transport. Moreover, it is important to note that the attraction of international currency improves balance of payments indicators and contributes to generating stability in the exchange rate system.

It should also be noted that, to a great extent, the majority of the organizations operating in the tourism sector correspond to micro, small and, in some cases, medium-sized enterprises. Furthermore, in terms of factors of production, the sector is work intensive, absorbing labor in the primary and service sectors and, thus, in some senses, reducing the indicators associated with local unemployment.

The relationship between human capital and productivity in tourism activity has been analyzed in developing economies, particularly the elements associated with the scarcity of
personnel trained for work in this sector. The importance of personal services in this industry, in which national and foreign tourists interact constantly with staff from this sector, requires the consideration of variables, such as the educational level of tourism workers and the quality of the services and/or products. The difficulties of delimiting the tourism sector complicate the study of human capital and the extant abilities required by this economic sector. Some of the most relevant questions relating to human capital in this sector refer to the contribution of labor, either vocationally or academically trained, to the productivity of the sector and the generation of related public policy, among others.

Rodríguez and Brown (2012) state that, in Mexico, the expansion of the tourism industry is very recent, having begun approximately 35 years ago. With tourism a pillar of the Mexican economy, the number of establishments offering services in this sector grew rapidly at the beginning of the 1960s, as a result of the internationalization of the port of Acapulco, in the state of Guerrero. This growth continued with the beginning of operations, in 1975, at what is now one of the main international tourism destinations, the city of Cancun, in the state of Quintana Roo. However, Brenner (2005) describes how the tourism boom coincided with the development of luxury resorts in the 1970s. This was supported by a government seeking to increase foreign investment, generate employment and integrate, into the national economy, peripheral regions with clear signs of social marginalization, the presence of shantytown[2] enclaves and environmental deterioration.

The present study examines the relationship between tourism activity and the generation of employment in the 32 federated states of Mexico, via the use of panel data methodology and the cointegration of said panel data, to respond to the following research questions:

\[ RQ1 \] What has been the impact of economic variables and the tourism sector on the generation of formal employment in the federated states of Mexico in the period 1999-2014?

\[ RQ2 \] Is it possible to identify long-term relationships among the variables that explain employment in the tourism sector?

While said relationship has been already studied by other disciplines, such as administration, anthropology and psychology, the present study comprises pioneering quantitative research for Mexico on these relationships and variables.

The first section of the study presents a theoretical review of the literature on the relationship between employment and the activity of the tourism sector. The second section presents the empirical evidence that enables the observation of the possible relationship among the variables of interest, such as employment, economic growth, national and international tourists, exchange rate, and tourism infrastructure. The models and results are presented in the third section. Finally, the last section presents the final considerations and the public policy recommendations resulting from this research.

**Theoretical review**

Johnson and Thomas (1990) state that analysis of the relationship between tourism and employment reveals three main trends:

1. studies of the generation of potential employment by tourism and the role it has been attributed to play in the economic revival of depressed regions;

2. the description of trends that help to explain the structural changes and generate prognoses that assist with planning; and

3. studies may comprise the evaluation of a policy or a specific program.
In the same vein, Ladking (2011) establishes that tourism has been present in the economic agenda since the 1980s, finding that the majority of studies on the tourism-employment relationship analyze impacts, the generation of income and wages, and the evaluation of the economic benefits that tourism has brought to destinations and tourism developments. The results of said studies can be used in the design of industrial policy strategy and in decision-making processes; however, they also indicate that many of the economic benefits associated with tourism activity are often exaggerated.

Gómez and Pérez (2014) establish that, in terms of public policy, the promotion of balanced economic development requires a detailed analysis of the determinants and effects of the tourism sector. Within this framework, it is necessary to analyze those variables of great relevance to the development of tourism that, to a large extent, are represented by the growing demand for associated services and the affinity of tourism sites with the geographical, natural and cultural characteristics.

It should be noted that tourism is recognized as an intensive activity in labor terms (Pais, 2006) and, similarly, that its nature is such that its multiplier and spillover effects are expected to be higher than those in other sectors. Moreover, this activity generates employment at all levels and categories of ability, as well as a higher degree of competitiveness. In the same vein, the spillover effect presents when the affluence of tourists increases demand for local goods and services, due to either direct or indirect expenditure, or multiplier effects (Kadiyali and Kosová, 2013).

In the same vein, Habibi et al. (2018) indicate that the tourism sector can, without doubt, be a long-term objective of economic policy, given its potential to increase employment and growth, by:

- generating greater efficiency and economies of scale for goods and services, based on demand;
- sending signals to the market for the entry of new participants, generating a positive impact on goods and services; and
- competition and more consumer choice options may raise quality of life.

Becerra (2009) argues that tourism generates local employment, both directly in the same sector and also in various support and resource management sectors. Moreover, it would stimulate profitable national industries, such as the hospitality sector, transport systems, artisanal manufacturing and tourist guide services, as well as driving improvements in transport, telecommunications and basic community infrastructure. She continues that it generates distribution facilities that could be used for either local communities or national and/or foreign tourists and stimulates and contributes to financing the conservation of historical sites, buildings and neighborhoods.

Along the same lines, Onetiu and Predonu (2013) describe how employment in the tourism sector attracts the labor surplus from other sectors, thus helping to reduce the unemployment rate; moreover, these new employees renew the labor market, increase consumption and, thus, contribute to GDP growth, while also improving the levels of welfare in the region.

According to Leiper (1999), there is some confusion over the generation of employment by tourism, due to the fact that the national statistics are based on tourist spending and do not focus on those industries in which the work itself is carried out, thus ignoring the concept of partial industrialization. This concept is relevant for understanding the impacts of tourism on the local environment. Although Witt and Witt (1995) concur on the point that the evaluation of the employment generated in the sector is important, they do state that
there is no standard industrial classification. This is a sector defined by demand and extending to other economic activities, partially measuring the employment created in those activities characteristic of the sector, such as hotels and restaurants and, for example, accounted for in the Tourism Satellite Account.

Studies such as those by Crouch and Ritchie (1999) document the role played by tourism as a generator of prosperity and quality of life, both for tourists themselves and the host communities. They also identify the economic impacts, among which are the generation of employment and the concomitant increase in prices. Garcia and Siles (2015) establish that the tourism-employment relationship has also been examined by numerous studies on the competitiveness of tourism destinations (Dwyer and Kim, 2003; Dwyer et al., 2003; Craigwell, 2007). The competitiveness of the destination generates employment, which, in turn, is translated into prosperity, well-being and increased income for local inhabitants in host regions.

Castillo et al. (2017) indicate that the promotion of tourism via public policy is not an objective per se, rather the income via foreign currency, economic growth and the generation of employment that its expansion would bring. The latter may be direct, indirect or induced, with a wide range of possibilities (instruction, specialization, occupation and size), and may empower vulnerable groups, given that women, young people and adults would be employed. Furthermore, the tourism sector has the advantage of having few obstacles to entry, thus opening the possibility for the starting of small enterprises and the generation of self-employment.

For the Mexican economy, at a federal and state level, the tourism-employment relationship has been important, because it has been the basis for the design of development policy, as this is considered a priority sector due to its effect on the economic structure and capacity to drive the creation of sources of employment (Barrón et al., 2014). However, to date, few studies have measured the contribution of the tourism sector at a state level in both aggregated and differentiated terms. Moreover, in terms of the sector’s contribution to employment, the available statistics correspond to official data rather than academic studies that quantify the volume of job vacancies generated, as well as the specialization and productivity in the sector and their variations in the communities, as associated with the seasonality of tourist activity[3].

Balaguer and Cantavella-Jordá (2002) studied the relationship between the variables of economic growth and tourism activity in Spain via a time series model, seeking to ascertain whether or not said relationship is a long-term one. For this latter objective, they used the Johansen cointegration methodology with GDP data, income from international tourism and the exchange rate, based on the fact that the Spanish economy is a small open economy. For these authors, the tourism industry is today of vital importance for the global economy and, in particular, those countries that depend on this sector (mainly via employment and the export of services), arguing that attention has not been paid to the study of the contribution of this sector to economic growth. These authors conducted their research in Spain as they sought to establish whether the growth in international tourism had made a significant contribution to the development of the national economy over a period of 22 years. The theoretical basis of Balaguer and Cantavella-Jordá’s (2002) study is the hypothesis of export-led growth, taking into account, in part, the non-tradable goods sector, of which tourism forms part. They found that the income generated by international tourism positively affected the growth of the Spanish economy for the period 1975-1997. The impact that tourism has had on Spanish economic growth and the magnitude of the parameter verify the long-term effects, prompting the authors to argue that this finding strengthens the predictions made in other studies that have focused on tourism as a service and a
non-tradable good. They also observe that, contrary to the prediction made by means of the export-led growth hypothesis, the growth of the tourism sector is not specific in developing economies, the income of which is based on the comparative advantage found in certain sectors of the economy.

Neves and Campos (2005) analyze the causal relationship between economic growth and tourism, using a panel data model on a sample of countries that have a tourism sector playing a significant role in their total economic activity. The studies they review approach said relationship from the point of view of a time series or other analytical tools, such as panel data, based on which, as well as data from Latin American countries, a greater per capita flow of tourists is found to generate higher levels of growth in nations with low and medium income. This relationship is not observed for wealthier economies. Therefore, Neves and Campos (2005) found that the conditional impact of tourism is not significant, while, in some sub-samples, an unexpected negative impact occurs, confirming the results found in the complete sample. The sign and significance of the parameters related to the variables of the tourist sector are relevant in Africa and Latin America as they are all found in the variables for the sub-sample, which assume a comparative advantage in the tourism sector. The authors conclude that tourism, on its own, cannot contribute significantly to the high rates of growth of those economies that specialize in tourism. The most surprising finding of this study is that, when there is a significant relationship between economic growth and tourism, the sign is negative.

Barro (1991) and Islam (1995) underestimate the presence of a causal relationship between tourism specialization and economic growth, a conclusion consistent with economic theory, which establishes that growth in a country is based more on the productive sectors than services. Oh (2005) analyzes the causal relationships between the growth of tourism and the expansion of the economy of South Korea under the focus proposed by Engle and Granger, doing so in two stages and using a bivariate vector autoregressive model. Among the main findings, the cointegration results do not indicate a long-term relationship between the two series while, secondly, the results of the Granger cointegration tests indicate a unidirectional causal relationship for the economic growth either directed or caused by the growth of the tourist sector. Thus, according to this author, the hypothesis that tourism is a source of economic growth is not sustained in the case of the South Korean economy. The same conclusion is sustained by the sensitivity tests for causality conducted under distinct delay selections. The results obtained by Oh (2005) for the South Korean economy contrast with those obtained by Balaguer and Cantavella-Jordá (2002), who used the same techniques for the Spanish economy.

Oh argues that the results of the tests indicate that the economic growth of the South Korean economy in recent years has tended to attract international tourists only in the short-term, given that international trade is known to be closely related to economic expansion. Therefore, while it would be rational to think that tourism is strongly affected by economic growth, the above-described positive effects are not maintained over the long-term. The author concludes that it would be desirable to include other variables, such as the exchange rate, which were perhaps not fully considered in his study. Economic policy recommends that care should be taken with the design of public policy that promotes tourism as a driver of economic development, given that the results obtained reveal economic growth to generate the growth of the tourism sector and not the reverse.

Lee and Chan (2008), on the other hand, use the technique of heterogeneous panel data cointegration to explore the co-movements and the causal relationships between the same variables for a group of countries in which the tourism sector is important, for the period 1990-2002. The application of the panel data methodology reveals a relationship between the
evolution of GDP and the development of tourism. They also document that, in countries that do not pertain to the OECD, the development of tourism has a greater impact on GDP compared to that found in countries that do pertain to said organization. Similarly, they also find that:

- If the variable of tourism income is taken into account, the greatest impact is observed in sub-Saharan African countries.
- The real exchange rate has significant effects on economic growth.
- In the long-term, the causality revealed by the panel tests shows that, while the development of tourism has a univariate directional relationship with economic growth in OECD countries, these relationships are bidirectional in countries external to the organization.

In particular, Lee and Chan (2008) analyze the economic policy implications of their results and, specifically, argue that the long-term relationship between the development of tourism and real GDP means that both variables are causally related in some way, in at least one direction. However, they do not find the relevant data to resolve the question as to whether economic growth generates economic development or vice versa. One of their most important conclusions with regard to globalization is that it is preferable to compare the relationships between tourism and economic activities by groups of countries rather than individually, namely that the regional effects should be taken into account, as should the fact that the efficacy of the models is improved.

Po and Huang (2008) use cross-sectional data for the period 1995-2005 from a sample of 88 economies, with the objective of analyzing the possible non-linear relationship between the development of tourism and economic growth when using a limit variable. The degree of specialization in tourism, defined as \( q_i \), is the earnings from international tourism as a percentage of GDP and is used as the threshold or limit variable. The results of the linearity tests indicate that the economies considered here should be separated into three distinct groups (or regimens) to analyze the possible nexus of tourism and economic growth. These authors observed that when \( q_i \) presents a value below 4.049 per cent (Regimen – 157 countries) or above 4.73 per cent (Regimen 3 – 23 countries), a positive and statistically significant relationship between tourism and economic growth is observed. Despite this, when \( q_i \) is within the range of 4.049 per cent – 4.73 per cent (Regimen 2 – 8 countries), evidence that confirms the relationship between these variables is not found.

Similar to the above-mentioned authors, Pablo-Romero and Molina (2013) indicate that the empirical study of this relationship could be attributed, in the first instance, to the work of Lanza and Pigliaru (2000), who observed that countries highly specialized in tourism activity share the characteristics of being small countries with a rapidly increasing per capita income. This results in what is known as the tourism-led growth hypothesis. To explore this relationship, the authors undertook a review of 87 studies, finding that a univocal relationship is observed between tourism and economic growth in 55 of them and a bidirectional relationship in 16, while nine studies either verify that the relationship runs from growth to tourism or find no relationship at all. The differences among the results respond to the selection of the specification of the model and the econometric techniques used. In general, all the studies conclude that tourism contributes to economic growth; however, the magnitude differs not only among studies but also within the same studies and the estimators obtained. Therefore, they propose the determination of the contribution based on the calculation of the global measurements with the published empirical evidence,
namely via meta-analysis, which will enable the integration and synthesis of estimations obtained in prior studies.

Empirical evidence

The data used in this study are taken from various sources of information: the Satellite Account for the tourism sector; the Mexican System of National Accounts and the Economic Census (both available from INEGI); DataTur, the Ministry for Tourism’s monitoring system; the National Population Council; the United Nations Development Programme (UNDP); and, the Bank of Mexico. The impact of economic variables on both employment in the tourism sector and development was studied in the 32 states of the Mexican Republic in the period 1999-2014.

The following variables were considered for the analysis: Staff Employed (EmpleoTur) in hospitality activities and tourism sector services, with data taken from the Economic Census for the years 2003, 2008 and 2013; National Tourists (Tur_Nac) – the number of national tourists per federated state i in year t; International Tourists (Tur_Int) – the number of international tourists received per federated state i in year t; Rooms Occupied (Cuart_Ocup) according to the DataTur tourism compendiums for each federated state i in year t; Real GDP at 2010 prices (PIBreal) for each federated state i in year t; Exchange Rate (TipodeCambio) in year t; the Human Development Index (IDH); and, the average annual temperature (TemperaturaPromedio) for each federated state i in year t.

The empirical evidence for the variables considered in the economic literature for analyzing the impacts of the tourism sector indicates a positive relationship among said variables. The literature on this matter considers these variables to be of the greatest relevance for analyzing the impacts of and employment generated by the tourism sector. Figure 1 shows the figures for the spread of data between two variables – employment in the tourism sector and the economic variable(s). All show a positive relationship, namely, the higher the numbers of national and international tourists, rooms occupied, and real GDP at 2010 prices, the more employment is created in the tourism sector. To date, the results are consistent with the results found in the literature.

The correlation coefficients, similar to the scatter plots, indicate a positive and statistically significant relationship with the following values: \( r_{EmpleoTur, TurNac} = 0.834; \) \( r_{EmpleoTur, TurInt} = 0.424; \) \( r_{EmpleoTur, CuartOcup} = 0.625; \) \( r_{EmpleoTur, PIBreal, Base2010} = 0.763; \) and, \( r_{EmpleoTur, TipodeCambio} = 0.1705. \) The variable that shows the lowest coefficient is the exchange rate. While the literature considers the exchange rate a key variable, it only indirectly impacts employment, although it does directly impact international tourists in particular.

Other results observed in the empirical evidence concur with the data for tourism employment taken from three years of economic censuses in Mexico (2003, 2008 and 2013), wherein, over the years, this source of employment has grown in the federated states of Mexico, suggesting that tourism activity has helped to increase employment.

The variables pertaining to international tourists, national tourists, state GDP and tourism employment are considered from a geographical perspective here to conduct a differentiated analysis of the states of the Mexican Republic. The maps – using geographical information systems – are presented in Figure 2. The first panel presents GDP at 2010 prices for the states of the Mexican Republic in the years 2003 and 2013, with the central and northern states presenting the most growth for these years. The states of Guanajuato, Campeche, Tabasco and Puebla showed a significant state GDP increase, while others, such as those from the south (Guerrero and Oaxaca), reduced their levels of production. In the case of the states of Campeche and Tabasco, the GDP growth may have been due to the
increase in international petrol prices and the concomitant increase in production. Over the same period of time, there were states whose production levels decreased significantly, as is the case with Baja California, Chiapas, Oaxaca and Chihuahua.

Over the 2003-2013 period, an increase is observed in the numbers of international tourists visiting the states of Campeche, Yucatán and Baja California Sur; however, these numbers decreased in various states, such as Sonora, Coahuila and, to a slight degree, Chiapas. However, in absolute terms, it can be seen that the number of international tourists increased for all of the federated states. National tourists increased in number, in particular
in states from the center to the south of the country, as well as in the northern states of Chihuahua, Sinaloa, Nuevo León and the two states of Baja California.

In terms of the generation of employment via distribution and hospitality activities, according to the economic censuses, a significant decrease was observed in employment associated with tourism activities from 2003 to 2013 in the states of Coahuila, Tamaulipas.
and Durango, which have been characterized by insecurity and violence in recent years. On the other hand, there are states, such as those in the center and south of Mexico, which maintained and, in some cases, increased their tourism-related employment levels, which is the case with Puebla, Baja California Sur, Guanajuato, Oaxaca, Chiapas and the State of Mexico. Such employment levels did not significantly increase in the rest of the states of the Mexican Republic.

**Model and results**

The data and the empirical evidence described in the previous section allows the a priori expectation that the tourism sector in the 32 federated states of Mexico could have a positive effect on formal employment, as reflected in jobs available within the sector itself. To measure the impact of the variables considered in the present study on employment in the tourism sector per federated state, we used panel data models and data panel cointegration. This enables us to explore the qualities of both the cross-sectional and time series data, and to establish whether there is a long-term balance among the related variables.

According to previous studies from the literature on employment in tourism and related activity, the models estimated enable the identification of relationships among the variables to study the impact of tourism activity and other relevant variables on employment.

**Data panel models**

The data panel model took into account the period-to-period evolution of the variables for the tourism sector for each of the states of Mexico. The annual evolution may help to build “expectations” for the future. Moreover, heterogeneity is observed among the tourism sector variables for the 32 federated states of Mexico, thus reinforcing the efficacy of observing the states per variable and per each year of the sampling period. For example, not all of the states in Mexico share the same tourism characteristics, given their economic structure, institutions, population, temperature and level of development, etc., meaning that each federated state would converge to distinct steady states. Moreover, the variables for the tourism sector may be measured imperfectly, while the measurement errors for a state may persist over time. All of these factors reinforce the idea of using panel data techniques for studying convergence in a set of heterogeneous states. With the objective of eliminating bias in the measurements of the variables, all are expressed logarithmically.

The review of the literature on the generation of employment in the tourism sector considers those variables that would have an impact on it:

- national tourists;
- international tourists;
- rooms occupied;
- state GDP (SGDP) at constant 2010 prices;
- exchange rate (pesos per dollar);
- annual average temperature; and
- the human development index.

With various studies in the literature also including variables such as cultural elements and mean state temperature, we include the latter variable in the data panel models. In the case of Mexico, it is a complicated task to include other variables due to problems with the availability of data.
As a first model, we estimate the following equation:

\[
_l\text{Empleo Tur}_{it} = \alpha + \beta_1 l\text{TurNac}_{it} + \beta_2 l\text{TurInt}_{it} + \beta_3 l\text{CuartOcup}_{it} + \beta_4 l\text{PIBReal}_{it} + \beta_5 l\text{PIBReal}_{it-1} + \beta_6 l\text{TipoCambio}_{it} + \beta_7 l\text{IDH}_{it} + \beta_8 l\text{TemperaturaProm}_{it} + \varepsilon_{it}
\]

(1)

where the variables are defined in the same way as in the empirical evidence section.

Given the restriction of information on employment in the tourism sector for all the federated states, we use the Economic Census for those years (2003, 2008 and 2013) for which official data exists. The restricted models estimated here enable the results presented in Table I to be obtained.

The Hausman contrast, used for measuring the endogeneity between the regressors and errors, indicates that the generalized least squares estimators are not consistent. Thus, the fixed effects model is the best model for predicting the relationship among the generation of employment in the 32 federated states of Mexico, the economic variables, and the variables pertaining to the sector itself. In the models proposed, the variable explaining employment in the tourism sector for the 32 federated states of Mexico in the period 1999-2014 is the state GDP, in pesos and at constant 2010 prices. The additional variables considered in the model are not relevant. While we also include the GDP lagged for a period to observe the impact and inertia of economic growth in employment in the tourism sector, this was not found to be statistically significant in any of the models.

Specifically, the growth of employment in the sector depends on state GDP at constant prices. The interpretation of the coefficient is that, for each percentage point by which GDP increases in the previous year, employment grows by 0.48 percentage points in the tourism sectors, namely the hospitality and tourism services sectors.

The second model uses the annual employment variations in the tourism sector with the objective of observing the year-on-year changes for all variables and, thus, best exploiting the dynamic and temporal heterogeneity. The study period is 1999-2014. We have called this variable \(StaffEmployed_{it}\). The results for these data panel models are presented in Table II.

### Table I. Panel data models

<table>
<thead>
<tr>
<th>Variable</th>
<th>Random effects model (MCG) empleo tur</th>
<th>Fixed effects model empleo tur</th>
<th>Fixed effects model log empleo tur</th>
<th>Random effects model (MCG) log empleo tur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constante – (\alpha)</td>
<td>-7515 (−0.1973)</td>
<td>36406.5 (1.017)</td>
<td>-0.279 (−0.0918)</td>
<td>-1.739 (−1.044)</td>
</tr>
<tr>
<td>(TurNac_{it})</td>
<td>0.0111 (2.458)</td>
<td>0.0279 (0.6246)</td>
<td>0.1976 (1.431)</td>
<td>0.2838 (2.913)</td>
</tr>
<tr>
<td>(TurInt_{it})</td>
<td>-0.0279 (−2.162)</td>
<td>-0.0593 (−2.024)</td>
<td>0.3115 (1.069)</td>
<td>0.4248 (3.603)</td>
</tr>
<tr>
<td>(CuartOcup_{it})</td>
<td>0.0156 (3.160)</td>
<td>0.0334 (2.705)</td>
<td>0.4780 (2.182)</td>
<td>0.2325 (3.107)</td>
</tr>
<tr>
<td>(PIBReal_{it-1})</td>
<td>6.5125 (4.402)</td>
<td>12.3152 (1.756)</td>
<td>0.3948 (0.7530)</td>
<td></td>
</tr>
<tr>
<td>(TipoCambio_{it})</td>
<td>402.243</td>
<td>6500.17 (−1.564)</td>
<td>0.0309 (0.0431)</td>
<td></td>
</tr>
<tr>
<td>(Observaciones)</td>
<td></td>
<td>94</td>
<td>0.8827</td>
<td>0.8635</td>
</tr>
</tbody>
</table>

**Notes:** \(t\) Statistic in parenthesis; Dependent variable: Tourist employment (empleo tur) and logarithm of Tourist Employment (log empleo tur); Census 2003, 2008 and 2013

**Source:** Own elaboration
The specification for the second model is the following:

\[ l_{\text{PersonalOcupado}} = \alpha + \beta_1 l_{\text{TurNac}} + \beta_2 l_{\text{TurInt}} + \beta_3 l_{\text{CuartOcup}} + \beta_4 l_{\text{PIBReal}} + \beta_5 l_{\text{TipoCambio}} + \beta_6 l_{\text{IDH}} + \beta_7 l_{\text{TemperaturaPromedio}} + \varepsilon_{it} \]

in which all the variables are defined in the same way as in the first estimated model.

The grouped least squares model imposes the restriction \( \beta_{1i} = \beta_1 \) in equation (2), namely, the 32 states have the same intercepts, which imposes strong restrictions for all the states, treating them identically without taking the heterogeneity among them into account. If the effects omitted are not correlated with the regressors, the estimations are consistent. The problem with the between model is that the units do not have the same perturbation variance, which was verified via the contrast of hypothesis. If the individual differences are correlated, it is possible to estimate the parameters of the model consistently with the fixed effect model.

The estimations for the same variables from the first sample are smaller. Given that this is panel data, there is the probability of intragroup autocorrelation and heteroskedasticity among groups, while the statistics from the t-tests could be deceptive or confusing.

The fixed effects model reports the testing of the hypothesis that the individual differences are equal to zero. Accepting this hypothesis leads us to estimations of weighted least squares. The value is close to zero and the equality among intercepts is rejected. The result of the estimation enables us to infer that the hypothesis that the states have an intercept in common is 99 per cent rejected, meaning that the differences among the states of the Mexican Republic are taken into account.

The results for these models indicate variation in the findings, suggesting that the non-observed individual differences are perhaps not correlated with the regressors for the model.

International tourists are a statistically significant variable, although the coefficient is very low. An increase in the percentage of international tourists increases the number of staff employed in the tourism sector by 0.011 per cent. The lagged variable of staff employed

<table>
<thead>
<tr>
<th>Variable</th>
<th>Fixed effects model</th>
<th>Random effects model (MCG)</th>
<th>Between model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constante</td>
<td>0.7635 (1.227)</td>
<td>0.1759 (2.738)</td>
<td>0.1995 (2.338)</td>
</tr>
<tr>
<td>PersonalOcupado_{it-1}</td>
<td>0.7084 (18.76)</td>
<td>0.9675 (52.57)</td>
<td>0.9777 (75.97)</td>
</tr>
<tr>
<td>TurN_{it}</td>
<td>-0.0048 (−0.3110)</td>
<td>-0.0204 (−2.463)</td>
<td>-0.0158 (−1.810)</td>
</tr>
<tr>
<td>TurInt_{it}</td>
<td>0.0115 (1.983)</td>
<td>0.0014 (0.5141)</td>
<td>0.0001 (0.0386)</td>
</tr>
<tr>
<td>CuartOcup_{it}</td>
<td>0.0348 (1.448)</td>
<td>0.0280 (2.957)</td>
<td>0.0204 (1.893)</td>
</tr>
<tr>
<td>PIBReal_{it}</td>
<td>0.0369 (3.314)</td>
<td>0.0102 (1.186)</td>
<td>0.0029 (0.1572)</td>
</tr>
<tr>
<td>PIBReal_{it-1}</td>
<td>0.0298 (1.576)</td>
<td>0.0059 (0.9375)</td>
<td>0.0102 (0.5229)</td>
</tr>
<tr>
<td>TipoCambio_{it}</td>
<td>0.1551 (5.782)</td>
<td>-0.0410 (−1.895)</td>
<td>-0.0617 (−2.424)</td>
</tr>
<tr>
<td>IDH_{it}</td>
<td>1.101 (2.289)</td>
<td>-0.1791 (−2.272)</td>
<td>-0.1409 (−2.053)</td>
</tr>
<tr>
<td>Temperatura Promedio_{it}</td>
<td>0.3542 (2.424)</td>
<td>0.0065 (0.4677)</td>
<td>0.0094 (0.5026)</td>
</tr>
<tr>
<td>Observaciones</td>
<td>334</td>
<td>334</td>
<td>32</td>
</tr>
<tr>
<td>R²</td>
<td>0.9967</td>
<td>0.9968</td>
<td></td>
</tr>
</tbody>
</table>

Notes: t Statistic in parentheses; Dependent variable: Tourist Employment, years 1999-2014, logarithms
Source: Own elaboration

Table II.
Panel data models
in the tourism sector has a positive and statistically significant impact. This is of great relevance, given that the generation of employment presents an inertia generated by the same variable. Furthermore, real production, exchange rate, annual average temperature and the human development index for the states have positive effects on the generation of employment in the sector. The variables with the most impact on the growth of employment are exchange rate, given that, for every percentage point rise, a 0.155 per cent employment increase is found, and temperature, which, in this case, is also important, with a 0.35 per cent increase in employment found per percentage point increase in average temperature.

Two specification tests were used to verify consistency (Hausman test) and the presence of random effects (Breusch–Pagan test[4]). The Hausman test conducts a hypothesis contrast for the consistency of the estimator for the random effects model, testing whether or not the estimators are consistent and whether they fulfill the condition of orthogonality between the errors of the model and the regressors.

Rejecting the hypothesis means that there is variance for the individual, and (in this model) random, differences. If the rejection fails, it is probably better to use the grouped least squares model.

Panel data cointegration
Additional to the data panel model, we include the cointegration model to test whether, in the period 1999-2014, the series for the 32 federated states in Mexico have a balanced relationship in the long-term. The majority of the tests for the cointegration of panel data used in the literature consider three distinct models: Kao; Pedroni; and, Westerlund. The series for which we apply the three cointegration tests are those which, in the data panel models, were found to be statistically significant in explaining employment in the tourism sector: international tourists; staff employed (employment); state GDP at constant 2010 prices; exchange rate; and, the human development index.

The study of unit roots and data panel cointegration has been fruitful in combining the advantages of receiving and using the information provided by the time series with cross-section data. The main argument is that, using the dimensions in \( N \) and \( T \) achieves more robust tests and determinants than solely applying the time series.

The literature on the application of cointegration tests on panel data has taken two directions, with the first consisting in establishing the null hypothesis of non-cointegration and applying, in an analogue manner, the remainders derived from the panel to the Engle and Granger (1987) static regression to construct the statistics from the test and tabulate the distributions.

The most general approach is that found in Pedroni (1995, 1997).

With the aim of establishing whether the variables cointegrate, we used the test proposed by Kao (1999), which is based on the Dickey and Fuller (1979) (DF) traditional and residual tests. Consider the following panel data model:

\[
y_{it} = x_{it}^\prime \beta + z_{it}^\prime \gamma + e_{it}
\]

where \( y_{it} \) and \( x_{it} \) are I(1) and are not cointegrated. For \( z_{it} = \{ \mu_i \} \), Kao (1999) proposed augmented DF and DF unit root tests for \( e_{it} \) to test the null non-cointegration hypothesis. The tests can be calculated from the remainders for the fixed effects:
\[
\hat{e}_{it} = \hat{\rho}\hat{e}_{it-1} + \nu_{it}
\]

where \(\hat{e}_{it} = \hat{y}_{it} - \hat{x}_{it}\hat{\beta}\) and \(\hat{y}_{it} = y_{it} - \bar{y}_i\). The estimations of the only least squares (OLS) model for \(r\) and the statistic \(t\) are given by the following expressions:

\[
\hat{\rho} = \frac{\sum_{i=1}^{N} \sum_{t=2}^{T} \hat{e}_{it}\hat{e}_{it-1}}{\sum_{i=1}^{N} \sum_{t=2}^{T} \hat{e}_{it}^2}
\]

and

\[
t_p = (\hat{\rho} - 1)\sqrt{\frac{\sum_{i=1}^{N} \sum_{t=2}^{T} \hat{e}_{it}^2}{\hat{s}_e}}
\]

Kao proposed four types of DF tests for verifying the relationship between regressors and errors, two based on exogeneity (strong) and two for the relationship between both. Pedroni (2000, 2004), in turn, proposed various tests for the null panel data cointegration hypothesis that gives a high level of heterogeneity.

While the condition that we establish is that the variables must be non-stationary in levels, when we convert the variables to their first differences they become stationary. We assume that the variables are stationary (once the first differences have been applied to them). Thus, the hypotheses that we establish in the Kao and Pedroni tests are as follows:

- \(H_0\). There is no cointegration between the panels.
- \(H_a\). All the panels are cointegrated.

In the case of the Westerlund model (a less restrictive model), the hypothesis is:

- \(H_0\). There is no cointegration between the panels.
- \(H_a\). All the panels are cointegrated.

When, taken together, the series are stationary, we can say that they are cointegrated, namely that they have a long-term relationship and, even more importantly, that they work in coordination in the long-term balance.

For the cointegration tests, we assume that the tests used (Kao, Pedroni and Westerlund) have the null non-cointegration hypothesis. The alternative hypotheses for the Kao and Pedroni tests are that the variables are cointegrated in all of the panels.

The Westerlund test has two versions, which is an advantage given that it imposes fewer restrictions than the Kao and Pedroni tests. In one of the tests, the alternative hypothesis is that the variables are cointegrated in some of the panels, while, in the second version, cointegration is considered in all of the panels.

The results of the cointegration tests for the panel data are presented in Table III.

The results for the panel data cointegration models indicate that the data series considered are found to be cointegrated in the long-term balance. The most compelling tests are the Pedroni and Westerlund tests, given that, according to the results, the variables considered are cointegrated for all the panels or that at least the majority of them are cointegrated. In the case of Kao, the results are ambiguous; however, the augmented Dickey Fuller test is statistically significant at 95 per cent, thus confirming the cointegration of the panels in the variables considered. The importance of the results in both cases is that both
the strong cointegration (Kao and Pedroni), in which all the panels are cointegrated, and the weak cointegration (Westerlund), in which some panels are cointegrated, suggest the importance of public policy aiming to strengthen the relationship between the variables studied.

To sum up, the variables pertaining to the number of international tourists, staff employed (employed), state GDP at constant 2010 prices, exchange rate, and human development index are cointegrated for the 32 federated states of the Mexican Republic. In other words, the results of the cointegration tests used here show that these variables maintain a relationship or balance over the long-term.

Conclusions
This paper presents a study conducted, in the context of the Mexican economy, on the relationship among economic growth, tourism activity and employment in the sector. The relevant literature on this area is not definitive in terms of the relationship among these variables, with the studies reviewed here being of various types: time series, cross-sectional, national and international. Among these studies, some conclude that there is a relationship between the increased levels of employment in the tourism sector and variables related to said sector. We use the methodology of panel data and panel data cointegration to prove whether it is possible to find said relationship for the 32 federated states in Mexico in the period 1999-2014.

The results indicate that said relationship can be found, indicating that tourists have an impact on the generation of employment in the tourism sector in the federated states. Moreover, GDP, exchange rate and the human development index for the states have positive effects on the generation of employment in the sector. The results are of great relevance for the period studied, given that they reinforce the public policy established at a federal and state level for the tourism sector.

The public policy recommendations emerge from the results of the models estimated and the analysis based on the geo-referencing undertaken by federated state, economic variable and tourism activity. The results obtained prompt the following public policy recommendations:

- In recent years, the activity of the tourism sector has been growing in Mexico, due to which, the activity of the tourism sector should continue to be fostered, at not only
an international but also a national level, because it is Mexican society itself that most impacts employment in the sector, particularly in hospitality activities and services in the tourism sector.

- Considering that the growth of the sector is not unlimited, those responsible for public policy for the development and growth of the tourism sector in Mexico must be conscious that increased activity in the tourism sector depends on other variables. These variables comprise the economic growth reflected, in part, in household income, economic, political and social stability in Mexico, security, the development of tourist destinations and associated activities, such as production and tourism services.

- Public policy in the sector not only must be oriented toward its growth but must also aim for the social and economic development of both Mexico’s tourist destinations and its federated states.

- The long-term relationships that result in a balanced sector are found in the variables of employment, national and international tourists, economic growth, economic development as measured by the human development index and exchange rate variations.

Moreover, the results open new research lines, such as the impact of the programs driving demand in terms of national tourism, such as *Viajemos todos por México* (Let’s all travel around Mexico) and *Pueblos Mágicos* (Magical Towns).

### Notes

1. It measures the factors and policy that enable the sustainable development of the global travel and tourism sector.

2. Area on the outskirts of a city with a large number of dwellings in conditions of poverty.

3. In Mexico, the Tourism Satellite Account provides information relevant to the sector; however, the level of aggregation would not allow for an instrument that will clearly determine tourism activity. Based on the information from the Economic Census of 2004, the Ministry of Tourism (SECTUR), taking into account geographical demarcation and economic activities, prepares the Tourism Statistics based on the Economic Censuses (Barrón, Castro and Madera, 2014). To date, only the 2009 and 2014 editions are available, given the regularity with which the censuses are conducted.

4. The Breusch-Pagan (or LM) test is based on a Lagrange multiplier:

   \[
   LM = \sqrt{\frac{NT}{2(T-k-1)} \left( \frac{\sum_{t=1}^{T} (\sum_{i=1}^{n} e_{it})^2}{\sum_{i=1}^{n} \sum_{t=1}^{T} e_{it}^2} \right)}
   \]

### References


**Further reading**


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Measuring the efficiency of medical tourism industry in EU member states

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Abstract

Purpose – Under the Directive 2011/24/EU, medical tourism and cross-border health are interrelated terms regarding the freedom to move to get the most accessible medical treatment into EU Member State within the defined procedures for reimbursement. Little known empirically regarding the efficiency of the cross-border health/medical tourism industry. This study aims to measure its efficiency in Europe for the years 2010-2014, by using Data Envelopment Analysis (DEA).

Design/methodology/approach – Data obtained from OECD and the European Core Health Indicators (ECHI), which is collecting the data through Eurostat. Eurostat collects data on health-care activities and provides data on hospital discharges, including the hospital discharges of non-residents and these include hospital discharges of in-patients and day care patients. The analysis uses “DEAP, 2.1 for windows” by Coelli (1996).

Findings – The results show that the Members States health systems were very efficient in handling non-residents in-patients; however, when managing day cases/outpatients, the efficiency scores dropped.

Practical implications – The findings would have significant associations affecting intentions to revisit clinics and the destination country. In addition, will be useful to those seeking a better understanding of the cross-border health and medical tourism industry efficiency.

Originality/value – Extending the findings of the European Commission report (2015c) by examining how well medical tourists are informed about the decision they are making, would be of perceived value. These are important indicators at European level by helping each Member State to measure its medical tourism services.

Keywords Data envelopment analysis (DEA), Efficiency, Health and medical tourism, Cross-border health care

Paper type Research paper

1. Introduction

In June 2010, the European Commission adopted the Communication, “Europe, the world’s No. 1 tourist destination – a new political framework for tourism in Europe”. This communication set out a new strategy and action plan for EU tourism. Tourism has a wide-ranging impact on growth, employment and social development in the EU. The
inbound tourism is contributing €356 billion in annual revenue to the European Economy (European Commission, 2017a). Health tourism in the EU is still a largely understudied and undocumented field in academic and professional literature (European Parliament, 2017). Moreover, health tourism contends with both national and European legislation, which generates issues with equal access to healthcare and wellness (European Parliament, 2017). Connell (2013, p. 11) found that “surprisingly little is known about cross-border mobility, even in Europe, despite its considerable and regulated significance”.

Cross-border care often refers to short and long term visitors to another EU country who find that they have to seek health care when they are abroad. These two classifications include those who fall ill when abroad and those who go abroad for planned treatment (WHO, 2014). Temporary visitors abroad include individuals traveling for work and for leisure (WHO, 2014). According to WHO (2014) temporary visitors are those who have travelled abroad for work and for leisure, and cross border health can be for them the most accessible or appropriate care. There has been a considerable increase in the volume of tourism in Europe, with especially large numbers traveling from northern to southern Europe in summer (Patterson, 2006). Medical tourism refers to people traveling to a country other than their own to obtain medical treatment (Horowitz et al., 2007). Medical tourism will play a significant role in shaping the future of medical care globally, as it sits at the growing intersections of technology, economy, cultural and other global relations (Jenner, 2008).

Health has always been on the European agenda. Several factors make health policies and the health systems across the European Union increasingly interconnected:

- patients receive health care across the EU;
- health professionals work in different EU countries;
- higher expectations for health care; and
- new developments in health technologies (European Commission, 2017b).

The number of individuals choosing to travel across national borders or overseas to receive medical treatments has been on the rise (European Commission, 2014). Making cross-border health care for European Union (EU) citizens possible, the Directive 2011/24/EU makes it easier for EU citizens to get medical treatment in another EU Member State and ensure that at least some of the costs are reimbursed in their own country. However, the Directive emphasises that Member States retain responsibility for providing safe, high-quality care on their territory, and that care should be provided according to their own standards of quality and safety. Health system performance is key to achieving the maximum that could be expected given the level of resources. Countries need to measure how well the health systems achieve to manage the arrival of the non-resident patients seeking treatment. Measurement of performance requires an explicit framework defining the goals of a health system against which outcomes can be judged and performance quantified. Performance comparison efforts are still in their early stages and there are many challenges involved in the design and implementation of comparison schemes.

Cross-border health including medical tourism has become a simpler way to get treatment abroad; and for temporary visitors such as medical tourists, can be the most accessible or appropriate care. Little is known empirically regarding the efficiency of EU hospitals while managing non-resident patients including medical tourists.

This study aims to measure the efficiency of the 15 EU Member States hospitals while managing non-resident patients including medical tourists for the years 2010-2014. The objectives of the study are as follows:
• to perform the literature review regarding medical tourism and cross border health;
• to gather available data from EU Member States for the years 2010-2014;
• to design and run DEA model to measure the efficiency of the EU hospitals while managing non-residents patients including medical tourists;
• to analyse the results and compare the efficiency scores;
• to provide discussion of the results; and
• to come up with conclusions and proposals.

2. Cross border health
The EU has a compendium of Directives dealing with health issues; with laws and Directives applying to the most crucial areas such as cross-border health including medical tourism. European Union’s Treaty and its Charter of Fundamental Rights (C364/1, 2000) and the EU institutions are bound to principles that ensure a high level of health protection. These are the right to benefit from medical treatment; access to health care – preventive, diagnostic and curative treatment regardless of financial means, gender or nationality (European Commission, 2015a). The Directive 2011/24/EU on the application of patients’ rights in cross-border health care came into force on 24 April 2011 and aims to provide all EU citizens with equal access to quality health care, responding to their specific needs (European Commission, 2015b). In 2014, the Communication on health systems shows that the Commission promotes cooperation at EU level with a view to strengthen effectiveness, increase accessibility and improve resilience of the national health systems in the EU (European Commission, 2014). In 2015, the European Commission released a report on the “Operation of Directive 2011/24/EU on the application of patients’ rights in cross-border healthcare” (European Commission, 2015c).

Moreover, it has released two Eurobarometers; one on patients’ rights in cross-border healthcare in the European Union (Eurobarometer 425, 2015) and one on the preferences of Europeans towards tourism (Eurobarometer 414, 2015).

The first Eurobarometer (2015/425) describes that as for the proportion of Europeans who reported that they actually received medical treatment in another Member State, there was a relatively small difference from one EU country to another. The findings show that in eight Member States, the percentage of people who used cross-border health care in another EU Member State at greater than 5 per cent were Luxembourg (LU) 16 per cent, 12 per cent Italy (IT) and 10 per cent in Hungary (HU). Other countries, which ranked above the average, were Romania (RO) (8 per cent), Portugal (PT) (7 per cent), Czech Republic (CZ) (7 per cent), Poland (PO) (7 per cent) and Ireland (IE) (6 per cent). The high rates observed in LU compared to other EU countries may be because its population is made up of many citizens from other Member States who are therefore more likely to seek healthcare abroad. For 27 per cent of the respondents, language was a major obstacle to receiving healthcare abroad, which could actually make them feel more vulnerable. In total, 23 per cent of respondents would want to know the waiting times for the treatment, they are looking for and the same proportion would want information on health-care providers (Eurobarometer, 2015/425).

The second Eurobarometer (2015/414) under study, showed that spending time in the sun or at the beach continues to be the main reason for going on holiday, and the second reason for going on holidays was health treatment with a response of one person in eight (13 per cent). Very high scores were observed in PT, Latvia (LV), Sweden (SE), Malta (MT), HU, and Slovakia (SK). It is worth mentioning that holidaymakers reported factors related to sports
or health not as the main motive for their main vacation in 2010 (3 per cent) but as an important factor boosting their holidays’ choice.

These two Eurobarometer showed that health problems within the medical tourism spectrum can be an opportunity for traveling and accessing quality health care treatments in another country.

In 2016, the European Commission released a study aiming to contribute to effective cross-border cooperation between EU-Member States by means of pooling resources for high-cost medical equipment investments (European Commission, 2016).

The aforementioned reports and Eurobarometer showed that the European Commission is putting a considerable effort into simplifying the process of traveling abroad and getting treatment.

3. Medical tourism

Health tourism is defined as “the organized travel outside one’s local environment for the maintenance, enhancement or restoration of an individual’s wellbeing in mind and body” (Carrera and Bridges, 2006). The health tourism includes all the situations related to people who choose to travel to a state other than the country of affiliation to receive health care-medical treatment (the person will be mainly dealing with scheduled treatment). The reason behind the decision to move, which has health implications, is to obtain a health service in a different state from that of their own health affiliation (provided by an institution and/or professional affiliated to a foreign NHS) (European Commission, 2018). According to the Turkish Ministry of Health and Department of Health Tourism categorised health tourism into - medical tourism, thermal tourism, elderly tourism and disabled tourism (Turkish Ministry of Health, 2012). A subset of this is medical tourism, which is “the organized travel outside one’s natural healthcare jurisdiction for the enhancement or restoration of the individual’s health through medical intervention” (Carrera and Bridges, 2006). Connell (2013) has defined medical tourism as: “the phenomenon of people travelling from their usual country of residence to another country with the expressed purpose of accessing medical treatment”. In the past, this usually referred to those who travelled from less-developed countries to major medical centres in highly developed countries for treatment unavailable at homes (Horowitz et al., 2007). Medical tourism is becoming increasingly popular, is driven by marketplace forces and occurs outside of the view and control of the organised health-care system (Horowitz et al., 2007). Medical tourism is one growing dimension of health-care globalisation, whereby consumers elect to travel across borders or to overseas destinations to receive their treatment (Lunt and Carrera, 2010). It is clear that medical tourism is a “new system” to meet health needs (Geitona and Sarantopoulos, 2015). There are some of the interrelationships between different areas of health and medical tourism, including wellness and wellbeing tourism, dental tourism, stem-cell tourism, transplant tourism, abortion tourism, and xeno-tourism. Key to defining these areas are the relationships to concepts of wellness and illness and the extent to which regulation encourages individuals to engage in cross-border purchase of health services and products (Hall, 2011). The concept of e-medical tourism can be also linked to health care systems (Sarantopoulos et al., 2014a).

At the international level, health tourism is an industry sustained by 617 million individuals with an annual growth of 3.9 per cent annually and worth US$513bn (Carrera and Bridges, 2006). The medical tourism industry is a fast-growing global niche market that generated $20 billion in income for destinations around the world (Woo and Schwartz, 2014). Some estimates on medical tourism between countries are made by consultancies in the process of assessing the potential of the medical tourism business. They range from
estimates based on Deloitte’s 2008 report on medical tourism, quantifying the number of people traveling abroad for healthcare at 30 and 50 million each year (Keckley and Underwood, 2008). Also, according to the Global Wellness Tourism Economy (2013), medical tourism market is worth US$50-60bn. The latest projection on medical tourism is estimated to be $100bn industry (Fetscherina and Stephano, 2016). There are several studies providing estimate on medical tourism growth, but they are based on US figures (Keckley and Underwood, 2008; Gan et al., 2011; Gan et al., 2012; Jacobs et al., 2013).

According to the calculations in the study, in 2014, the total size of the European market for health tourism was equal to 56 million domestic arrivals and 5.1 million international arrivals (from all over the world), for a total of 61.1 million arrivals. The total market of health tourism makes up for 4.3 per cent of all the EU arrivals, 5.8 per cent of the domestic ones and 1.1 per cent of international arrivals (European Commission, 2018). At European level, health tourism comprises around 5 per cent of general tourism in the EU28 and contributes approximately 0.3 per cent to the EU economy (European Parliament, 2017). Health tourism has a much higher domestic share than general tourism does. Increasing the share of health tourism may reduce tourism seasonality, improve sustainability and labour quality and may help to reduce health costs through prevention measures and decreased pharmaceutical consumption (European Parliament, 2017). Revenues generated by health tourism amounted to 12 billion euro in Europe, according to the data of the OCSP Observatory-SDA Bocconi (European Commission, 2018).

To provide reliable and accurate data on the flow of medical tourists is very hard as agreed by other authors because most of the records are held by private entities (Johnson and Garman, 2010; Turner, 2012; Lunt et al., 2012). Data collection, measures and studies of medical tourism all need to be greatly improved if countries are to assess better both the magnitude and potential health implications of this trade (Hopkins et al., 2010). Despite the increasing number of people, companies and countries involved in medical tourism, very little is known about the key drivers and how countries are perceived as medical tourism destinations. Studies have tried to estimate the costs and the benefits of medical tourism (Hanefeld et al., 2013; Beladi et al., 2015); to investigate the understanding of the factors that influence the travel intentions of medical tourists through its empirical investigation, and especially in its targeting of customers’ value perception (Wang, 2012); to investigate the decision to engage in medical tourism (Runnels and Carrera, 2012); or to investigate tourist executives’ opinions, aspects and beliefs in medical tourism and examine factors affecting their potential investments (Sarantopoulos et al., 2014b); and to explain the development, functioning, purposes and possible implications of cross-border contracting (Glinos et al., 2010). Other studies suggest and test a mechanism to assess the medical tourism providers, perceptions about the tourists, perceived important product attributes when selecting a medical tourism destination (Woo and Schwartz, 2014). In addition, research has been conducted to develop a model explaining international medical travellers’ intention formation by considering the impact of quality, satisfaction, trust and price reasonableness (Han and Hyun, 2015) or to develop a model by introducing and explaining main elements of medical tourism such as types of medical tourists (Ko, 2011).

4. Material and method
Empirical data that would provide evidence on measuring the efficiency of hospitals while managing non-residents including medical tourists in the EU, by using DEA is very limited.

The non-parametric mathematical programming approach frequently goes by the name Data Envelopment Analysis or DEA for short, attributed to Charnes et al. (1978) who introduced it. This name derives from the features of the method which is piece-wise linear
DEA analysis has been widely used in other economic sectors since 1957 by Farrell (1957) as organisations have struggled to improve productivity and efficiency. DEA has a long history with lots of important publications in measuring efficiency of hospitals and clinics (Caves et al., 1982; Lovell, 1996; Cook and Seiford, 2009; Charnes et al., 1978; Färe et al., 1994; Coelli et al., 2005; Coelli and Perelman, 1996; Hollingsworth et al., 1999; Färe et al., 1989; Halkos and Tzeremes, 2010; Ancarani et al., 2009; Maniadakis et al., 2007; Androutsou et al., 2011; Staat, 2006; Geitona et al., 2013; Pulina et al., 2010; Khushalani and Ozcan, 2017; Steinmichl and Zweifel, 2003; Leleu et al., 2014; Samut and Cafri, 2016; Moran and Jacobs, 2013; Linna et al., 2006; Varabyova and Schreyögg, 2013; Medina et al., 2013).

DEA method has been also used in tourism industry by measuring the performance of the hotels (Assaf and Agbola, 2011; Barros, 2006; Tingting and Liang, 2015; Wöber, 2008; Kao et al., 2011; Soysal-Kurt, 2017; Hu et al., 2014; Debata et al., 2013). Therefore, this method has been selected as it has been used in both sectors (health and tourism) to measure efficiency and provide reliable results.

Data were obtained from the Organisation of Economic Co-operation and Development (OECD) and the European Core Health Indicators (ECHI), which is collecting the data through Eurostat. Eurostat collects data on health-care activities and provides data on hospital discharges, including the hospital discharges of non-residents, and these include hospital discharges of in-patients and day care patients. The results were obtained by using “DEAP Version 2.1 for windows” by Coelli (1996). This study aims to measure the efficiency of the 15 EU Member States hospitals while managing non-resident patients including medical tourists for the years 2010-2014. The availability of data was the main selection criteria of the 15 EU Member States.

The computation of the EU hospitals’ efficiency while managing non-resident patients including medical tourists has been explored by using the non-parametric mathematical programming approach – DEA. Efficiency measurement refers to technical efficiency (TE), which aims at the maximisation of outputs for a given level of inputs, or conversely the minimisation of input use for a given output level. In this study, an input-oriented measure has been performed to evaluate by how much quantities can be proportionally increased without changing the output quantities used (Banker et al., 1984; Charnes et al., 1978; Hollingsworth et al., 1999).

The formulation used to define efficiency in this study is described as follows. To characterise production technology related to the efficiency measurement, each clinic uses variable inputs \( x = (x_1, \ldots, x_N) \in \mathbb{R}_N^+ \) to produce variable outputs \( y = (y_1, \ldots, y_M) \in \mathbb{R}_M^+ \). The clinic inputs can be transformed into outputs using technology that can be described by 

\[
GR = \{(x, y): x \text{ can produce } y\},
\]

Corresponding to the GR, there is a family of input sets \( L(y) = \{x (x, y) \in GR\}, y \in \mathbb{R}_M^+ \). Input sets are assumed to be closed and bounded above, and to satisfy strong disposability of inputs. The input sets contain isoquants \( Isoq L(y) = \{x: x \in L (y), \theta x \in L (y), \theta \notin (0,1)\}, y \in \mathbb{R}_M^+ \). Also corresponding to the GR of the technology is a family of output sets \( P (x) = \{y: (y,x) \in GR\}, x \in \mathbb{R}_N^+ \). Output sets are assumed to be closed and bounded above, and to satisfy the properties of convexity and strong disposability of outputs. A Farrell radial measure of the technical efficiency of input vector \( x \) in the production of output vector \( y \) is given by: 

\[
TE(x,y) = \min \{\theta: \theta x \in L(y)\}, \text{ where } \theta = 1 \text{ indicates radial technical efficiency and } \theta < 1 \text{ shows the degree of radial technical inefficiency.}
\]
DEA efficiency scores at EU Member States are related to the relative efficiency of the services provided by each Member State or to inefficiencies related to the excessive and incorrect input utilisation. Fully efficient EU Member States per year are those, which score 1.00 and achieve the highest performance, 100 per cent efficiency scores. Inefficiency or minimum levels of performance refer to any regressed scores below 1.00 or below 100 per cent efficiency scores.

This study runs two (2) models to analyse the efficiency of the Member States health systems when treating non-resident patients. The reason of creating these two models is due to data availability. The study used all the data available per year and per reference country. The study used as output the indicator hospital discharges of non-residents, which includes hospital discharges of in-patients and day care patients. Medical tourists can be classified as a non-resident category of patients that have been discharged by the hospital after an episode of care.

The study considers hospitals as a multi-product organisation with the annual number of practising physicians and practising qualified nurses and midwives per 100,000 inhabitants per EU Member State used as labour inputs and the number of beds as an aggregate proxy of capital inputs. Table I shows the inputs and outputs used in the two models along with a description of the data used and the sources of the data. In both models, it used three (3) inputs (hospital beds, total number of practising physicians, per 100,000 inhabitants and practising qualified nurses and midwives, per 100,000 inhabitants).

The difference in the two models is that model no1 (MA) used two outputs (hospital discharges in-patients per 100,000 inhabitants, number of non-resident people among all people discharged from hospital per 100,000 inhabitants), while model no. 2 (MB) used two outputs by keeping the same indicator “the number of non-resident people among all people discharged from hospital per 100,000 inhabitants”, but as a second output indicator it used the day cases/number of outpatients. The indicator on patient mobility meets the increasingly important EU-health policy issue of cross-border care. Increased patient mobility raises a number of issues and concerns in Member States such as health care availability and utilisation, health infrastructure development, cost sharing and patient safety. Therefore, the main indicator taken into consideration in measuring the EU hospitals’ efficiency while managing non-resident patients including medical tourists, is the number of non-resident people among all people discharged from hospital per 100,000 inhabitants. A non-resident patient is a patient living in another country/region but coming in the country/region of reference for treatment and/or care. Each EU Member State is considered as a single decision-making unit (DMU) in terms of provision of in-patient care and day cases/outpatients. The available data provided by more than one EU Member State per year was for the period 2010-2014; therefore, the DEA models were evaluated in terms of

<table>
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<tr>
<th>Inputs and outputs</th>
<th>Model 1</th>
<th>Model 2</th>
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<tr>
<td><strong>Inputs</strong></td>
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<tr>
<td>Hospital beds per 100,000 inhabitants</td>
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<td>Total number of practising physicians per 100,000 inhabitants</td>
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<td>Total number of practising qualified nurses and midwives, per 100,000 inhabitants</td>
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<td><strong>Outputs</strong></td>
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<tr>
<td>Hospital discharges of inpatients per 100,000 inhabitants</td>
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<tr>
<td>Hospital discharges of non-resident inpatients per 100,000 inhabitants</td>
<td>x</td>
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| Day cases/number of outpatients per 100,000 inhabitants | x |         | Table I. DEA models’ design
their cross-country performance over that period. The study used 49 DMUs for the
aforementioned years.

The input-oriented method has been chosen due to the fact that the output used in this
study—the non-resident people among all people being discharged—is a source which
presents the arrival of medical visitors to the host Member State hospitals, which regarding
to the usual health systems procedure is an indicator that in terms of budget and resources
allocation cannot be predicted, but is aggregated to the number of “health care users”. A
hospital discharge is the formal release of a patient from a hospital after a procedure or
course of treatment (episode of care) (ECHI, 2017). The inputs used; hospital beds and the
human resources are indicators forming a health care system and can be crucial when
planning a reform to achieve efficiency.

There are some methodological limitations that should be mentioned as the fact that the
data available per year did not include the same countries. It is worth pointing out that the
efficiency scores could vary if different models were to be run. Data availability in the EU on
provision and utilisation rates of medical tourism is only limited. Institutional barriers such
as European comparison of waiting times to enable patients to make informed choices when
seeking medical care in another Member State, is very limited. The use of the output data
provides information about the patients that are non-residence to the host country they
received treatment, and these data include those that are medical tourists. However, the data
available do not distinguish groups. Therefore, for the purposes of this study, it is assumed
that medical tourists are included in the data of those received cross-border health, as they
can lay in the category of temporary visitors that have travelled abroad for work and/or for
leisure and cross-border care was for them the most accessible or appropriate care. To
overcome these limitations data needs to be gathered from Member States at European level
annually. This will facilitate future research and will provide comparable results that can
form the basis for decision making.

To create comparable units and avoid heterogeneity of the sample the data used were
from the EU Member States that have provided figures on the number of non-resident
people among all people discharged from hospital per 100,000 inhabitants. In addition,
future research would be benefited if the selection of data in EU, along with different trade
blocs is homogeneous, so as future analysis can provide comparable results. Another
important limitation refers to the fact that outputs adjusted for case-mix and in-patients’
severity have not been taken into consideration due to the lack of relevant data.
Consequently, the data set used does not reflect output qualitative dimensions, which should
constitute a primary criterion in the evaluation of hospital care. Moreover, TE has been used
as an input-oriented measure but an output-oriented measure including patients’ satisfaction
of the services may be useful for long-term growth of the industry, as it is an important and
commonly used indicator for measuring the quality in health care. It could also be useful to
compare the findings of this study with other studies that have measured the efficiency of
health systems in the sample countries, but this study has put emphasis on the non-resident
patient discharges, which is a relatively new issue, and most of the available comparable
studies have not used such a DEA output.

5. Results
In this paper, EU Member States performance has been assessed by measuring hospitals
efficiency while managing non-resident patients including medical tourists, through a set of
similar DMUs. The results at a European level by running Model No.1, showed that in 2010
all the countries with available data (HU, IE, LU) were fully efficient when providing
medical treatment to those that are non-residents. In 2011, six (HU, IE, LU, IT), Slovenia (SI),
Lithuania (LT)] out of ten countries were fully efficient, while CZ and Croatia (HR)] had the lowest efficiency scores. In 2012, six [IE, LU, SI, MT, RO and SK] out of fourteen countries were fully efficient, while HR, CZ and Spain (ES) showed the lowest efficiency scores among the countries studied. In 2013, five [IE, LU, MT, RO, SI] out of 13 countries were fully efficient, while HR and Italy (IT) where those with the minimum levels of performance. In 2014, four (LU, SI, MT, RO) out of ten countries were fully efficient, while Germany (DE) showed the minimum level of performance. Overall, the countries under study were very efficient, as the ranking between the scores throughout the years was from the lowest 0.71 (HR) to the highest 1 (LU, IE, SI, RO and SK).

The results by running model no. 2 showed that in 2010, 2011 and 2012 two countries (IE, LU) out of three, ten and fourteen accordingly, were fully efficient. In 2013, three (IE, LU, MT) out of eleven countries scored 1. In 2014, four out of ten countries were fully efficient. Throughout the years, IE and LU were fully efficient, while HU, CZ, DE and LT achieved only the minimum levels of performance.

By comparing the two models, the results show that IE and LU were fully efficient run by both models throughout the years. The rest of the Member States run by Model 1 achieved better scores than run by Model 2, meaning that they could manage better in-patients than day cases/outpatients. The Member States with the broader differences in scores between the two models are HU, CZ, DE and LT. Figure 1 shows the results of the two models for the time horizon of the analysis.

6. Discussion
By considering the importance of the cross-border Directive 2011/24/EU that was engaged by the Member States in 2013, this study’s observations were that the efficiency scores achieved per country were similar through the years before and after this milestone. The reason that there is no considerable efficiency improvement after 2013 can be due to the issue that the Directive was not properly disseminated to the citizens, as it was also

![Figure 1. Comparison of Model 1 (MA) and Model 2 (MB) DEA efficiency scores 2010-2014](image)
concluded by the report regarding the operation of European Commission (2015c) Directive. However, it is worth mentioning that after 2011 (the year that the Directive was published) more Member States were collecting data on non-residents patients. The Member States can link this to an observation that cross border health/medical tourism is gaining a great interest and an early stage collection of reliable data has been performed. The results also showed that LU and IE were fully efficient throughout the years of consideration. These results can be linked to the findings of the Eurobarometer 2015/425, which reported that the percentage of people who used cross-border healthcare in another EU Member State and was greater than 5 per cent was LU and IE. LU high performance can also be due to the facts highlighted at the same Eurobarometer, that was among the countries that were more open to cross-border healthcare and as an international country – with population made up of many citizens from other Member States and many people working in LU but living in neighbouring countries – may support a health system that needs to respond to non-residents provision of health care on a daily basis, meaning that LU health system is more familiar with the cross-border health policy. Another factor, which was a major obstacle for respondents to travel, was the language. LU and IE may be fully efficient also due to the fact that health professionals in both countries speak fluent English. This encourages patients to use the health-care facilities, but also creates a level of understanding of the health care needs by the health professionals; which may lead to a more efficient health system. Addressing language barriers through interpreters and language training professionals is also important for the safety of mobile patients, but again, these measures have come to be seen as vital for all high-quality care due to the increasing ethnic heterogeneity of Europe (Legido-Quigley et al., 2007). By comparing this study’s observations to the Eurobarometer 2015/414 results, the countries with the highest scores of the population that travelled due to health reason were PT, LV, MT, HU, SK; these countries were also very efficient in treating non-residents patients according to the findings of this study. However, the determining factor is whether the cost to the patient is seen as a barrier to free movement (Legido-Quigley et al., 2007).

7. Conclusions
Seeing the necessity for comparative assessment in the hospitals across the EU, this study comes at the right moment to carry out this research at an EU Member State level, as efficiency is particularly crucial in the context of defining new areas of potential national actions such as cross-border health/medical tourism. This study highlighted the fact that cross-border health and medical tourism can be interrelated concepts regarding the freedom to move to get the most accessible or appropriate medical treatment to any EU Member State within the defined procedures for reimbursement. The introduction of DEA as a practical research tool for examining efficiency across EU-Member States hospitals seems to open a path to evaluate and compare health system performance from a cross-border/medical tourism perspective. The study presented that the efficiency of this market industry differs between EU Member States and the reasons are diverse and can be ascribed to lacking information, differences of national health systems, organisational and administrative hurdles and lacking political support.

Member States need to put more effort into improving and broadening data collection. This study proposes further analysis through field surveys at medical clinics, that will enable measurements regarding perceived quality, satisfaction and trust in the staff and clinic. Waiting times measurements aiming at EU and international comparisons would also benefit patients who seek cross-border alternatives for their care.
The outcomes of such study would have significant associations affecting intentions to revisit clinics and the destination country. Extending the findings of the European Commission (2015c) report by examining how well medical tourists are informed about the decision they are making, would be of perceived value. These are important indicators to be considered at the European level and would help each Member State to measure its medical tourism services.

Health system performance comparisons have the potential to provide a “rich” source of evidence as well as to influence policy. Measuring its efficiencies at the regional, local or even clinical level aiming at offering high-quality health-care services that would encourage medical tourists to visit and/or revisit the countries, could potentially bring economic advantages for many EU-Member States. Studies like this can form the basis for policymakers interested in understanding whether their health system is performing as well as it could while treating patients from abroad – including medical tourists. Growth is a priority in Europe and the health systems should also aim for it by considering medical tourism as an incentive. The successful integration of European policies into a local system, and the endorsement of other Member States best practices, often involves a degree of adaptation to ensure compatibility with existing structures that may take time. Therefore, as the degree of adaption of the EU Directive 2011/24/EU is quite recent and aims to have a beneficial effect on health care systems, according to the results of this study it is worth to compliment the Member States for their performance so far. Further research at national, regional and European level that would provide evidence in developing and integrating health tourism and healthcare is needed. Coordinated and targeted funding actions on eliminating barriers to the economic growth of health tourism and that correspond to “open” health-care systems, should be introduced by policymaker.

References


Further reading


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A positioning strategy for a tourist destination, based on analysis of customers’ perceptions and satisfactions
A case of Kashmir, India
Natasha Saqib
Department of Management Studies, University of Kashmir, Srinagar, India

Abstract

Purpose – The purpose of this paper is to measure the perception and satisfactions of consumers of the tourism product of Kashmir region and identify potential niche markets that could be used in the development of the destination’s positioning strategy.

Design/methodology/approach – The author used a case study methodology. Self-completion questionnaires were distributed to tourists visiting Kashmir region at the peak of the 2018 tourism season. The scales used were adapted from two authoritative sources. Data from 479 completed questionnaires were analysed quantitatively by a variety of statistical techniques, including factor analysis.

Findings – Four possible niche markets are identified that can inform the development of the destination’s positioning strategy: nature based, adventure, cultural and culinary. The overall conclusions and discussion of the findings should provide a case-based framework for the practical planning and implementation of positioning strategies in the tourism context.

Research limitations/implications – The time frame of the study was five summer months in one year, and only actual visitors completed the questionnaire. The study did not assess their evaluation of the quality of the services provided and consumed.

Originality/value – The overall conclusions and discussion of the findings should provide a case-based framework for the practical planning and implementation of positioning strategies in the tourism context.

Keywords Positioning, Customer satisfaction, Kashmir, Destination positioning, Customer perception

Paper type Research paper

1. Introduction

Destinations are the centrepiece of tourism and are acknowledged to be one of the most difficult entities to manage and market. The multiplicity of components that make up the destination product, the complexity of the relationship that exists between them and the involvement of large number of stakeholders are the factors that make a destination more complex. The complexity is further increased when consumer is taken into consideration.
Consumers of the destination product often differ in their perceptions, expectations and desired satisfaction of the tourism place. It is the customer who decide how and when they access their travel and tourism information and how and through what process they access and purchase their travel and tourism arrangements. Therefore, for destination to be a success, it requires to be positioned in the mind of the consumer through eliciting consumers’ perception. Ries and Trout (1986) assert that marketing is more a battle of perceptions than of products and that the customers mind is more important than the market place and it is better to be first in the mind than to be first in the market place. It is, thus, imperative to understand the psychology of the consumers’ i.e. consumers’ perception.

As mentioned by Blankson and Kalafatis (2004) understanding the customer perspective is essential for the development of a positioning strategy. Boatswain (2015) and Fuchs and Diamantopoulos (2012) are also of the view that that if positioning strategies are based on examination of consumers’ perceptions then they are successful strategies and could last longer and should be assessed by measuring consumers’ perceptions and preferences for the product in relationship to its competitors. Dibb et al. (1997) also noted that positioning of any product is based on consumer’s perceptions and marketers have only partial control of their products positioning in the marketplace. So positioning strategies designed by organisations for the destinations might fail when implemented if they are designed from the organization’s perspective and not from the customers’ perspective (Brooksbank, 1994). For this reason, the image or position a product has in the mind of the consumer is more important to success than the product itself (Jamal and Goode, 2003). This eventually necessitates this research to find a better method of understanding the destination positioning through eliciting consumers’ perception.

Kashmir region is one of the most important and famous tourist destinations of India because of its strategic location and uniqueness. It possesses numerous tourist attractions varied in type and appealing to a wide range of interests. The attractions include historical, cultural, archaeological, scenic, climatic, culinary and adventure resources. However, in past decades Kashmir region has become one of the most vulnerable sectors to crises. Crises in region range from political instability, terrorist attacks, war, to various forms of natural disasters such as earthquakes and floods. So one of the biggest impediment to tourism industry in region is crisis and ineffective crises management plans in place (Saqib, 2018). According to Beirman (2003), long lasting series of crises poses almost a significant threat to the destinations public image and its ability to attract tourists and visitors in articulate and same is true for the region. The region unfortunately has a negative image in the minds of tourists, due to crisis (Saqib, 2018); therefore, it is necessary that tourism stakeholders and the government ensure to create a positive image through proper destination positioning and provide new opportunities to the region in becoming an attractive tourist destination all over the world.

Responding to the increase recognition on the importance of positioning for Kashmir tourism industry, this research will be an attempt to carry out a positioning exercise for the Kashmir region. This study uses the functional and psychological dimensions of customers’ perception and satisfaction as the basis for formulating a destination’s positioning strategy. Specifically, this study uses a case study approach to measures customers’ images of Kashmir regions tourism products and the attributes that influence tourists’ satisfaction, to identify specific niche markets that can be used in the development of the destination’s positioning strategy.

Moreover, the primary review of the literature clearly indicates that there is a scope for carrying research on the positioning strategies for tourism industry in India, especially on the positioning strategies for tourism industry in Kashmir since there are not enough literatures on the positioning strategies for tourism industry in India which were published recently and to the best of our knowledge no researches/literature reviews were focussed on
highlighting the positioning strategies for tourism industry in Kashmir region. Hence, this case study will also address this gap in the literature.

The paper is divided into four sections: Section 2 provides a review of the extant literature of positioning strategy, destination image and tourist satisfaction; methodological discussion, including details of sampling procedures and data collection, is presented in Section 3; presentation and discussion of the research findings are given in Section 4; discussion of managerial implications and limitations are presented in Sections 5, 6 and 7.

2. Literature review

It is generally agreed that conceptually, practically and strategically positioning has become one of the fundamental components in modern marketing management, both from the academic point of view (Aaker and Shansby, 1982; Blankson and Kalafatis, 2004; Boatswain, 2015; Fuchs and Diamantopoulos, 2012; Urde and Koch, 2014) and from the practical or business point of view (Ries and Trout, 1986; Trout and Rivkin, 1996). It is because of its inevitable effect on profitability and long term success of the firm it has been applied to tourism destinations (Botha et al., 1999; Claveria, 2016; Echtner and Ritchie, 1993, 2003; Evren and Kozak, 2018, 2019; Ibrahim and Gill, 2005; Pike, 2012; Pike et al., 2018; Pike and Ryan, 2004; Pike and Page, 2014; Tasci, 2011; Tasci et al., 2007; Walmsley and Young, 1998; Zins, 2014).

The concept of positioning has a potential connection with destination in that a location is considered to be a product with brand image, loyalty or equity. Destination positioning is the centrepiece and the most critical element of all future efforts for the tourist and probably economic development of an area. This important form of market communication helps to distinguish tourism destinations from similar destinations so that customers can choose the one that is the most attractive. Thus, true positioning differentiates a destination from its competitors on attributes that are meaningful to customers and gives it a competitive edge (Chacko and Marcell, 2007).

Due to the rapidly increasing number of tourist destinations in the marketplace and since tourism destinations have become dedifferentiated with the effect of globalisation and modernisation. DMOs face the challenge of differentiating the tourist destination and the recognition of this differentiation by current and/or potential visitors (Dann, 2000; Evren and Kozak, 2018; Pike, 2012; Plog, 2000) and because of this dedifferentiation, an explicit positioning strategy is valuable in helping to create a distinctive place in the minds of potential tourists, so that they know how a destination differs from competitive destinations, and how it can satisfy their needs (Botha et al., 1999).

Moreover, a major objective of any destination positioning strategy is to reinforce positive images already held by the target audience, correct negative images or create a new image. Therefore, according to Tasci, 2011, the first step of positioning a destination is the assessment of the image of destination attributes in current and potential target markets. Similarly, Reich (1999) is also of the view that the construct of image forms the foundation for the study of positioning and its basis is the perception or opinion that individuals have regarding both intrinsic and extrinsic elements.

Destination image has become a popular area of investigation among tourism researchers as it has been found to influence destination choice, satisfaction, and post-purchase behaviour (Munhurruna et al., 2015; Zhang et al., 2014). Destination image can be defined as a tourist’s general impression of a destination (Fakeye and Crompton, 1991), that is, it is “sum of beliefs, ideals and impressions” that a visitor has toward a certain place (Assaker and Hallak, 2013). The image of a destination can have some impact on variables such as the satisfaction or dissatisfaction that a tourist derived from the destination. Chon and Olsen (1991) found that measuring an image by evaluating a list of attributes was significantly
correlated to satisfaction with a destination’s products. Ibrahim and Gill (2005) also asserted that a two-way relationship exists between the image tourists have and the satisfaction they derive from their experience. This two-way relationship highlights the importance of placing more emphasis on the measurement/identification of customers’ perception and satisfaction of a tourism product for positioning purposes. Although research examining customers’ satisfaction with destinations’ products and attributes is to be found in the marketing literature (Crompton and Love, 1995; Spreng et al., 1996; Cho, 1998; Baker and Crompton, 2000), very few research studies acknowledged such a two-way relationship and have attempted to combine the two variables of customer’s perception and satisfaction together to inform the development of a destination’s positioning strategy (Ibrahim and Gill, 2005). We believe that these two variables are important and can be combined together to identify the strongest functional and psychological attributes that can be used for positioning and promotion purposes. Therefore, we propose that the measurement of customers’ perception and satisfaction when combined together can result in identifying specific niche markets, which can be used in developing and promoting an effective positioning strategy for a destination.

“Tourism satisfaction” refers to the degree to which a tourist’s assessment of the attributes of that destination exceeds his or her expectations for those attributes (Tribe and Snaith, 1998). However, measuring satisfaction is a complex process. According to Assaker and Hallak (2013) and Yoon and Uysal (2005), tourist satisfaction can be measured based on the expectation/disconfirmation paradigm, equity theory, norm models and perceived overall performance. Of these theories, the expectation/disconfirmation theory are the most frequently used (Kozak, 2001; Skogland and Siguaw, 2004; Hui Wan and Ho, 2007; Chen and Chen, 2010). According to Chung and Petrick (2012) the expectation/disconfirmation theory, which was developed by Oliver (1980), postulates that satisfaction is a result of the discrepancy between expectations and perceived performance. When the performance of a tourism destination, as perceived by the tourist, is higher (lower) than his/her expectations, a positive (negative) disconfirmation will result in satisfaction (dissatisfaction) (Yoon and Uysal, 2005; Hui et al., 2007). However, this conceptualisation has been problematic, particularly in tourism contexts (Kozak, 2001; Yuksel and Yuksel, 2001; Millan and Esteban, 2004; Hui et al., 2007; Petrick, 2004). Due to the intangibility of tourism and leisure products, it has been argued that expectations are inevitably less concrete and less useful. Yi (1990) also claimed that the desires of the consumer, as the key determinants of satisfaction, have not been considered in previous research. Spreng et al. (1996), therefore, pointed out the necessity of using the concept of desire as a predictor of satisfaction. Desires indicate, “the attributes, levels of attributes, and benefits that the consumer believes will lead to or are connected with higher-level values” (Spreng and Olshavsky, 1993). Baker and Crompton (2000) also supported this view by indicating that factors such as desires, needs and disposition can influence the measurement of satisfaction.

“Travel Attributes” are set of attributes that describe a place as a travel destination (Heung and Quf, 2000). There are several studies in consumer behaviour indicate that the customers consider the attributes to decide on the goods and the same applies to tourists and destinations. Echtner and Ritchie (1993) concluded in their research that every destination has a combination of functional or tangible attributes and psychological or abstract attributes. For example, a destination’s image is comprised of beliefs about specific attributes such as accommodation, climate, ease of access, etc. as well as a more overall or holistic impression. The functional psychological dimension distinguishes between the parts of an image which are directly observable (e.g. prices) and those which are intangible (e.g. friendliness). The third element, common unique, recognises what is similar about a destination and what is distinctive about it. Similarly, Cho (1998) has identified a number of attributes that are most important in the measurement of tourists’ satisfaction.
From the above literature, one can conclude that to ensure success for the positioning strategy of a destination, it is very much imperative that the image of the destination and the specific product attributes that satisfy the tourists should be identified. Therefore, the measurement of the customer’s image of the tourism product (Echtner and Ritchie, 1993) and the satisfaction of the product attributes, combined with the identification of the tourist needs and desires in a tourist destination (Cho, 1998), can be seen as the basis for identifying specific niche markets for the development of a destination’s positioning strategy (Ibrahim and Gill, 2005).

3. Method
We administered a survey consisting of the 37 items and demographic variables to tourists coming to Kashmir region at five famous tourist nodes of region (Pahalgam, Gulmarg, Sonamarg, Srinagar and Kokernag). For the present study, Comrey and Lee (1992) sample guidelines were followed. In total, 500 questionnaires were distributed and returned. After excluding cases with missing values, a total of 479 responses were retained for analysis. The participant profiles are shown in Table I.

3.1 Research variables and questionnaire structure
Destination image is typically measured using attribute scales and a structured semantic differential or Likert-scale type methodology (Crompton, 1979; Gartner and Hunt, 1987; Gartner, 1989; Hunt, 1975; Phelps, 1986; Richardson and Crompton, 1988). Ritchie and Goeldner (1987) suggested three basic approaches to constructing a scale. The first is to

| Variables          | Options Options (%)
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
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<tr>
<td></td>
<td>Female</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
</tr>
<tr>
<td></td>
<td>Unmarried</td>
</tr>
<tr>
<td>Age</td>
<td>18-27</td>
</tr>
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<td></td>
<td>48-57</td>
</tr>
<tr>
<td></td>
<td>58 years and over</td>
</tr>
<tr>
<td>Education</td>
<td>Postgraduate or above</td>
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<tr>
<td></td>
<td>College level</td>
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<tr>
<td></td>
<td>High school or technical school</td>
</tr>
<tr>
<td></td>
<td>Below high school</td>
</tr>
<tr>
<td>Occupation</td>
<td>Student</td>
</tr>
<tr>
<td></td>
<td>Government service</td>
</tr>
<tr>
<td></td>
<td>Private service</td>
</tr>
<tr>
<td></td>
<td>Self employed</td>
</tr>
<tr>
<td></td>
<td>Others</td>
</tr>
<tr>
<td></td>
<td>Below 20,000</td>
</tr>
<tr>
<td>Income</td>
<td>20,000-49,9999</td>
</tr>
<tr>
<td></td>
<td>50,000-99,9999</td>
</tr>
<tr>
<td></td>
<td>10,000 and above</td>
</tr>
<tr>
<td>Nationality</td>
<td>Indian</td>
</tr>
<tr>
<td></td>
<td>Foreign (the UK, the USA, Australia, Canada, France, Germany, Italy and Japan)</td>
</tr>
</tbody>
</table>

**Source:** Based on the primary data

**Table I.** Demographic profile of respondents (Total N = 479)
select a scale that has been previously developed and tested by others. The second is to
develop a scale either by modifying an existing scale or by introducing a new set of item
tests. The third is to develop a new scale that is valid and reliable. Bearing this in mind, the two
test variables customers’ perception and satisfaction were used in the study. A 19-item scale
used to measure customers’ perception of the destination was adapted from Echtner and
Ritchie (1993). This framework allows researchers to better measure destination images,
measurements that are useful for positioning and promoting destinations. However, given
the particular nature of the destination selected some minor modifications were made and
more detailed items were added from prior studies of specifically urban destinations (Choi
et al., 1999). Likewise the scale of satisfaction consisted of 18 items was adapted from Cho
(1998) with modifications. Of all the studies reviewed, those carried out by Echtner and
Ritchie (1993) and Cho (1998) were considered of special interest, due to his emphasising the
importance of destination image to tourism as a whole. The questionnaire was structured
into three sections comprising of open-ended and Likert scale questions, with a section
designed to collect demographic data. The first section explored customers perceptions,
respondents were asked to rate the relative importance of the image attributes on the basis
of five-point Likert scale, for example, “How important is scenic beauty for you” – on a scale
of one to five (where 1 = not at all important and 5 = very important). The second section
explored customers satisfaction, respondents were asked to rate the relative
importance of the satisfaction attributes again on the basis of five point likert scale, for
example for example, “How important is safe and secure environment for you” on a scale
of one to five (where 1 = not at all important and 5 = very important)!.

To capture the holistic and unique components, the questionnaire also comprised three
open-ended questions:

Q1. What images or characteristics come to your mind when you think of Kashmir as a
vacation destination?

Q2. How would you describe the atmosphere or mood that you would expect to
experience while visiting Kashmir?

Q3. List any distinctive or unique tourist attractions that you can think of in Kashmir.
These questions were adapted directly from Echtner and Ritchie (1993) without
modification.

4. Analysis and discussion
The two key variables of the study (customer perception and satisfaction) were analysed for
the functional and psychological dimensions. The analysis of the open-ended questions was
based on the approach of Finn et al. (2000). This required the grouping of similar responses
from the open-ended questions and the categorising and labelling of the various descriptions
provided by the respondents. This technique was used to identify the most frequent words
or phrases used to describe the destination (Kashmir) and its image in the customer’s mind.
The analysis of the open-ended questions showed that the image of “breathtaking scenery”
and “exotic beauty” is closely associated with Kashmir. The “friendly attitude” of the
residents was another factor that was prominent as a destination image in the customer’s mind, which supported the findings of Echtner and Ritchie’s (1993). The most outstanding
psychological attributes representing holistic image of the Kashmir region was its relaxing,
friendly and laid-back atmosphere. The distinctive and unique attractions (functional
attributes) perceived by the tourists were the “Majestic Mountains”, “Dramatic Lakes”,
“Meadows”, “Mughal Gardens” and “Flowing Water”.

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4.1 Customers’ perception and destination image

The principal axis factor analysis with varimax rotation was used to reduce the 19 item perception attributes included in the questionnaire to measure tourists perception of Kashmir as tourist destination. The factor analysis results are shown in Table II.

The suitability of the dataset for exploratory factor analysis was established through the Bartlett’s Test of Sphericity \( (p < 0.001) \) and Kaiser–Meyer–Olkin (0.832) (KMO) which justified the use of exploratory factor analysis. One important decision in the factor analysis is the number of factors to be extracted. By Kaisers criterion six factors (Eigen value greater than 1) could be extracted. However, this criterion is accurate when there are less than 30 variables and communalities after extraction are greater than 0.7 or when the sample size exceeds 250 and the average communality is greater than 0.6. None of the communalities exceeded the value of 0.7 and the average of the communalities was found to be below 0.6. So, on both grounds Kaiser’s rule was not found to be accurate. However, considering the sample size of 479, Scree plot was used for deciding the number of factors to be extracted. To determine the “break”, horizontal line and a vertical line was drawn starting from each end of the curve. In Scree plot (Figure 1) the point of inflexion occurred at the fourth data point the curve begins to flatten between factor 4 and 5; therefore, four factors were extracted.

Furthermore, the items having a loading score lower than 0.40 were excluded from the analysis (Ford et al., 1986) which ranged from 0.416 to 0.795. After a series of eliminations, 1 item was removed from the scale, 18 items remained and a distinct four-factor structure emerged. Combined factor loadings accounted for 50.237 per cent of the total variance in the factor pattern. For something to be labelled as a factor it should have at least 3 variables, although this depends on the design of the study (Tabachnick and Fidell, 2007). Factor

<table>
<thead>
<tr>
<th>Factor items/statements</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Scenic Beauty</td>
<td>0.705</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beautiful Gardens, Parks and Meadows</td>
<td>0.666</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flowing Water/Lakes</td>
<td>0.648</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Springs/Glaciers</td>
<td>0.617</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pleasant Climate</td>
<td>0.561</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wildlife *</td>
<td>0.365</td>
<td>0.795</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snow Skiing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mountaineering/Trekking</td>
<td></td>
<td>0.683</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Rafting</td>
<td></td>
<td>0.655</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golfing</td>
<td></td>
<td>0.622</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pilgrimages</td>
<td></td>
<td>0.743</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural and Historic Sites</td>
<td></td>
<td>0.734</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variety of architectural styles</td>
<td></td>
<td>0.635</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Festivals/Events</td>
<td></td>
<td>0.537</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Cuisine (food and drink)</td>
<td></td>
<td></td>
<td></td>
<td>0.645</td>
</tr>
<tr>
<td>Convenient shopping</td>
<td></td>
<td></td>
<td></td>
<td>0.624</td>
</tr>
<tr>
<td>Good quality of products</td>
<td></td>
<td></td>
<td></td>
<td>0.528</td>
</tr>
<tr>
<td>Local Art and Craft</td>
<td></td>
<td></td>
<td></td>
<td>0.486</td>
</tr>
<tr>
<td>Wide variety of products</td>
<td></td>
<td></td>
<td></td>
<td>0.416</td>
</tr>
<tr>
<td>Eigen value</td>
<td>2.896</td>
<td>2.501</td>
<td>1.983</td>
<td>1.974</td>
</tr>
<tr>
<td>Cumulative percentage</td>
<td>15.249</td>
<td>29.410</td>
<td>39.848</td>
<td>50.237</td>
</tr>
</tbody>
</table>

Note: Factor loadings below the 0.40 (asterisk marked) were eventually excluded from further analysis

Source: Based on the primary data

Table II. Components of image variable as yielded by factor analysis
names are based on the characteristics of its composing variables. The attributes that load high on factor 1 seem to all relate to nature, scenery and beauty; therefore, the factor was labelled as natural attractions. The attributes that load high on factor 2 seem to all relate to different aspects of outdoor activities and sports therefore, the factor was labelled as adventure and sports. The five questions that were found to load highly on factor 3 were related to the cultural and historical attractions and thus factor was labelled as cultural/historical attractions. Finally, the questions that load highly on factor 4 consisted of some component related to the food and shopping; therefore, this factor was labelled as culinary and shopping attractions. The resulting four factors are shown in Table III.

4.2 Customer satisfaction
The 18-attribute statements of the satisfaction variable were also analysed using the principal axis factor analysis with varimax rotation. The factor analysis results and associated statistics are shown in Table IV. Prior to the extraction of the factors, several tests were used to assess the suitability of the respondent data for factor analysis. These tests include KMO and Bartlett’s Test of Sphericity. The KMO for the customer satisfaction variables was found to be 0.789, which falls in the range of being great. Bartlett’s Test of Sphericity was also found highly significant ($p < 0.001$), and therefore factor analysis was appropriate. The Scree-Plot test (Figure 2) was used to decode the number of factors to be retained. This exercise resulted in the extraction of three factors.

Furthermore, the items having a loading score lower than 0.40 were excluded from the analysis (Ford et al., 1986) which ranged from 0.417 to 0.927 After a series of eliminations, 2 items were removed from the scale, 15 items remained and a distinct three-factor structure emerged. Combined factor loadings accounted for 54.913 per cent of the total variance in the factor pattern. The attributes that load high on factor 1 seem to all relate to security; therefore, the factor was labelled as safety. The attributes that load high on factor 2 seem to all relate to different aspects of service, ambience and mood therefore, the factor was labelled as service and atmosphere. The four questions that were found to load highly on factor 3
were related to the environment, infrastructure and thus factor was labelled as environment and infrastructure. The resulting four factors are shown in Table III.

4.3 Reliability and validity

4.3.1 Reliability. To establish the reliability of the positioning taxonomy two Cronbach’s coefficient indices, i.e. the alpha value and item-to-total correlations, were utilised. This
study considered an alpha value of 0.6 or more as satisfactory. This bearing is supported by (Dekovic et al., 1991; Diwan and Bodla, 2011; Holden et al., 1991; Malhotra and Dash, 2009; Nhat and Hau, 2007; Tull and Hawkins, 1993) who confirmed that alpha value of 0.6 under each factor, indicated good internal consistency among items. The reliability of extracted factors ranged from 0.639 to 0.761 for image scale and 0.604 to 0.849 for satisfaction scale thus, they lie within the acceptable range, with strength ranging from good to excellent. The results of the reliability test of the scales used in the main survey are presented in Tables V and VI. The acceptable benchmark level of item-to-total correlation was set above 0.3 and all items contained item-to-total correlation above the benchmark value as a result none was removed.

4.3.2 Validity. In the present study, the validity of the research constructs/dimensions has been tested through content validity and nomological validity.

4.3.2.1 Content validity. Was strengthened through an extensive review of the literature and also before collecting data; one expert majoring in tourism management and two experts (both had industry experience in destination marketing organisations) were invited to assess the content and relevance of the 37 items. These three experts were invited to evaluate the appropriateness of the dimensions and items, as well as the wording of the item content. During face-to-face discussions, they revised certain items to achieve mutual consent. They also provided recommendations for correcting the wording of the item content and for whether items should be added or removed. The revisions made to the pre-test questionnaire in this study were based on these recommendations. Finally, 37 items were adopted for the formal survey.

4.3.2.2 Nomological validity. The importance of establishing nomological validity has also been well documented (Bagozzi et al., 1991; Hair et al., 2010; Netemeyer et al., 2003). Given the congruence of existing positioning strategies the nomological validity of the scale was assured.
5. Results of the study

5.1 Positioning strategies

The factor analysis resulted in seven factors which can be labelled as positioning strategies. Table IV gives a summary of the main extracted factors and their labelling. The description of each positioning strategy is given as follows.

5.1.1 Factor/strategy 1: natural attractions. Natural attraction (Factor 1) contained five attributes and explained 15.249 per cent of the variance in the data, with an eigenvalue of 2.896. The attributes associated with this factor dealt with the “natural scenic beauty”, “Beautiful gardens, parks and meadows”, “Flowing Water and Lakes”, “Springs and Glaciers” and “Pleasant Climate”. This factor measures the sensational pleasure of the sight. The consumers who scored high on these attributes/statements were nature loving. The highest loading (0.705) item was “natural scenic beauty” highlighting the importance of scenery in the consumer perception of a tourist destination. Positioning on the basis of “natural attractions” emerged as a main strategy in this study.

5.1.2 Factor/strategy 2: adventure and sports. Adventure and sports (Factor 2) accounted for 13.161 per cent of the variance, with an eigenvalue of 2.501, the factor focuses on outdoor high adrenaline experience. This factor was loaded with four attributes that referred to “Mountaineering/Trekking”, “Snow Skiing”, “Water Rafting” and “Golfinh”. Respondents who scored high on this factor were more concerned about getting adventure as they believe that holiday should be adventurous. The item “snow skiing” indicates the highest loading (0.795) in this factor reflecting the opportunity for winter tourism. Mountaineering/

<table>
<thead>
<tr>
<th>Factors</th>
<th>Corrected item-total correlation</th>
<th>Cronbach’s Alpha Value</th>
</tr>
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<tbody>
<tr>
<td>Factor 1</td>
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<tr>
<td>Natural Scenic Beauty</td>
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<td>Pleasant Climate</td>
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<td>Factor 2</td>
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<td>Snow Skiing</td>
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<tr>
<td>Mountaineering/Trekking</td>
<td>0.563</td>
<td></td>
</tr>
<tr>
<td>Water Rafting</td>
<td>0.605</td>
<td></td>
</tr>
<tr>
<td>Golfinh</td>
<td>0.514</td>
<td></td>
</tr>
<tr>
<td>Factor 3</td>
<td></td>
<td>0.639</td>
</tr>
<tr>
<td>Pilgrimages</td>
<td>0.539</td>
<td></td>
</tr>
<tr>
<td>Cultural And Historic Sites</td>
<td>0.414</td>
<td></td>
</tr>
<tr>
<td>Variety of Architectural Styles</td>
<td>0.348</td>
<td></td>
</tr>
<tr>
<td>Festivals/Events</td>
<td>0.394</td>
<td></td>
</tr>
<tr>
<td>Factor 4</td>
<td></td>
<td>0.696</td>
</tr>
<tr>
<td>Local Cuisine (Food And Drink)</td>
<td>0.502</td>
<td></td>
</tr>
<tr>
<td>Convenient Shopping</td>
<td>0.383</td>
<td></td>
</tr>
<tr>
<td>Good Quality of Products</td>
<td>0.375</td>
<td></td>
</tr>
<tr>
<td>Local Art and Craft</td>
<td>0.339</td>
<td></td>
</tr>
<tr>
<td>Wide Variety of Products*</td>
<td>0.415</td>
<td></td>
</tr>
</tbody>
</table>

Note: * Item already eliminated due to low factor loading (Table II)
Source: Based on the primary data

Table V. Reliability analysis for image scale

Positioning strategy for a tourist destination
trekking, water rafting and golfing have also obtained relatively high factor loadings. This indicates that tourism stakeholders need to give importance to adventure tourism.

5.1.3 Factor/strategy 3: cultural attraction. Cultural attraction (Factor 3) contained four attributes that referred to cultural dimensions. This factor explained 10.439 per cent of the variance, with an eigenvalue of 1.983. The attributes were “Cultural and Historic Sites”, “Variety of Architectural Styles”, “Pilgrimages” and “Festivals/Events”. Among these features, the highest loading (0.743) is found in the case of “pilgrimages” which gives an evidence of the importance of the religious tourism. Thus, a marketer has large scope to position Kashmir on the basis of this strategy for the domestic tourist who likes to visit Kashmir.

5.1.4 Factor/strategy 4: shopping and dining. Shopping and dining (Factor 4) contained five attributes that referred to local cuisine and art and craft. This factor explained 10.389 per cent of the variance, with an eigenvalue of 1.974. These attributes were “Local cuisine”, “Convenient shopping”, “Local art and craft” and “Good quality of products”. The craze about the Kashmir cuisine is reflected in this factor. Cuisine attained the highest scoring (0.645) followed by shopping (0.624). Therefore, marketers should focus on culinary tourism.

5.1.5 Factor/strategy 5: safety. Safety (Factor 5) contained three attributes and explained 17.451 per cent of the variance in the data, with an eigenvalue of 3.141. These attributes were “Safety at a tourist spot”, “Personal safety” and “Safety at a place of stay”. Among all the 37 items considered in this survey, “safety at a tourist spot” (0.927) and personal safety (0.927) are two top scorers (i.e. highest factor loadings) which substantiate the importance of this factor. This indicates that there is an immediate need for positioning Kashmir as a safe destination.

5.1.6 Factor/strategy 6: service and atmosphere. Service and atmosphere (Factor 6) accounted for 13.843 per cent of the variance, with an eigenvalue of 2.492. The factor was
loaded with eight attributes that referred “Friendly and helpful local people”, “Restful and relaxing atmosphere”, “Quiet and peaceful atmosphere”, “Fairness of cost at tourist spots”, “Value for money”, “Good quality hotels and restaurants”, “Fairness of cost at place of stay” and “Attitude of staff at place of stay.” Among various attributes comprised by the factor, the highest loading (0.678) was of “friendly and helpful local people” followed by restful and relaxing atmosphere (0.660). This indicates that there is a need for social group interactions or friendly people were high on their lists and the need to be in an environment conducive to relaxation was essential to tourists.

5.1.7 Factor/strategy 7: environment and infrastructure. Environment and Infrastructure (Factor 7) contained six attributes. This factor explained 13.619 per cent of the variance, with an eigenvalue of 2.451. These attributes were “Clean/unspoiled environment”, “Local infrastructure”, “Good local transportation system”, “Availability of travel information” and “Easy access to the area.” The respondents who scored high on this factor believed that Clean/unspoiled environment (0.637) and local Infrastructure (0.612) are more important considerations.

5.2 Niche markets
5.2.1 Nature-based tourism. The results of the study reveals that Kashmir is still considered as a “Paradise on Earth”, the high scores were gained for the items like Natural scenic beauty (0.705), Beautiful garden, parks and meadows (0.666), Flowing water and lakes (0.648), Springs and Glaciers (0.617). Thus, among seven identified Image Positioning Strategies, “Natural Attractions” emerged as the top positioning strategy for Kashmir. In support of this finding, several other studies have found that natural attractions as a potential “pull” factor for tourists. Gearing et al. (1974), while measuring the attractiveness of Turkey, found that “Natural Beauty” was ranked the highest. This was also supported by Var et al. (1977) by studying attractiveness of British Columbia. Their study showed that “Natural Beauty” and “Climate” are two major factors that contribute to the attractiveness of the region. Ritchie and Zins (1978) measured the attractiveness of a destination and also found that, of the eight attributes evaluated, natural beauty and climate were ranked the most important. In an attempt to identify tourist preferences for a specific category of attractions in Southern Africa, Ferrario (1979) found strong emphasis on “Scenery and Landscape”, “Wildlife”, and “Natural Vegetation”. Elwin (1989) found “Climate” to be one of the most significant components for the enjoyment of outdoor tourism activities. Also, Meinung (1989) pointed out that the landscape, its natural form, is the most important factor in attracting visitors to any tourist region. Tang and Rochananond (1990) also support this in their comparison the attractiveness of 32 tourist destinations. They found that all respondents considered natural beauty and climate important. Similarly, Hu and Ritchie’s (1993) investigated destination attractiveness and found that Views, Scenery, and ‘Climate’ were evaluated the most attractive by the visitors Weber (1997) studied tourist satisfaction of the German travel market in Australia and found that variables such as “Spectacular Landscapes” and “Watching Unique Fauna” were rated highest. Moreover, according to Vaughan and Edwards (1999) study of tourists experiential perceptions of two winter sun destinations, Algarve and Cyprus, “Climate” was the most important factor in tourists selection of the destination. Morachat (2003) in his study found that the Natural Factors’ of Chiang Mai such as climate, water, and vegetation, as being highly attractive.

The region must exploit its own unique natural attributes that create a competitive advantage and assist in positioning its products more effectively in the tourism market. The results of the present study identified the functional unique imagery of the destination in customer’s mind as mountains, lakes, flowing waters and meadows. In addition, the unique
psychological attributes were identified as the relaxing environment and the friendly local people. Thus, the combination of the functional and psychological attributes would suggest a nature based tourism niche that can provide a competitive advantage, this niche can effectively be used in the destination’s positioning strategy and marketed as a lucrative niche. To ensure that the customers’ needs are met an ambience promoting rest and relaxation should be developed to support this niche.

5.2.2 Adventure tourism. Several authors have found that there is a growth in demand for adventure tourism (Williams and Soutar, 2009). The “outdoor activities” factor includes mountaineering and trekking water rafting, snow skiing and other family activities. These attributes can be classified as an adventure tourism niche. This niche can effectively be used in the destination’s positioning strategy to assist in minimising the seasonality associated with the current mass tourism strategy by scheduling sports activities during low season to attract more tourists to the destination like snow skiing during winter season. In support of this finding, Kozak (2002) found that some tourists might visit a destination in the summer season just to relax, but others in the winter to seek adventure. According to Uysal and Jurowski (1994), Klenosky (2002) and Mohammad and Som (2010), adventure tourism is a “pull” factor for tourists. Also Ibrahim and Gill (2005) pointed out that adventurous atmosphere particularly water sports was a leading attribute that could be created for Barbados tourists.

To ensure that this niche is developed to its full potential, the services and environmental conditions that contribute to the satisfaction of the tourists should be promoted. The infrastructure and equipment for adventure sports combined with such with the socially accommodating nature of local people can support this niche.

5.2.3 Cultural tourism. Cultural tourism is a vital aspect which appeals tourists to visit as well as revisit to Kashmir. High scores were gained for this factor during the study. In support of this finding, several other studies have found that cultural uniqueness is a potential “pull” factor for tourists. Zeppel and Hall (1992) and Zhang and Lam (1999) found cultural attractions constitute the bases which appeals tourist. Ritchie and Zins (1978) found that attractiveness in terms of “Cultural Features” was ranked second to “Natural Attributes” in their destination study. Hu and Ritchie (1993) investigated that among educational vacation experience was the uniqueness of way of life of the local population, and historical attractions. Kim (1998) found that the seasonal and cultural attractiveness of Korea was rated the most attractive. Similarly, Ibrahim and Gill (2005) found that the cultural attractiveness of Barbados like interesting caves and cultural and historic sites were rated most attractive.

Rittichainuwal et al. (2001) found that of the thirty-one selected attributes, “Architecture and Buildings”, “Interesting Customs and Culture” and “Numerous Cultural” and “Historical Attractions” were ranked the highest. Kozak (2002) also found “Cultural Motivations” the highest scores among German travellers in Mallorca. Similarly, the most important features of Chiang Mai Province in terms of their attractiveness to overseas visitors are “Cultural Features” (Morachat, 2003).

5.2.4 Culinary tourism. The distinctiveness of Kashmir food is an opportunity for Kashmir tourism sector to become a culinary tourism destination. High scores were gained for local cuisine; this suggests that Kashmir food can serve as an attraction for tourists. Thus, to enhance positive images and tourists satisfaction, it is essential for Kashmir to exert an effective positioning strategy to promote Kashmiri ethnic food worldwide. Kim et al. (2009) assert that the desire to travel and taste unique and authentic dishes is becoming one of the biggest paradigms in the tourism industry. Few years ago, food events were not considered a reason to travel, but with the popularity of the Food Network and the star chef phenomenon, such events are being recognised as attractions in and of themselves (Peers, 2006). According to Canizares and Canalejo (2015), local cuisine is an important tourist
attraction and an essential element in the way people experience a destination. It is also a non-seasonal activity that can help reactivate the economies of certain regions. Sormaza et al. (2016) are also of the view that Gastronomic/culinary tourism supports regional development by setting the link between food and beverages and tourism and strengthens local identity and culture as well as financial conditions. Hajlager and Richards (2002) are of the opinion that destinations can capitalise on elements of culinary tourism unique to their community for destination image building. Culinary experiences can add value to tourism by providing the tourist with a link between local culture, landscape and food, and by creating an “atmosphere” so essential to a memorable travel experience. Boyne et al. (2003), Hall and Mitchell (2005), Lin et al. (2011), Okumus et al. (2013) and Yurtseven and Kaya, 2011 also supports that local food as a means of differentiating tourist destinations.

However, the successful promotion of these niches in the destination’s positioning strategy requires accommodating tourists in safe and secure environments. Safety is a major concern for tourists and people would not travel to a location believed to be unsafe (Davidoff and Davidoff (1994). Ali et al. (2018) concluded that physical security is an effective measure for improvement of the destination’s image.

The restful and relaxing atmosphere is also an influencing factor for tourists. The results of the present study indicate that there is a need to create an environment conducive to relaxation; this is also supported by study of Mansfeld (1992), Ibrahim and Gill (2005) and the friendly attitude of the residents was another factor that was prominent as a destination image in the customer’s mind, thus supporting the findings of Echtner and Ritchie’s (1993), Hu and Ritchie (1993), Ibrahim and Gill (2005), Rittichainuwat et al. (2001), Vaughan and Edwards (1999), Yuksel and Yuksel (2001).

In relation to fairness of price at tourist spots and place of stay which scored high in the tourist satisfaction in the current study is in consistent with the study conducted by Gnoth and Paulin (1995) that price of goods or services influences tourists’ patronage decisions.

Good Infrastructure is also an influencing factor for tourist visiting Kashmir; this finding is consistent with findings of Masterson and Verhoven’s (1995) wide range of accommodation facilities influence tourists satisfaction.

The results, in general, support what was proposed earlier in the literature that the assessment of customer’s perception and satisfaction can play a significant role in identifying attributes that can effectively contribute to the development of the destination’s positioning strategy.

6. Managerial implications

The results of present case study will provide academics, researchers and practitioners working in tourist destination with new insights towards the attributes of the destinations and their role in destination positioning. Since the results indicated that the most important factor that influenced tourists’ satisfaction was the safety, it is recommended that tourism managers should ensure the provision of safety accompany the selected niche markets. It will also help tourism marketers to better understand their customers and hence contribute significantly to the process of planning a destination’s positioning strategy, i.e. it will help the destination to position it differently from the competing destinations and gain a competitive edge.

This study is also important for tourism policy makers, practitioners, and academic researchers interested in tourism in North India. Moreover, the results of this study can provide tourism-marketing researchers, policymakers of the Kashmir region with an insight into the choice of appropriate niche markets based on the unique attributes of the destination, which can differentiate it in the tourist’s minds and also meet the customer’s demand. This example of the measurement of customers’ perceptions and satisfaction with the destination’s attributes
can serve as groundwork for future research into the more specific niche markets that satisfy the needs of the target tourists. Further research is also called for into the specific places and activities preferred by different market segments.

7. Limitations
A number of limitations should be acknowledged here to inform future research:

- The time frame of the study was five summer months in one year, which permitted only summer tourists to be surveyed. Thus, the respondents’ views would only be those of a particular set of tourists and not representative of year round tourism.
- Measurement of image was limited to the tourists currently visiting the destination and excluded the potential tourists. Thus, the image measured in this study corresponds to the complex image as explained by Fakeye and Crompton (1991).
- The satisfaction of the tourist was based on the feelings after exposure to the destination attributes. However, evaluations of the quality of the services provided were not considered in the study.

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Further reading


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Dark tourism consumption in Mexico City: a new perspective of the thanatological experience

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Abstract

Purpose – The Euro-centric nature of dark tourism research is limiting the perspective and restricting the scope of contemporary theory. Hence, this paper aims to explore how dark tourism consumption differs in a society apart from the Anglo/Eurosphere. This is done by testing Stone and Sharpley’s (2008) thanatological framework in Mexico, a country whose residents are renown for having a unique perspective on death, to assess whether Mexican dark tourism consumers undergo a similar, or different, thanatological experience to that proposed in the framework.

Design/methodology/approach – The study adopts a qualitative approach in the form of a case study. The opinions of Mexican dark tourism consumers were gained by using the technique of semi-structured interviewing in four separate dark tourism sites within Mexico City, with coding serving as the form of analysis.

Findings – The findings show that due to the non-existence of an absent/present death paradox in Mexican society, the research participants experienced a thanatological process that contrasts with those from Western societies, which indicates that the thanatological framework is unsuitable in the context of Mexican dark tourism. At the same time, the study contests the common perception that Mexicans have a jovial familiarity with death, and demonstrates that in this case the thanatological process confirmed an acceptance of death, rather than any kind of intimacy.

Originality/value – The research is valuable in that it is a response to recent calls for research in geographical locations not previously considered in a dark tourism/thanatology context.

Keywords Mexico, Dark tourism

Paper type Research paper

1. Introduction

Dark tourism, a term coined by Lennon and Foley (1996), refers to the act of travel to actual or recreated places that can be connected to death, dying, or the macabre (Stone, 2006). Auschwitz-Birkenau, the concentration camp that was the scene of horrific suffering during the Holocaust, has been referred to by scholars as the “epitome of dark tourism” (Biran et al., 2011, p. 820), while other, less emotive attractions, such as the London Dungeon, exemplify those places that provide a form of connection with death and suffering but are commodified so that entertainment, rather than remembrance and serious reflection, is the intended experiential outcome (Powell and Iankova, 2016). The common feature throughout is the...
presentation and consumption of suffering, which is often related to death (although “death” is not an essential requirement of dark tourism), presented on the actual sites where the incident occurred (or in some cases, such as slum tourism, is currently taking place) or off-site memorials that have been developed to commemorate past events and atrocities.

It is an activity that has generated a large amount of scholarly interest over the previous twenty years, predominantly in the areas of production and consumption, yet something of an impasse appears to have been reached, common agreement being that dark tourism’s complex, contested and multi-faceted nature is deterring attempts to reach a consensus regarding its definition and conceptualization, and in some cases disillusionment has led to calls to abandon research (Ashworth and Isaac, 2015).

As noted by various commentators (Biran and Hyde, 2013; Yoshida et al., 2016; Cohen, 2018) one of the problems affecting conceptual and theoretical concordance is that dark tourism research to date has been mostly Anglo, or Eurocentric, which has limited its perspective and affected the potential of research to follow unfamiliar, yet potentially enlightening paths. So not only has the majority of research focused on dark tourism in Britain, the USA and Europe, but emerging concepts have been grounded by Western viewpoints of mortality (Light, 2017). Accordingly, this paper, which is appropriate and timely in view of the criticism concerning the topic’s conceptual fragility and limited geographical scope, will seek to expand the parameters of dark tourism research. It will do so by examining the consumption of dark tourism in Mexico, a country which falls outside of the Anglosphere, is classified as “emerging”, rather than Western (Cohen and Cohen, 2015), and whose inhabitants are renowned for a distinct relationship with death, evident, for example, in the writings of Octavio Paz (1950) and Juan Rulfo (1955), in Frida Kahlo’s “Self-portrait on the Borderline between Mexico and the United States” (1932), and recently portrayed in the internationally successful Disney Pixar movie “Coco” (2017). The basic aim of the paper is to explore, by means of a case study of four dark tourism sites in Mexico City, whether a widely accepted conceptual framework developed by Stone and Sharpley (2008), which considers dark tourism consumption from a thanatological perspective, is applicable within this setting, or if distinct socio-cultural differences diminish its suitability.

More specifically, the objectives of this research are to:

- consider the theoretical foundations of Stone and Sharples’ (2008) thanatological framework;
- explore perspectives of death and mortality within Mexican society;
- empirically test the thanatological framework by conducting qualitative research in several dark tourism locations in Mexico City; and
- discuss the results and consider the implications of the research.

2. Dark tourism consumption from a thanatological perspective

Over the previous two decades, an increasing number of scholars have investigated the production and consumption of dark tourism using a variety of theoretical approaches. Some have sought to investigate the representation of the dead at dark sites, and how this is affected by discord, politics and history, while others have addressed the sociological implications of dark tourism (Stone, 2018). It is not within the scope of this paper to conduct a full literature review regarding the theoretical and conceptual development of the topic, as this has been done recently by Stone (2013), Hartmann (2014) and Light (2017); instead, this paper will focus upon the consumption of dark tourism through the lens of Stone and Sharples’ (2008) thanatological framework, a seminal contribution that focused
The framework draws upon literature related to the sociology of death (Berger, 1967; Giddens, 1991) and expresses the authors’ understanding that the conceptual origins of dark tourism lie within the domains of thanatology, which is the study of how humans perceive and cope with the inescapable reality of their own eventual demise. It proposes that death has now become sequestered, or, in other words, kept at a safe distance, by the medicalisation of the dying process, in which “the dying man’s bedroom has passed from the home to the hospital [...]” (Aries, 1983, p. 571), and the professionalisation of the death industry which refers to the practice of commercial services taking custody of the recently deceased, as explained by Berridge (2001, p. 21): “Where once bodies of our loved ones stayed at home, laid out on trestles in open coffins, visible and visited, now they are spirited away to the fake domesticity of the funeral home”. Meanwhile, the decline of religious institutions (Berger, 1999) has added to the situation by removing, for many, the spiritual comfort provided by a belief in a higher guiding power and the promise of an afterlife.

The authors note that these societal changes have led to a state of ontological insecurity for many, manifested in the sensation of dread that is commonly experienced when individuals pause to confront their own limited existence. At the same time, however, death is constantly present in media output, such as in the glut of coverage which occurs when disaster strikes; yet this is a rather de-personalised death of “others”, often rendered somewhat innocuous by over-saturation. Hence, a situation has arisen which is referred to as the absent/present death paradox, in which “real” death is increasingly hidden from view, while “present” death is continually visible on our screens and pages.

Consequently, Stone and Sharpley (2008) propose that dark tourism, at various levels of intensity and depending on the characteristics of the site, offers the opportunity to provide consumers with a culturally acceptable means of confronting the concept of mortality, thus making the ‘real’ death that is absent from their lives become present. This is due to the interactive processes that occur during an encounter with dark tourism allowing individuals to undergo thanatopsis – that is, the opportunity to contemplate death of the self -and re-conceptualise their ideas of death, dying and mortality. Ultimately, this serves to ease ontological concerns, acting, in the words of Seaton (2018, p. 11), as: “a surrogate form of memento mori ritual.”

Nonetheless, the authors accept that “[...] an awareness of mortality and the anticipation of death will differ among various social and cultural groups.” (Stone and Sharpley, 2008, p. 589), and admit that the framework was constructed with “secularised death sequestered societies” (Stone, 2010, p. 252) as the context. As discussed in the introduction, Mexico is a society in which the perspective of death, according to numerous scholars, writers, artists, musicians and film-makers, is of a humorous, playful, even jovial nature. As such it appears an appropriate location from which to test the concepts included in the thanatological framework. However, before doing so, it is first necessary to consider the Mexican attitude towards death in more detail.

3. The Mexican perspective of death
Care must be taken when exploring the concept of death in Mexico. While death can be seen, heard and read about frequently in art, music and literature, one must question whether this does indeed reflect the perspective referred to above, or if it is more so a manifestation of cultural tradition within what Hamnett (2019, p. 15) refers to as a “rapidly changing and dynamic North American society”.
According to Brodman (2011), religious beliefs led to ancient Mexicans adopting a fatalistic attitude towards life, and for many the manner of death was more important than life’s events. Following the Spanish conquest (1521), Catholic assumptions of heaven, hell and purgatory were added to the concoction, resulting in a fusion of notions that resulted in a process of trans-acculturation (Báez-Jorge, 2012) that has morphed into what Brodman (2011) labels the modern “Mexican death cult”.

Over the years, a number of scholars have commented on the fearless attitude displayed by Mexicans towards death. For example, Paz’s (1950) Labyrinth of Solitude explored issues related to Mexican identity including their perception of death and mortality, which he described in this oft-cited passage: “The word death is not pronounced in New York, in Paris, in London because it burns the lips. The Mexican, in contrast, is familiar with death, jokes about it, caresses it, sleeps with it, celebrates it (Paz, 1985, p. 57). Meanwhile, other commentators adopt a similar perspective: Lomnitz (2005, p. 20) suggests that in Mexico death “gets a very different rap”; Strupp Green (1969, p. 1) states that the Mexican is “familiar, accepting, even in humorous terms with death”, while Toor (1947, p. 236) reveals that: “The Mexicans, fatalists that they are, accept death uncompainingly but also bravely”, an attitude, according to Brenner (1970, p. 25) which can be “shocking to the European”.

For Sanchez (2013), it reflects a widely held opinion in Mexico that it is perhaps wiser to co-exist with death in the present, in contrast with the “Western” notion that death is an event that will take place far into the future, so best ignored for now.

Yet Paz has since been accused of essentialising the Mexican character (Garciagodoy, 1998), whilst Brandes (2006) and Alvarado Sizzo and Romero Gallardo (2018) argue that the notion of bravado is exaggerated, and a Mexican’s reaction to death, evident, for example, when grief is displayed at funerals, is very similar to that which occurs in Anglo-European societies. Indeed, Brandes believes, as does Hellier-Tinoco (2010), that these famed acts of defiance are mostly confined to the Day of the Dead celebrations, and it is the extensive commercial promotion of this tradition, which began with President Lazaro Cardenas’s tourism marketing strategy in the 1930s, that has culminated in the widespread assumption that Mexicans accept death and their own mortality with such boldness.

Brandes (2006, p. 9) explains that in Mexico: “Ideas regarding cosmology and spirituality vary enormously not only by region, class, and ethnicity, but even more dramatically from one individual to another”, further emphasising that caution is necessary when forming opinions based on an agenda adopted by the media, affectionately endorsed in artistic circles and commented upon by scholars who adapt a similar, idealized vision of “Mexican-ness”.

4. Dark tourism in Mexico
Research concerning dark tourism issues from a Mexican context has been limited (Guerrero Rodriguez et al., 2018); nonetheless, a number of Mexican scholars have recently initiated attempts to resolve this situation by publishing a special issue of the Teoría y Praxis journal which focuses specifically on the topic of dark tourism in Mexico. The first chapter, by López and Van Broeck (2018), provides an extensive sample of dark tourism locations and activities throughout Mexico, some of which are featured as case studies in the collection, which include The Day of the Dead festivities at Janitzio (Alvarado Sizzo and Romero Gallardo, 2018) and Huaquechula in Puebla (Mysyk and Morales Cano, 2018); the Museum of Mummies in Guanajuato (Guerrero Rodriguez et al., 2018); EcoAlberto park in Hidalgo in which a night walking tour involving local actors demonstrates the dangers encountered by illegal immigrants attempting to enter the USA (López et al., 2018); bullfighting at Mexico City’s Plaza de Torres (Quintero and López); and “disaster tourism” in the city of Chetumal.
which suffered the adverse consequences of Hurricane Janet in 1955 (Frausto Martinez, 2018).

The articles that explored the Day of the Dead festivities are particularly relevant to this study, as they provide specific information regarding the Mexican perspective of death in a dark tourism context. Firstly, Alvarado Sizzo and Romero Gallardo (2018) note that though the Day of the Dead is a solemn occasion for the residents of Janitzio, the occasion merely provided the domestic tourists with an opportunity to observe an authentic ritual, that is the symbolic reunion of the Janitzians with their deceased relatives. Importantly, there was no evidence of thanatological contemplation on the part of the visitors.

However, the domestic tourists visiting Day of the Dead activities at Huaquechula stated that they intended to contemplate matters of death and dying, but only considered this after viewing the decorated altars, signifying that this was a consequence of their visit and not something deliberated beforehand. Interestingly, while the foreign participants of the study would not elaborate on interview questions relating to human mortality, the Mexican participants responded enthusiastically and spoke of the inevitability and natural nature of death, which for Mysyk and Morales Cano (2018, p. 113) “suggest if not a fascination with, then, at least, an interest in the ‘meaning’ of death”.

These two papers support the claim of Brandes (2006) that the Mexican “obsession” with death is more a reflection of cultural tradition than a common perspective shared by the country’s inhabitants. This matter will be considered in more detail shortly, when the following four sites, which together form the case study of this research, provide the basis for discussion:

- The Plaza of the Three Cultures can be found in the Tlatelolco district of Mexico City and is notorious for being the scene at which three separate tragedies have occurred: it is associated with the fall of the Aztec Empire in 1521 (Valesco Fuentes, 2010); it is the setting of the 1968 student massacre, in which a multitude of protesting students were shot and killed by the Mexican army just months before the Olympic games took place in the city (Ruisanchez Serra, 2011); and it was also the scene of tragedy in 1985 as an earthquake caused a nearby building to collapse leaving many dead. A commemorative museum is present, but it has been closed since the earthquake of September 19th, 2007, during which it suffered considerable damage. Despite its authentic nature, the site is not a particularly popular tourism attraction, yet a small number of visitors attend throughout the day.

- The Trotsky Museum is in the Coyoacán district of Mexico City, at the actual house in which Trotsky lived for a short time from 1939 until his death in 1940. The interior of the house has apparently not been changed, and visitors are able to enter the study in which Spanish communist Ramón Mercader delivered the fatal blow with an ice pick which led to Trotsky’s death the following day. The museum, created in 1990, is a popular attraction, particularly with foreign tourists.

- The Museum of Memory and Tolerance was established at the historical centre of Mexico City in 2010. The central theme of the museum is genocide provoked by racial discrimination, with exhibits on display which focus on examples of genocide in the form of the holocaust, along with events in Armenia, Yugoslavia, Rwanda, Guatemala, Cambodia and Darfur, while the theme of the final section relates to the disappearance of thousands of Mexicans since 2006. It is a popular attraction, education centric and is visited by many Mexican students and tourists.

- The Island of the Dolls is a small island which appears in the extensive network of canals that characterise the Xochimilco part of Mexico City. A large number of
mutilated dolls can be seen hanging from the branches of the trees, placed there by a hermit named Don Julian Santa who supposedly lived on the island for 50 years. The story has it that one day Don Santa discovered the body of a small girl who had drowned near the lake: floating next to her body was a doll, apparently belonging to the girl. Shortly after, the girl’s ghost began to appear at night, so Don Santa decided to hang her doll from the branch of a tree, being of the opinion that this would appease the ghost. Nonetheless, the nocturnal visits continued and, thereafter, he formed a collection of hundreds of dolls which are viewable dangling from the trees. Don Santa has since died, yet the dolls remain and the island has become a popular tourism attraction, enticing many visitors who travel two hours by canal boat to survey the macabre scene (Fonseca et al., 2015).

As is evident, Mexico is home to a number of dark tourism sites, although the “darkness” aspect of each site differs considerably. This will be discussed further in the methodology section below.

5. Methodology
This paper is based upon research conducted in Mexico City in May and June 2018 and was funded by the Mexican Secretary of Education (SEP). It adopts a qualitative research strategy to permit an accurate interpretation of tourists’ thanatological viewpoints and uses the case study as the research method, as this is particularly suited to the descriptive, heuristic requirements of the study. Data were collected by means of semi-structured interviews with 15 Mexicans that were visiting the four sites previously mentioned. The participant identification process will be discussed in more detail below.

As discussed in the previous section, there exist a number of dark tourism sites throughout Mexico, each occupying a different location on Stone’s (2006) dark tourism spectrum. A range of specific factors influence the “darkness” of the site. The darkest sites tend to be sites of death and suffering and demonstrate the following characteristics: high political influence and ideology, education oriented, history centric, authenticity in terms of product and location, a shorter time scale from the event, a non-purposeful supply and a lower tourism infrastructure. Those that are situated on the lightest scale of the spectrum are associated with death and suffering and tend to have less political influence and ideology, are oriented to entertain, are heritage centric, are inauthentic in terms of product and location, have a longer time scale from the event, show a purposeful supply and display a higher tourism infrastructure. Dark tourism sites thus range on a scale from “darkest-darker-dark-light-lighter-lightest”.

It was considered important to use a diverse range of dark tourism sites, rather than just one, and consequently they were chosen by their level of “darkness”, the aim being to provide a contrast between “light” and “dark” sites as demonstrated in Table I:

<table>
<thead>
<tr>
<th>Dark tourism site</th>
<th>Location</th>
<th>Spectrum</th>
<th>Date of visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plaza of the Three Cultures</td>
<td>Tlatelolco, Mexico City</td>
<td>Darker</td>
<td>May 2018</td>
</tr>
<tr>
<td>Trotsky Museum</td>
<td>Coyoacan, Mexico City</td>
<td>Dark</td>
<td>May 2018</td>
</tr>
<tr>
<td>Museum of Memory and Tolerance</td>
<td>Historical Centre, Mexico City</td>
<td>Light</td>
<td>June 2018</td>
</tr>
<tr>
<td>Island of the Dolls</td>
<td>Xochimilco, Mexico City</td>
<td>Lighter</td>
<td>May 2018</td>
</tr>
</tbody>
</table>

Table I. The chosen sites and their place on the dark tourism spectrum
The Plaza of the Three Cultures occupies the “darker” space of the spectrum, being an actual site of suffering that is education oriented, history centric, authentic and has a low surrounding tourism infrastructure.

The Trotsky Museum is located on the “dark” space of the tourism spectrum, as it is the authentic location in which Trotsky was attacked, is education oriented, history centric and has a low tourism infrastructure.

The Museum of Memory and Tolerance just fails to reach the “dark” side of the spectrum, because, in spite of its somber nature and it being an education oriented, politically ideological history-centric attraction, it is not located at the site at which the museum’s themes occurred (unless one takes into account the final section based on atrocities committed in Mexico) and displays a high tourism infrastructure.

The Island of the Dolls is on the “lighter” part of the spectrum as even though it is located at the supposed location of the girl’s death (according to the tale) and is where Don Santa chose to live and hang the dolls, it has low political influence or ideology, is oriented for entertainment, is heritage centric and exhibits a high surrounding tourism infrastructure.

It was also considered important to confine the research to Mexico City, the reasoning being that as the city attracts a substantial number of domestic tourists from throughout the country, each of these four locations would consist of participants who would represent a cross-section of Mexican society, not just of Mexico City residents, so that the results would be indicative of a general Mexican society view on aspects of thanatology and dark tourism. It was likewise, imperative to seek a variation of participants so that the answers to the interview questions would capture the beliefs, opinions and experience of respondents with differing demographic profiles. Thus, as well as targeting participants from different areas of Mexico, their age, gender and socio-economic level were also vital factors. In all, fifteen semi-structured interviews were undertaken (3 at the Island of the Dolls and 4 at the other sites) with participants coming from Mexico City, the State of Mexico, Puebla, Hidalgo, Queretaro and Sonora. The participants consisted of 21 women and 16 men with an average age of 37, ranging from 18 to 59.

The interview questions were focused on obtaining information regarding the elements of the thanatological framework and gaining further information relating to the Mexican perspective of death and mortality, as demonstrated in Table II.

As the researcher is British, yet proficient in Spanish, the interviews were undertaken in Spanish, but care was taken so that language issues and cultural traits would not affect the quality of the research by adopting the method of cross-language interviewing proposed by Lopez et al. (2008). All of the data were analysed using the coding methods proposed in the literature (Strauss and Corbin, 1998; Jennings, 2010; Saldaña, 2015).

6. Results

The thanatological framework from a Mexican perspective:

The following section is based on the participant responses to the questions that were posed in Table II, among others.

6.1 Mexican perception of death, dying and mortality

The participants were asked some general questions regarding their own, and that of other Mexicans, opinion on death, dying and mortality. Two participants displayed the nonchalant attitude prevalent in much of the literature:
Death will come to us all. I don’t fear it, in fact who cares? In Mexico, we all think this way.

(Participant 4)

Yet this view was not held by the other participants. Indeed, what became apparent during the interviews and subsequent analysis was a commonly held perception that Mexicans live in co-existence with death, not in a negative sense but in a manner which accepts death as being natural.

Several participants related stories of how they had experienced viewing the bodies of the recently deceased in numerous homes the night before burial and were comfortable with this and the idea that one day it would be their turn. Nonetheless, most participants stressed that they do not want to die in the near future, in fact that they wished to live long and happy lives. For many, the spectre of death served to encourage them to pursue a fulfilling life:

Death, like birth, is totally natural. Babies are born, people die. It’s a cycle. I don’t want to die, I want to live my life and do things, but it will be my turn one day. All my friends and family have this opinion, it’s not playful; it is respecting and accepting. (Participant 15)

As death is around the corner-hopefully a long corner- then I must live well while I am here. (Participant 14)

The responses indicate that Brandes (2006) is accurate in his analysis of the Mexican perception of death, dying and mortality, in that the view of the vast majority of participants rejects any hint of bravado or morbid fascination.

6.2 Absent/present death paradox

The following section will reveal the participants’ views on the absent/present death paradox captured by the thanatological framework, beginning with the institutional sequestration of death.

Institutional sequestration of death

6.2.1 Medicalization of the dying process. When questioned whether it appears that more Mexicans are dying in hospitals than previously, the majority of participants expressed the opinion that although hospital deaths appeared to be increasing slightly, families tend to prefer that loved ones die at home when possible and this is what happens on most
occasions. They also explained that much depends on the financial resources of the individual and the family, as in some cases people are kept at home to avoid high medical expenses, but, in most cases, the home is the favoured option regardless of financial issues:

Put it this way, my grand-parents all died at home, and in two cases I was at their home with the rest of the family. It is better to die at home in familiar surroundings, with the family around, than in some strange hospital room. (Participant 3)

6.2.2 Professionalization of the death industry. A number of participants referred to how the immediate hours following death continue to take part within the community gaze, as friends, relatives and colleagues visit the home of the deceased to offer condolences and help and to “view” the dead body for one last time before burial, which is usually the next day. In some cases, the body is transferred to a funeral home which then takes the place of the house, with the body being on display and many people turning up to pay respects:

When people die where I come from the street is often closed as too many people arrive to fit in the house. Food and drink is offered to all who come. We do it to show our respect, and so that the family do not feel alone in their grief. (Participant 7)

6.2.3 Decline in religious institutions. Many participants stressed that religion remains a strong force throughout the country, with Catholicism being by far the most supported faith:

Yes, a lot of people are religious. Look at how everybody hangs rosaries or crucifixes in their cars and a lot of people attend my local church every Sunday. (Participant 13)

Several participants did stress that other Christian religions, such as Protestantism, were becoming more popular while many commented and expressed concern about the growth surrounding the cult of Santa Muerte, a practice which takes death as its Patron Saint.

6.2.4 Death in Mexican popular culture. As regards the presence of death in popular culture and media output, all of the participants agreed that manifestations of death are common in Mexico. The majority mentioned the Day of the Dead activities and claimed that they tended to enjoy preparing for the event and taking part in festivities, which they took seriously as a time to remember departed relatives and friends. Only two of the participants claimed to believe that the spirits of the dead made an annual appearance, but the others agreed that it was a special time in which one could pause for reflection:

My father died five years ago and while I don’t believe, although I would like to, that he is actually there with us, I think about him and feel a connection. It helps me. (Participant 5)

Some of the participants also stated that the occasion made them ponder their own mortality:

Each year on Day of the Dead I think about the fact that one day I will die and my family will remember me in this way. (Participant 5)

Day of the Dead occurs once a year, yet many participants claimed that “death” is palpable in Mexican daily life though art, music and literature and is visible in households, churches, vehicles, restaurants and cafes:

Look at the work of Frida Kahlo, she frequently made use of death imagery, or Jose Posada’s skulls. Many cafes, restaurants and bars display pictures of skeletons and skulls; it’s normal here, we are accustomed to it. (Participant 8)

Finally, several participants mentioned the preponderance of graphic images and descriptions of death in the media, with newspapers, tabloid crime magazines and websites frequently publishing photographs of murdered bodies lying in the street.
To summarise the response to the absent/present death paradox, it was evident that many participants were at variance with the “absent death” concept present in Western secularized societies. While concern was voiced that sequestration might occur in the future, as a result of globalization, the participants made it evident that it is not a feature of contemporary Mexican society:

I would disagree that death has been kidnapped in Mexico. In fact, that couldn’t be further from the truth. (Participant 2)

This hasn’t happened yet, but maybe in the future with all the changes happening in the world. (Participant 10)

Meanwhile, although there are reminders of death’s presence in many aspects of daily life and popular culture, such as the Day of the Dead which provides an opportunity for individuals to contemplate mortality, these do not clash with a “hidden, sequestered” death, and so the combination of factors that produce the absent/present death paradox that is paramount to the thanatological model, are not present, and consequently ontological security levels are unaffected by any absent/present death paradox.

6.2.5 Ontological insecurity. The majority of the participants expressed a belief in life after death, some believing in a Christian heaven, while others were unsure how to explain their belief, apart from that it involved some form of co-existence between the dead and the living:

I am sure that when we die we continue to exist in some way, be it in heaven or whatever, but I don’t think death means that’s it. (Participant 8)

When asked whether the thought of their own death made them feel uneasy, again most of the participants remarked that they while they certainly do not wish death upon themselves, they understand that dying is a fact of life. That is, most participants insisted that they want to live a long and happy life, yet there was a general acceptance that death is continually present and may thus interrupt one’s plans:

Do I fear death? I would not say that I fear it as such, but I do not want to die yet of course. But I know that one day it will come and that is the path we take from the day we are born. (Participant 9)

Consequently, the notion of “dreading and avoiding death”, present in Western secular societies, was not apparent among the participants. Rather, they recognised that life and death co-exist, both complementing each other and, accordingly, feelings of ontological insecurity did not appear to be a significant factor among the participants.

6.3 Consumption of dark tourism
Having sought the participants’ reaction to the concepts presented in the thanatological model, it was necessary to complement this by searching for the factors that motivated their trip to the dark tourism sites, and to reveal any instances of thanatopsis during their visit.

6.3.1 Motivation. The participants were motivated to visit the dark tourism sites for several reasons that depended on the nature of the site. For example, those visiting the Plaza of the Three Cultures expressed their interest in the historical and blighted nature of the site and what these past events signify for Mexican society. They also sought the opportunity to pay respects to the victims (particularly the students) and make a moral stance against political oppression. These motivations reflect the fact that the site is commemorative, history-centric and with an educational focus (although the temporary closing of the museum had affected the educational aspect of the site at the time of the interviews):
Tlatelolco is very well known here in Mexico. It is famous for the time when the authorities killed the students. I wanted to come here and “feel” the place. (Participant 1)

This place has a fascinating history, it seems to be cursed. War, massacre and earthquake [...] I felt I should come and somehow show solidarity with the students. The way the World is right now, something like this could happen again. (Participant 2)

Similarly, the participants at the Trotsky museum were particularly interested in the historical nature of the site and revealed a sense of fulfilment to be present at a location in which such a notorious event had occurred:

This house, particularly the study, provides such a feeling of history. I wanted to come here to somehow get a sense of what happened here. (Participant 10)

As with the Plaza of the Three Cultures, the motivations of the visitors can be linked with the history centric, educational nature of its presentation. Historical interest was also present as a motivation factor for those visiting the Museum of the Memory and Tolerance, and, as with the Plaza of the Three Cultures, there was a desire to pay respects and show support for the genocide victims. The participants were visibly upset by the exhibitions and particularly adamant with their view that future atrocities should be prevented:

I have always been shocked with Genocide. I did not want to come at first because I knew that it would upset me, but I was motivated to come here to try to understand what happened. I worry about the way that the world is going; we must make sure these atrocities do not happen again (Participant 13)

Again, the motivations to visit can be related to the Museum being a history-centric, education oriented attraction, that focuses on large-scale global atrocities. Meanwhile, those visiting the Island of the Dolls were attracted by the “macabre” nature of the site and anticipated a scary thrill in surveying the island and its inhabitants:

I think it’s quite weird how this island is full of dolls. I’m here with friends, and we thought it would be fun, in a bit of a dark way, to go and see it. (Participant 6)

None of the participants expressed the notion that their visit was motivated by thoughts related to their own mortality, unless, as three participants commented upon, there existed a subconscious need that they were unaware of. Instead, the principal motivation factors were:

- the desire to educate themselves by evaluating the events from a historical, societal and political perspective;
- empathy and support for the victims;
- to demonstrate a moral stance against political oppression; and
- in the case of the Island of the Dolls, to experience the thrill of the macabre.

In fact, the findings corresponded with those of Alvarado Sizzo and Romero Gallardo (2018), mentioned earlier, who concluded that Mexican tourists visiting Day of the Dead celebrations at Janitizio were predominantly motivated by the desire to observe a traditional, authentic ritual that is part of their cultural heritage, more so than an opportunity to reflect on issues of mortality.

6.3.2 Thanatological experiences. When the participants were asked whether the visit had made them contemplate their own mortality, there was a mixture of responses depending on the particular site. The participants at the Plaza of the Three Cultures agreed that as well as evoking feelings of empathy for the victims and anger towards the government and the military for their part in the 1968 massacre, the experience had made
them consider the co-existence of life with death, and that the violent history of the site illustrates how own mortality is a constant presence throughout our lives:

Look around, this place just proves that us Mexicans live alongside death. I always know this, but coming here helps to re-inforce this. (Participant 2)

When asked if the experience has helped to alleviate any fears concerning their own mortality, the general reply was that it had re-confirmed the view that life co-exists with death and that one should accept this as being the natural cycle:

Being here strengthens the feeling that I have that there is a thin line between us and them [the living and the dead] (Participant 3)

The Island of the Dolls, however, did not evoke the same depth of thought regarding matters of mortality. That is, when asked whether the site had provoked thoughts of death, dying and mortality, the participants’ responses were generally negative; that is, despite them being aware of the story regarding the little girl’s death, they remarked that it was the scary experience provided by the aura of the island and multitudes of disfigured dolls that gained their attention above all else. Asked if the trip had helped soothe any anxiety concerning their own mortality, the participants stated that it had not occurred to them to consider such thoughts:

I feel creeped out by these dolls, but it does not really make me think about my death. It’s not like that. (Participant 5)

The Trotsky museum, likewise, did not inspire the participants to deliberate their own personal mortality. For them, it was more so an opportunity to experience a part of Mexico’s cultural heritage, along with viewing Frida Kahlo’s former home which is situated next to the museum:

Trotsky was such an important figure in history, and here am I in the place in which he was killed. But it makes me think about Trotsky and his death, not mine, or my family. (Participant 11)

Nevertheless, the Museum of Memory and Tolerance did provoke ample contemplation of personal death, while at the same time the participants displayed a palpable empathy towards the victims. The common consensus was that the museum reminded them of the frailty of life and of how situations can suddenly change, thus encouraging them to feel grateful that such adversity has not befallen themselves or their family. Once again, as with the participants at the Plaza of Three Cultures, feelings of anger and disgust were expressed towards the perpetrators of genocide:

My experience here is one of sadness for these poor people who suffered. Of course, it made me think-what if that had been me? (Participant 15)

When posed with the question as to whether the visit had helped to assuage ontological concerns, several referred to the co-existence of life and death in a similar manner to those participants from the Plaza of the Three Cultures, and how the visit had reaffirmed the notion that one must accept death and be aware of its presence:

I have been very moved by this museum. What shocked me was at the end when the subject turns to Mexico and you see the faces of thousands of people who have disappeared here. You spend all the time before thinking thank God these horrible things haven’t happened to us, and then you realise [pause] yes, death is here too. I think most of us as Mexicans sort of have this in our heads, but coming here today proves it to me. (Participant 13)
It is, therefore, evident that thanatopsis occurred in two of the four dark tourism sites in question, as many of those participants interviewed at the Plaza of the Three Cultures and the Museum of Memory and Tolerance remarked that they felt the urge and a necessity to reflect upon their own mortality.

7. Discussion and conclusion

The Eurocentric nature of dark tourism research is limiting its perspective (Light, 2017). This study was an attempt to address this situation by testing Stone and Sharpley’s (2008) thanatological framework in the context of Mexico. The framework is based on the notion that in Western society death is paradoxically both absent, as a result of “death denying” social changes such as the medicalization of the dying process, the professionalism of post-death services and the decline in religion, and present, due to the prominence of death in mediated popular culture. This situation has led to many individuals suffering death anxiety, thus resulting in widespread ontological insecurity throughout society. Dark tourism reintroduces absent death and provides the means for individual reflection and the subsequent “purchase” of ontological security.

Mexicans, however, are renowned for having a distinct, intimate relationship with death which suggests that the thanatological framework might not be appropriate in this setting. All the same, a review of the literature raises doubts as to the accuracy of this impression, with some arguing that in reality Mexicans share the same apprehensions as those in Anglo European societies, and that it is the publicity surrounding the day of the dead activities that has shaped this exaggerated opinion of the “death-defying” Mexican. With this in mind, the principal aim of the research was to explore the Mexican perspective of death in the context of dark tourism consumption so as to determine whether particular concepts related to the consumption of dark tourism by those from Western society, as presented in the thanatological model, still applied when Mexicans visited dark tourism sites.

The conclusion to be made regarding the Mexican perspective of death is that the truth lies somewhere in-between. That is, the research participants were not death-mocking fatalists, yet, generally speaking, they did demonstrate a distinct attitude towards death that appears to be markedly different than their Anglo-European counterparts. They declared that they did not celebrate death, as such, apart from during the day of the dead festivities; however, they acknowledged its existence and were aware that death can occur unexpectedly.

The participants also revealed that death is not sequestered in Mexico, although some expressed concerns that it could happen in the future. Most stated that in their experience people generally died at home, usually surrounded by family, while immediately following death the deceased is displayed in the house (or occasionally the funeral parlour), covered by a simple blanket and visited by relatives, friends and colleagues. Meanwhile, according to the majority of the participants, religion remains an important influence in Mexican life, in particular Catholicism, although the increasing worship of Santa Muerte (Saint of Death) represents an intriguing development that merits further research.

Invariably, taking into account the participants’ perspective towards death and their testimony that an absent/present death paradox does not exist in Mexico, the conclusion to be had regarding the viability of the thanatological framework in a Mexican context is that it is not suitable, because, to put it simply, ontological security is already present. This is because Mexicans, despite being part of the rapidly changing world, still persist with religious tradition and prefer that family members die at home and remain there under the gaze of friends and family until the day of the funeral.
 Nonetheless, ontological security does not rule out the possibility that Mexican dark tourism consumers will experience thanatopsis to varying degrees, so it was necessary to explore the motivations and experiences of the participants at the dark tourism sites. Subsequently, it became apparent that thanatopsis did not occur prior to or during the visit to the Trotsky Museum, nor at the Island of the Dolls, both very different types of dark tourism attractions, the museum motivating those with a historical interest, and the island serving to entice those with a desire to encounter a “scary thrill”; however, the Plaza of the Three Cultures, viewed as part of Mexico’s cultural heritage and attracting participants wanting to pay respects and express their dislike of political oppression, did arouse substantial thanatological thought among various participants. Likewise, a comparable thanatological experience took place among the participants at the Museum of Memory and Tolerance, an attraction which held similar appeal to the Plaza of Three Cultures as a site that represents large-scale atrocity, albeit on “lighter” scale of the spectrum. While not expecting to be contemplating death, the majority of participants at these two dark tourism sites did indeed undergo thanatological self-discourse, that served to re-confirm their own socially constructed perspective on death.

Consequently, the research leads to the principal conclusion that as the participants’ responses indicated that the thanatological framework was unsuitable for Mexican society, then research on other societies throughout the world would surely expose other variations, different to both Anglo-European and Mexican interpretations, thus confirming Cohen’s (2018, p. 157) observation that “Western thanotourism would be just one particular case”. This illustrates that thanatology, in the context of dark tourism consumption, is a fluid concept, in that the nature of thanatological contemplation varies according to the geographical background of the visitor, thus highlighting the necessity to emerge from the confines of Eurocentric academic assumptions by adopting alternative perspectives, such as a shift to a mobilities paradigm as suggested by Cohen and Cohen (2015).

While this research contributes to the dark tourism debate, particularly as regards the relevance of Western-based theoretical and conceptual notions in emerging societies, there are, as always, limitations to a study and it is important to acknowledge this. The main limitation to this study is that a sample of 15 participants was used to represent the opinions of Mexicans in general. A larger sample would have reflected the diversity of motivations, emotions and experiences of Mexicans to a more accurate degree, yet given the time and resources this was not possible. The researcher was aware of this limitation when choosing the participants, and made an effort to obtain the opinions of a broad range of individuals.

More research is necessary to further explore dark tourism’s supply and consumption in those geographical areas in which opinions of death, dying and mortality differ from those held in Western societies. In particular, four dimensions of research was identified by Cohen (2018), which includes: the types of site, death theologies and soteriological teaching, relationships with the dead and the motivations and experiences of domestic visitors to these sites. All of these should be included in future research.

An interesting avenue for research would be to construct a thanatological framework specifically related to the consumption of dark tourism in Mexico, exploring more profoundly issues related to death, dying and mortality and its role in Mexican society. Likewise, it would be fascinating to investigate the Museum of Mummies in Guanajuato from a supply perspective, as the Museum displays numerous death and mortality related quotations from the likes of Octavio Paz throughout the exhibition, reflecting the awareness by the site administrators of the unique domestic market that they are dealing with.
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