Medical tourism: How lobby servicescape may influence customers' **image** and **pleasure**

SANDRA MARIA CORREIA LOUREIRO * [sandramloureiro@netcabo.pt]
EDUARDO SARMENTO FERREIRA ** [emoraessarmento@gmail.com]

Abstract | Medical tourism has become of increasing interest for both researchers and managers in 21st century. However, how lobby servicescape influences customer's image and pleasure is not well understood. To contribute to address this gap, this study aims to explore the effect of three factors of servicescape on customers' image and pleasure. So, a sample of 332 fully completely questionnaires were employed to test the proposed model. Findings reveal servicescape as an effective antecedent of customer's image and pleasure. Finally, the article also attempts to provide managerial implications and suggests further research.

Keywords | Servicescape, Pleasure, Image, Medical tourism.

Resumo | O turismo de saúde tornou-se um tema de crescente interesse tanto para os investigadores como para os gestores do século 21. Contudo, a forma como o *lobby* do *servicescape* influencia a imagem e o prazer do cliente não está ainda bem compreendida. De forma a colmatar esta lacuna, este estudo tem como objetivo explorar o efeito de três fatores de *servicescape* na imagem e prazer dos clientes. Neste contexto, utilizou-se uma amostra de 332 questionários totalmente preenchidos para testar o modelo proposto. As conclusões revelaram que o *servicescape* é um antecedente efetivo na imagem e no prazer do cliente. Por fim, o artigo também tenta analisar as implicações para a gestão e sugere ainda investigações futuras.

Palavras-chave | *Servicescape*, Prazer, Imagem, Turismo de saúde.

* **PhD in Marketing and International Commerce** by the University of Extremadura. **Marketing Professo**r at the Department of Marketing, Operations and General Management at *Instituto Universitário de Lisboa* (ISCTE-IUL) and member of the Business Research Unit (BRU/UNIDE) (Portugal).
** **PhD in Economy** by the ISEG-University of Lisbon. **Tourism Professor** at the Lusófona University and member of the Center for African Studies and Development (CEsA), Technical University of Lisbon (Portugal).

1. Introduction

Population ageing, older people's requirements for more medical services, people wanting to look and feel younger, waiting times and/or the increasing cost of health services at home, has led new healthcare consumers to seek treatment abroad (Hazarika, 2010). These factors are at the root of the re-emergence of medical and healthcare tourism, once one may consider its origin in the Ancient Greeks and Egyptians who travelled for the therapeutic benefits of hot springs and baths (Snyder, Crooks, Johnston & Kingsbury, 2011).

The globalization of health care is responsible for the phenomenon of medical tourism, where citizens decide to have their own treatment abroad and travel often to less economically developed areas of the world (Ehrbeck, Guevara & Mango, 2008). Carrera and Bridges (2006, p. 447) define medical tourism as a subset of health tourism, whose broader definition involves "the organized travel outside one's local environment for the maintenance, enhancement or restoration of the individual's wellbeing in mind and body". Globalization and increasing acceptance of health services as a market commodity have led to a new trend – organized medical tourism for fee paying patients, regardless of citizenship, who shop for health services overseas, using new information sources, new agents to connect them to providers, and inexpensive air travel to reach medical tourism destination (Whittaker, 2010; Crooks, Kingsbury, Snyder & Johnston, 2010). Medical tourism integrates a heterogeneous collection of health-related travel (Goodrich, 1993; Huat, 2006a, 2006b; Fedorov, Tata, Raveslooy, Dhakal, Kanosue & Roncarati, 2009) and spans across a wide range of medical specialties, such as cosmetic surgery, dental procedures, orthopedic surgery, cardiac surgery, assisted reproductive technology and organ and cellular transplantation.

Medical tourism generates income for the health sector of the destination country whilst increasing tourist spend on air fares, accommodation, subsistence and excursions is also an important source of foreign exchange income for destination countries (Johnson & Garman, 2010). A substantial level of expenditure by medical tourists, and their companions, is not related to medical care. For example, it is estimated that those accompanying the patient can spend about twice as much on hotels and tourism activities as the patient (NaRanong & NaRanong, 2011). In fact, this type of tourism is a growing phenomenon in Asia and also in European countries, where patients are willing to travel for the purposes of receiving medical care and surgical treatments (Lee, Buse, & Fustukian, 2002; Lunt, Exworthy, Green, Horsfall, Mannion & Smith, 2011; Smith & Puczkó, 2008).

In Europe, medical tourism can be viewed in two main perspectives: i) citizens who use their European citizenship rights to access medical care in EU Member States and their national purchaser reimburses the costs of their treatment abroad; and ii) patients who are mobile through their own volition. This last group of patients are medical tourists that do not make use of EU rights (where the phenomenon is ordinarily known as 'cross-border care'), but choose to pay out-of pocket, and so are better cast as consumers, rather than as individuals exercising their European citizenship rights (Lunt & Carrera, 2010). The present study refers to this last group of consumers, which look for outstanding equipment and facilities and a very good service delivery. This type of consumers may come from abroad but can also live in the country where the hospital is located.

Recent studies within tourism research have started to explore the intersection between health and tourism (e.g. Lee, 2010; Hall, 2011; Heung, Kucukusta & Song, 2010). Other studies for patient mobility include the desire to avoid long waiting times for certain procedures and to avoid restrictive eligibility rules for particular treatments and services. The growing ease and affordability of international air travel and the expansion of internet marketing are also factors influencing the decision of citizens

to seek treatment abroad (Lunt & Carrera, 2010; Crooks et al. 2010). Some patients are also likely to be attracted by the privacy and confidentiality afforded by distant destinations. Others may be attracted by the availability of a wider variety of holistic alternatives and complementary approaches to medicine and wellness services provided in some countries (Gesler, 1992).

Nevertheless, previous studies on this topic tend to focus on the motivations of consumers or goers (e.g. Mak, Wong & Chang, 2009; Kucukusta, Pang & Chui, 2013) rather than understand customers' perceptions about the atmosphere and characteristics of the facilities. Therefore, this study intend to contribute to address this gap in understand how customers view the lobby atmosphere and facilities and how that perception may influence the customers' image and pleasure.

In this vein, after the introduction, the main characteristics of medical tourism hospitals in Portugal are presented, followed by the literature review on S-O-R model, which is the basis of the proposed model, as well as the servicescape and its consequences. The reason for conducting such literature review lies in the objective of the study and in the adaptation of the S-O-R model to the context under study. Then, the methodology, data collection, and results are described. Finally, the article presents conclusions, managerial implications, and proposals to future research.

2. Main characteristics of medical tourism hospitals in Portugal

In Portugal, the official services for the provision of health care to the population are organized under the National Health Service. The World Health Report evaluated Portuguese health system to be at the 12th position of the World Health Organization's ranking. In addition to the public service, there are private hospitals and offices of professionals in the liberal regime. The private hospital network devoted to medical tourism consists of modern, well-equipped units, distributed across the country.

In order to best accommodate the patient abroad, hospitals have been implementing and monitoring care services customized to the patient, with English being the basic language of communication. Portugal also has an Integrated Medical Emergency, which provides victims of accidents or sudden illness, prompt and accurate delivery of health care, with high levels of speed in drive assistance means. Nevertheless, not all hospitals in Portugal are devoted to medical tourism. The medical tourism hospitals in Portugal are those with medical facilities offering cutting edge technology and highly qualified doctors, dentists, cosmetic surgeons and healthcare staff that can deliver an outstanding experience beyond the treatment itself. Patients are treated as they are guests and can stay at the hospital more time after the surgery or treatment than in a more traditional hospital. The marketing communication uses similar tools as used in the tourism sector, so patients can use websites not only to book their treatments, but also to get more information about the city and places of interests. Medical hospitals in Portugal are not only part of the National Health Service, but also have a certificate from Medical Tourism Association.

3. Literature review

The current study is based on the S-O-R framework and proposes a model linking servicescape to customer' image and pleasure. The S-O-R framework is firstly presented in the context of environmental psychology by Mehrabian and Russel (1974) and first applied on retail context by Donovan and Rossiter (1982). These authors have investigated the relationship between emotional states, induced by several different environments, and their behavioural intentions. In this application, the stimuli were

operationalized as components of the atmosphere, the organism as consumers' emotional states (such as pleasure and arousal) and the response as attitudes and behavioural intentions (approach and avoidance) (Donovan & Rossiter, 1982). Thus, an adequate S-O-R framework should regard three elements: i) taxonomy of stimulus; ii) taxonomy of organism; and iii) taxonomy of responses (Donovan & Rossiter, 1982). This model also suggests that the stimuli precede and affect the consumers' emotional states (organism), which influence their retail behaviours (responses), such as re-patronage, store search and in-store behaviour (Thang & Tan, 2003).

The stimulus is a set of characteristics inside the environment which affect the internal states of the individuals (e.g. Baker, Levy & Grewal, 1992; Eroglu, Machleit & Davis, 2001; McKinney, 2004; Sherman, Mathur & Smith, 1997). Organism refers to the intervening internal process, which take place between the stimulus and the final actions, causing alterations on the emotional states of the consumer. That process allows the consumers to convert the stimulus into meaningful information and utilize them to understand the environment before making a decision (Koo & Ju, 2010). The response is used to express the satisfaction or dissatisfaction with the consumer's experience (McKinney, 2004) and, according to Donovan and Rossiter (1982), that can be done through approach and avoidance behaviours.

3.1. Servicescape

This study employs ambient factor, design factor and social factor as stimulus, also called servicescape (Bitner, 1992), pleasure feeling as positive emotions and perceived service quality and image as response. In fact, as Bitner (1992) points out, the place where the service is produced cannot be hidden and may have a strong effect on customers' perceptions of the service experience. Booms and Bitner (1981, p. 36) define servicescape as "the environment in which the service is assembled and in which seller and consumer interact, combined with tangible commodities that facilitate performance or communication of the service". Bitner (1982) suggests three dimensions of the physical environment: i) ambient conditions (e.g. temperature, air quality, noise, music, and odour); ii) spatial layout and functionality (e.g. layout, equipment, furnishings); and iii) signs, symbols and artefacts (e.g. signage, personal artefacts, style of décor).

Wakefield and Blodgett (1994) analyse the effect of the servicescape in leisure service settings and propose a servicescape typology in terms of: i) spatial layout and functionality (e.g. stadium seats, ticket windows/gates, hallways/walkways, entrances/exits, food service areas, and restrooms); and ii) aesthetics (e.g. external environment, exterior construction, interior construction, score boards, facility cleanliness, and personnel appearance). Lucas (2003) identifies five main factors of servicescape in the slot floor of the hotel casino: (i) layout navigation; (ii) cleanliness; (iii) ambience; (iv) seating comfort; and v) interior décor. Ryu and Jang (2007) and Kim and Moon (2009) employ five composite dimensions for restaurant context: (i) facility aesthetics; (ii) layout; (iii) electric equipment; (iv) seating comfort; and (v) ambient conditions.

Therefore, the factors that comprise the servicescape depend on the context. For the purpose

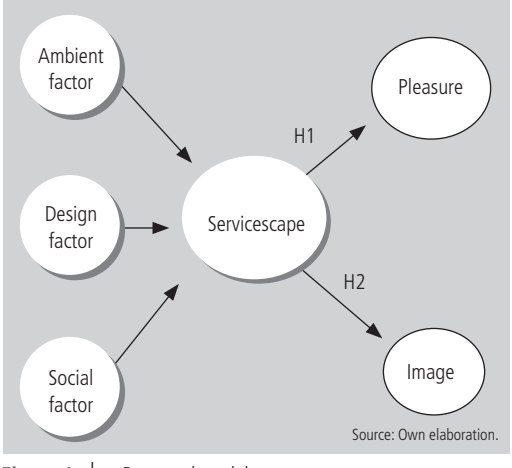

Figure 1 | Proposed model.

Table 1 | Respondents' profile.

Gender	Age	Qualifications
Male : 40.5%	< 20 :11.4%	Primary school: 3.3%
Female: 59.5%	21 to 30: 35.8%	Middle school: 7.8%
	31 to 40:18.4%	High school: 33.1%
	41 to 50: 20.5%	Bachelor: 33.1%
	51 to 60: 10.8%	Post-graduation (Master. PhD or DBA): 22.6%
	> 60: 3.0%	

Source: Own elaboration.

Table 2 | Construct, number of items, and sources.

Construct		No. of items	Source
Servicescape	Ambient factor	6	Michaelia (2008)
	Design factor	8	
	Social factor	8	Hightower, Brady and Baker (2002)
Pleasure		4	Kim and Moon (2009)
Image		4	Jeon (2011)

Source: Own elaboration.

of this study, three factors are considered: i) ambient factor regarding background characteristics of the environment (e.g. odour, lighting, temperature, music/sound, noise level and cleaning); ii) design factor referring the way in which equipment and furnishings are organized and colour scheme (e.g. electronic equipment, layout, signage, restroom, wall and floor colour schemes, architectures and pictures); iii) social factor (e.g. number, characteristic and empathy of employees).

3.2. Consequences of servicescape stimuli and hypotheses development

Pleasure has been regarded as a direct consequence of servicescape, especially in more hedonic services (e.g. Kim & Moon, 2009; Ryu & Jang, 2007; Wakefield & Blodgett, 1994; Loureiro, Koo & Ribeiro, 2013). In fact, pleasure defined as an overall sensation of happiness, delighted and entertained should be more effective in case of ambient, design and social are associated to the lobby of a health care hedonic service, where pleasure can result in trust and hope in treatment to be carried out. This leads us to propose (see figure 1):

H1: Perceptions of the lobby servicescape have a positive effect on pleasure feeling. A well-presented physical and social environment may be very influential in communicating the firm's identity which become in customer's image (Bitner, 1992; Rapoport, 1982). Defining image as the consumer's mental representation of the firm or "the overall perception or total set of impressions of a place, or even as the mental portrayal of a destination" (Loureiro & Miranda, 2008, p. 120), a lobby servicescape may influence positively or negatively such impression or mental representation of the health care hospital. Thus:

H2: Perceptions of the lobby servicescape have a positive effect on customers' image.

4. Methodology

4.1. Data collection

The questionnaire containing the items of the constructs and the socio-demographic variables was written in English, then translated to Portuguese, and translated back to English. Back translation was used to ensure that the items in Portuguese communicate similar information as those in English (Brislin, 1970). Then, the questionnaire was pre-tested with the help of ten customers.

Data was collected between September and October 2013, in main hospitals in Lisbon, devoted to medical tourism. 332 fully completed questionnaires were collected, out of 400 that were distributed to the patients. During the data collection process, a

member of the research team was in the hospitals to offer support. Of all the participants, 59.5% were female and 40.5% were male. Most of the participants were between 21 and 50 years old and had high school or bachelor degree (see table 1). The average number of visits to the healthcare hospital was 2 (SD=0.983).

4.2. Variable and measurement

The constructs were measured with multi-item scales. All items were measured by using a five-point Likert-type scale and the questionnaire was constructed with 33 items representing the constructs (see table 2).

5. Results

5.1. Measurement Results

The PLS approach was employed to test the model with second order formative construct; more specifically, the repeated indicators method was used (Chin, Marcolin & Newsted, 2003; Kleijnen, Ruyter & Wetzels, 2007). A PLS model should be analysed and interpreted in two stages. First, the measurement model or the adequacy of the measures is assessed by evaluating the reliability of the individual measures, the convergent validity, and the discriminant validity of the constructs. Then, the structural model is evaluated. In order to evaluate the adequacy of the measures, the item reliability is assessed by examining the loadings of the measures on their corresponding construct. Item loadings of scales measuring reflective constructs should be 0.707 or more, which indicates that over 50% of the variance in the observed variable is explained by the construct (Wetzels, Odekerken-Schröder & van Oppen, 2009). The item loading of each item that had exceeded the value of 0.707 was analysed, while items with factor loading lower than 0.707 were eliminated (see table 3).

All Cronbach's alpha values are above 0.7 and all composite reliability values in table 3 are above 0.8. All constructs are reliable since the composite reliability values exceed the threshold value 0.7. The measures demonstrate convergent validity, as the average variance of manifest variables extracted by constructs (AVE) are above 0.5, indicating that more variance of each indicators are explained by their own construct.

In order to analyse the discriminant validity, the square root of AVE should be greater than the correlation between the construct and other constructs in the model (Fornell & Larcker, 1981). Table 4 shows that this criterion has been met.

5.2. Structural results

In this study, a nonparametric approach, known as 'Bootstrap', was used to estimate the precision of the PLS in estimating and supporting the hypotheses (Chin, 1998; Fornell & Larcker, 1981). All path coefficients are found to be significant at the 0.001, 0.01 or 0.05 levels, and so all hypotheses are supported (see figure 2). However, as models yielding significant bootstrap statistics can still be invalid in a predictive sense (Chin, 1998), measures of predictive validity (such as R^2 and Q^2) for focal endogenous constructs should be employed. All values of Q^2 (Chi-square of the Stone-Geisser Criterion) are positive, so the relations in the model have predictive relevance (Fornell & Cha, 1994). The model also demonstrated a good level of predictive power (R^2) as the modelled constructs explained 57.2% of the variance in image, 51.5% in service quality and 33.7% in pleasure feeling. In fact, the good value of GoF, proposed by Tenenhaus, Vinzi, Chatelin and Lauro (2005), and the good level of predictive power (R^2) reveal a good overall fit of the structural model (see figure 2).

Table 3 | Measurement results.

Items and constructs	Mean	SD	LV Mean	Factor loading	AVE	Cronbach Alpha	Composite reliability
Servicescape - Ambient factor			3.97		0.553	0.838	0.881
The odour in the lobby is pleasant	3.96	0.877		0.718			
The lighting in the lobby is adequate	4.00	0.871		0.741			
Overall, the lobby is kept clean	4.23	0.822		0.764			
The temperature in the lobby is Comfortable	3.95	0.852		0.778			
The background music/sound is Appropriate	3.87	0.973		0.727			
The noise level in the lobby is acceptable	3.76	0.949		0.731			
Servicescape - Design factor			3.97		0.670	0.875	0.910
Electronic equipment (elevator, cafe, etc.) that you need is available in this lobby	3.62	1.033		a			
The lobby's layout makes it easy to get to where you want to go	3.71	0.883		a			
The signage in the lobby makes it easy to find your way	3.69	0.895		a			
The lobby's restrooms are well designed	4.09	0.788		0.706			
The interior wall and floor colour schemes are attractive	3.91	0.897		0.846			
The quality of interior wall and floor are appropriate	3.92	0.935		0.862			
The interior of the lobby is attractive	4.02	0.926		0.855			
The lobby's architectures and pictures gives it an attractive character	3.93	0.930		0.815			
Servicescap - Social factor			4.11		0.587	0.824	0.876
There are enough employees in the lobby to service customers	3.98	0.958		a			
The employees are neat and well dressed	4.18	0.877		0.740			
The employees are helpful	4.23	0.790		0.798			
The employees are friendly	4.23	0.874		0.754			
The Lobby has more than enough space for me to be comfortable	4.00	0.864		0.785			
The lobby's customers are neat and well dressed	3.91	0.925		0.752			
The lobby's customers are friendly	3.72	1.056		a			
I feel like the customers will help me if I need them	3.49	1.235		a			
Pleasure			3.76		0.683	0.768	0.866
The overall feeling I get form this lobby Happy	3.83	0.933		0.838			
The overall feeling I get form this lobby Delighted	3.50	1.009		0.823			
The overall feeling I get form this lobby Pleased	3.92	0.908		0.818			
The overall feeling I get form this lobby Entertained	3.36	1.067		a			
Image			4.06		0.754	0.892	0.925
The overall image of hospital is good	4.03	0.856		0.860			
The image of hospital is clean	4.15	0.834		0.863			
I feel friendliness about the hospital	3.99	0.885		0.874			
I like the hospital in overall	4.08	0.901		0.877			

Source: Own elaboration.

Legend: AVE – average variance extracted; a – item eliminated because factor loading (value lower than 0.707).

6. Conclusions and implications

This study proposes a model that regards the effect of servicescape on cognitive and affective outcomes into the context of healthcare hospital. Participants were the target population for the study, but a convenience sample collected in Lisbon was used, rather than a randomized sample, thus it is necessary to be cautious in generalizing the results. Nevertheless, the findings seem to show that a favourable servicescape can lead to a positive image of the hospital and a favourable pleasure.

All three factors of servicescape are found to be significant in the formation of servicescape itself. However, ambient and design factors seem to be more important factors than social factor in Portuguese context in building servicescape perception. The findings are in accordance with those of Kim and Moon (2009) for restaurant context or Loureiro and Miranda (2008) for rural tourism context. In fact, servicscape is an important determinant of service quality, image and pleasure feeling. Nevertheless, the values of the paths seem to reveal that in case of healthcare hospital in Portugal, servicescape is especially important to predict the customer evaluation of the image of the hospital and the pleasure feeling. In this vein, the way hospital lobby is organized, the layout, the equipment, the signage, and all ambient elements, should not be overlooked because it is the first impression to attract customers.

Once again, the S-O-R model proved to be appropriate in explaining the effect of stimuli on emotions, such as pleasure. However, stimuli, or better – the servicescape –, has an important effect on image perceived by customers.

Regarding the implications for the management, they should take more attention to the social components of servicespace, that is, the number of employees in the lobby, their empathy and the way are dressed. More attention to the employees may enhance the overview of the servicescape. The customer perception that they are always been helped and supported may improve the perception of service quality and this together with a favourable image may lead to a better pleasure feeling. Technologically advanced equipment and modern facilities are very important to achieve good treatments and give a good perceived image. Nevertheless, the human factor should not be neglected, not only the technical skill, but also the ability to establish a good relationship with each patient.

In the future, other health care medical tourism hospitals should be analysed and compared in order to better understand the phenomenon. Different

Table 4 | Discriminant validity.

	1.	2.	3.	4.	5.
AVE$^{1/2}$	0.869	0.827	0.744	0.819	0.766
1.Image	1.000				
2. Pleasure	0.619	1.000			
3.Ambient factor	0.618	0.474	1.000		
4.Design factor	0.614	0.500	0.611	1.000	
5. Social factor	0.609	0.444	0.614	0.612	1.000

Note: Diagonal elements in the 'correlation of constructs' matrix are the square root of AVE. For adequate discriminant validity, diagonal elements should be greater than corresponding off-diagonal elements.
Source: Own elaboration.

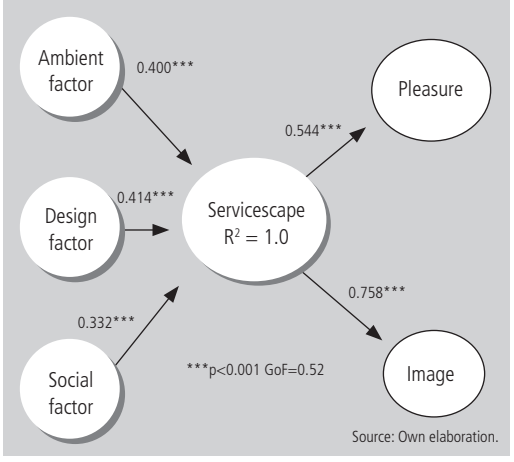

Figure 2 | Structural results.

nation cultures could be a moderator variable to be considered. Other variables may be integrated in the model, such as behavioural intentions, trust and attachment to the hospital, how tourists identify themselves with the hospital. Finally, it will also be interesting to compare the perceptions of younger medical tourists with the older ones.

References

Baker, J., Levy, M., & Grewal, D. (1992). An experimental approach to making retail store environmental decisions. *Journal of Retailing, 68*, 445-460.

Bitner, M. J. (1992). Servicescape: The impact of the physical environment surrounds customers and employees. *Journal of Marketing, 56,* 57-71.

Booms, B. H., & Bitner, M. J. (1981). Marketing strategies and organization structure for service firms. In J. H. Donnelly & W. R. George (Eds.), *Marketing of Services* (pp. 47-51). Chicago: American Marketing.

Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology, 1*(3), 185-216.

Carrera, P., & Bridges, J. (2006). Globalization and healthcare: Understanding health and medical tourism. *Expert Review of Pharmacoeconomics and Outcomes Research, 6*(4), 447-454.

Chin, W. (1998). The partial least squares approach to structural equation modelling. In G. A. Marcoulides (Ed.), *Modern Methods for Business* (pp. 295-336). Mahwah, NJ: Erlbaum Associates Publisher.

Chin, W., Marcolin, B., & Newsted, P. (2003). A partial least squares latent variable modelling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic mail adoption study. *Information Systems Research*, *14*, 189-217.

Crooks, A., Kingsbury, P., Snyder, J., & Johnston, R. (2010). What is known about the patient's experience of medical tourism? A scoping review. *BMC Health Services Research, 10*, 266-278.

Donovan, J., & Rossiter, R. (1982). Store atmosphere: An environmental psychology approach. *Journal of Retailing, 58*, 34-57.

Ehrbeck, T., Guevara, C., & Mango, D. (2008). Mapping the market for medical tourism. *McKinsey Quarterly,* May, 1-11.

Eroglu, A., Machleit, A., & Davis, M. (2001). Atmospheric qualities of online retailing: A conceptual model and implications. *Journal of Business Research, 54*, 177-184.

Fedorov, G., Tata, S., Raveslooy, B., Dhakal, G., Kanosue, Y., & Roncarati, M. (2009). *Medical travel in Asia and the Pacific: Challenges and opportunities.* Bangkok: UN Economic and Social Commission for Asia and the Pacific.

Fornell, C., & Cha, J. (1994). Partial least squares. In R. P. Bagozzi (Ed.), *Advanced methods in marketing research* (pp. 52-78). Cambridge: Blackwell Publishers.

Fornell C., & Larcker, F. (1981). Evaluating structural models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39–50.

Gesler, W. (1992). Therapeutic landscapes: Medical issues in light of the new cultural Geography. *Social Science Medicine, 34*, 735–746.

Goodrich, N. (1993). Socialist Cuba: A study of health tourism. *Journal of Travel Research*, *32*(1), 36–41.

Hall, C. (2011). Health and medical tourism: A kill or cure for global public health?. *Tourism Review, 66*(1/2), 4–15.

Hazarika, I. (2010). Medical tourism: its potential impact on the health workforce and health systems in India. *Health Policy and Planning,* 25, 248-251.

Heung, V., Kucukusta, D., & Song, H. (2010). A conceptual model of medical tourism: Implications for future research. *Journal of Travel & Tourism Marketing, 27*, 236-251.

Hightower, R., Brady, M., & Baker, T. (2002). Investigating the role of the physical environment in hedonic service consumption: An exploratory study of sporting events. *Journal of Retailing*, *55*(9), 697-707.

Huat, C. (2006a). Medical tourism/medical travel (part one). *SMA News, 38*, 17-21.

Huat, C. (2006b), Medical tourism/medical travel (part two). *SMA News, 38*, 14-16.

Jeon, H. (2011). The effect of corporate social responsibility on the corporate image and purchase intention. *Journal of the Korean Society of Clothing and Textiles, 35*(5), 547-560.

Johnson, T., & Garman, A. (2010). Impact of medical travel on imports and exports of medical services. *Health Policy, 98*, 171–177.

Kim, G., & Moon, J. (2009). Customers' cognitive, emotional, and actionable response to the servicescape: A test of the moderating effect of the restaurant type. *International Journal of Hospitality Management*, *28*(1), 144-156.

Kleijnen, M., Ruyter, K., & Wetzels, M. (2007). An assessment of value creation in mobile service delivery and the moderating role of time consciousness. *Journal of Retailing, 83*(1), 33-46.

Koo, M., & Ju, H. (2010). The interactional effects of atmospherics and perceptual curiosity on emotions and online shopping intention. *Computers in Human Behavior, 26*, 377-388.

Kucukusta, D., Pang, L., & Chui, S. (2013). Inbound travellers' selection criteria for hotel spas in Hong Kong. *Journal of Travel & Tourism Marketing, 30*(6), 557-576.

Lee, C. (2010). Health care and tourism: Evidence from Singapore. *Tourism Management, 31*, 486–488.

Lee, L., Buse, K., & Fustukian, S. (2002). *Health policy in a globalising world*. Cambridge: Cambridge University Press.

Loureiro, S., & Miranda, G. (2008). The importance of quality, satisfaction, trust and image in relation to rural tourism loyalty. *Journal of Travel & Tourism Marketing*, *25*(2), 117-136.

Loureiro, S., Koo, D., & Ribeiro, L. (2013). Effects of atmospherics on emotions and intention with respect to involvement under different shopping environments. *Journal of Global Scholars of Marketing Science (Bridging Asia and the World), 23*(4), 435-459.

Lucas, A. (2003). The determinants and effects of slot servicescape satisfaction in a Las Vegas hotel casino. *UNLV Gaming Research & Review Journal*, *7*(1), 1-17.

Lunt, N. & Carrera, P. (2010). Medical tourism: Assessing the evidence on treatment abroad. *Maturitas, 66*, 27-32.

Lunt, N., Hardey, M., & Mannion, R. (2010). Nip, tuck and click: Medical tourism and the emergence of web-based health information. *Open Medical Informatics Journal, 4*, 1-11.

Lunt, N., Exworthy, M., Green, S., Horsfall, D., Mannion, R. & Smith, R. (2011). *Medical tourism: Treatments, markets and health system implications: A scoping review*. Paris: Organisation for Economic Co-operation and Development.

Mak, A., Wong, K., & Chang, R. (2009). Health or self-indulgence? The motivations and characteristics of spa-goers. *The International Journal of Tourism Research, 11*(2), 185-199.

McKinney, L. (2004). Creating a satisfying internet shopping experience via atmospherics variables. *International Journal of Consumer Studies,* 28, 268-283.

Mehrabian, A., & Russell, J. (1974). *An approach to environmental psychology*. MA, Cambrige: MIT Press.

Michaelia, C. (2008). *The role of servicescape in convention and exhibition centre and AsiaWorld–Expo*. Bachelor thesis, Hong Kong Baptist University, Marketing, Hong Kong.

NaRanong, A., & NaRanong, V. (2011). The effects of medical tourism: Thailand's experience. *Bulletin of the World Health Organization, 89*(5), 336–344.

Rapoport, A. (1982). *The meaning of the built environment.* Beverly Hills, CA: Sage Publications, Inc.

Ryu, K. & Jang, S. (2007). The effect of environmental perceptions on behavioral intentions through emotions: the case of upscale restaurants. *Journal of Hospitality & Tourism Research*, *31*(1), 56–72.

Sherman, E., Mathur, A., & Smith, R. (1997). Store environment and consumer purchase behavior: Mediating role of consumer emotions. *Psychology & Marketing, 14*, 361-378.

Smith, M., & Puczkó, L. (2008). *Health and wellness tourism.* Oxford: Butterworth-Heinemann/Elsevier.

Snyder, J., Crooks, V., Johnston, R., & Kingsbury, P. (2011). What do we know about Canadian involvement in medical tourism? A scoping review. *Open Medicine, 5*(3), 139–148.

Tenenhaus, M., Vinzi, V., Chatelin, Y., & Lauro, C. (2005). PLS Path Modeling. *Computational Statistics & Data Analysis*, *48*, 159-205.

Thang, D., & Tan, B. (2003). Linking consumer perception to preference of retail stores: An empirical assessment of multiple-attributes of store image. *Journal of Retailing and Consumer Services*, *10*, 193-200.

Wakefield, K. L. & Blodgett, J.G. (1994). The importance of servicescape in leisure service settings. *Journal of Services Marketing*, *8*(3), 66-76.

Wetzels, M., Odekerken-Schröder, G., & van Oppen, C. (2009). Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly, 33*, 177-195.

Whittaker, A., Manderson, L., & Cartwright, E. (2010). Patients without borders: Understanding medical travel. *Medical Anthropology, 29*(4), 336-343.