The Role of Risk, Culture, Image and Quality on Destination Loyalty: Perspectives from International Medical Tourists toward Thailand as a Medical Tourism Destination

by

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Abstract

The purpose of the study was to develop as well as evaluate a theoretical structural model for establishing a medical tourist's loyalty by incorporating five important constructs including risk, culture, image, quality, and satisfaction. More specifically, the seven main objectives were proposed, as followed: 1) to investigate how the underlying dimensions of international medical tourists' perceived risk 2) to investigate the relationship between perceived risk and destination image in terms of cognitive, affective and overall image perceived by medical tourists 3) to examine the relationships among risk, quality, overall image perceived by medical tourists and their satisfaction 4) to examine the role of culture in creating loyalty and its variables namely quality and satisfaction 5) to explore the role of overall image and satisfaction on consumer loyalty toward the medical tourism destination 6) to test the moderating role of medical tourists' perceived risk on the relationship between overall image of destination and satisfaction as well as the relationship between satisfaction and loyalty and 7) to examine the mediating role of satisfaction between perceived medical product and service quality and consumer loyalty as well as between overall image of the destination and consumer loyalty. A total 205 respondents and 13 interviewees were collected from international medical tourists in Thailand. To achieve the purposes of this study, seventeen hypotheses were developed and Structural Equation Modeling was conducted to investigate them. The findings are as followed. There is not a direct negative relationship between risk and cognitive image as well as affective image perceived by international medical tourists in Thailand. Hypothesis 1

and 2 were not supported. The following hypotheses (Hypothesis 3 and Hypothesis 4) are supported on a direct negative relationship between cognitive image as well as affective image, and overall image of a destination perceived by international medical tourists. Hypothesis 5, there was not a direct positive relationship between risk and quality perceived by medical tourists. Hypothesis 6, the result found that quality perceived by international medical tourists positively influences their perceived overall image of Thailand as a medical tourism destination. Hypothesis 7, the finding showed that quality perceived by medical tourists had a significant influence their satisfaction. Hypothesis 8, there is not a direct positive relationship between medical tourists' culture and their perceived quality. For testing the moderating effect of culture, Hypothesis 10 was supported. The finding confirmed that there was a significant moderating effect of culture on the impact of satisfaction on loyalty but not on the impact of quality on satisfaction. Thus, Hypothesis 9 was not supported. Hypothesis 11, 12 and 13 were supported. The results confirmed that there was a direct positive relationship between overall and satisfaction as well as loyalty. Also, satisfaction had a direct positive impact on loyalty. Moreover, the findings presented that perceived risk partially moderates the relationship between overall image and satisfaction as well as the relationship between satisfaction and loyalty. Thus, Hypothesis 14 and 15 were supported. Finally, Hypothesis 16 was supported and the finding confirmed that satisfaction positively mediates the relationship between quality and loyalty but not on the relationship between overall image and loyalty (Hypothesis 17). The findings of this study contribute to the theoretical and practical implications of medical tourism industry. The findings of this study are expected to make major contributions to the existing theory. The results of the study provide important implications of strategies to develop and enhance effort for their product and services so as to keep consumer loyalty. Furthermore, the

findings can provide useful information for destinations that seek to keep their market share and their consumer loyalty, in order to develop more effective strategies related to decrease consumer' perceived risk, to develop quality of product and service, destination image, and consumer satisfaction.

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Chapter 1

Introduction

1.1 Background of the problem

Tourism industry has expanded markedly to become one of the fastest growing economic sectors in the world. The tourism sector has been regarded as the important engine in driving national development with an increasing importance in the gross domestic product of many countries. The latest UNWTO World Barometer reveals that international tourist arrivals reached 1,184 million, grew by 4.4% in 2015 (UNWTO, 2016). In 2014, the industry generated 9.8% (or about US$7.6 trillion) of the world GDP and employed nearly 277 million people worldwide (WTTC, 2015). The sector will continue to increase in importance, forecasting to grow by 3.3% a year in real terms between 2010 and 2030, and at the same time the market share of emerging economies is expected to reach 57% by 2030 with over 1 billion international arrivals. Therefore, tourism industry plays an important role in increasing economic growth as well as in contributing indirectly to several social benefits such as providing employment and business opportunities, economic diversification, and multiple effect (Archer, Cooper and Ruhanen, 2005; Gunn and Var, 2002; Lee and Brahmasrene, 2013).

Medical tourism is a niche special interest tourism segment in the globalized health industry (Connell, 2006). Several researchers indicate that medical tourism is not a new phenomenon of travel for health or medical treatment overseas (Hutchinson 2005; Connell 2006; Smith and Puczkó 2008). The rapid development of globalization and technological advancement in the past century have had a huge impact in shifting the role of medical tourism throughout the world. Travel abroad for medical treatment is becoming very popular in the twenty first century as people are becoming more and more aware of their health needs

(Hutchinson 2005; Carrera and Bridges 2006; Bookman and Bookman 2007; Horowitz and Rosensweig 2007; Hopkins et al., 2010; Lunt, Hardey and Mannion 2010; Ghose 2010; Stanley 2010). Moreover, medical tourism is now becoming an economic motor of increasing importance as a global industry, with producers and consumers spread around the world. According to advisory group Patients Without Borders, there were about 8 million people who travel for medical and dental treatment in oversea each year and the industry is worth as much as $55 billion annually (Woodword, 2015), with an average annual growth rate of 20% (Morgan, 2012). According to a 2014 report from the Commonwealth Fund, the United States is ranked at the bottom of a list of 11 industrialized nations with the most expensive and inaccessible healthcare. It is unsurprising that the number of U.S. citizens travelling abroad for medical services that has been doubling each year since 2003, as noted by Keckley (2008). The same author further indicated that its expansion projected to continue to potentially over 23 million by 2017. Therefore, over 50 countries have considered medical tourism as a national industry (Gahlinger, 2008) due to the increasingly number of medical tourists as well as the average growth rate.

There are so many reasons explaining why people choose to travel outside their home country in order to obtain medical treatments. As mentioned by several researchers, low cost of medical treatments in developing countries, long waiting list in developed countries, affordable international airfares, favorable exchange rates, easy to access to information by Internet and the state of art technology adopted by the new healthcare services have been usually considered the main reasons for the growth popularity in medical tourism (e.g. Matthew, 2013; Woodman, 2007). Furthermore, the study of McKinsey revealed that quality drivers is one of the major drivers that influence patients' decision on medical tourism destination including advanced technology, better quality, quicker access and at the very end-costs of care, as presented in Figure 1.1 (European Hospitality and Healthcare Federation, 2015).

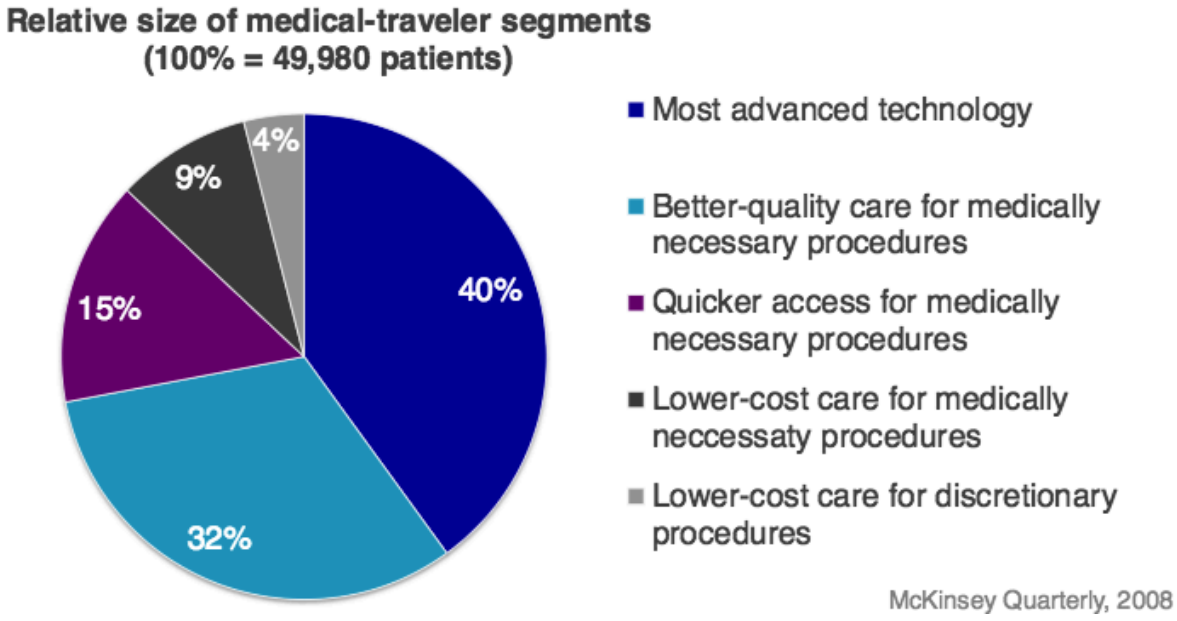


Figure 1.1 Main drivers of medical tourism
Source: McKinsey Quarterly, Mapping the market for medical travel, 2008

For example, price is the main reason attracting medical tourists to go overseas for medical treatment. There is considerable point that the financial saving of medical treatments range in between 30% to 80% of the charge that you would generally pay in developed countries. The following table (Table 1.1) provides the details of the price comparison on specific medical treatments in the U.S. and other international medical treatment destinations of Asia. Therefore, the price in the United States pays a significant higher medical expense when compared to medical treatment in other destinations in Asia.

Global Medical Procedures Cost Comparison

U.S., Thailand, Singapore, and Malaysia (US$)

Procedure	U.S.	Thailand	Singapore	Malaysia
Heart Bypass	$130,000	$11,000	$18,000	$9,000
Valve Replacement	$160,000	$10,000	$12,500	$9,000
Angioplasty	$57,000	$13,000	$13,000	$11,000
Hip Replacement	$43,000	$12,000	$12,000	$10,000
Hysterectomy	$20,000	$4,500	$6,000	$3,000
Knee Replacement	$40,000	$10,000	$13,000	$8,000
Spinal Fusion	$62,000	$7,000	$9,000	$6,000

** Estimated costs of common medical procedures*

Source: Global Health and Travel, Jul–Aug 2013, Page 56.

Table 1.1: Global Medical Procedures Cost Comparison (US$)

Source: Global Health and Travel, Jul-Aug (2013), p.56

Many countries in Asia have attracted increasing numbers of medical tourists in order to obtain health treatment in the past and at the same time in the early 1970s, countries like Thailand, India and Singapore became popular medical tourism destinations (Connell and Burgess, 2006) because of several reasons. Hospitals in some countries in Asia have considered as outstanding reputations. Moreover, government in each main medical tourism destination in

Asia provides assistance to support the medical tourism industry. For example, the government agencies in Singapore and Thailand have been set up to help their expertise globally while the Indian government has removed many visa restrictions and at the same time introduced a visa-on-arrival scheme for medical tourists for selected countries (Financial Tribute, 2015). The recent Frost and Sullivan research indicated the top 14 medical tourism destinations (Das, 2014), as illustrated in Table 2. Thailand has been recognized as the world's largest medical tourism destination offering premium product and service with low cost that include efficient staff, state-of-the-art facilities and technologies, excellent medical expertise, internationally certified medical services, highly qualified medical professionals, and a wide range of high-standard hospitals. Thailand is also well positioned to be the medical hub of Asia with the increasing number of international patients from developed countries due to long waiting lists as well as high medical expenses in their home countries (Awadzi and Panda, 2005). Similarly, medical tourists in Thailand believed that the service providers are qualified with service mind and hospitality as well as medical treatment rate in Thailand is fair when compared with the quality (MOPH, 2014). However, the government of Thailand is confronting its challenges along with the success of medical tourism in Thailand including lacking of medical and nurse personnel and limitation in language.

TOP 14 MEDICAL TOURIST DESTINATIONS BY VOLUME OF CARE	
1-Thailand	8-Costa Rica
2-Hungary	9-Brazil
3-India	10-Mexico
4-Singapore	11-South Korea
5-Malaysia	12-Colombia
6-Philippines	13-Belgium
7-United States	14-Turkey
Source: Frost & Sullivan	

Table 1.2 Top 14 Medical Tourist Destinations by volume of care

Source: Frost and Sullivan. Forbes (2014). Retrieved August 15, 2015, from http://www.forbes.com/sites/reenitadas/2014/08/19/medical-tourism-gets-a-facelift-and-perhaps-a-pacemaker/

Due to the benefits as well as the opportunities to be medical tourism destinations, the competition among countries in the international market place has become more intense in recent years (Connell, 2013). As noted by Bookman and Bookman (2007), the international trade in medical services has huge economic potential for global economy. Many countries have recognized the business opportunity for making a significant contribution to the medical tourism destinations' economy. Renee (2012) illustrate that medical tourism facilitators can usually make a profit about 20 – 40 percent of the total cost of a medical procedure. Moreover, Ramirez de Arrelano (2007) has proved that medical tourism helps in boosting tourism because investing in the medical industry is a way to increase the gross domestic product, upgrade services, generate foreign exchange and create a more favorable balance-of-trade situation. To confront with major challenge caused by highly competitive environment, many medical tourism destinations have thus attempted to gain a competitive advantage by several strategies,

especially low-cost leadership through price. Some scholars further asserted that price appears to be a key factor attracting international medical tourists outside their home countries (Voigt et al., 2010; Cabrera, 2010). For instance, Alsever (2006) indicated Americans tend to travel to other countries, such as Costa Rica, Thailand and Malaysia, in order to obtain several medical treatments that cost about 20 – 80 percent less than their home countries. However, only low-cost strategy can run the serious risk of having a negative impact on the medical tourism destinations' long- term profitability. Price is not the only one factor that the medical tourism destinations should consider when creating a competitive advantage in the long term. In other words, if customers decided to buy products or service based on price without emotional connection to a particular destination, they are not engaged with the destination leading to not revisit as well as recommend the destination to others. For these reasons, developing consumer loyalty plays a crucial role in keeping their market shares in order to sustain their medical tourism destinations in the long term.

Consumer loyalty has been found to be a competitive tool for many tourism destinations in the literature. As the medical tourism industry facing with today's highly globalized and competitive markets, the growth and survival of medical tourism destinations depend on how loyal their customers are. There is therefore a need to understand why medical tourists are faithful to medical tourism destinations and what determines their loyalty. According to Aaker (1996), loyalty is the key consideration because a highly loyal customer base generates larger sales and profits. Reichheld and Sasser (1990) asserted that a business might increase its profits by between 25% and 85% by retaining 5% of its customers. There are other associated benefits to fostering a lasting relationship with customers, including the fact that loyal customers are more likely to recommend destinations or businesses to others with a free advertising

(Reichheld & Sasser, 1990) as well as businesses tend to not only spend more but also are less price sensitive (O'Brien & Jones, 1995). Therefore, medical tourism destinations can create a sustainable competitive advantage in the marketplace by keeping existing consumers rather than attracting new customers.

1.2 Statement of the problem

There are several reasons explaining the importance of better understand the critical success factors that influence consumers' loyalty toward medical tourism destinations. First, medical tourism has emerged as the fastest growing segment of tourism industry. This has resulted in a significant amount of attention being given to it from researchers, policy-makers and stakeholders. But several researchers have claimed that there have been very few studies focusing in medical tourism. A need of empirical studies in medical tourism is therefore evident from the prominence of the issue. Second, the increasing competition in medical tourism global market place has had major implications for consumers including increased choices of medical tourism destinations, greater value for money and augmented levels of service. Medical tourism destinations are now attempting to find the key competitive advantages in order to attracting and sustaining their medical tourists. Low-cost leadership through price is considered one of the most commonly strategies using by many medical tourism destinations so as to gain a competitive advantage. Although discounting price of medical treatments may help medical tourism destinations to improve their market share, the risk of having a negative impact on destinations, particularly in medical tourism is caused by this price strategy. In stead, consumer loyalty can be seen as an important prerequisite for the future survival of medical tourism destinations in the long term. For these reasons, the research focusing on medical tourists' loyalty is needed for adding existing limited studies on this field in order to help medical

tourism destinations deeper understand how consumers have loyalty. Finally, previous studies on hospitality and tourism research literature have extensively investigated the subject of consumer loyalty and behavior but only a few studies has examined consumers' loyalty from an emerging market perspective. In particular, limited research efforts have studied the critical factors influencing the loyalty of medical tourists. The literature presented that risk, image, quality and satisfaction have consistently been regarded as key determinants in affecting customers' loyalty. According to Chi and Qu (2008) and Radder and Han (2015), destination image, tourist satisfaction and destination loyalty are important determinants predicting tourists' intention to revisit a destination. Several researchers pointed out that quality and customer satisfaction are antecedents of customer loyalty (Cronin & Taylor, 1992; Gremler & Brown, 1997). In other words, customer with high satisfaction and service quality are the main cause of higher customer loyalty as well as willingness to recommend the service, as noted by Danaher and Mattsson (1998). Additionally, many previous studies have supported the impact of quality on customer loyalty (Aydin & Ozer, 2005; Bloemer et al., 1998; Ganesan, 2007; Wah & Ndubisi, 2007; Akbar et al. (2012); Cronin et al., 2000) and also Al-Refaie et al. (2012) asserted that quality of the destination has a positive influence on tourists' satisfaction and in turn this satisfaction positively affects tourists' loyalty. However, no study combines these aforementioned variables in a medical tourist' loyalty model. Due to a lack of a theoretical model explaining a medical tourist loyalty, this study aims to fill research gap as well as extend medical tourism research by focusing about the relationships among important variables, namely risk, image, quality, satisfaction and consumer loyalty in the context of medical tourism.

1.3 Purpose and significance of the study

The purpose of this study is to develop and evaluate a theoretical structural model for establishing a medical tourist's loyalty by using five main factors, namely risk, culture, image, quality and satisfaction affecting medical tourists' intention to revisit the destination as well as intention to recommend the destination to others.

More specifically, the objectives of this study are as followed:

1. To investigate how the underlying dimensions of international medical tourists' perceived risk
2. To investigate the relationship between perceived risk and destination image in terms of cognitive, affective and overall image perceived by medical tourists.
3. To examine the relationships among risk, quality, overall image perceived by medical tourists and their satisfaction.
4. To examine the role of culture in creating loyalty and its variables namely quality and satisfaction.
5. To explore the role of overall image and satisfaction on consumer loyalty toward the medical tourism destination.
6. To test the moderating role of medical tourists' perceived risk on the relationship between overall image of destination and satisfaction as well as the relationship between satisfaction and loyalty.
7. To examine the mediating role of satisfaction between perceived medical product and service quality and consumer loyalty as well as between overall image of the destination and consumer loyalty.

Significance of the study

This study is being conducted so as to provide a basis for the assessment of the future medical tourism industry. As mentioned earlier, loyalty of a destination's consumer has been considered as the important factor in a medical tourism destination's success. The findings of this study will contribute to the theoretical and practical implications of medical tourism industry.

From a theoretical standpoint, loyalty is of considerable interest to both practitioners and academics in the field of hospitality management and at the same time there is fairly limited study in medical tourism destinations' loyalty based on the review of previous literature. The findings of this study are expected to make major contributions to the existing theory. More specifically, the result of the study is expected to be extending the understanding of consumer loyalty, risk, image, quality and satisfaction in the context of medial tourism. Besides, the study attempts to integrate model of risk, image, quality, satisfaction and post purchase behavior in order to establish a structural model for medical tourism in hopes that this model can explain medical tourists' loyalty in terms of revisit as well as recommend the destination to others applicable to medical tourism industry. Moreover, it helps to provide the information on the marketing strategies to the medical tourism stakeholders in medical tourism destinations in order to compete in the international market place. Therefore, the findings of the study will not only to enhance the theory of risk, quality, image, satisfaction and consumer loyalty applicable to medical tourism literature but also to apply these results to the interdisciplinary field of research.

From a practical standpoint, the stakeholders in any destination need a better understand of factors influencing international medical tourists in building their loyalty in terms of intention

to revisit and intention to recommend destination to others. The results of the study provide important implications of strategies to develop and enhance effort for their product and services so as to keep consumer loyalty. Furthermore, the findings can provide useful information for destinations that seek to keep their market share and their consumer loyalty, in order to develop more effective strategies related to decrease consumer' perceived risk, to develop quality of product and service, destination image, and consumer satisfaction.

1.4 Research questions and hypotheses

The study aims to identify the relationships that exist between medical tourists' loyalty and its five determinants: medical tourists' perceived risk, culture, perceived image, perceived quality and satisfaction in the medical tourism industry. Based on the foregoing description, the following research questions will be addressed in this study.

Research question 1: What are the underlying dimensions of international medical tourists' perceived risk toward Thailand as a medical tourism destination in terms of before, during and after travelling?

More specifically, research question 1 is broken into:

Research question 1.1: Overall, what is the most influential risk affecting your loyalty toward Thailand as a medical tourism destination?

Research question 1.2: What dimensions of risk are they worried about before deciding travelling to Thailand for medical tourism?

Research question 1.3: What dimensions of risk have they experienced during their stay in Thailand for medical tourism?

Research question 1.4: What dimensions of risk will they receive after travelling in Thailand for medical treatment(s)?

Research question 2: Is there a significant relationship between a medical tourist's perceived risk and destination image?

Based on this research question, four hypotheses have been developed:

Hypothesis 1: There is a direct negative relationship between risk and cognitive image perceived by medical tourists

Hypothesis 2: There is a direct negative relationship between risk and affective image perceived by medical tourists

Hypothesis 3: There is a direct, positive relationship between cognitive image and overall image perceived by medical tourists

Hypothesis 4: There is a direct, positive relationship between affective image and overall image perceived by medical tourists

Research question 3: What is the nature of the relationships among risk, quality, overall image and satisfaction?

With regard to this research question, the following hypotheses will be proposed:

Hypothesis 5: There is a direct positive relationship between risk and quality perceived by medical tourists

Hypothesis 6: There is a direct positive relationship between quality and overall image perceived by medical tourists

Hypothesis 7: There is a direct positive relationship between quality perceived by medical tourists and their satisfaction

Research question 4: What is the role of culture in creating destination loyalty and its antecedents namely quality and satisfaction?

Based on this research question, the following hypotheses will be proposed:

Hypothesis 8: There is a direct positive relationship between medical tourists' culture and their perceived quality

Hypothesis 9: Culture positively moderates in the relationship between quality perceived by medical tourists and their satisfaction

Hypothesis 10: Culture positively moderates in the relationship between medical tourists' satisfaction and their loyalty toward medical tourism destination

Research question 5: What are the relationships between overall image of the destination and medical tourists' satisfaction on their loyalty toward medical tourism destinations?

Based on this research question, the following hypotheses will be proposed:

Hypothesis 11: There is a direct positive relationship between overall image of medical tourism destination and medical tourists' satisfaction

Hypothesis 12: There is a direct positive relationship between overall image of medical tourism destination and medical tourists' loyalty

Hypothesis 13: There is a direct positive relationship between medical tourists' satisfaction and their loyalty toward medical tourism destination

Research question 6: Is there the moderating role of medical tourists' perceived risk on the relationship between overall image of destination and satisfaction as well as the relationship between satisfaction and loyalty?

Based on this research question, the following hypotheses will be proposed:

Hypothesis 14: Medical tourists' perceived risk negatively moderates in the relationship between overall of medical tourism destinations and medical tourists' satisfaction

Hypothesis 15: Medical tourists' perceived risk negatively moderates in the relationship between medical tourists' satisfaction and their loyalty

Research question 7: Is there the mediating role of satisfaction between perceived medical product and service quality and consumer loyalty as well as between overall image of the destination and consumer loyalty?

Based on this research question, the following hypotheses will be proposed:

Hypothesis 16: Medical tourists' satisfaction positively mediates the relationship between Quality perceived by medical tourists and their loyalty toward medical tourism Destination

Hypothesis 17: Customer satisfaction positively mediates the relationship between overall image perceived by medical tourists and their loyalty toward medical tourism destination

1.5 Definitions of terms

Perceived risk — is described as the likelihood of perception of an individual about the probability that a particular action will lead them to a situation exposed with danger more than acceptable limit, and will lead to influence travel-making (Mansfeld, 2006)

Culture — is defined as "the collective programming of the mid which distinguishes the members of one group or category of people from another (Hofsfede, 1997, p.9)

Cognitive image	refers to the individual's beliefs and knowledge about the attributes of the destination (Beerli and Martín, 2004; Bauer, 1960).
Affective image	refers to the evaluation stage, concerning the feelings that the individual associates with the place of visit (Beerli and Martín, 2004).
Overall image of the destination	can be defined as mental pictures a person holds about the characteristics of a destination including infrastructure to cultural, natural and social attributes (Coshall, 2000; Beerli and Martin, 2004)
Perceived quality	is defined as the medical tourists' perception of overall components of both core-product and service-product performance (Han and Hyun, 2015), in other words, both medical products and service.
Satisfaction	refers to consumers' overall evaluation about products and service fulfillment (Oliver, 1997; Chen and Tsai, 2007).
Behavioral loyalty	can be defined as a behavior that is shown by a consumer to a destination within the form of repeated purchases (Back and Parks, 2003).
Attitudinal loyalty	refers to an attitude that is shown by a consumer to a destination within the form of recommend the product/ destination to other consumers (Dick and Basu, 1994; Dimitriades, 2006).

1.6 Limitations of the study

The results of the present study should be viewed in light of several limitations. First, this study will be conducted in one destination, or Thailand in this study, employing a convenience-sampling approach. The findings of the study are not intended to be generalizable to other medical tourism destinations in other geographic locations. Another limitation the

imbalance of profile of international tourists such as age, gender, education, and nationality will be happened due to a convenience-sampling approach. Finally, the limitation is regarding to a low response rate that can lead to sample bias, low power, and inaccurate effect although some of steps designed to promote responses such as personally contacting potential respondents and asking them to participate, sending a reminder to no respondents, assuring respondents of confidentiality, and making the survey short and easy to complete will be adopted.

1.7 Outline of the dissertation

The dissertation will be structured in a logical way introducing the progression of the research as well as its findings. This study attempts to provide all the relevant information and description of the steps for the fulfillment of the objectives of this dissertation. The dissertation will include five chapters with more detail as shown in Figure 1.2.

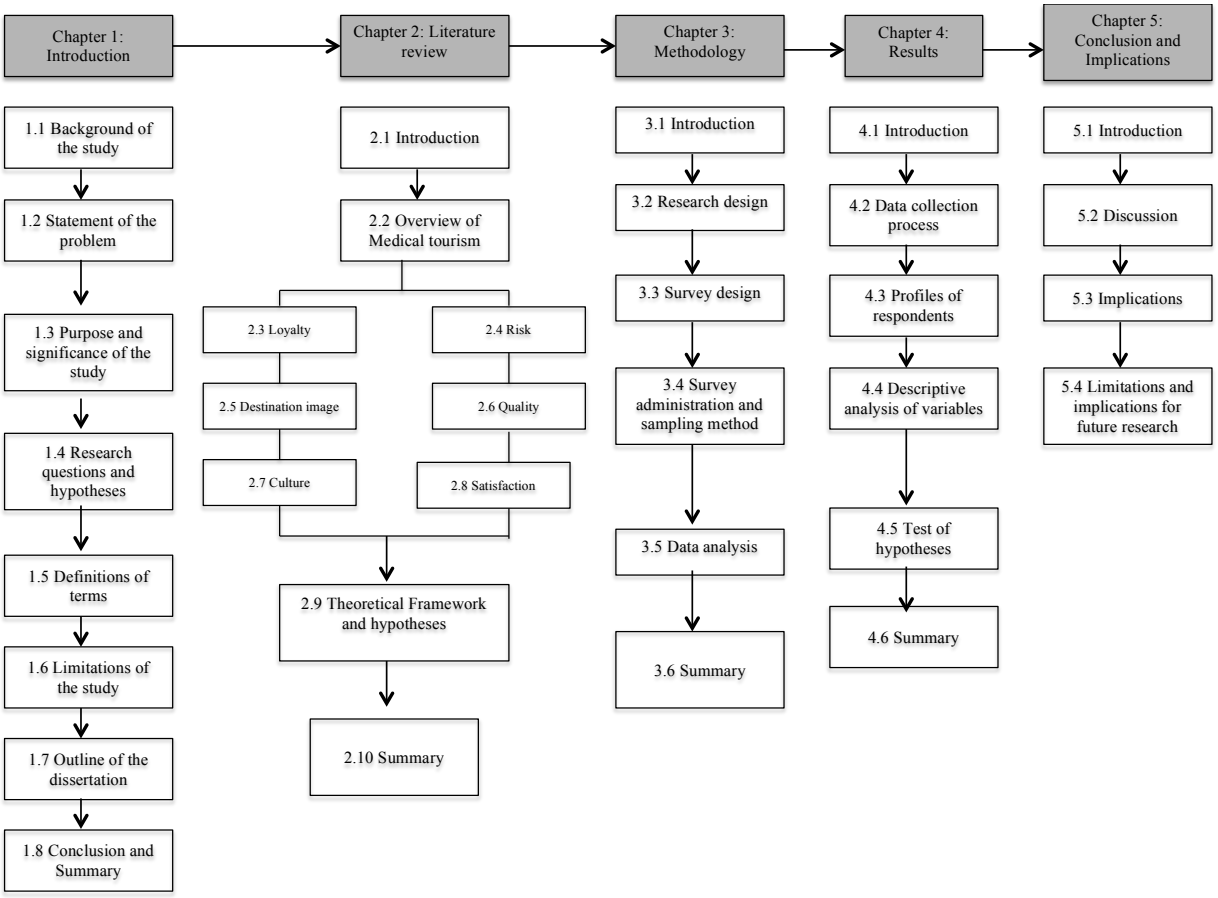


Figure 1.2 The structure of the dissertation

Source: Developed by the researcher

Chapter One describes the main focus of the dissertation and at the same time the necessity for the research in the chosen are will be presented. Moreover, the objectives, research questions, definition of terms, limitations and outline of the dissertation will be discussed in brief.

Chapter Two will focus on the literature relating to medical tourism and five main constructs used in this study. In other words, this chapter will begin with describing overview of medical tourism. Next, the author is going to discuss the five independent variables (risk, culture, quality, image and satisfaction) and one dependent variable (consumer loyalty) from the previous study done by other researchers. Following a description of each construct, the

relationships among aforementioned factors will be discussed. Finally, Theoretical framework and hypotheses will be presented.

Chapter Three will focus on how to design the study survey, survey administration and sampling method. The last part of this chapter will provide data analysis and also summary.

Chapter Four will explain the findings of this study including data collection process, profiles of respondents, descriptive analysis of variables. Finally, the test of hypotheses and summary will be included.

Chapter Five will discuss the research findings presented in Chapter Four. It also identifies limitations for this research and concludes with recommendations for future research in the context of medical tourism.

1.8 Summary

Medical tourism is a growing sector in many countries around the world. Consumer loyalty is the key in today's competitive medical tourism. The purpose of the study is to develop and evaluate a theoretical structural model for establishing a medical tourist's loyalty by using four main factors, namely risk, image, quality and satisfaction affecting medical tourists' intention to revisit the destination as well as intention to recommend the destination to others. This study will be conducted in a particular medical tourism destination, in Thailand because Thailand is the world's largest medical tourism destination. Moreover, the researcher is Thai and the findings of the study will therefore provide useful information to stakeholders in medical tourism in Thailand such as health-care providers and other organizations or government including Tourism Authority of Thailand, the Ministry of Tourism and Sports in sustaining medical tourism in the long term.

Chapter 2

Literature Review

2.1 Introduction

The main purpose of this study was to develop and test a theoretical model, which represents the role of culture, quality, risk, image and satisfaction in contributing to medical tourism destination loyalty. Due to the constructs of the study, the main academic discipline to be used was that of marketing. Moreover, the concept of risk, culture, quality, destination image, satisfaction and consumer loyalty have received a lot of research attention within the discipline of leisure, recreation and tourism as well as the psychological literature. Therefore, a multi-discipline approach (marketing, leisure, recreation and tourism and psychology) has been used so as to address the research question posed in this study. However, these disciplines would not be addressed in isolation, rather, the mutuality of each would be recognized and used to enhance the understanding of the complexities involved in medical tourism.

In literature review, the author discussed the five independent variables (culture, quality, risk, image and satisfaction) and one dependent variable (consumer loyalty) from the past study done by other researchers. The author also defined and described din details on each variable with the supporting literature done by others. Therefore, this chapter reviewed the relevant literature under the following headings that consist of 10 sections (see Figure 2.1).

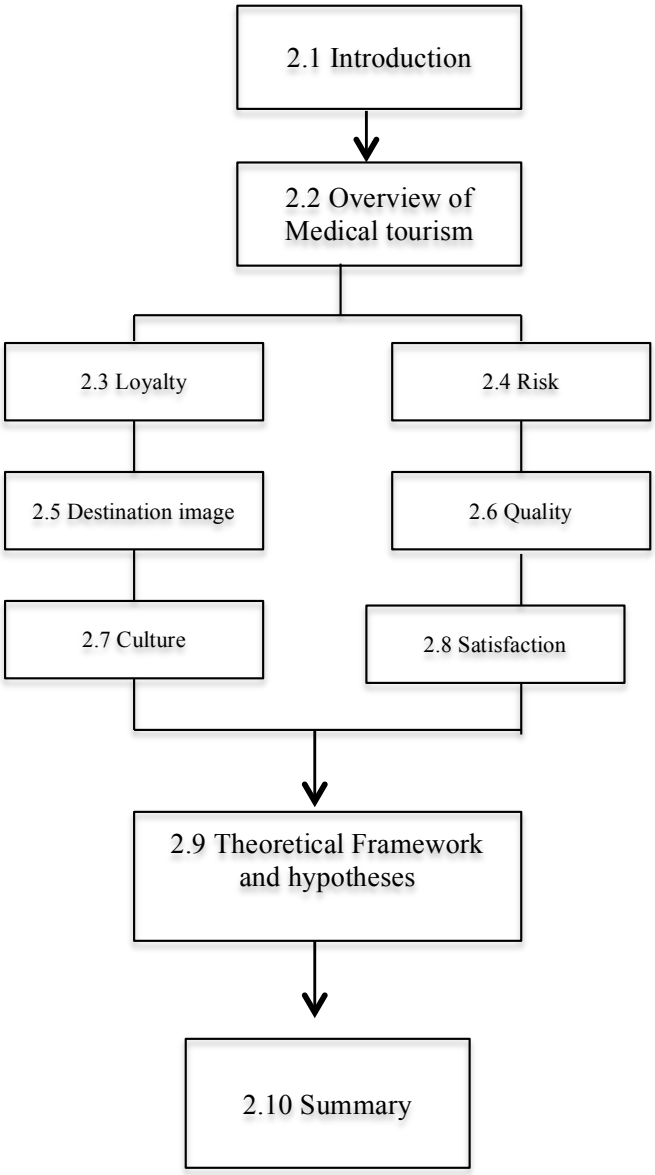


Figure 2.1 Literature concept map

Source: Developed by the researcher

2.2 Overview of medical tourism

The overview of medical tourism starts with definition of medical tourism, followed by main drivers of medical tourism and medical tourism in Thailand.

Definition of medical tourism

Medical tourism is a problematic term because it is no universally defined and applied consistently (Lee, 2006). The word "medical tourism", "wellness tourism" and "health tourism" are used interchangeably in the literature. It is necessary to comprehend the definition of medical tourism. Some researchers grasp the notion of medical tourism and health tourism, such as that of Henderson (2004) stated that the health care considered from medical tourism through cosmetic surgery to spas and alternative therapies. Similarly, Mecir and Greider (2007) defined the terms "medical tourism" and "health tourism" as treatment or surgery which has been planned in advance to take place outside a patient's usual place of residence. Hall (2011) identified some of the interrelationships between different areas of health and medical tourism including wellness tourism, stem-cell tourism, transplant tourism, dental tourism, abortion tourism, and Xenotourism. The same author attempted to link the concept of wellness and illness as well as other regulations in order to motivate people in engaging consumers to purchase health products and services in other countries.

According to Bookman and Bookman (2007), medical or health tourism is described as the sale of high-tech medical care to consumers in other countries. However, health tourism and medical tourism are just related concepts but two different definitions, in other words, the medical tourism serves as a subset of health tourism (Carrera & Bridges, 2006). Most scholars mentioned that health tourism is divided into three components: medical care, wellness and fitness (Ghazali, 2002). The medical market refers to tourists seeking cure in terms of medicinal

and spa treatments, surgical operations, alternative medicine and rehabilitation. The wellness tourism market refers to the activity that rejuvenates, maintains the state of wellness physically, mentally and socially. Finally, the fitness market focuses on getting the optimum level of fitness by performing more strenuous activities which eventually helps to maintain health and prevent ailments.

In its broadest conceptualization, medical tourism refers to patients travelling to other countries with the collaboration purpose of obtaining medical, dental, surgical and other forms of specialization treatment and tourism (El Taguri, 2007; Hutchison, 2005; Ramirez de Arellan, 2007). Medical tourism is also defined as the provision of cost-effective medical care in attracting patients jointed with their traveling in oversea (Gupta, 2004). Although, both private and public hospitals directly involved in medical tourism, the private medical sector is gained more attention from medical tourists, as noted by Gupta (2004). Likewise, Johnson et al. (2010) distinguishes medical tourists as patients who leave their country of residence outside of established cross-border care arrangements made with the intent of accessing medical care, often surgery, abroad.

A comprehensive model of medical tourism proposed by George (2004) described that medical tourism starts with medical tourists moving from their countries of residence to destination regions, or those regions where medical treatments are available. Subsequently, the transit refers to both the actual mode and trajectory of the transportation utilized for this movement as well as any constraining and/or facilitating forces in the travel experience. Consequently, a medical tourism destination includes not only the healthcare facility available but also the additional destination attractions, both natural and cultural. In other words, the core

product is the healthcare provided, but tourist comforts do form an important hygiene factor in medical tourism (Messerli and Oyama 2004). The model is presented in Figure 4.

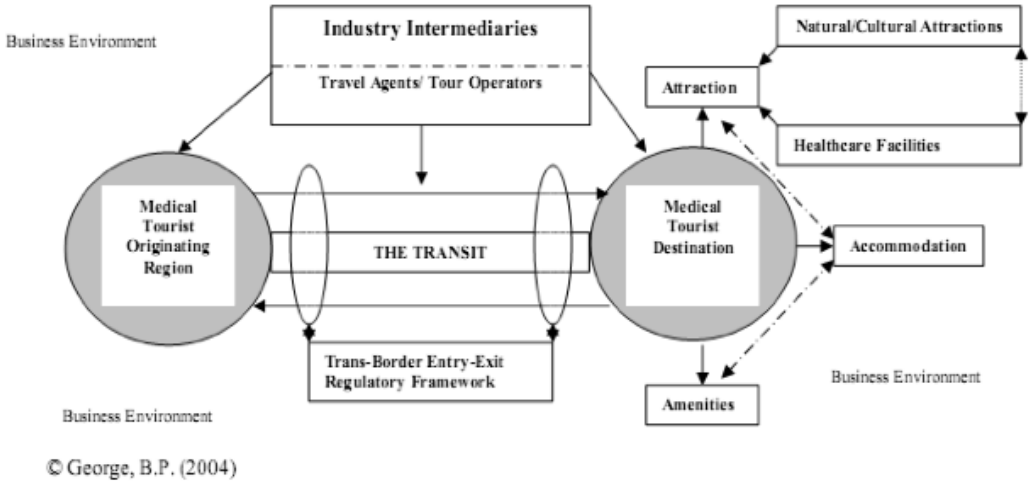


Figure 2.2 A comprehensive model of medical tourism
Source: Bindu and Babu (2009)

Another scope of medical and healthcare tourism mainly focuses on the components of medical and health care tourism as illustrated in Figure 2.2 (Tourism Research and Marketing, 2006). This medical and healthcare tourism consists of four main components or segments, namely illness, wellness, enhancement and reproduction. The first segment is illness segment or medical tourism including a wide range of treatments such as medical check-ups, health screening, dental treatment, joint replacements, heart surgery, cancer treatment, neurosurgery, transplants and other procedures requiring qualified medical intervention. The second or wellness segment of medical and healthcare tourism includes promoting healthier lifestyles (Bennett, King & Milner, 2004) such as treatment in spas, thermal and water treatments, acupuncture, aromatherapy, beauty care, facials, exercise and diet, herbal healing, homeopathy, massage, spa treatment, yoga and other similar products. This case does not require qualified doctors but some cases need medical staffs or professionals of the various associations. Another

segment is enhancement' procedures including mainly for aesthetic purposes (Lee & Spisto, 2007) that some of these procedures require qualified medical personnel such as cosmetic surgery, breast surgery, facelifts, liposuction and cosmetic dental work. The last segment is reproduction tourism or fertility treatment including both fertility treatments *in vitro* and *in vivo,* and similarly, the situations when a pregnant mother travels in another country to give birth.

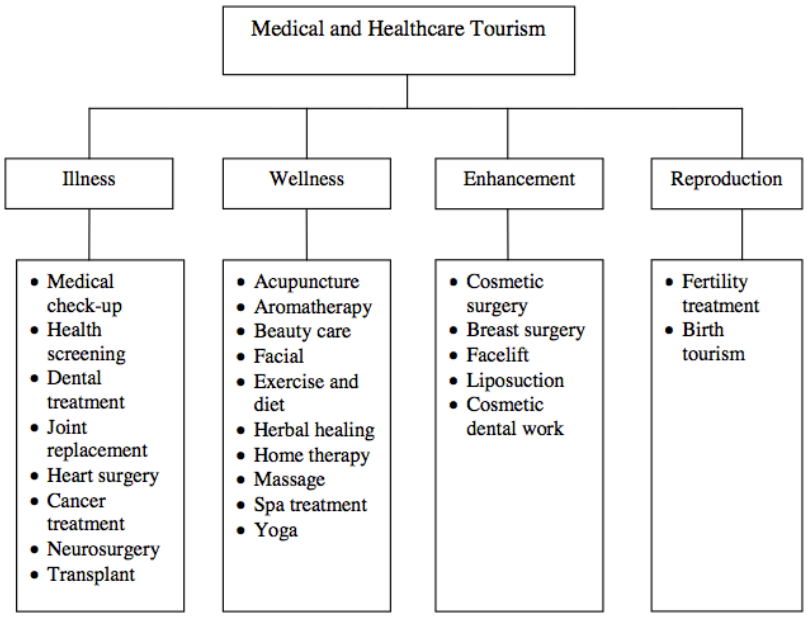


Figure 2.3 Medical and Healthcare Tourism Segment

Source: Tourism Research and Marketing (2006)

Health tourism is a very broad concept of linking health and tourism together (Bavejan, 2012). Health tourism can be divided into two key areas: health and wellness tourism, as illustrated in Figure 6. Medical tourism is attributed to health services. This means that a person has certain health problems, which would be cured. In this case, man needs more complex services such as surgery, dental services, plastic surgery and the like. Health tourism refers to people tend to protect themselves from possible health risks as well as to improve well-being by using services such as spa or beauty treatments and so on. (Bavėjan, 2012).

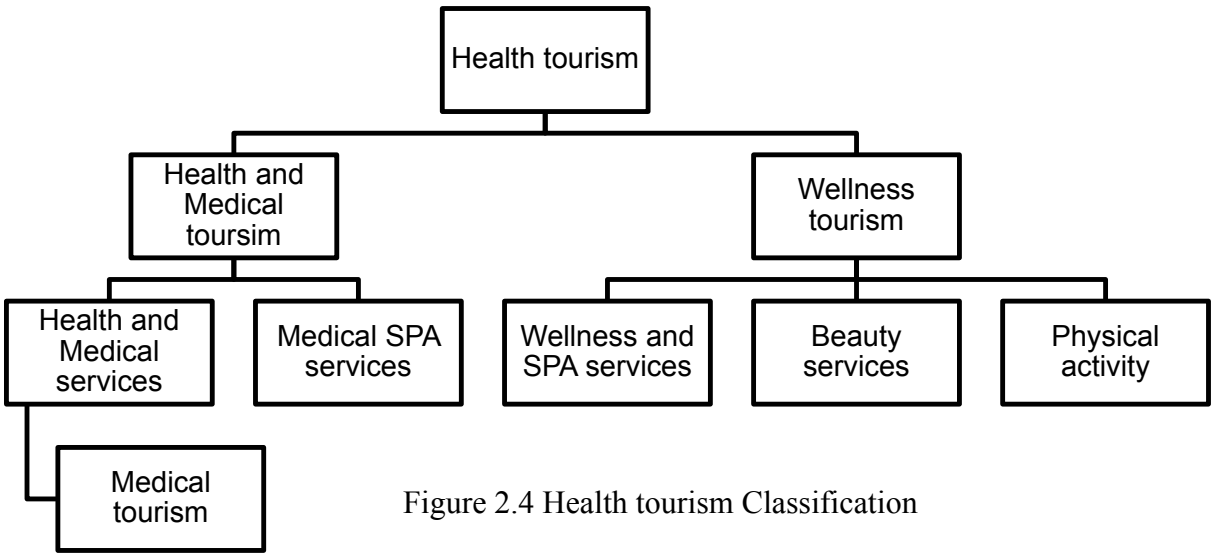


Figure 2.4 Health tourism Classification

Source: Bavejan, 2012

The study of Phua (2010) has provided two main terms used to describe types of cross-border medical tourism: price-sensitive medical tourism and quality sensitive medical tourism. The first type, price-sensitive medical tourism refers to the patients mostly travel abroad in order to seek treatment at affordable price with the standards of developed countries. For example, the prices of medical treatments are cheaper about 40-60% in Brazil, Mexico and Turkey, 30% in Thailand or 20% in India than US price. The other type, quality sensitive medical tourism refers to patients are affluent people searching high quality and sophisticated medical services, often not available in their home countries.

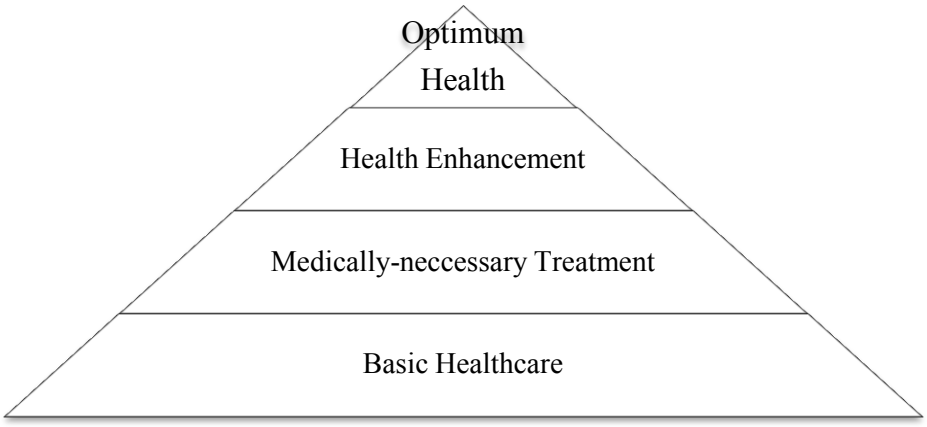


Figure 2.5 Hierarchy of Health Care Needs (Runnels & Carrera, 2012)

Review of the literature on Medical Tourism (Runnels & Carrera, 2012) proposed the hierarchy of health care needs by applying Maslow's hierarchy of needs, as presented in Figure 7. The same authors explain that people will seek for different types of healthcare providers since each person had a different set of healthcare needs. The authors therefore summarized from the analysis of hierarchy in healthcare need that medical tourism consisted of four levels, namely basic healthcare, medical-necessary treatment, health enhancement and optimum health. The first level is described as a basic healthcare of medical tourism including dental care, preventive screening, health checkups and immunization. Medical tourists at this basic healthcare are willing to focus mainly on tourism and at the same time many factors attracting medical tourists' decision making to obtain medical treatments in other countries are affordable price, standard medical service and particularly special packages or promotions from health providers. The second level of hierarchy of healthcare service is medical-necessary treatment. This level refers to medical tourists focusing mainly on medical treatment such as surgery, treatment in various diseases as well as most medical tourists in this level prefer a short trip or travel destinations available for their recuperation. The next level is explained as medical

tourists with additional medical service that is called health enhancement. This health enhancement includes some types of medical treatments that related to fill, to remove, to surgery or to modify some of the body including cosmetic surgery, Lasik, sex reassignment surgery and lose weight. A medical tourist who has healthcare needs at this level will mainly consider the conditions of medical services while they will arrange the tourism to be during or after receiving medical treatment. The last level of healthcare needs is optimum health that refers to medical tourists with a good health condition tend to be a better healthy condition as well as maintain good health. Medical tourists at this level focus more on tourism and include some types of health treatments including acupuncture, holistic healthcare treatment, massage, tradition medicine and spa.

Although there are many relevant terms used to describe medical tourism in the literature, this study will apply a more holistic definition. Medical tourism in this study therefore refers to persons who travel from their normal place of residence to a destination at which medical or surgical treatment is provided or performed, involving more than one night away from the country of residence along with their traveling (Tourism Research and Marketing, 2006).

Main drivers of medical tourism

More than fifty countries around the world have currently announced medical tourism as strategic priority for development because the number of international medical tourists is expected to reach 15 million in 2017 (Almanaitė, 2011). Evidence from previous empirical studies from academic literature revealed several reasons attracting people travel in oversea in order to seek for medical treatments as well as to travel tourist attractions. According to Smith

and Forgione (2008), a two-stage model was proposed to investigate the factors influencing a patient' s decision to obtain health-care services abroad, as shown in Figure 2.6. The first stage refers to choosing a destination or country and the other stage involves choosing a health-care facility. The authors further explained that medical tourists select a destination before consider the medical facility or infrastructure in that destination. More specifically, the first stage or country-specific criteria influencing the choice of destination consists of economic conditions, political climate and regulatory policies. Economic situation refers to medical tourism is a lucrative business that engages in any of the other party. And those that have stable or growing economic situation has an advantage over other countries including choosing medical tourists The political climate stated that Security is important for all medical tourists. In previous research, it was discovered that medical tourists prefer areas with more quiet and stable political environment. Thus, terrorism or the threat of political uprisings leads in damaging medical tourism sector in the country. Finally, regulatory standards: countries such as the United States in search of international medical patients are always interested in foreign country's legal environment. Health Insurance and Accountability Act, which was signed in 1996 in order to protect patient health information use and disclosure in order to protect patients.

The second stage has included four main factors, namely costs, hospital accreditation, quality of care and physician training having an impact on the choice of health-care facilities. Price is the main factor that describe that great medical service price difference between different countries is one of the main things why medical tourism market is expanding rapidly. According to previous studies, it was found that price is the main factor why US residents chose treatment abroad. (Smith & Forgione, 2008). Accreditation standards are an important factor influencing the quality of care and the provision of foreign patients. Medical tourists always

expect the hospital to provide them with excellent quality, international standards of health care. One of the main and most famous is the JCI accreditation standard for accreditation. The quality of services. Foreign countries provide medical services and its quality is also very important factor influencing the choice of patients. According to earlier studies it was observed that medical tourists before choosing a country viewed the treatment of endemic diseases such as HIV, malaria, hepatitis, tuberculosis and others which they may encounter during their visit. So the countries that can boast without endemic disease outbreaks medical history in the eyes of the tourist gets bonuses. Professional qualification: certified and experienced doctors who speak several languages are highly valued. English and / or Russian-speaking certified physician can more detail and tell the patient about the disease, the treatment.

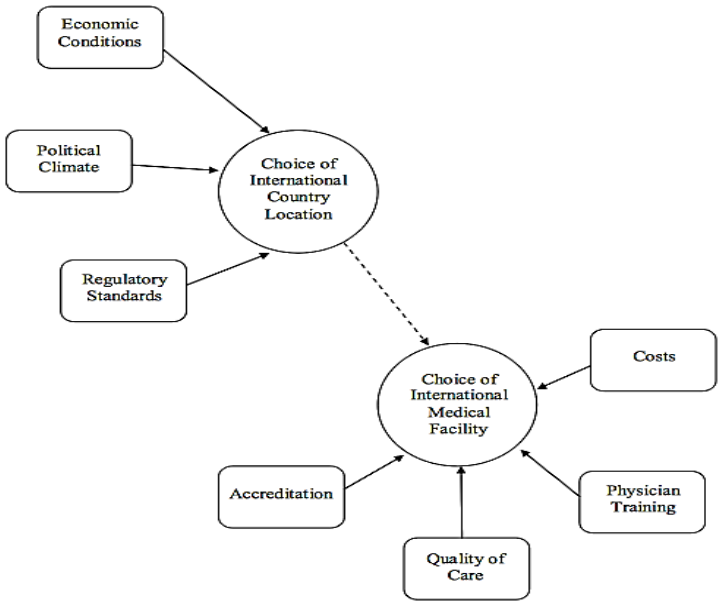


Figure 2.6 Selection criteria for choosing a medical tourist in the country.

Source: Smith and Forgione (2008)

The medical tourism marketplace consists of a growing number of countries competing for patients by offering a wide variety of medical, surgical, and dental services (Horowitz, Rosensweig & Jones, 2007). Many scholars have attempted to define main factors of choosing medical tourism destinations in another country. Cost is one of the most influential determinants for seeking medical treatments in foreign countries (Deloitte, 2014). Patients living in the developed countries are looking for medical treatment in other countries because health care costs have increased tremendously (Connell, 2006). Ricafort (2011) has asserted that people travel overseas for medical treatments because of the high cost as well as high demand in developed countries such as the United States, Western countries, and Middle East countries. Moreover, consumers are faced with escalating healthcare costs in the United States and are forced to comparison shop in order to seek alternative sources for treatment (Smith & Forgione, 2008). Several researchers have confirmed that medical care in developing countries is substantially 6-8 times cheaper than the same medical treatments in developed countries (e.g. Awadzi and Panda, 2005; Moody, 2007), as presented in Table 2.1.

USA vs. The World Cost Comparison

Country	Coronary Artery Bypass	Hip Replacement	Knee Replacement	Gastric Bypass
USA	$88,000	$33,000	$34,000	$18,000
Brazil	$35,000	$15,000	$12,000	$12,000
Costa Rica	$31,500	$14,500	$ 9,500	$11,200
India	$ 9,500	$ 8,000	$ 7,500	$ 6,800
Malaysia	$20,800	$12,500	$12,500	$ 8,200
Mexico	$27,500	$14,300	$12,500	$11,500
Singapore	$22,500	$20,700	$18,500	$14,000
South Korea	$29,000	$15,500	$15,000	$12,500
Taiwan	$21,000	$10,500	$12,000	$13,000
Thailand	$23,000	$13,000	$11,500	$12,000
Turkey	$20,500	$11,800	$12,000	$13,000

SOURCE: Patients Beyond Borders (February 2014)

Table 2.1 USA versus The World Cost Comparison

Source: Patients Beyond Border (2014)

In some cases, the lower cost of medical or health care is important for a patient who does not have health insurance. Newman (2006) illustrates that about 46 million Americans do not have health insurance according to U.S. Census data and about 250 million American have insurance policies that do not include the cost of some medical procedures. As a result, a growing number of American travel to other countries such as Thailand, Costa Rica and Malaysia for cosmetic, orthopedic, coronary and other medical and dental treatments that cost about 20-80 % less than at their home countries (Alsever, 2006). Similarly, the number of medical tourists from developed countries tends to increase according to health care services of some countries promising "first-class services at third-world prices" (Wolfe, 2006), especially in developing countries such as India, Thailand, and Malaysia. Several studies indicated that

medical treatments in popular medical tourism destinations, like Thailand, India, and Singapore could be as low as 10% of those in the United States (Deloitte, 2008) and also surgery is about 30-70% cheaper than in the home country of the medical tourist as well as even 80% in some cases (Caballero-Danell & Mugomba, 2007; Herrick, 2007). For example, a heart surgery in a US hospital can easily cost more than $100,000 while the same surgery offering for enormous savings in hospitals in India and Thailand costs only $25,000 including the travel expenses of the patients as well as their families (Baker, 2010). Another example illustrated by Herrick (2007), has provided the evidence that the estimated cost of coronary artery bypass surgery in the United States is about US$150,000 while it costs only US$10,000 for the total cost of surgery along with 20 days stay in India. Therefore, the medical tourism trend has been made famous for the Americans, Canadians, British and other patients in developed countries who seek for low cost with high-quality medical treatments in other countries.

Another important factor is long waiting lists of medical treatments in the home countries of medical tourists. It appears reasonable to point out that a lower cost of medical treatments, as well as a shorter waiting period, are the fundamental reasons for medical tourists obtained medical treatments in oversea (Horowitz & Rosensweig, 2007; MacReady, 2007). Gill and Singh (2011) indicated that patients along with long waiting lists to get medical treatments in developed countries are willing to seek the same medical treatments for other countries. Besides the rising costs of healthcare along with government-run systems in the United States, American are more willing to search for medical care in other destinations so as to avoid waits and then motivation in traveling for medical tourism tends to increase (Patsner, 2008). According to the National Coalition on Health Care (NCHC), about 500,000 Americans went oversea for the purpose of medical tourism because of long waiting lists in the United States

(NCHC, 2007). Similarly, waiting lists for essential surgery will extend more than a year in some countries with publicly financed health care systems like the United Kingdom and Canada (Runckel, 2007) and medical tourism has generally been accepted as the best solution for reducing long surgical waiting lists (Leahy, 2008; Eggertson, 2006; García-Altés, 2004; Botten et al., 2004). For example, the waiting times for some medical treatments like hip and knee replacement were about 22 -28 weeks in British Columbia, Canada (Runckel, 2007). Furthermore, many medical tourists from the United Kingdom have gone overseas in order to obtain fertility treatments due to the long waiting times (Graham, 2005). Eggertson (2006) further asserted that patients with wait-listed for medical treatment in some countries like the UK and Canada traveled to India to obtain hip and knee replacements. For that reason, about 70,000 Britons traveled to another country for medical care including hip operations, cardiac surgery, and cataracts in 2007, as noted by Donnelly and Sawer (2007). Therefore, many people tend to choose offshore health care in foreign countries since delays in obtaining access to local health-care facilities and they can receive these treatments mentioned above within a few days of referral in most medical tourism destinations (Asia Pacific Post, 2005).

The other reason to address is the quality of care perceived by prospective medical tourists. There are many different definitions and dimensions of quality of care in the domain of medical tourism. When prospective medical tourists establish international networks of health-care providers, they tend to decrease the risks facing during their trips by arranging health care products and services at medical clinics and hospitals that have undergone international accreditation organizations. Many international health care providers have therefore attempted to ensure the quality of care by accrediting from recognized organizations such as Joint Commission International (JCI), the International Organization for Standards (ISO) or the Joint

Commission for the Accreditation of Healthcare Organizations (JCAHO) (Chow, 2009; Marlowe & Sullivan, 2007). Recognizing that this accreditation is the best way to ensure many excellent health-care facilities in medical tourism destinations around the world, in other words, this can guarantee that medical tourists will receive high-quality care at international hospitals and clinics once crossing national borders.

It is important to note that many medical tourists travel abroad for medical interventions that are illegal and are not approved in their home country. In other words, some medical or health care treatments may not be available or may be subject to an illegal issue in their home region. There have been several issues for this reason in the literature, and one typically points out that organ transplantation is one of the topics that interest quite q lot of people in the history. Researchers have different views about this organ transplantation in other countries. While there are some good arguments in favor of offering chances for people to survive or get better, some studies disagree with commercially donated organ, in other words, the literature of this treatment presented in a negative view. Shimazono (2007) and Turner (2008) have indicated that several countries like India, Pakistan, the Philippines, Brazil, Bolivia, Columbia and so on have been heavily promoted as being medical tourism destinations in transplantation as well as exporters of commercially donated organs. As defined by Shimazono (2007), transplant tourism is described as the sales and purchase of organs and other components related to the commercialization of organ transplantation. Some people have suffered from renal failure that this procedure is illegal in their home countries. They thus traveled for this procedure in other countries where kidney selling and buying are possible (Scheper-Hughes, 2003; Bramstedt, 2007). Several articles have revealed that some cases of international organ trade focused on demand attention. For example, live donors involve the transfer from Nepal to India or the

Republic of Moldova to the United States of America (Haviland, 2004; Kates, 2005). Shimazono (2007) further asserted that there were more than 100 cases of illegal kidney transplants happening in cases both donors and recipients from different countries before sending to another country. This type of case happened at St. Augustine Hospital in South Africa in 2001 and 2002 that the donors came from eastern and Brazil while most patients were from Israel. Similarly, Naqvi et al. (2007) noted that more than 2000 kidney transplants are done each year for patients from other countries in Pakistan where the transplant tourism is illegal. The other example of the most common treatment is stem cell-based therapies that are not widely available in the United States due to restrictive government regulations (Runkel, 2007). This can lead patients from the United States, and other countries travel to offshore medical destinations in order to have procedures. Although the existence of evidence revealed that the organ transplantation leads to human trafficking, medical tourists required this treatment have increased gradually around the world. Patsner (2008) stated that two important reasons are influencing patients traveling in oversea because of lack of access and the long waits. The same author further explained that some patients seek for the latest technology or sometimes the technology is illegal, prohibited or not available in the home country.

Medical Tourism in Thailand

Thailand is one of the most popular tourism destination in Southeast Asia with a fascinating history, a devout Buddhist culture, a tropical climate, great food, majestic mountains and great beaches that lure travelers from all over the world. Thailand has indeed recorded a total of about 29.88 million visitor arrivals in 2015, representing a 15.45% increase over about 5 million international tourists in 2012 (Ministry of Tourism and Sports, 2014). Tourism industry

seems to be a crucial role in the social and economic development of Thailand. According to Wangpaichitr et al. (2004), the Tourism Authority of Thailand and the Ministry of Tourism and Sports, which was established in 2002, are responsible for tourism promotion in Thailand. As a result of the active campaigns during the past years, Thailand has established itself as a preferred destination in both the leisure market and the business travel market. For example, in 2007 it was ranked eighth in the world in terms of tourists' awareness of potential destinations, fourth as a nightlife destination, seventh as a beach destination, eighth as a family destination, and tenth as a destination for meeting and conferences. Most importantly, the year 2013 was the most successful in the history of Thai tourism with aforementioned international visitor arrivals. Furthermore, Thailand's tourism revenue also ranked sixth in the world and third in Asia by the World Tourism Organization in 2013. Kim et al. (2013) have claimed that both per capita spending and the absolute number of tourists reached the drive to maturity stage. Therefore, Thailand has sought to enhance both its tourism numbers and revenue by reducing its dependence on leisure tourism and diversifying its tourist market to include other types of travelers, especially in medical tourism.

The medical tourism industry has been growing at a double-digit growth rate for the past few years in Asia. Behind the success of medical tourism destinations in Asia, the major contributing factors include less costly skilled labor force, standard quality medical services, latest medical technologies and facility of use of English language. In particular, medical tourism has become an important industry in Thailand in recent years. According to Youngman (2010), Thailand, India, and Singapore have been successful in attracting some 2.2 million medical travelers. This increase has been attributed to the high quality of care offered by highly trained doctors and nurses, the use of sophisticated medical technologies, and a high level of

hospitality offered to clients (Connell, 2011). Also, the cost of medical treatment in Thailand is significantly lower than the cost of similar treatment in developed economies. Therefore, the Thai government tends to develop medical services to meet international standards with the ultimate aim of envisaging itself as a major medical hub in Asia since 2004 (Euromonitor International, 2011). With a successful marketing campaign, various government entities have been increasingly cooperating with private healthcare providers to promote the country in the international medical tourism market. Subsequently, medical tourism in Thailand has dramatically increased in recent years. The official figures indicate the number of international arrivals for medical treatment and medical tourism spending. The number of foreign patients increased by approximately 13% from 2011, representing from 2.2 million in 2011 to roughly 2.5 million international patients in 2012, respectively (Ministry of Public Health Thailand, 2012) and the majority of medical tourists came from Asia, Europe, and the Middle East (Health and Wellness Tourism-Thailand, 2012).

To confront the challenges of global competition, Thailand attempted to find ways differentiating itself from competitors in ways that do not include direct price discounting. Thailand is well suited for medical tourism because of its competitive advantages such as a well-known tourist destination, its unique culture of services- Thai hospitality, and also high-quality services by qualified staff at a reasonable price. Most importantly, most Thai hospitals have been recognized and approved for the standards set by the Hospital Accreditation in Thailand under the guidance and regulation of the Ministry of Public Health, and also other international standards like JCI or Joint Commission International, ISO and Hazards and Critical Control Points Principle (HACCP) (Rerkrujipimol and Assenov, 2011). Because medical tourism is a relatively new segment of tourism for Thailand, it requires considerable further

development. Both the Tourism Authority of Thailand and the Ministry of Tourism and Sports have attempted to integrate their efforts to promote the country as a medical tourism destination since they have ever accomplished the platinum level of the business in tourism sectors in the past (Rittichainuwat et al., 2001). As a result, to provide a foundation for the further development of Thailand as a medical tourism market, the key behaviors of medical tourist loyalty which is likely to be fundamentally different from those of leisure tourists, should be understood.

2.3 Customer Loyalty

Customer loyalty plays a vital role in the marketing literature, and the loyal consumer is an essential asset of a company (Blackton, 1995). The main concept of loyalty has derived from the benefits associated with retaining existing customers (McMullan, 2005). As noted by Hayes (2008), customers are the driving force for profitable growth as well as customer loyalty can lead to profitability. Research indicated that brand loyalty is linked to business performance (Reichheld, 2003) and at the same time is critical to a long-term sustainable profitability (Salegna and Goodwin, 2005). Chu (2009) also stated that loyalty is a positive and behavior of customers that promises to repurchase the same brand in the future. Given that the main reason for customer loyalty is the profitability of firms, loyalty refers to the consumers' deep commitment to both products and services, in other words, the customers will continuously repurchase products or services from the same brand. A typical loyal customer will not switch to other brands under the change of market situation as well as the competitive market power, as indicated by Oliver (1997). Therefore, the marketing literature pointed that managers should understand the strategies building customer loyalty in order to hold on existing consumers,

motivating them to spend more as well as getting them to recommend products and service to the other people. Several market researchers assert that customer loyalty can lead to positive outcomes such as a reduction in costs, augmented sales, foreseeable profit flows (Terrill et al., 2000; Ostrowski et al., 1993), increased competitive advantage (Bharadwaj et al., 1993), and is critical to a firm's survival and growth (Reichheld, 1996).

Customer loyalty on product and service is a wide concept, and there is no universally accepted definition among researchers in previous studies (Dick & Basu 1994; Jacoby and Chestnut 1978; Oliver 1999; Uncles, Dowling, & Hammond 2003). The literature also reveals that loyalty is a very complex, complicated and conflicting construct of research (Salegna & Goodwin, 2005; Javalgi et al., 1997; Fournier 1998; Oliver 1999; Pritchard, Havitz, and Howard 1999; Reichheld 2003; Sirgy & Samli 1985; Copeland, 1923; Brown, 1952) existing among researchers to this day. There are numerous definitions of customer loyalty in the marketing literature, see Table 2.2. The definitions of customer loyalty have been interpreted in different ways by different researchers. For example, Jocoby and Kyner (1973) who is one of the most used definitions for loyalty defined loyalty as "a biased behavioral response expressed over time by a decision making unit with respect to one or more alternative brands out of a set of brands and being a function of psychological processes" (p.2). Similarly, loyalty has defined a characteristic of customers who considered only the same brand as well as repurchased that brand without seeking any information related to it (Newman & Werbel, 1973). The study of Fornell (1992) revealed that not only repeats purchasing but also willing to spread positive word-of-mouth about a service provider are considered the leading indicators of customer loyalty. Oliver (1999) has defined loyalty as "a deeply held commitment to rebuy or re-patronize a preferred product or service consistently in the future, causing same repetitive brand

or same brand-set purchasing, despite situational influences or marketing efforts" (p.31). Later, loyalty is described as a product of repeat purchase, self-stated retention, price insensitivity, resistance to counter-persuasion, and recommendation to others (Jaishankar et al., 2000).

Author	*Definition*
The Global Loyalty Agency	all the feelings or experiences that would incline a customer to consider the re-purchase of a particular product, service or brand or re-visit particular company, shop or website
Newnan J.W., Werbel R.A.	repeat purchase of a particular brand, without considering purchase of any other available brand
Jacoby J., Chestnut R.W., Day G.S.	customer's predisposition towards the brand as a function of psychological processes
Storbacka K., Lehtinen J.R.	intention to act and willingness to interact with others
Bloemer J., de Ruyter K.	customers' non-incidental and intentional actions displayed over a long period of time towards a particular service/product supplier which operates among numerous and similar service/product suppliers
Olivier R.L.	deeply-term engagement and product/service/brand re-purchase intention displayed toward a particular product, service or brand
Reichheld F.F.	willingness to invest in further product/service/brand relationship development
Dick A.S., Basu K.	function of attitude manifested in behaviour
Jacoby J., Kyner B.D	the biased (i.e. non-random), behavioural response (i.e. purchase), expressed over time, by some decision making unit, with respect to one or more alternative brands out of a set of such brands, and is a function of psychological (i.e. decision making, evaluation) processes
Zawadzka A.M.	the result of rational-functional motivation teamed up with emotional-symbolic motivation

Table 2.2 Definitions of customer loyalty

Souces: Katarzyna Szczepańska1 and Patryk Paweł Gawron (2011)

More specifically, there are many perspectives of consumer loyalty in the literature. According to Bobalca (2013), there are three main approaches of customer loyalty from previous studies, namely unidimensional approach, bi-dimensional approach and multi-dimensional approach. A unidimensional approach refers a patronage behavior before 1970, in other words, customer loyalty has been defined to explain only regarding results, or to repeat the

purchase but not of reasons (Bobalca, 2013). The same author further explains that loyalty is considered as a simple variable that measures the frequency of customer purchase but not investigate as a construct. The behavioral dimension of loyal consumers can be divided into three sub-segments: forced to be loyal, loyal due to inertia or functionally loyal (Kuusik, 2007). The first sub-segment refers to consumers who can be forced to be loyal. Even if consumers do not want to buy a certain product or a brand, loyal consumers are made to buy. For example, when the consumers with the financial situation can limit their selection of products as well as the provider has a monopoly over a market, consumers may still have to buy certain products and services. Grönholdt et al. (2000) have mentioned that firms with a low price strategy had a high degree of loyalty among their consumers rather than their consumer satisfaction. Conversely, firms with heavy investment on branding are more likely to have a high level of consumer satisfaction but scored a lot lower on customer loyalty. The second sub-segment is described as a result of inertia, in other words, consumers do not switch companies due to relative or comfort low importance of the particular products and services (Reichheld, 2003). If the choice in other companies has low importance, consumers will not spend time and effort on searching alternatives. This inertia-based behavioral loyalty is consistent with the approach of cognitive loyalty proposed by Oliver (1999) that can be depended on prior knowledge or recent experience-based information. Bendapudi and Berry (1997) further explained that although consumers do not switch product brands when they are unsatisfied, they believed the alternatives are as much bad as the brand they are using or even worse. Finally, Wernerfelt (1991) stated that inertia occurs as a result of lack of information about attractive characteristics of the brands. The last sub-segment of behavioral loyalty or functional loyalty is based on the reason why consumers are loyal. Cost-based brand loyalty is described as the benefits of using

a brand Wernerfelt (1991) have a positive effect on the choice of brand. Also isn't profitable in the long run.

The second approach, or bi-dimensional approach has proposed two perspectives in defining customer loyalty: behavioral and attitudinal. In other words, this approach is a relationship between attitude and behavior. Owing to a questionable concept of consumer loyalty in the marketing literature, many studies must endeavor to emerge this two-dimensional view. To begin with, Day (1969) began the study by proposing a two-dimensional loyalty. This is a need to recognize that attitude to the product would distinguish the intention of a consumer to be truly loyal from the spuriously loyal consumers and subsequently; consumers' retention will arise from environmental pressure, convenience or habit. The same author also suggested that attitudinal measure should be integrated with behavioral measure in order to conceptualize loyalty. That means consumers who are to be truly loyal have to hold a favorable attitude to the products or services as well as purchase them repeatedly. Consequently, the study of Day reveals that a combination of attitude and repeat patronage used as a measurement of customer loyalty is related to consumer consumption rather than a measurement of repeat patronage. In the 1970's, Olson and Jacoby (1971) have supported the concept of Day's loyalty with measures of cognitive and behavioral loyalty. Customer loyalty can be described as a "process in which various alternative brands are psychologically compared and evaluated on certain criteria and the selected brand or brands are selected" (Olson and Jacoby, 1971, p. 49). There is further important evidence supporting the bi-dimensional approach that in order to successfully identify the relationships when measuring loyalty should involve more than simple repurchase usage, in other words, measuring loyalty should include an attitudinal measure (Backman and Crompton, 1991). Foremost among there is its purported capacity to include two aspects of the

phenomenon in marketing literature: behavioral and attitudinal loyalty. Behavioral loyalty is critically important for a firm because it refers to a behavior shown by a consumer to a firm within the form of repeated purchase (Back and Parks, 2003). In other words, the customer who has continuously used a particular brand is loyal to this brand (Odin et al., 2001). Besides repurchase probability, behavioral loyalty also includes long-term choice probability and switching behavior. Attitudinal loyalty is mostly depicted as attitude focusing on the psychological commitment of the consumer (Odin et al., 2001). Bennet and Thiele (2002) further defined attitudinal loyalty as consumers' deal with the intensive problem-solving behavior that covers the brand and feature comparisons and leads to strong brand preferences. Attitudinal loyal can be most summarized as an analysis of the customer attitude that includes the consumer's psychological loyalty for the brand (Quester & Lim, 2003) and at the same time the attitudinal data used for measured attitudinal loyalty is related to not only affective and psychological factors within the structure of loyalty but also the commitment and loyalty feelings (Bowen and Chen, 2001). After that, many studies have increased to focus customer loyalty on two-dimensional aspects, or attitudinal and behavioral loyalty (e.g. Kumar and Shah, 2006; Jones and Taylor, 2007; Kumar and Reinartz, 2006; Bove et al., 2009; Rundle-Thele & Bennett, 2001; Baloglu, 2002; Ha, 1998). Rundle-Thiele and Bennett (2001) believed that to integrate both attitudinal and behavioral loyalty investigating a customer loyalty is appropriate for helping predict of future customer loyalty. Baloglu (2002) claimed that a bi-dimensional construct of customer loyalty facilitated the identification of different consumer segments due to their loyalty level. Another study of Ha (1998) attempted to combine customer loyalty in both attitude and behavior and concluded that consumers have three different types of loyalty: Loyal attitude but disloyal behavior, loyal behavior but disloyal attitude and loyalty in both of attitude

and behavior. Finally, Bowen and Chen (2001) summarized three approaches for the evaluation of customer loyalty including behavioral measurement, attitudinal measurement, and composite measurement (a combination of behavioral and attitudinal measurements). Customer loyalty matrix is the example of comprising attitudinal loyalty, or a psychological construct and behavioral loyalty. As presented in Figure 2.7, Backman (1988) employing Jacoby and Kyner (1973)'s definition of loyalty has provided a combination of integrated behavioral and attitudinal measurements of loyalty so as to compute an index measuring respondents' loyalty. The measures of combining both behavioral and altitudinal loyalty are assigned to one of four cells that constitute the loyalty paradigm and low loyalty, latent a loyalty, spurious loyalty and high loyalty were included. More specifically, low loyalty refers to participants with low behavioral consistency as well as low psychological attachment while latent loyalty is described as participants with high psychological attachment, but low behavioral consistency. Another category, spurious loyalty is explained as participants with high behavioral consistency, but low psychological attachment. The other category, or high loyalty refers to participants having high behavioral consistency and high psychological attachment. Therefore, even though the many early loyalty researchers considered frequent buying as loyalty, modern research shows that repeat purchasing is not a sufficient indicator of loyalty (Jacoby and Kyner, 1973; Reichheld, 2001).

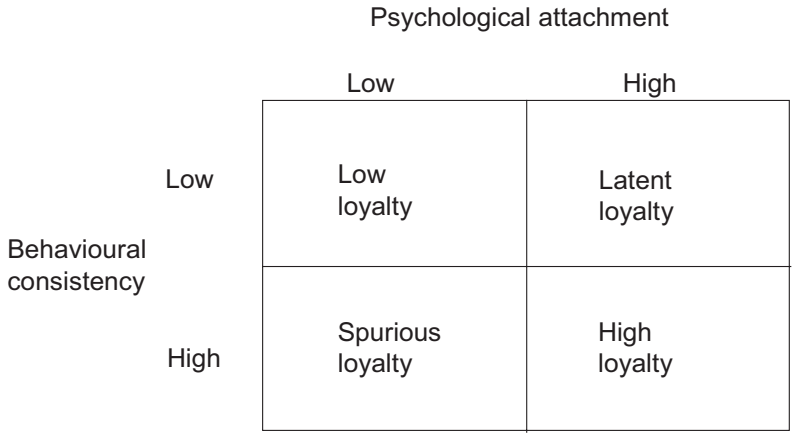


Figure 2.7 Consumer Loyalty Matrix

Source: Petrick, 2004; Backman, 1988

The last approach is a multi-dimensional approach to customer loyalty. This concept includes cognitive, affective and conative arising from the subjects of many previous studies in the consumer behavior field (Akerlund, 2004). Cognitive stage is explained as the determinations of loyalty perceived by consumers including the offering such as price and quality (Blut et al., 2007). This type of loyalty is considered the weakest one for the reason that consumers' loyalty is directly related to costs as well as benefits of an offering but not to the brand itself. The consumers who have an experience with respect to the cost-benefit ratio will influence directly to their cognitive loyalty. As a result, consumers intend to switch from one provider to another provider once they perceive alternative offerings, specifically the perceived performance related to price (Kalyanaram & Little, 1994; Sivakumar & Raj, 1997). Another stage of the multi-dimensional loyalty is affective loyalty. Affective loyalty refers to a favorable attitude toward a specific product or service brand that related to a function of cognition such as expectation (Blut et al., 2007). Satisfaction can be defined as a global affect

evaluation or feeling state that can be forecasttheoretically991). The study of Bitner (1990) found that expectancy confirmation leads to satisfaction which in turn influence affective loyalty. Affective loyalty also refers deterioration that is the result of an increased attractiveness of competitive offerings (Sambandam & Lord 1995). The last dimension of loyalty is conative loyalty explicating that attitudinal loyalty must be accompanied by a desire to intend an action, in particular, repurchase a particular product or service brand (Oliver, 1999). Although the conative loyalty is stronger than affective loyalty, it still has vulnerabilities too (Blut et al., 2007). The same authors also clarify that diminishing conative loyalty from consumers occurs as a result of repeated delivery failures and thus they tend to try alternative offerings from other providers. Oliver (1999) confirmed that consumers with conative loyalty are still considering alternative offerings from other providers. The study of Dick and Basu (1994) is the example of using three loyalty dimensions affecting repeat purchase, as shown in Figure 2.8. The model has become very popular and is probably one of the most widely cited articles on the topic. The model illustrates that relative attitude drives repeat patronage, depends on antecedent and situational constraints and in turn an association between attitude and behavior affects to further loyalty behaviors. Customer loyalty in this model is also explicated as the relationship between an individual's relative attitude and their repeat patronage.

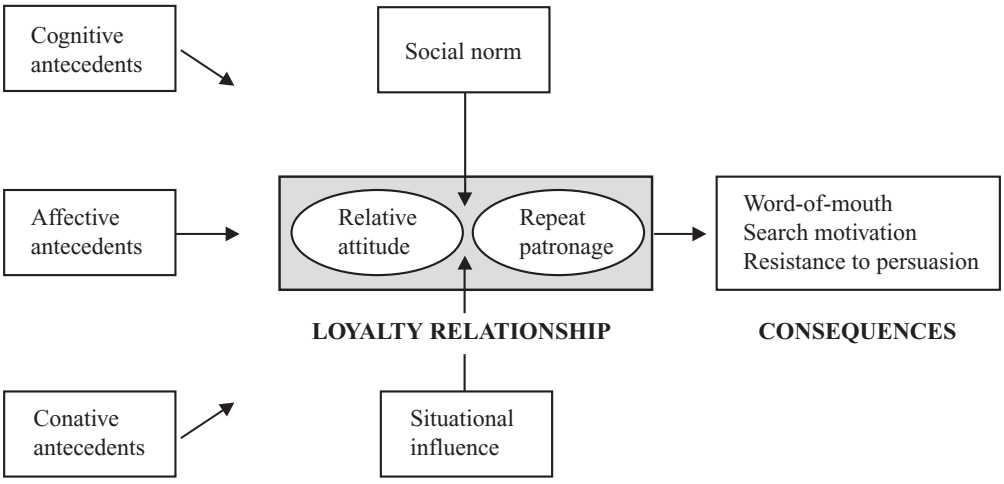


Figure 2.8 Framework for Customer Loyalty Relationship

Source: Dick and Basu (1994)

Another perspective of a multi-dimensional approach of customer loyalty is proposed by Lu et al. (2001) who pointed out that the three levels of customer cognition, affection and behaviors of customer loyalty should be measured simultaneously. A number of studies have incorporated a new dimension of conative loyalty in the cognitive, affective, conative and behavioral approach in hopes that this approach will be the most comprehensive depiction of customer loyalty. Similarly, the study of Oliver (1999) had been categorized into four sequential phases as presented in Figure 2.9. Action loyalty is described as a necessary result of previous engaging phases of loyalty that may prevent a customer from patronizing the service organization (Oliver, 1999). In other words, a readiness to act, or to purchase in this case is the result of the three previous stages of loyalty, namely cognitive, affective and conative loyalty.

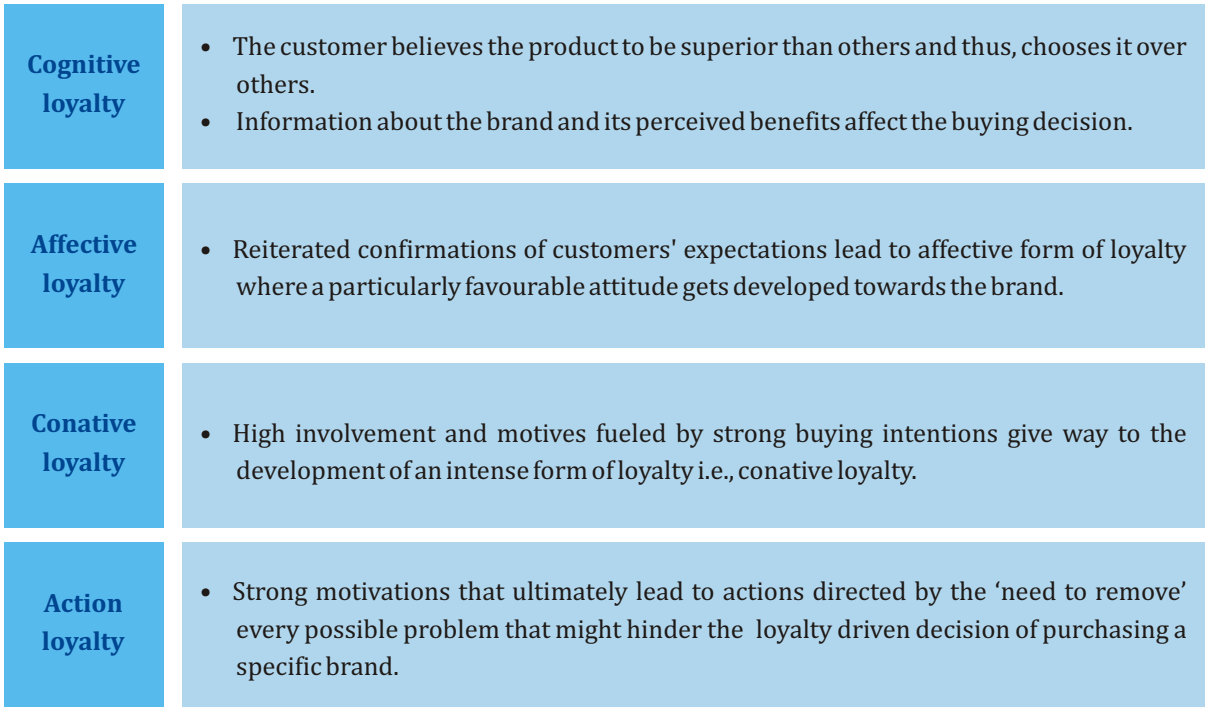


Figure 2.9 Phases of Customer Loyalty Development

Source: Oliver (1999)

In summary, the marketing literature has confirmed an evolution of the concept of customer loyalty through time (Alhabeeb, 2007; Khan, 2009; Dick & Basu 1994; 2007; Worthington et al., 2009) because the evolution has involved various stages and interpretations. Loyalty is defined as a unidimensional loyalty or only repeated purchase behavior (e.g. Jacoby and Kyner, 1973; Cunningham, 1956; Farley, 1964) in the early studies. More recent studies have focused the characterization of loyalty as a multi-dimensional concept (e.g. Dick and Basu, 1994; Oliver, 1999; Worthington et al., 2009). However, most previous studies refer to customer loyalty including two aspects, namely attitudinal and behavioral loyalty (e.g. Zeithaml et al. 1996; Sirdeshmukh et al. 2009; Rundle-Thele and Bennett, 2001; Baloglu, 2002; Ha, 1998). Behavioral loyalty refers to a consumer's repeated purchase of a specific brand chosen

from the available alternatives (Jacoby and Chestnut, 1978; Oliver, 1997) while attitudinal loyalty can be described as both cognition and emotion. This attitudinal loyal can easily observe when consumers have a positive feeling about the same product or service brand and are more likely to recommend it to others, like families, relatives, and friends (Agrawal, 1996). Finally, Too et al. (2001) have confirmed that loyalty explaining both psychological and behavioral dimensions is the strongest conceptualization.

Due to the increasing competition in medical tourism, loyalty has become a critical part of destination marketing. The concept of loyalty formation has received a growing interest from researchers in hopes that intention to return and willingness to recommend the destination to others can help the medical tourism destinations to sustain their business in the long term. Numerous researchers in hospitality and tourism industry have examined usefulness and applications of loyalty. Juan and Yan (2007) pointed out that a division of service industry focusing on the specific relationship between consumers and service providers can pursue further study on the issue of customer loyalty in order to gain a benefit. However, studies on destination loyalty and its relations to other constructs are still lacking in the emerging niche market, or medical tourism segmentation. To better understand the important factors and related constructs explaining consumer loyalty in this market can create a competitive weapon that results in increased patronage and profits. The following provides previous studies describing consumer loyalty in the context of medical tourism as well as health care service.

As noted by Lertwannawit and Gulid (2011), the objective of the research is to investigate in Thailand. To overcome the gap in the literature, the authors have developed a conceptual model for medical tourists' loyalty that combines insights from the tourism industry on customer loyalty with the relationship approach of marketing theory. This ensures that the

model takes proper account of the specific characteristics of medical tourism within its broadened perspective of relationship marketing. The results found that service quality has a positive impact on value, satisfaction, and brand trust, which in turn influence positively to medical tourists' behavioral loyalty. Moreover, this study indicated that value, satisfaction, and brand trust have a mediating effect on the relationship between service quality and behavioral loyalty. Finally, nationality concerning individualism and collectivism does not have a moderation effect on the relationship between service quality and value as well as satisfaction and brand trust.

Han and Hyun (2015) have attempted to develop a theoretical model examining the relationships among perceived medical and service quality, satisfaction, trust in staff and clinic, and intention to revisit the clinic and destination country for medical care. Moreover, the authors have tested the moderating role of perceived price reasonableness as well as the mediating impact of satisfaction and trust components. The findings of this study presented that the proposed factors, namely perceived medical and service quality, satisfaction and trust in staff and clinic have a strong explanatory power for outcome variables, effectively predicting intention to revisit the clinic and to revisit the destination country for medical care. In addition, the moderating role of perceived price reasonableness in the proposed conceptual model was supported. Lastly, medical travelers' satisfaction and trust were found to have a significant mediating role.

The study of Mechinda et al. (2010) was conducted, to investigate the antecedents of tourists' attitudinal loyalty towards medical tourism. The factors predicting customer loyalty are examined, in other words, the authors have used five variables; satisfaction, perceived value, trust, destination familiarity and destination image explaining consumers' attitudinal loyalty

towards medical tourism destinations. The authors' intention is to inform theoretically and applied models for promoting medical tourist loyalty in brief continuing medical tourism industry by applying consumer loyalty from the business. The target population consisted of international medical tourists traveling to Thailand for the purpose of obtaining medical treatments as well as visiting the tourist attractions in Pattaya province, Thailand. The findings reviewed that these five factors including satisfaction, perceived value, trust, destination familiarity and destination image, have an influence on tourists' attitudinal loyalty toward medical tourism in Pattaya, Thailand.

Huei et al. (2015) attempted to examine the importance of brand image and its impact on hospital service quality as perceived by the medical tourists. Moreover, the authors examine the interrelationships among perceived service quality, patient satisfaction, and behavioral intention. The authors believe that customer loyalty is the key element in medical tourism success and competitive advantage because medical tourist loyalty can save more cost in finding new customers as well as word-of-mouth promotion. After reviewing all of the past literature, this study has included four main constructs, namely a brand image, patient satisfaction, perceived quality and behavioral intention. The authors described behavior intention as post-purchase behavior including repurchase intention and willingness to recommend to others. The authors collected the sample from medical tourists from Indonesia seeking medical services in Malaysia, in particular, the top four private hospitals in one of the northern states of Malaysia. The study found that brand image of a hospital was evidently shown to have significant positive influence on medical tourists' perception on the quality of the medical services provided by the hospital. Moreover, the result presented the direct relationship between perceived service quality and

medical tourists' behavioral intention. Finally, satisfaction partially mediated the relationship between perceived service quality and behavioral intention.

The study of Chaniotakis and Lymperopoulos (2009) has focused on service quality, satisfaction and word of mouth and how these constructs connect in the context of the health care industry in Greece. The authors tended to fill a gap in the literature related to the effect of service quality dimensions on satisfaction and word-of-mouth and the interrelationships of these variables. The study proposed service quality in five dimensions based on the work of Parasuraman et al. (1985). The five latent variables included tangibles, reliability, responsiveness, assurance, and empathy. The sample of this study was mothers who have given birth to a child during the last five years. The findings have confirmed that more satisfied mothers are from their maternity, the more willing they are to use positive word-of-mouth. And empathy appears to be an important factor in the model because it directly affects word-of-mouth as well as it affects almost all the other dimensions of service quality.

Based on the literature review, the researcher has decided to focus on two main dimensions of loyalty, namely behavioral and attitudinal loyalty. Behavioral loyalty is defined as a behavior that is shown by a consumer to a destination within the form of repeated purchases (Back & Parks, 2003). The other dimension or attitudinal loyalty refers to an attitude that is shown by a consumer to a destination within the form of recommending the product/ destination to other consumers (Dick & Basu, 1994; Dimitriades, 2006). To better understand consumer loyalty in terms of intention to revisit in the medical tourism industry leads to increase profitability and to maintain the position of the destination. Another perspective of a tourist loyalty to a medical tourism destination is a willingness to recommend if the destination to others including friends, family, and relatives. Medical tourist with positive word-of-mouth to

others is considered to be an important factor enhancing the destination image of the destination and therefore the growing number of tourists is accounted to that location (Marrocu & Paci, 2013).

2.4 Perceived Risk

Perceived risk has been a subject of attention in the academic literature over the past 40 years. Since the 1960s, the perceived risk has been studied mainly for its influence on consumer behavior in the decision making process (Pérez-Cabañero, 2007) as well as in explaining and understanding consumer evaluation and buying behavior (Bauer, 1960; Dowling and Staelin, 1994; Mitchell, 1999). "Every willingly takes risks" (Adams, 1995, p.16) is regarded as the starting point of any theory of risk. As humans, we generally engage in some kind of dangerous events every day. In taking up this point of view, researchers have directed substantial effort to understand the conceptualization of risk perceived by people. The literature strongly supported the idea that people will never know exactly certain risks that appear and have to be addressed all the time. Moreover, risk appears to mean different things to different people (Brun, 1994). Boholm (1998) further asserted that people might act and understand about risks are informed by socially and culturally structured conceptions, in other words, what it looks like and what it should or should not be. A number of previous studies have examined the conceptualization of perceived risk in various ways and at the same time Sjoberg (1980) pointed out that the risk construct was "ambitious and many more or less specific meanings (were) attributed to it" (p.302). Bauer (1960) was the first to stimulate the marketing research to explicitly incorporate the perceived risk construct into consumer research. The same author stated that consumer behavior is regarded as an act of risk. This may be because any individual action of

consumption is associated with uncertainty, implying unanticipated and possibly unpleasant consequences. In other words, there were two dimensions, namely uncertainty and adverse consequences in Bauer's definition of research. Since Bauer's conceptualization of buyer behavior as a risk taking activity, many different researchers have been attempting to operationalize the perceived risk concept. Perceived risk or a consumer's subjective estimation is connected with the possible consequences of a wrong purchase decision (Peter & Ryan, 1976). In the 1980's, Stone and Winter (1987) has defined risk in terms of expectation of loss and the amount of loss that occurs when a decision has been made. Another researcher proposes that it seems to be a consensus about essence of risk as the probability that individual will experience the effect of danger (Short Jt, 1984). Rayner and Cantor (1987) mention that risk is often seen as being consisting of the likelihood of adverse events and the magnitude of its consequences. The other study in the field of management by MacCrimmon and Wehrung (1986) has defined perceived as in three different ways including the amount of the loss, the possibility of loss, and the exposure to loss. Subsequently, risk refers to the terms of the uncertainty of buying a product or service and at the same time refers to the unfavorable consequences of a purchase decision (Dowling and Staelin, 1994). Fuchs and Reichel (2010) asserted that consumers perceive risk when purchasing products or services and they usually look for means to alleviate such risk. Therefore, prior research shows clearly that according to Du (2009), many previous studies are highly quoted the models of perceived risk as two dimensions, namely importance and probability of loss. Similar, two sorts of perceived risk in the literature reviewed by Kim and his colleagues (2005) have included uncertainty (Bauer 1960; Cox 1967; Taylor 1974) and expected loss (Cunningham 1967; Bettman 1973; Kogan & Wallach 1964; Peter and Ryan, 1976; Roselius 1971; Stone and Winter, 1987). However, most

popular definition of perceived risk as multifaceted dimension such as social, psychological, physical, performance, financial loss and so on have developed by several researchers (e.g. Peter and Tarpey 1975; Vincent & Zikmund 1976; Peter and Ryan 1976; Bearden & Mason 1978, Dowling 1985). Finally, researchers continue to regard perceived risk as an important construct in explaining and understanding consumer evaluation, choice and buying behavior (Bauer, 1960; Dowling and Staelin, 1994; Mitchell, 1999). Several researchers have confirmed that perceived risk would affect consumer purchase decision because perceived risk is a combination of uncertainty and negative consequences (Peter and Ryan, 1976; Stone and Gronhaug, 1993; Aaker, 1996). Specifically, perceived risk negatively influences consumers' purchase intention (Mitchell, 1999), in other words, "the higher the perceived risk, the more consumers must gamble in the purchase decision" (Chen & Chang, 2013). Researchers therefore need to understand how consumers' perceived risk in order to increase their purchase probability by reducing risk as purchase probability negatively relates to consumers' perceived risk, as supported by (Wood and Scheer, 1996).

A number of previous studies have discussed risk in the tourism industry, in particular since the 1990s (e.g. Roehl & Fesenmaier, 1992; Sönmez & Graefe, 1998; Maser & Weiermair, 1998). "*Risk and tourism are interwoven as the purchase of leisure trip is inherently attached to risk*" (Baker, 2015, p. 4). Because of unique features of tourism products and service, it is undeniable that these products and service inherit the intangibility, heterogeneity, perishability, and inseparability (Williams & Baláž, 2013). Consumers in the tourism industry might perceive greater risk than consumers in other industries. Thus, the survival of the tourism industry depends on how the destinations or businesses can possess the ability to manage risk as well as

the skill to recognize it (Shaw et al., 2012) in hopes that the destinations with risk management will gain and achieve a competitive advantage (Shaw, 2010).

A risk in tourism is a controversial research topic with many disputes and paradoxes. The definition of perceived risk is considered the greatest challenge faced by risk research in the tourism industry (Korstanje, 2009). Yang and Nair (2015) further asserted that the definitions of safety, security and risk are overlapping and confusing. There are numerous definitions of perceived risk from the tourism industry literature. For example, Sonmez and Graefe (1998) is one of the most cited articles in the discussion of perceived risk definition. The authors define perceived risk as tourists' perceptions are concerned about damaging to the decision to travel rather than actual security. Reisinger and Mavondo (2005) defined risk as the uncertainty as well as negative consequences of buying a product. The perception of risk is also defined as an individual's subjective assessment of the real risk present at any time (Chang, 2010). The study of Fuchs and Reichel (2011) defined perceived risk as "a consumer's perception of the overall negativity of a course of action based upon an assessment of the possible negative outcomes and the likelihood that those outcomes will occur" (p.267). A more recent study by Yang and Nair (2014) proposed the relationship chains of concepts related to risk perception from a previous literature, as shown in Figure 2.10. The authors argued that relationship chains generated by perceived risk and fear consist of two separate main streams. Hofstede (2001) indicates that both risk perception and fear are induced by direct stimulus, more specifically; an object triggers fear while perceived risk is triggered by an event with known probability. Subsequently, the second layer has included diffuse feeling, or uncertainty and anxiety. According to Quintal et al. (2005), uncertainty is connected to perceived risk but without probability while anxiety is

related to fear but no direct stimulation from specific object. This specific object is built upon the subject's own imagination as well as fantasy, as indicated by Korstanje (2009). Also, the authors illustrated that tourism space has gained increasing interesting for tourists who are seeking for fantasy, imaginary, reflection and escapism (Light, 2009; William & Baláž, 2014). Consequently, the third layer refers to worry that can be defined as the cognitive response to anxiety and uncertainty (Larsen et al., 2009). Wolff and Larsen (2013) have sated that a concept of worry has not been widely studies in the tourism industry but it receives relative more attention in psychology domain. Worry is defined as a chain of thoughts or cognitive responses that has negatively affected the uncertain outcome or future (Larsen et al., 2009). In contrast, several researchers believed that worry relating to cognitive activity has appositive effect since people are conscious about the possible negative outcome. Thus, they are prepared to manage risk as well as fear (Freeston et al., 1994; Peters et al., 2006). Larsen et al. (2009) finally confirmed that worry about traveling is not influenced by tourists' risk perception towards a risky destination and worry is acted as only a moderator relating to risk perception.

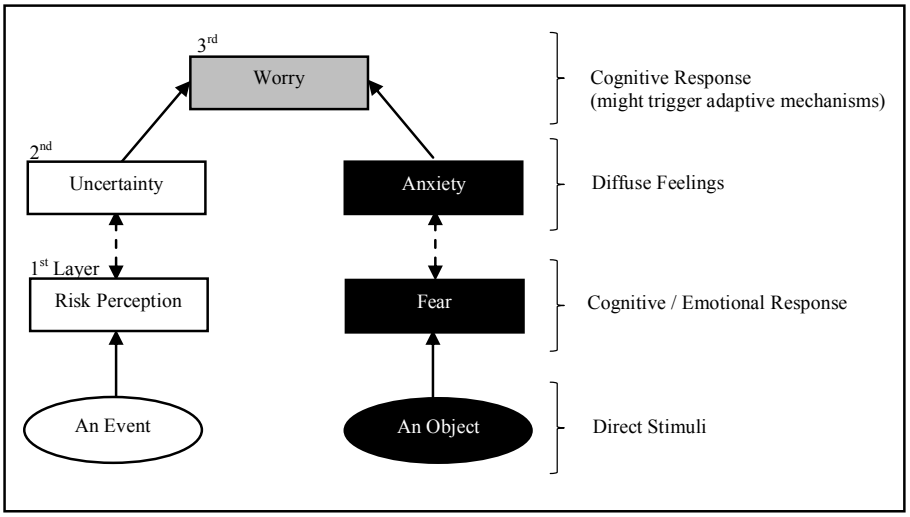


Figure 2.10 The Relationship Chains of Concepts Related to Risk Perception

Source: Yang and Nair (2014)

Many scholars indicated that there are an increasing number of studies on risk in tourism since the attack of 9/11 in 2001 coupled with major tragedies, like the SARS outbreak, the Bali bombings, and the Asian tsunami, resulting in tourist flows as well as regional stagnation (McCartney, 2008; Shin, 2005; Kovari and Zimmyi, 2011; Lepp and Gibson, 2003; Pizam et al., 2004; Simpson and Siguaw, 2008; William and Balaz, 2013; Yang and Nair, 2014). Indeed, the literature pointed out that tourism studies on risk and safety has discussed since 1970s (Sonmez and Graefe, 1998; Tsaur, Tzeng and Wang, 1997; Pizam, 1999) and has exponentially increased in the 1990s (e.g. Maser and Weiermair, 1998; Roehl and Fesenmaier, 1992; Sönmez and Graefe, 1998). As mentioned by Blake and Sinclair (2003) and Santana (2004), unforeseen crises as well as risks can significantly impact on a long-term sustainability and the destination's economy. There has been much dispute between perceived and actual risk in the tourism industry literature. The study of Dickson and Dolnicar (2004) claimed that risk perception is highly subjective. However, the tourism literature emphasized that most studies have focused on perceived or subjective risk rather than real or objective risk (Reisinger & Mavondo, 2005; Quintal, Lee, & Soutar, 2010). This may be because it might be difficult to identify the actual scale and range of risk, as indicated by (Bentlet et al., 2001). It is critical to be aware of the fact that investigating tourists' perceived risk is very important topic for researchers since perceived risk has a positive impact on their current and future travel decision (Yüksel & Yüksel, 2007). For example, the study of Roehl and Fesenmaier (1992) investigated perceived risk in three dimensions including physical-equipment risk, vacation risk, and destination-specific risk while the other study by Pennington-Gray and Schroeder (2013) has proposed seven types of risk perception from international tourists including crime, disease, physical, equipment failure, weather, cultural barriers, and political crises. Additionally, a substantial body of tourism

literature has identified many studies regarding the perception of tourist risk in terms of travel (Roehl & Fesenmaier, 1992; Sönmez & Graefe, 1998; Maser & Weiermair, 1998; Lepp and Gibson, 2003 Floyd et al., 2004; Dolnicar, 2005; Reisinger & Mavondo, 2006; Kozak et al., 2007; Carlton & Jacobson, 2013) as well as risks perceived at the destination (Fuchs & Reichel, 2006; Eitzinger & Wiedemann 2007; Fuchs & Reichel, 2011; Schroeder et al., 2013; Karamustafa et al., 2013; Çetinsöz & Ege, 2013). Moreover, past studies have provided empirical evidences to support the idea that risk is a key indicator influencing tourists' travelling in terms of tourists' decision-making and travel experience (Teng, 2005; Kovari & Zimanyi, 2011). Most researchers found that perceived risk has a strong inverse relationship with travel intentions; in other words, intentions to travel will lower if perceptions of risk are high. Reisinger and Mavondo (2005) have confirmed that travel safety exhibited a positive association on intentions to travel but conversely travel safety was negatively associated with travel anxiety. Finally, the majority of previous research in the tourism literature has identified the multi-dimensional nature of the perceived risk construct as presented in Table 2.3. In a more relevant study, Roehl and Fesenmaier (1992) empirically tested the effects of seven facets of risk including equipment risk, financial risk, physical risk, social risk, satisfaction risk and time risk perceived by tourists during their holidays. In addition to the above seven facets, possible four dimensions of risk that includes financial, psychological, satisfaction and time risks have been discussed in the study of Sönmez and Graefe (1998). In the 2000s, Lepp and Gibson (2003) have used seven facets of risk perceived by American: health, political uncertainties, terrorism, foreign food, cultural handicaps, political and religious rules and crime risks. A year later, Floyd and his colleagues (2004) found that there was a significant affiliation with travel intention of participants in New York after the 9/11 attacks to travel a holiday during

the next year and five facets of risk including perceived social risk, security concerns, travel experience and income. Dolnicar (2005) has suggested five dimensions of perceived risk in examining tourists who intend to travel in domestic and in oversea. These five dimensions of risk included political, environmental, health, planning and property risks. The nationality is used to determine an impact on perceived risk in the study of Reisinger and Mavondo (2006). The authors included thirteen travel risks including financial, cultural, health, equipment/functional, physical, psychological, political, satisfaction, time, social, missing flights and detonating explosives and biological. The results presented there was a significant relationship between the nationality of tourists and risk perception. More specifically, risk perceived by tourists from Hong Kong, Australia and the United States was higher than the risk perception of tourists from Canada, Greece and the United Kingdom. There are many studies investigating the risk perception in several countries. For instance, Çetinsöz and Ege (2013) have attempted to risks perceived by foreign tourists during traveling in Alanya. This study has focused on five different facets of risk that included physical risks, satisfaction, time risk, socio-psychological risks and functional risks. Another study by Schroeder et al (2013) demonstrated the perceived risks of American citizens toward the summer Olympics of 2012 in London and the perceived risk of this study included natural disasters, SARS, food safety, financial crises, infrastructural problems, poor weather conditions, political problems and terror incidents. Crime rates and the terror activities are the highest risks perceived by the respondents. The other study by Karamustafa et al. (2013) aimed to examine the perceived risks regarding Turkey as a tourism destination including six dimensions of risk: time and social risk, financial risk, physical risks geopolitical risks, risks involving holiday experiences, weather conditions and risks regarding hotels. Therefore, the study of perceived risk is still an important issue for

researchers in the context of tourism since how tourists perceive risk is more likely to affect their travel in the future.

Risk category	Description and reference
Nature	▪ Natural disaster – Abbott (1996); Hystad and Keller (2008); National Hurricane Center (2005); ▪ Weather and climatic conditions – Ehmer and Heymann (2008); Met Office (2007); SAWS (2008); ▪ Environmental factors – Hystad and Keller (2008); Page (2007);
Crime and safety	▪ Fraud and crime – Brunt, Mawby and Hambly (2000); Dimanche and Leptic (1999); Garcia and Nicholls (1995); Hall, Selwood and McKeown (1995); Moore and Berno (1995); Pizam, Tarlow and Bloom (1997); Raynor and Robinson (2005); ▪ Acts of terrorism and hijacking – Aziz (1995); Bar-On (1996); Enders, Sandler and Parise (1992); Leslie (1999); Richter and Waugh (1986); Sönmez (1998); Sönmez and Graefe (1998); Sönmez, Apostolopoulos and Tarlow (1999); Wagner, Apostolopoulos and Tarlow (1999);
Health	▪ Infectious diseases – Carter (1998); Cossens and Gin (1994); Lawton and Page (1997); Vellas and Becherel (1995); WHO (2006, 2008) ▪ Malaria – Carter (1998); Lawton and Page (1997); WHO (2006, 2008);
Political factors	▪ War – Ellis (1995); ▪ Political instability – Aziz (1995); Bar-On (1996); Enders et al. (1992); Leslie (1999); Richter and Waugh (1986); Sönmez (1998); Sönmez and Graefe (1998); Sönmez et al. (1999);
Economic factors	▪ Lack of funding – Hill (2002); Page (2007); Raval and Fichadia (2007); ▪ Exchange rates – Hill (2002); Oxelheim and Wihlborg (1998); Saayman (2008); ▪ Rising prices – Hill (2002); Oxelheim and Wihlborg (1998); Page (2007); ▪ Economic recession – Hill (2002); Oxelheim and Wihlborg (1998); ▪ Financial crises – Oxelheim and Wihlborg (1998); Raval and Fichadia (2007); ▪ Transport – Dorf and Byers (2008); Ntuli (2005); Page (2007); Saayman (2008);
Technology	▪ Information technology (IT) – Dorf and Byers (2008); Jacobson, Booch andRumbaugh (1999); Jordan and Silcock (2005); Raval and Fichadia (2007); Rayner (2003); ▪ Reservation systems – Jordan and Silcock (2005); ▪ Computer programs – Jordan and Silcock (2005);
Socio-demographic factors	▪ Age – Krippendorf (1987); State and Nedelea (2008); Tretheway and Mak (2006); ▪ Sex – Krippendorf (1987); Tretheway and Mak (2006); ▪ Family life – Krippendorf (1987); Tretheway and Mak (2006); ▪ New markets – State and Nedelea (2008); Tretheway and Mak (2006).

Table 2.3 Risk Categories Associated with Tourism and the Tourism Industry

Source: Shaw et al. (2012)

In attempting to understand the manner in consumers who engage in the new emerging market or medical tourism, it appears that perceived risk is one of the main concerns for medical tourism destination around the world. As mentioned in several previous studies, a tourism product is mostly a service rather than product. Reisinger et al. (2010) further explained that service has focused on the service process, performance and service encounter, in other words,

the interaction between the customer and the firm or service provider. That means service industry characterized by their inherent properties, namely heterogeneity, perishability, inseparability and intangibility (Guseman, 1981; Murray & Schlacter, 1990; Mitchell and Greatorex, 1993; Mitchel, 1999). Although tourism industry is found to be closely related to uncertainty, worry, fear and anxiety, medical tourism is more risky than other types of tourism because of the purpose of medical tourism, combining both travelling and obtaining medical treatments in other countries. There are a number of reasons why perceived risk is an appropriate place to look at the manner in which traditional theories and propositions of marketers hold up in the medical tourism segment. First of all, the concept of perceived risk offers on the basis of a comprehensive view explaining why medical tourists are often motivated to avoid negative aspects rather than to seek positive aspects in a given buying situation. As noted by Mitchell (1999), the theory of perceived risk demonstrates that consumers begin the process of inclining to minimize the perceived risk instead of maximizing the expected pay off or positive result. In addition, it has some evidence to show that when risk perceived by consumers has been noticed in a buying situation, it has been shown the subsequent consumer in line with such risks (Taylor, 1974). Second, the increased perceived risk analysis in medical tourism leads to increase marketing efficiency. In other words, to better understand how medical tourists' perceived risk about the destination in oversea, can bring more useful strategies into all marketing activities including segmentation, positioning, targeting and also image development. Third, perceived risk theory is expandable to almost all kinds of consumer products and services. The successful theory of perceived risk can ever be definitely proven by previous studies with a wide range of different product types (Mitchell, 1999; Hisrich et al., 1972; Cunningham, 1967; Arndt, 1967; Peter & Tarpey, 1975). Therefore, investigating

consumer risk perception within medical tourism environment offers a great deal to potential medical tourism marketing. More specifically, the perceived risk can influence marketing decision making concerning efficient resources location (towards marketing strategies considering the impact of products' perceived risk), segmentation strategies can be designed according to risk reduction strategies employed by customers (Mitchell & McGoldrick, 1996; Mitchell, 1999), perceived risk can be considered to develop the image and positioning of a brand and it can even help to generate ideas for new products (Mitchell & Boustani, 1993).

In the context of medical tourism, few previous studies have used perceived risk as one of antecedents of tourists' behavioral intention to travel for medical care to a foreign destination (Wang & Wang, 2013; Garrouch, 2015). As noted by Crooks et al., 2010 and Turner, 2011, as health-care practices differ among countries, patients seeking offshore treatment are exposed to several risks. Samir and Kasim (2011) indicated that it is necessary to understand that medical tourism is not a completely regulated industry. As mentioned by Hall (2013), in medical tourism, where the focus is curative and the traveler is, by tendency, ill, the perceived risk tends to be much higher as much more is at stake than in other subsectors of health tourism, for example, wellness tourism, where the focus is on wellbeing in general. Bies and Zacharia (2007), Crooks et al. (2010), and Leah (2008) point out that the main risks include exposure to medical malpractice, difficulties obtaining follow-up care, and the danger of infectious disease transmission.

In this study, perceived risk can be defined as the likelihood of perception of an individual about the probability that a particular action will lead them to a situation exposed with danger more than acceptable limit, and will lead to influence travel-making (Manfield, 2006). The present study attempted to investigate the underlying dimensions of risk perceived

by international medical tourists in both qualitative and quantitative approach in hopes that the findings will help to broaden the understanding of risk perception in the context of medical tourism. The qualitative approach focused all dimensions of risk while three main dimensions of risk were selected to investigate in the quantitative one including terrorism risk, physical and health risk, and communication risk. Although the quantitative approach of this study aims to investigate on three main risks in medical tourism, the author would not depend on the multi-dimension of perceived risk. Instead, the author measured the perceived as a whole; in other words, the study has been designed in order to ask respondents to evaluate their overall perceived risk. This is because the main objective of the study was to find out the relationship between perceived risk and other parameters (image, quality etc.) but the author would not focus on which dimension of perceived risk is influencing the other parameters.

2.5 Destination Image

There is a substantial body of empirical and theoretical writing on the topic of importance of destination image. Destination image is described in several disciplines including environmental planning, geography, psychology (Echtner and Ritchie, 1991) marketing and behavioral science (Crompton (1979). The definition of destination image is controversial and extremely problematic in determining an exact meaning, as noted by Jenkins (1999). This can lead to various definitions found in the literature as presented in Table 2.4. Echtner and Ritchie (1991), highly cited researchers, indicated that destination image is primary concerned with the field of psychology and destination image can be described as a subset of this much broader field in imagery research. In contrast, destination image is a multidisciplinary research characterized by many different approaches (Gallarza, Gil, & Calderón, 2002). However, the majority of previous studies defined destination image as a set of ideas, expectations, emotion

thoughts and impressions that a person as toward a specific destination (Kim and Richardson, 2003; Assaker, 2014; Baloglu & McCleary, 1999; Beerli & Martin, 2004). Similarly, the study Crompton (1979) is one of the most commonly cited terms of destination image describing as "the sum of beliefs, ideas and impressions that a person has of a destination" (p.18).

In the field of tourism industry, a construct of image is widely applied in many tourist destination researches because of tourism depending on image (Tasci & Gartner, 2007). The image of destination is a very important concern perceived by tourists rather than other tangible resources and also the perception of destination image has become more popular area of investigation than the reality among tourism studies (Gallarza et al., 2002). It is not easy to assess destination image perceived by tourists due to tourism industry relying more on service than physical products (Nadeau et al., 2008) as well as the differences in perceptions of the same destination among different visitors (Pike, 2004). Likewise, several researchers asserted that the difficulty of assessing the image of destination for a certain place since images can be different regarding to different markets (Fakeye & Crompton, 1991; Leisen, 2001; Russell, Thomas & Fredline, 2005). However, the topic of destination image is still receiving the attention of both academics and practitioners based on the fact that destination image has been found to influence choice of destinations, travel decision, (Hunt, 1975; Chen & Tsai, 2007; Nadeau et al., 2008), satisfaction and post-purchase behavior (Chon, 1990; Um & Crompton, 1990; Echtner & Ritchie, 1991; Oppermann, 2000; Bigné et al., 200; Echtner & Ritchie, 2003; Chen & Tsai, 2007; Zhang et al., 2014).

Reference	Objective	Definition of Image
Hunt (1975)	To measure the images of four states; Utah, Montana, Colorado, Wyoming	"Perceptions held by potential visitors about an area"
Crompton (1977)	To measure the image of Mexico	"Organized representations of a destination in a cognitive system"
Goodrich (1977)	To measure the image of nine destinations: Florida, Hawaii, Mexico, California and five Caribbean Islands	Not defined
Crompton (1979)	To measure the image of Mexico in different States of the United States	"Sum of beliefs, ideas and impressions that a person has of a destination"
Pearce (1982)	To measure and compare the pre-travel and post-travel images of seven countries	Not defined
Haahti & Yavas (1983)	To measure the image of Finland (twelve countries included in the survey)	Not defined
Crompton & Duray (1985)	To measure the image of Texas (while testing alternative approaches to importance-performance analysis)	Not defined
Kale & Weir (1986)	To measure the image of India	Not discussed
Phelps (1986)	To measure pre-travel and post-travel images of Menorca	"Perceptions or impressions of a place"
Tourism Canada (1986-1989)	To measure the image of Canada in various major tourism generating markets	"How a country is perceived relative to others"
Gartner & Hunt (1987)	To measure the change in Utah's image over a 12 year period	"Impressions that a person ...holds about a state in which they do not reside"
Richardson & Crompton (1988)	To explore differences in images held of USA and Canada between French and English Canadians	"Perceptions of vacation attributes"
Gartner (1989)	To measure the images of four states: Utah, Montana, Colorado, Wyoming (utilising multidimensional scaling techniques)	"A complex combination of various products and associated attributes"
Calantone, *et al.* (1989)	To measure the images of eight Pacific Rim countries held by tourists from various countries of origin	"Perceptions of potential tourist destinations"
Reilly (1990)	To measure the image of Montana	"Not individual traits ... but the total impression an entity makes" (ref: Dichter)

Table 2.4 Definitions of Destination Image

Source: Echtner and Richie (1991)

Author/s	Definition
Lawson and Baud-Bovy (1977)	An expression of knowledge, impressions, prejudices, imaginations and emotional thoughts an individual has of a specific place
Crompton (1979)	Sum of beliefs, ideas, and impressions that a person has of a destination
Assael (1984)	Total perception of the destination that is formed by processing information from various sources over time
Phelps (1986)	Perceptions or impressions of a place
Gartner and Hunt (1987)	Impressions that persons hold about a state in which they do not reside
Moutinho (1987)	An individual's attitude toward the destination attributes based on their knowledge and feelings
Calantone et al. (1989)	Perceptions of potential tourist destinations
Embacher and Buttle (1989)	Ideas or conceptions held individually or collectively of the destination under investigation
Chon (1990)	Result of the interaction of a person's beliefs, ideas, feelings, expectations and impressions about a destination
Echtner and Ritchie (1991)	The perceptions of individual destination attributes and the holistic impression made by the destination
Dadgostar and Isotalo (1992)	Overall impression or attitude that an individual acquires of a place
Milman and Pizam (1995)	Visual or mental impression of a place, a product, or an experience held by the general public
MacKay and Fesenmaier (1997)	A composite of various products (attractions) and attributes woven into a total impression
Pritchard (1998)	An visual or mental impression of a specific place
Baloglu and McCleary (1999a)	An individual's mental representation of knowledge, feelings, and global impressions about a destination
Coshall (2000)	The individual's perceptions of the characteristics of destinations
Murphy, Pritchard and Smith (2000)	A sum of associations and pieces of information connected to a destination, which would include multiple components of the destination and personal perception
Tapachai and Waryszak (2000)	Perceptions or impressions of a destination held by tourists with respect to the expected benefit or consumption values
Bigné, Sánchez and Sánchez (2001)	The subjective interpretation of reality made by the tourist
Kim and Richardson (2003)	Totality of impressions, beliefs, ideas, expectations, and feelings accumulated towards a place over time

Table 2.4 Definitions of Destination Image

Source: Martin and Bosque (2008)

A number of perspectives have been established to examining destination image in the context of tourism industry. In the early 1970s, the study of Hunt's (1975) has been considered the first study attempting to measure destination image. The study also found that the destination image increased the number of visitors toward destinations rather than tangible resources. In the following years, Gunn (1988) intended to investigate how destination is formed. The same researcher has developed two levels of destination image, namely organic and induced levels. The organic level forms internally due to actual visitation or experience while the latter is based on external forming including received and processed information such as advertisement, words of mouth, news and publicity. The study of Gunn also provides the formation of tourist image in multiple stages including accumulating mental images of the destination, modifying the initial image after more information – induced image, deciding to visit the destination, visiting the destination, sharing the destination, returning home and modifying the image based on the experience. In the 1990s, the conceptual framework on destination image by Echtner and Ritchie (1993) has proposed multidimensional approach for analyzing destination image, as shown in Figure 2.11. Destination image has comprised holistic and attribute-based components that are composed of functional or tangible and psychological or intangible aspects. Functional characteristics of tourist destinations describe physical scenery, infrastructure, prices, climate, and so on while psychological aspects are explained to the evaluation of attributes as well as personal interpretation such as the quality of products and services, the friendliness of local and the safety standard of a country. Subsequently, not only mental pictures of physical aspects but also the general atmosphere or mood are included in holistic elements that reflect the imagery created by psychological and functional attributes. In 1999, Jenkins developed destination image dimensions in common and unique categories of

both functional and psychological attributes. The author describes common functional attributes as characteristics using to describe in most tourist attractions such as price, climate, facilities, accommodation etc. Another category is unique functional attributes explaining signs as well as special events that are considered parts of destination image. Common psychological attributes have included the safety of destinations, quality of products and services, friendliness of local people, etc. The other attribute, or unique psychological attribute is defined as association and feelings with a destination or place.

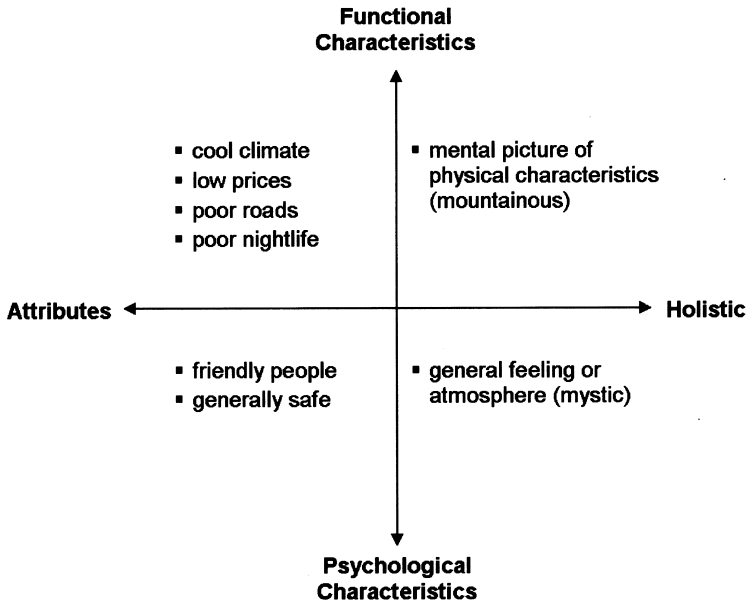


Figure 2.11 The components of destination image

Source: Echtner and Ritchie (1993)

Recent advances consider that researchers utilize three main dimensions of destination image – cognitive, affective and conative (Bloglu & McCleary, 1999; Dann, 1996; Konecnik & Gartner, 2007; Pike & Ryan, 2004; Stepchenkova & Mills, 2010; Tasci & Gartner, 2007; Tasci et al., 2007). The study of Boulding (1956) indicated that an image comprises what one knows and thinks about an object (cognitive), how one feels about it (affective), and how one acts using this information (conative). More specifically, cognitive image may be considered as the sum of what is known about a destination consisted of induced or organic aspects (Gunn, 1988). It can be seen that cognitive image refers to knowledge, beliefs or awareness deriving from previous visits. The tourism industry literature pointed out that most studies analyze cognitive image by focusing on tangible physical attributes (Pearch, 1977; Pike, 2002). Affective image is described as an individual's feelings towards an object including favorable, unfavorable, or neutral (Gartner, 1993). Similarly, affective component is described as the evaluation stage, concerning the feelings that the individual associates with the place of visit (Baloglu & Brinberg, 1997; Baloglu & McCleary, 1999; Beerli & Martín, 2004). Affective image has become operational in the evaluation stage of the destination selection process (Gartner, 1993) that had been overlooked selection in the literature of tourism industry (Walmsley & Young, 1998). Baloglu and McCleary (1999) have further asserted that affective image has been considered one of the most influential factors in the tourism industry since this image always uses by destinations for better efficiency. In the study of Pike (2002), the author has reviewed 142 published articles focusing on destination image in the literature and the study found that only six dimensions presented an explicit interest in affective images. However, four semantic differential scales used most often in the literature consist of positive dimension including arousing, exciting, pleasant and relaxing, and negative dimension including sleepy, gloomy,

unpleasant and distressing (Baloglu & Brinbberg, 1997; Baloglu & McCleary, 1999; Baloglu & Mangaloglu, 2001). This is consistent with the study of McLellan and Foushee (1983) that states that the image of destination can be described as a mixture of both positive and negative perceptions. In other words, tourists are more likely to consider and choose destinations with positive images in their travel decision process (Goodrich, 1978; Woodside & Lysonski, 1989). Finally, conative image is the likelihood of visiting a destination within a certain time period. The tourism industry literature composed of action in terms of the individual's actual conduct or intention to revisit and recommend the destination to others (Bigné et al., 2001; Gartner, 1993; Konecnik & Gartner, 2007; Pike and Ryan, 2004; Tasci and Gartner, 2007; Tasci et al., 2007), and to spread positive word of mouth (Baker & Crompton, 2000).

There is a need to understand destination images related to the emerging tourism market, medical tourism. Although destination image has been interested in the tourism industry literature for a long time, this is rarely discussed in the work on the field of medical tourism. In general, destination image plays a big role in the marketing of a destination, particularly in the tourism industry. Similarly, destination image is considered one of the most important predictors in medical tourism (Mohamed et al., 2012). Pollard (2012) stated that destination image is something hard to change or influence, in other words, "you are what you are… or what people believe you to be". Image is often a simple version of impression about the destination created by the tourists. Pollard (2012) further illustrates that if medical tourists decide to travel the United States for medical treatment, they will find the latest technology with high cost. Moreover, if medical tourists go to India for medical tourism, they are bound to suffer "Delhi belly" at some stage. This implies that if the destination country of medical tourism has a positive image, medical tourists will draw on their perception of that destination,

be they real or imagined. Jalivand et al. (2012) mentioned that destination image positively affects tourists' attitude. That means a positive image of medical tourism destinations will lead to positive attitude towards developing behavior intention of medical tourists. In other words, it is an important component that affects future customers' decision-making process and behavior.

With regard to the importance of destination image in medical tourism industry, far less information is available with very few studies being conducted. Two studies have investigated the relationship between destination image and medical tourists' attitudinal loyalty (Mechinda et al., 2010) and the relationship between brand image and perceived service quality (Huei et al., 2015). This study will make under the assumption that a better understanding of the importance of image can bring insights with regards to more effective and efficient ways of marketing for medical tourism destinations. Realizing the current need to examine closely the perception of medical tourists, this study aims to incorporate destination image in terms of cognitive, affective and overall image of the destination perceived by medical tourists in building medical tourist loyalty model. Overall image of the destination can be defined as mental pictures a person holds about the characteristics of a destination including tourism infrastructure to cultural, natural and social attributes (Coshall, 2000; Beerli & Martin, 2004). While cognitive image refers to the individual's own beliefs and knowledge and how individual perceived about the attributes of the destination (Beerli & Martín, 2004; Lepp, 2011), affective image refers to the evaluation stage, concerning the feelings that the individual associates with the place of visit (Beerli & Martín, 2004). The present study aims to integrate destination image in the customer loyalty of medical tourism literature in hopes that this can contribute to a better understanding this phenomenon as well as can create an appropriate destination image. In the view of the fact that a consumer is a critical part of a successful positioning, marketing strategy

(Echtner & Ritchie, 1993), tourism development within a destination (Chon, 1990; Echtner and Ritchie 1991, 1993; Gunn, 1972; Hunt, 1975; Smith, 2001) and understanding tourists' destination choice processes (Reilly, 1990).

2.6 Perceived Quality

Perceived quality has been considered an important focus for practitioners and researchers across the marketing field due to a belief in its beneficial effects on marketing performance. Enhancing quality perceived by consumers can obtain competitive advantages as well as has a positive effect on marketing performance (Parasuraman et al., 1988). The business press has asserted that quality is the main factor in examining causes of a firm's success or failure (Fortune, 1998; New York Times, 2003; Wall Street Journal, 2004). Perceived quality is a dynamic, complex configuration of physical, situation and behavioral variables, as noted by Klaus (1985). There have been various attempts to define the concept of perceived quality. Perceived quality can be defined in very different ways depending on the application of interest. Quality can be defined as "the shared experience of gain by participants and stable pattern of behavior associated with a given type of service encounter" (Klaus, 1985, p.24). Injac (1998) has defined quality as "a measurement or indicator of scope, i.e. the term for usability of a product or service for meeting specific needs at a certain place and time, when the product or service is confirmed as goods through the process of exchange" (p.64). Zeithaml (1998) defined perceived quality as the judgment from consumers about a product's overall superiority or excellence. Similarly, perceived quality has been defined as the perception of consumers on the overall superiority or quality along with its intended purpose relative to alternatives (Aaker, 1991). The literature pointed out the difference between objective and perceived quality (e.g. Parasuraman et al., 1986; Jacoby and Olson, 1985). Objective quality can be described as the

actual technical excellence of the product that can be verified and measured (Monroe and Krishman, 1985). In contrast, perceived quality is (1) different from objective or actual quality, (2) a higher level abstraction rather that a specific attribute of a product, (3) a global assessment that in some cases resembles attitude, and (4) a judgment usually made within a consumer's evoked set (Zeithaml, 1988).

There are several dimensions of quality on previous studies and the exact nature and content of these dimensions are not founded (Brady & Cronin, 2001). Collier (1994) clearly described quality as set of tangible, or goods-content and intangible, or service-content attributes recognizes, pays for, uses or experiences. Two-dimensional model proposed by Grönroos (1984) is composed of technical quality and functional quality, as presented in Figure 2.12. Technical quality refers to the outcome or the result of the service that can be measured by consumers in a rather objective manner because service is produced in interaction with consumers. Thus, he or she will be influenced by the way, which the technical quality is transferred to him or her. The other dimension, or functional quality can be described as the process or the way the service has been delivered. The same author has suggested that functional quality is important to the perception of the service rather than technical quality. Furthermore, functional quality should be important for particular in the many industries in which the technical quality is very similar among the firms in the market. According to Lien and Kao (2008), the distinction of technical and functional qualities is believed to stem from the justice theory consisting of distributive and procedural justices (Cohen-Charash & Spector, 2001). Lind and Taylor (1988) further explained that distributive dimension deals with decision outcomes and procedural justice deals with decision-making procedure, or how the outcome distribution is arrived.

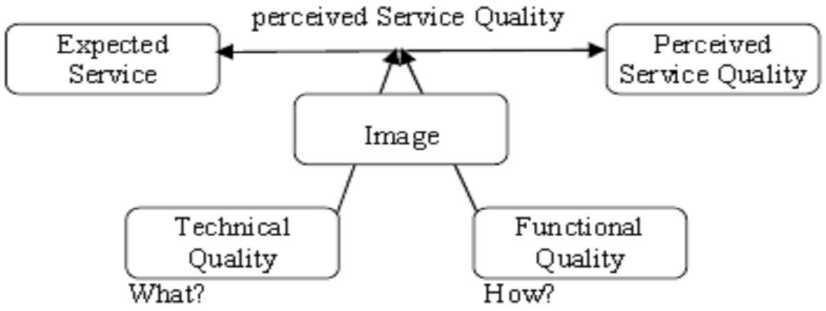


Figure 2.12 Technical and functional Quality

Source: Grönroos (1982)

Another perspective proposed by Lehtinen and Lehtinen (1983, 1991) was the basic premise that service quality derives from the interaction between a consumer and elements in the service firm. The researchers have proposed two and three-dimensional models explaining quality. The two-dimensional approach includes process quality and outcome quality describing that different criteria and different valuations of these criteria were used by different consumer groups. The other model with three- dimensions including physical quality, interactive quality and corporate quality is related to the elements of the service production process. Physical quality refers the physical aspects of the service while interactive quality refers to the interaction between contact personnel and customers as well as between some consumers and other ones. Finally, corporate quality includes the company or firm's image or profile perceived by current or potential consumers.

Parasuraman et al. (1985) have proposed the most used and famous model, or SERVQUAL model for service quality measurement consisting of five dimensions of tangibles,

reliability, responsiveness, assurance, and empathy based on disconfirmation paradigm. Disconfirmation model is based on product quality literature that is the base of service quality. The five dimensional quality of this model is as presented in Table 2.5. The SERVQUAL model attempted to cover the weakness of Nordic model as well as to fill the gap of difference between perception and expectation of quality of service through five dimensions as shown in Figure 2.13. Although SERVQUAL is an analytical tool that can help managers to identifying the gaps between variables affecting the quality of the offering services (Seth, Deshmukh, and Vrat, 2005), several researchers argued that factors of this model are inconsistent as well as it is not comprehensive for different applications (e.g. Dabholkar et al., 1996; Shahin and Samea, 2010).

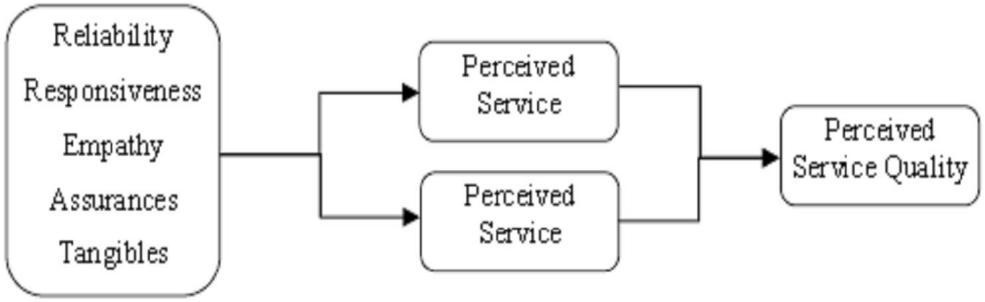


Figure 2.13 The SERVQUAL model

Source: Parasuraman et al. (1985)

Dimension	Definition
Tangibles	Appearance of physical facilities, equipment, personnel and written materials
Reliability	Ability to perform the promised service dependably and accurately
Responsiveness	Willingness to help customers and provide prompt service
Assurance	Employees' knowledge and courtesy and their ability to inspire trust and confidence
Empathy	Caring, easy access, good /communication, customer understanding and individualized attention given to cutomers

Table 2.5 Five Broad Dimensions of Service Quality

Source: Naik et al. (2010)

More than twenty years later, a new hierarchical model proposed by Brady and Cronin (2001) has been developed from previous studies. In particular, the idea of service quality perception from the study of Dabholkar et al. (1996) was adopted to explain multilevel as well as multidimensional aspects of service quality. The researchers have believed that the dimensions of SERVQUAL must to be specifically defined instead of refining as reliable, responsive, empathic, assured, and tangible aspects. Two previous models from different researchers are adapted to determine dimensions of service quality in this new model. The researchers firstly adopted the model of Gronroos (1984) proposing two dimensions, in other words, interaction quality or functional quality between employees and consumers, and technical quality or outcome. The following is the third dimension, namely service environment adopted from Rust and Oliver (1994). Due to empirical evidence supporting the concept of multidimensional and multilevel service quality, this model comprises three main level dimensions, namely interaction quality dimension, physical environment quality and outcome quality dimension. The first dimension or interaction quality is composed of attitude, behavior and expertise (Attitude – Behavior – Expertise) while the second dimension or physical environment quality dimension consists of ambient, design and social factors (Ambient Conditions – Design – Social Factors). Finally, waiting time, tangibles and valence have formed the last dimension of service quality, or outcome quality (Waiting Time – Tangibles – Valence), as shown in Figure 2.14.

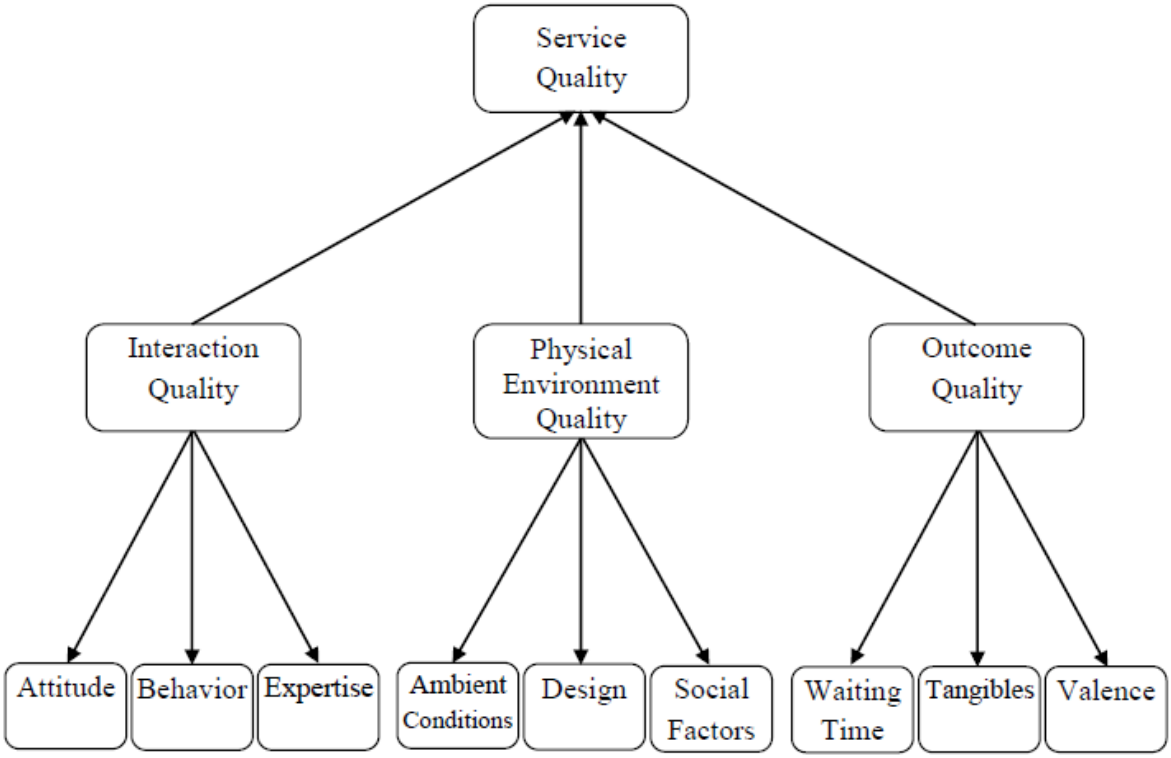


Figure 2.14 The Hierarchical model

Source: Brady and Cronin (2001)

From the above literature review, there exist various defintions and concepts of perceived quality regarding the nature of quality dimensions. However, the majority of previous studies has deal with two main perspectives of perceived quality belonging to school of thought including the Nordic school of thought and the North American school of thought (e.g. Ennew and Waite, 2007; Santos, 2003; Karatepe et al., 2005; Tsoukatos and Mastrojianni, 2010). Based on the study of Grönroos (1984), the Nordic school of thought is composed of functional, environmental and technical quality. The Nordic model refers to customers will judge service

quality depending on the physical surroundings, the process and the outcome of the service (Grönroos, 1984; Rust and Oliver, 1994). In contrast, the North American approach is based on the measurements from Parasuraman et al. (1988) and has received a considerable amount of attention from both academics and practitioners. The assessment of consumers depends on the five distinct dimensions of service quality including tangibles, reliability, responsiveness, assurance and empathy (Parasuraman et al., 1988). Although scholars have defined perceived quality in various ways, a shared common meaning of perceived quality based on the preceding discussion can be defined as consumers' perception of overall components of products and service in terms of intangible and intangible characteristics.

Perceived quality is a critical factor and competitive requirements to a destination's success and survival in the tourism industry literature. To confront insecure in tourism destinations, it is necessary to employ numerous ways of increasing profit and Rocco (1993) has suggested that product quality is an essential element of a product's competitive advantage at the market. Given the many challenges facing by many medical tourism destinations, they have attempted to enhance consumer satisfaction as well as to induce their consumers to revisit the medical tourism destinations more often and perceived quality becomes an important factor in a customer's revisit behavioral intentions. Rad, Som and Zainuddin (2010) indicated that level of service quality and cost consideration are the main factors of medical tourists looking for quality medical treatments in medical tourism destinations in other countries. Ahuja (2010) further asserted that not only quality service plays an important role in building a hospital's competitive arsenal, but also it is the driving force behind profitability by identifying the right things and then do them right. Quality in healthcare industry cannot be measured directly but must be

judgmentally assessed by considering entity attributes that are more directly perceptible (Crossby, 1979).

The literature relating healthcare and medical tourism industry pointed out various ways of quality perceived by patients or consumers. For example, the study of Johnson (1988) found that the human dimension, or human organizations meeting human or patient needs, is a main key to remain successful as well as to stay ahead of the competition in an eye care market. In the medical tourism literature, the study of Huei et al. (2015) used perceived service quality as one of predictors explaining patient satisfaction as well as behavioral intention. Perceived service quality of their study involves five dimensions, namely assurance, responsiveness, tangible, empathy, and reliability. Similarly, Lertwannawit and Gulid (2011) have used these five dimensions of service quality to test the relationship on value, satisfaction and brand trust in medical tourism industry. Based on the study of Han and Hyun (2015), perceived core-medical product quality relates to medical product performance including excellence of medical care, wider availability of medical/ health care, surgical/ medical skills, continuity of care and modernity of medical facilities. Perceived service quality states the assessment in the service performance of both medical professionals and staff including service delivery skills and competencies, efficient/ comfortable communication and kindness.

There has been a sufficient body of relevant studies regarding the perceived quality from a marketing research perspective, applied psychology and consumer research. As indicated by Han and Ryu (2006), perceived quality refers to the process of evaluating the products and service offered by a particular firm for excellence against alternatives provided by competitors. Bitner et al. (1990) further argue that quality consisted of two main factors: core-product and service-product performance. More empirical evidences have supported the concept of

perceived quality that involves superiority or excellence of a product and service as perceived by consumers, in other words, the performance of a product and service (Lee et al., 2009; Rigatti-Luchini & Mason, 2010; Song et al., 2014; Wu et al. 2014; Yoon et al., 2010). Core-product quality refers to the performance of the basic product relative to its value (Clemmer, 1990). Aaker (1991) has stated seven dimensions of perceived product-quality including performance, features, durability, reliability, conformance with specifications, service ability and, fit and finish. The other factor is service-product quality that refers to the performances derived from interactions with service personnel (Price et al., 1995). The present study therefore defined perceived quality as the medical tourists' perception of overall components of both core-product and service-product performance (Han & Hyun, 2015), in other words, both medical products and service. It is essential for the healthcare service providers to consider all aspects of medical tourism including physicians' professionalism level, certification services and ethical issues, thereby helping to assure maximum patient satisfaction. Therefore, this study attempted to study the role of perceived quality associated with other constructs, namely perceived risk, overall image of the medical tourism destination, satisfaction and customer loyalty from medical tourists' perspective. Therefore, the better product and service quality that medical tourists perceive will create greater opportunity for healthcare service providers and policy makers to establish the country as a popular medical tourism destination and attract other international medical patients.

2.7 Satisfaction

According to the theoretical and research tradition, customer satisfaction has been recognized to be the most important construct in marketing literature over the last few decades

(Erevelles & Leavitt, 1992) because it is a good predictor of purchase behavior and customer loyalty including repurchase, purchase intentions, brand choice and switching behavior (McQuitty et al., 2000; Yang & Peterson, 2004). Several scholars have defined satisfaction in various ways. Satisfaction is defined as "the consumer's fulfillment response" and "a judgment that a product or service feature, or the product or service itself, provides a pleasurable level of consumption-related fulfillment" (Oliver, 1977, p. 13). The study of Giese and Cote (2000) conducted a review of literature and interviewed customers, then the authors defined satisfaction as a summary affective response of varying intensity with a specific time point of determination and limited duration directed toward focal aspects of product acquisition and/or consumption. Customer satisfaction can be defined as customer evaluation of a product or service regarding to their expectations and needs (Hu, 2009). According to Mason and Paggiaro (2012), satisfaction can be defined as a part of affective and cognitive evaluation of the consumption experience. Some researchers defined satisfaction as a consumer's overall evaluation of his/her consumption experience (Kim et al. 2011, Lee & Back, 2008). A more recent study by Taha et al. (2013) defined customer satisfaction as kind of pleasant or disappointed status forming from a comparison between the customers' expectation and the customers' perceived outcome. The definitions of customer satisfaction from previous studies listed below (Table 2.6) are adapted from Giese and Cote (2000).

Author/s	Definition
Oliver (1997)	The consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over fulfillment (p. 13)
Halstead, Hartman, and Schmidt (1994)	A transaction-specific affective response resulting from the customer's comparison of product performance to some prepurchase standard (e.g., Hunt 1977; Oliver 1989) (p. 122).
Mano and Oliver (1993)	(Product satisfaction) is an attitude - like postconsumption evaluative judgment (Hunt 1977) varying along the hedonic continuum (Oliver 1989; Westbrook and Oliver 1991) (p. 454).
Fornell 1992	An overall postpurchase evaluation (p.11).
Oliver (1992)	Examined whether satisfaction was an emotion. Concluded that satisfaction is a summary attribute phenomenon coexisting with other consumption emotions (p. 242).
Westbrook and Oliver (1991)	A postchoice evaluative judgment concerning a specific purchase selection (Day 1984) (p. 84).
Oliver and Swan (1989)	No conceptual definition. (with the salesperson) a function of fairness, preference, and disconfirmation (pp. 28- 29).
Tse and Wilton (1988)	The consumer's response to the evaluation of the perceived discrepancy between prior expectations (or some norm of performance) and the actual performance of the product as perceived after its consumption (p. 204).
Cadotte, Woodruff and Jenkins (1987)	Conceptualized as a feeling developed from an evaluation of the use experience (p.305)
Day (1984)	The evaluative reaponse to the current consumption event.. the consumer's response in a particular consumption experience to the evaluation of perceived discrepancy between prior expectations (or some other norm of performance) and the actual performance of product perceived after its acquisition (p.496).
Bearden and Teel (1983)	No conceptual definition. A function of consumer expectations operationalized as product attribute beliefs (Olson and Dover, 1979) and disconfirmation (p.22).
LaBarbera and Mazursky (1983)	Post purchase evaluation. Cited Olivers's (1981) definition: An evaluation of the surprise inherent in a product acquisition and/ or consumption experience (p.394).
Westbrook (1987)	Global evaluative judgment about product usage/consumption (p. 260)
Churchill and Surprenant (1982)	An emotional response to the experiences provided by and associated with particular products or services purchased, retail outlets, or even molar patterns of behavior such as shopping and buyer behavior, as well as the overall marketplace (p. 256). An emotional response triggered by

	a cognitive evaluative process in which the perceptions of (or beliefs about) an object, action, or condition are compared to one's values (or needs, wants, desires) (p. 258).
Oliver (1981)	Conceptually, an outcome of purchase and use resulting from the buyer's comparison of the rewards and costs of the purchase relative to anticipated consequences. Operationally, similar to attitude in that it can be assessed as a summation of satisfactions with various attributes (p.493).
Churchill and Surprenant (1982)	An evaluation of the surprise inherent in a product acquisition and/or consumption experience. In essence, the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience (p. 27).
Swan, Trawick and Carroll (1980)	A conscious evaluation or cognitive judgment that the product has performed relatively well or poorly or that the product was suitable or unsuitable for its use/purpose. Another dimension of satisfaction involves affect of feelings toward the product (p. 17).
Westbrook (1980)	Refer to the favorability of the individual's subjective evaluation of the favorability of various outcomes and experiences associated with using or consuming it (product) (Hunt 1977, p.49)

Table 2.6 Definitions of satisfaction

Source: Adapted from Giese and Cote (2000)

Based on the literature, several issues about consumer satisfaction have been identified by several researchers. Satisfaction is regarded as a complex human process involving physiological and psychological influences as well as cognitive and affective processes, as claimed by Oh and Park (1997). Another perspective from the marketing literature has viewed satisfaction as evaluation of emotional responses to a service (Westbrook, 1981). Other researchers in the medical sociology and community health literature conceptualize satisfaction as a cognitive view of satisfaction based on evaluation of attributes differing from emotional responses (Singh, 1991; Yellen et al., 2002). In general, researchers have favored a view of satisfaction based on a result from process of comparing perceptions of a service with expectations (e.g. Oliver, 1980; Spreng et al., 1996; Tam, 2005).

All above-mentioned definitions, the customer satisfaction formation is described as the entire satisfaction process or specific linkages and interactions among key variables. Oliver (1997) indicated that satisfaction is the final step of a psychological process and at the same time is perceived as the final outcome of all activities that carry out during the process of consumption and purchase in both observation and direct consumption of service or products. Finally, Milana and Esteban (2004) have proposed the main concepts of satisfaction comprising consumers' objectives, consumers' accomplishment of that objective and consumer satisfaction evaluation process. The process of evaluating consumer satisfaction refers to the possibilities of interference of two stimuli, a result and a standard or reference of comparison. Thus, customer satisfaction is the most important concept of marketing practice as well as occupies a significant position in both theory and observation (Churchill & Suprenant, 1982).

The literature in the field of marketing and psychology pointed out that academics and practitioners have attempted to understand the phenomenology of customer satisfaction. Many theories underpinning the concept of customer satisfaction have been used to examine the construct as well as to describe satisfaction in different perspectives of products/services such as assimilation-contrast theory (Sherif & Hovland (1960), the expectancy-disconfirmation paradigm (Oliver, 1980), norm theory (Latour & Peat, 1979), affective models (Westbrook, 1987), the perceived performance model (Churchill & Suprenant, 1982), attribution models (Folkes, 1984), and equity models (Oliver & DeSarbo, 1988).

Expectancy Disconfirmation Paradigm by Oliver (1980) seems to be one of the most important theories explaining customer satisfaction as shown in Figure 2.15. Weber (1997) stated that this model has become the most popularly adopted method to assess the consumer satisfaction and dissatisfaction. The model has consisted of four main components, namely

expectation, perceived performance, disconfirmation and satisfaction. The first component, or expectation refers to the customer's anticipations about performance of products and services (Churchchill & Suprenant, 1992). Another component, perceived performance investigates the customer's experience after using products or services that can be better or worse than customer's expectation (Spreng et al., 1996). Disconfirmation including positive, negative and simple can be defined is as the difference between the customer's initial expectations and observed actual performance (Bhattacherjee & Premkumar, 2004). This theory suggests that customer satisfaction is the result from a comparison between expectations and actual experiences, which in turn influences to confirmation, positive disconfirmation, or negative disconfirmation (Oliver, 1980). Disconfirmation will happen if there is a discrepancy between expectations and actual performance leading to satisfaction or dissatisfaction among consumers, as discussed by Hui et al. (2007). In other words, consumers' expectation is confirmed when their perception meet the exact predictive expectation (Jiang & Rosenbloom, 2005). Olsen (2002) defined satisfaction as overall delight that consumers felt and also satisfaction is the result of the product performance in order to fulfill their desires, needs and expectations. Therefore, the expectancy-disconfirmation paradigm can identify not only customer satisfaction that is caused by confirmation and positive disconfirmation but also dissatisfaction from negative disconfirmation.

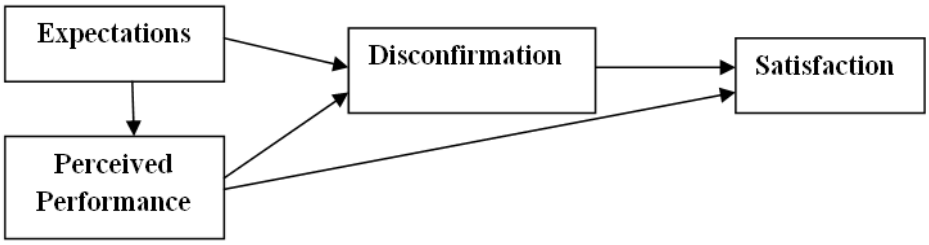


Figure 2.15 The Expectancy-Disconfirmation Paradigm

Source: Oliver (1980)

Oliver and Swan (1989) have developed another theory, equity theory so as to describe consumer satisfaction based on a comparison between cost of products/ services and benefits. The main factors in explaining customer satisfaction are benefits, effort, time and price (Heskett et al., 1997). In the context of tourism industry, this theory seems to assure that tourists believe that the destination is really beneficial when benefits perceived by tourists depend on effort, money for travel and time. Conversely, if a person perceives an inequity, he or she will be motivated to act in ways of dissatisfaction such as anger, guilt or resentment. Customer satisfaction is therefore the main cause of switching brand (Fornell & Wernerfelt 1987) and at the same time generating negative word of mouth (Richins 1983). Another perspective of the equity theory by Lapidus and Pinkerston (1995) described this theory as a comparison between consumers' evaluation of their inputs and outcomes as well as their perceived inputs and outcomes from the seller so as to assess the equity of transaction. Finally, Oliver and Swan (1989) have distinguished between traditional and contemporary equity theories. The traditional equity theory refers to the difference between the customer outcome and the seller outcome while the contemporary equity theory is described as multidimensional inputs and outputs that

both the merchants and consumer have translated into common units so as to draw a conclusion according to the equity of the exchange. In summary, as seen in the above discussion, both researchers and practitioners have devoted considerable attention to the concept of satisfaction due to its many positive results including future purchases, profits and loyalty (Yu and Dean, 2001; Brady & Robertson, 2001).

The tourism industry literature pointed out that tourist satisfaction is widely accepted as a key factor in building successful business (Yoon & Uysal, 2005; Zhu, 2011). Aziz et al. (2011) explained that tourist satisfaction depends on the differences between expectation of pre-planning activities and travel experiences gained after visiting the destination. Reisinger and Turner (2003) have supported that the tourists are satisfied when the comparison between experiences and expectations results in a feeling of pleasure. Conversely, the tourist experiences dissatisfaction if it results in a feeling of displeasure. Tourist satisfaction can influence the choice of destination, the consumption of products and services as well as the decision to return, as indicated by Kozak and Rimmington (2000). To study tourist satisfaction will help not only to gain the market share but also to gain a primary source for future revenue growth (Wang et al., 2009). Moreover, tourists with high satisfaction are more likely to contribute benefit both tourism product/ service providers, local governments and residents. To support this statement, Bolton and Lemon (1999) asserted that satisfied consumers tend to use products or services more often than those not satisfied. Therefore, to better understand tourists satisfaction will help to ascertain how well suppliers at a particular destination recognize and respond to the needs of its visitors and identify aspects of destination offering that requires improvement (Dmitrovic et al., 2009). Thus, it is undeniable that tourist satisfaction is very important topic for academics and practitioners in the field of tourism.

There are many main streams of previous studies regarding to tourist satisfaction. Chen et al. (2016) argued that most previous researchers have focused on two main themes of tourist satisfaction. First, how to build consumer satisfaction for business success have focused on the idea that satisfied tourists are more likely to repurchase the product or service as well as recommend it to others by using several determinants such as perceived value and quality, motivation and destination image. Second, several researchers have investigated tourism satisfaction from the idea that leisure travel can contribute to tourists 'psychological wellness, in other words, positive holiday experiences effect on how individuals evaluate various life domains as well as their overall satisfaction with life. Most studies have identified tourist satisfaction as one of the key factors of successful destination marketing that influences the choice of destination as well as the decision to revisit (Kozak & Rimmington, 2000; Yoon and Uysal, 2005). Shoemaker and Lewis (1999) as well as Baker and Crompton (2000) further explained that loyalty signals customers' attitudes and behaviors towards the products and services received and their repeat usage. Also, the link between customer satisfaction and loyalty has been confirmed by many researchers from previous studies (e.g. Cronin et al., 2000, McDougall & Levesque, 2000; Taylor & Baker, 1994). In summary, it seems to be that most studies in the field of tourism have examined tourist satisfaction predicting positive post-purchase behavior and overall success of a destination including determinants of destination loyalty, intention to revisit or repurchase and positive word-of-mouth.

Similarly, satisfaction is an important factor in building customer loyalty that has appeared in the literature of health and medical tourism at least forty years (Sitzia, 1999). Satisfaction is a key success for the healthcare and medical service providers because of a quality indicator (Pakdil & Harwood, 2005; Yellen et al., 2002) and increased competition in the

profession. Previous studies have defined patient satisfaction in several ways. In 1997, Krisner and Federman defined patient satisfaction in terms of an interactive process reflecting patient perception into quality assessment on experience of medical services. Patient satisfaction can be defined as the healthcare provider and service build customer satisfaction by meeting their desire expectations, preferences and goals (Debono & Travaglia, 2009). According to Tengilimoglu et al. (2014), patient satisfaction is defined as the comparative conclusion in benefits and expectations reached by an individual or organization and the measures of a patient's decision to become a medical tourist included the investigation process for services, identification required for service, agreement to utilize and continuity care. It is therefore to better understand the concept of customer satisfaction leading to the benefits for the healthcare service providers as well as medical tourism destinations (Aldaqal et al., 2012). More specifically, the relationship between medical or health care providers and their patients can be maintained by patients' satisfaction, in other words, satisfied patients are retuned consumers. Additionally, patient satisfaction can identify areas of strength and weaknesses in the firm or organization. Finally, patient satisfaction associated directly with their financial benefits.

Patient satisfaction has become a major outcome of medical care because of the emphasis placing on patients as customers of services (Davies & Ware, 1988). Wang (2002) argued that when consumers in the healthcare environment have evaluated service quality, they are more likely to rely on service process functional aspects such as doctors' and nurses' attitudes towards patients and procedure waiting time rather than technical quality, like diagnosis accuracy and subsequent treatment and procedures. It is common for the healthcare services' value to be attributed to intangible assets and patient involvement is always required in the process of production. Patient satisfaction is normally involved both intimate interaction

and extensive communication between providers and patients (Winstead, 2000) and most importantly providers showing sincere interest and courtesy can obtain great benefits without any cost (Mostafa, 2005). Thus, the literature of patient satisfaction focused mostly on service provided by providers. However, medical tourists are determined by tangible (e.g. medical equipment, drug, food provide by hospitals) and intangible factors (e.g. responsiveness, assurance and empathy). Both intangible and tangible characteristics of medical tourism cannot be separated during providing medical treatments. These two factors are equally important in affecting the level of customer satisfaction. For example, a hospital in medical tourism destinations in overseas has the best technology in the world but only tangible factors will not be able to satisfy the customer if she or he ever confronted with a negative intangible experience during his or her medical treatment. All above mentioned, there is a growing consensus that assessment of the quality of hospital care should be based, in part on patients' perceptions of overall care and patient satisfaction (Carmichael, 1996; Davies & Ware, 1988). Baltussen et al. (2002) further asserted that patient's perception and expectations of quality of care are critical to understand the relationship between quality of care and utilization of health services. Donabedian (1988) further suggests "patient satisfaction may be considered being one of the desired outcomes of care… information about patient satisfaction may be as indispensable to assessment of quality as to the design and management of healthcare systems". Therefore, one of the most challenging things to deal with in the field of medical tourism is how to satisfy medical tourists with both tangible and intangible factors in medical tourism destinations because customers may find it difficult to evaluate after the event because they lack the necessary knowledge and skills to make the necessary judgments, and are obliged to trust the providers (Zeithaml, 1981). However, customer satisfaction leads to developing and

maintaining loyal customers who may become advocates for a firm and promote the organisation further by making positive referrals through credible word-of-mouth communication (Zeithaml et al. 2013). Medical tourism destinations seeking to maintain or improve medical tourists' service quality perceptions need to clearly recognise that, only by meeting or exceeding tourist expectations can desired outcomes such as satisfaction and improved financial performance be achieved (Michael et al. 2013; Zeithaml et al. 2009). Finally, the importance of securing customer satisfaction is further supported by empirical research findings which suggest that achieving high level of patient satisfaction can lead to loyalty and generate referrals that enhance long term success (Yucel, 1994) as well as satisfied tourists tend to communicate their positive experience to others and intend to make repeat purchases or return trips.

In this study, satisfaction can be defined as customers' overall evaluation about products and service fulfillment (Oliver, 1997; Chen & Tsai, 2007). Delivering patient satisfaction is today ever more difficult and complicated. As noted by Taleghani et al. (2011), health care service buyers are better educated and more aware than in the past. They have to think carefully in choosing the best medical tourism destinations available for them. Pettersen and Spreng (1997) suggested, "It really does not matter if the patient is right or wrong what counts is how the patient felt even though the caregiver's perception of reality may be quite different" (p. 23). Therefore, it is necessary for medical tourism destinations to understand medical tourists' point of view in order to deliver customer satisfaction. Moreover, customer satisfaction is a critical marketing tool in attracting the most variable segments of the market for marketers as well as consumer researchers, as indicated clearly by Kozak and Rimmington (2000). The present study have attempted to study the relationships between satisfaction and other constructs,

namely perceived risk, perceived quality, image perceived by medical tourists and customer loyalty. The findings of this study will take the lead in establishing operating procedures and strategies that serve as leading indicators for high customer satisfaction. Furthermore, medical tourism destinations can gain a competitive advantage through an increase concentration in customer satisfaction (Philip & Hazlett, 1996).

2.8 Theoretical Framework and Hypotheses Development

Researchers continue to develop an understanding of conceptual relationships between parties in exchange processes over the past two decades. The main objective of this study has been to develop an improved understanding of the concepts themselves and at the same time how the constructs relate to each other and subsequently drive the consumer loyalty in the medical tourism industry. It is noted above that risk, culture, quality, image, satisfaction and customer loyalty have taken the center stage in those discussions. Based on the discussion and review of extant theoretical and empirical literature, it is possible to design a theoretical model of the relationship between risk, culture, image, quality, satisfaction, and post purchase behavioral intentions. The model is defined and conceptualized based on the results of previous studies. Therefore, this study proposes to examine six sub-models of the relationships among the aforementioned constructs.

The relationships between risk and image

The first sub-model highlights the relationship between risk and image in terms of cognitive, affective and overall image perceived by medical tourists as presented in Figure 2.16. Many researchers in the tourism industry have investigated destination image for a long time. Tourism is unlike other industries, in other words, people have to buy in the sense that they are

not able to fully see what you are buying before you travel to the destination. It is essential a destination holding a proper and accurate image. Having a positive image attached to a destination is a tool that will help to attract people to the destination. Therefore, the image of a destination is a key factor in conveying the destination's physical attributes to tourists (Tasci and Gartner, 2007), attracting tourists as well as providing a positive travel experience (Prayag and Ryan, 2011). Due to destination image representing the very closely actual destination, destination image positively perceived by tourists play a significant role in competing against other destinations. It is critical to be aware of the fact that perceptions that people hold of a destination are crucial for the tourism industry as they directly influence individuals' travel choices as well as their loyalty. In this manner, tourists' negative awareness concerning safety and security present at a destination can prove disastrous for its ability to attract visitors (Resinger and Mavondo, 2005). So far it has been suggested that risk should be studied together with destination images because of crisis management teams, as well as destination managers, need to alter negative perception and reinforce positive perceptions (Sonmez, 1998). Chew and Jahari (2014) further asserted that researchers and practitioners need to understand these relationships better because perceived risk might have on tourists' perceived destination image and travel choices. That means it is undeniable that risk and destination image are related concepts. Previous studies in tourism industry tend to examine risk perceptions isolating from destination image (e.g. Floyd et al., 2003; Fuchs and Reichel, 2011; Kozak et al., 2007). Very few studies have focused on the relationship between perceived risk and image perceived by tourists in the literature of tourism industry, yet no studies in the context of medical tourism. Therefore, this relationship is needed to better understand by medical tourism destinations to provide useful information for improving destination image by altering perceived risk levels.

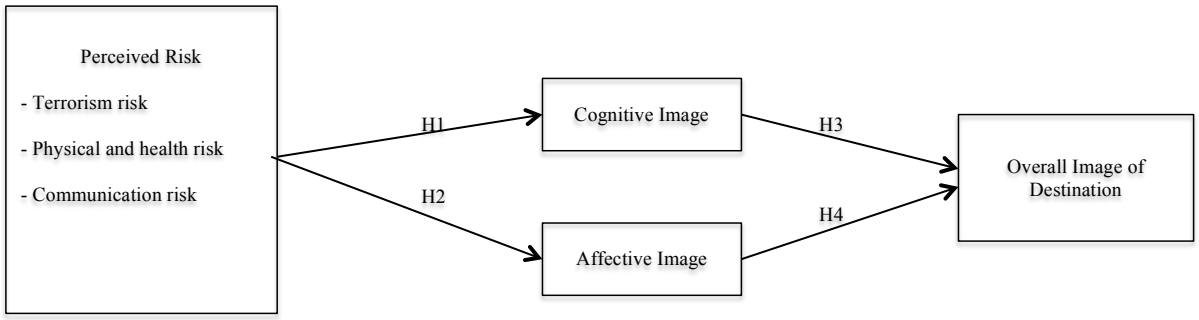


Figure 2.16 The model of relationship between perceived risk and image

Source: Developed by the researcher

The literature states that the lower the perceived risk by tourists the more the destination will be perceived as familiar and attractive to tourists (San Martin and Del Bosque, 2008). Some scholars also asserted that insecurity and perceived risk directly affect destination image (Georges, 2010; Sonmez and Graefe, 1998; Qi, Gibson and Zhang, 2009). Other studies attempted to investigate the relationship between each of perceived (e.g. disaster risk, socio - psychological risk, health risk, financial risk) and destination image in both cognitive and affective image. For example, several Hsu and Lin (2006) physical risk perceived by tourists as a severe consequence during their traveling can significantly influence tourists' subjective perception of the destination leading to confer higher overall perceived travel risk. Subsequently, the perceived risk would create a negative image of the destination. Moreover, Lehto et al. (2008) pointed out that events of natural disaster, or perceived disaster risk, have a significant influence on tourists' affective (feeling) responses and in turn develop negative destination image. A more recent study by Chew and Jahari (2014) has confirmed the relationship between perceived travel risk and destination image. More specifically, the findings presented two of three tested types of perceived risks: socio-psychological and

financial risks, were relevant to Malaysian repeat tourists to Japan in reforming their destination image of the disaster-struck country. The author can assume that perceived risk has a negative correlation on both cognitive and affective image in the context of medical tourism. Thus, the hypotheses will be proposed:

Hypothesis 1: There is a direct negative relationship between risk and cognitive image perceived by medical tourists

Hypothesis 2: There is a direct negative relationship between risk and affective image perceived by medical tourists

According to Tasci and Gartner (2007), the authors developed the multifaceted concept of destination image describing that destination image consists of a holistic image component (overall image) and an attribute component (cognitive and affective image) dominantly draws upon attributes through the formation of cognitive and affective images, while the combination of these images form the overall image. Moreover, it has for a long time been supported that cognitive and affective image are strongly associated in forming the overall image of the destination (Baloglu and McClearly, 1999; Beerli and Martin, 2004; Hosany and Uysal, 2006; Philips and Jang, 2008). Therefore, the study proposes the following hypothesis:

Hypothesis 3: There is a direct, positive relationship between cognitive image and overall image perceived by medical tourists

Hypothesis 4: There is a direct, positive relationship between affective image and overall image perceived by medical tourists

The relationships among risk, quality, overall image and satisfaction

The second sub-model aims to examine the relationships among risk, quality, overall image perceived by medical tourists and their satisfaction, as shown in Figure 2.17.

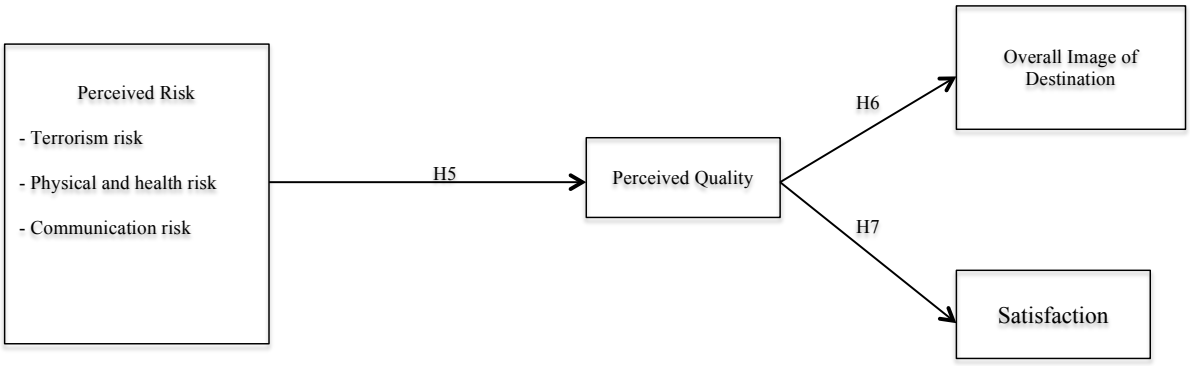


Figure 2.17 The relationships among risk, quality, overall image and satisfaction

Source: Developed by the researcher

Perceived Risk and Quality

The literature pointed out that the association between perceived risk and perceived quality has just been investigated by few studies and no studies have focused this relationship in the context of medical tourism. The study of Bettman (1973) indicated the unfavorable relationship between perceived risk and perceived quality. Moreover, Sheau-Fen et al. (2012) and Thuy and Chi (2015) examined the relationship between perceived risk as a multidimensional framework and perceived quality. The results found that the feelings of uncertainty in both performance risk and physical risk negatively affect the perceived quality of the consumers (Sheau-Fen et al., 2012; Thuy & Chi, 2015), but the effect of financial risk is rejected, as noted by Thuy and Chi (2015). Therefore, a better understanding of international medical tourists' perception of risk and quality is required if the industry is going to be

successful in the global market. As noted earlier, medical tourism is highly sensitive to the perception of danger and lack of safety. Medical tourism's primary goal is to fulfill people's travel desire and expectations regarding both traveling and medical treatment. It is needed that successful medical tourism development is subject to the reduction of risks associated with a destination. Product and service quality is considered a critical dimension of the medical tourism industry because medical tourists concern more about the quality of product and service before leaving their home countries for medical treatments. For example, Gill and Singh (2011) mentioned that besides of price, the quality of health care is recognized as an important determinant for medical tourists because some people believe that if something is offered at lower cost, they might not receive better quality. Similarly, the UNWTO states that safety and security as a determinant of quality tourist product and service (UNWTO, 2013). Therefore, the subsequent hypothesis explained the relationship between risk and quality perceived by international tourists.

Hypothesis 5: There is a direct positive relationship between risk and quality perceived by medical tourists

Perceived Quality and Image

The study explores the relationship between perceived quality and overall image with special attention on medical tourism destination. It is clear that several researchers supported favorable perceived quality along with a positive image. A number of research studies across diverse fields have evidence a direct positive relationship between perceived quality and destination image (Aydin and Ozer, 2005; Zins, 2001; Selres, 1993). Aydin and Ozer (2005) indicated that corporate image is from all of a consumer's consumption experiences, and service, quality refers to a function of these consumption experiences. Thus, it can assume that

customer perception about service quality effects the perception of a corporate image, in other words, the positive relationship between perceived service quality and the corporate image was significant. Similarly, if medical tourists have experience with the good quality of both product and service in medical tourism destinations, they are more likely to have a good image of that destination. According to the above discussion, the following hypothesis will be formulated for this study:

Hypothesis 6: There is a direct positive relationship between quality and overall image perceived by medical tourists

Perceived Quality and Satisfaction

The relationship between perceived quality and customer satisfaction has been considered one of the most frequently used constructs in performing an evaluation of products or services over the past twenty years (Zeithaml, 1988; Babin and Griffin 1998; Oliver, 1997). Olsen (2002, 2005) stated that perceived quality and satisfaction are highly intercorrelated, and sometimes there is a question of whether quality and satisfaction is the same construct (Bitner and Hubbert 1994; Churchill and Surprenant 1982). Most marketing researchers indicated that perceived quality affects to satisfaction (Dabholkar et al. 2000; Oliver 1997), in turn, influencing purchasing behavior (Johnson and Gustafsson 2000; Oliver 1999, Olsen 2002, 2005). Numerous studies attempted to examine the direct and indirect relationships among service quality and satisfaction and repurchase intention. It is well documented that several researchers (e.g., Mao and Zhang, 2012; Zeithaml, Berry and Parasuraman, 1996; Zeithaml, Bitner, and Gremler, 2003; Bisschoff and Lotriet, 2009; Bodet and Meurgey, 2002; Kyle, et al., 2010; Murray and Howat, 2002; Shonk and Chelladurai, 2009) have suggested that the provision of high-quality services is critical to the profitability of an organization, because it

enhances customer satisfaction, which in turn influences the future intentions of current customers (Kim and Trail, 2010; Kyle, et al., 2010; Murray and Howat, 2002; Shonk and Chelladural, 2008; Westerbeek and Shilbury, 2003). In the context of service marketing, Parasuraman and Zeithaml (1994) argued that the spectator's perceptions for the core product and the secondary services can exist as precedents to customers' satisfaction and their behavioral intention. Other researchers also asserted that quality is the main factor of satisfaction in explaining customers' behavioral intention (Ting, 2004; Han and Hyun, 2006; Ryu and Han, 2010). This relationship has been further confirmed in studies of the health care service industry (Andaleeb, 2000; Chaniotakis and Lymperopoulos, 2009; Naidu, 2007). In the medical tourism sector, several researchers have confirmed the association between perceived quality and medical tourists' satisfaction. For example, Han and Hyun (2015) have focused on perceived medical quality and perceived service quality. The findings presented perceived medical quality and service quality significantly and positively affected customer satisfaction. Another study proposed by Lertwannawit and Gulid (2011) investigated the relationship between service quality, namely tangibility, responsiveness, empathy, assurance and reliability, and satisfaction. The result found that service quality has a positive relationship with satisfaction. Similarly, Huei, Mee, and Cheik (2015) confirmed that perceived service quality has a positive direct effect on patient satisfaction. Therefore, a large amount of empirical research has approved that perceived product and service associated with customer satisfaction. It can assume that if perceived quality in both product and service in the context of medical tourism is confirmed, medical tourists will be satisfied. The study hypothesizes the following hypothesis:

Hypothesis 7: There is a direct positive relationship between quality perceived by medical tourists and their satisfaction

The role of culture in creating destination loyalty and its antecedents namely quality and satisfaction

Due to the relevance of this topic, limited studies have examined the role of culture in building destination loyalty in the literature of medical tourism. It is critical to develop service quality, satisfaction and loyalty in hopes that these factors will satisfy a diverse customer base so as to remain competitive in a globalized medical tourism industry. At the same time, the characteristics of culture have been considered vital importance to the actual of a product (Pizam and Fleischer, 2005). Culture has been recognized one of the most effective complicated elements that medical tourism destinations need to understand in order to provide great service quality, to satisfy customers as well as to build consumer loyalty towards in accordance with the needs of consumers in different cultures. Therefore, this study has attempted to fill that gap and also to contribute to cultural research within medical tourism by empirically investigating the role of culture on the relationships between satisfaction and perceived quality as well as destination loyalty in Thailand as a medical tourism destination on the basis of marketing and cross-cultural psychology literature. More specifically, the first objective of this third sub model attempts to investigate the relationships between culture and perceived quality in medical tourism industry. The researcher will hypothesize relationships between Hofstede's cultural dimensional in terms of power distance, individualism, masculinity, uncertainty avoidance and long-term orientations and five dimensions of perceived quality based on SERVQUAL theory, namely reliability, responsiveness, assurance, empathy and tangibles toward medical services. The second objective aims to study the moderating effect of

culture in the influence of five dimensions of perceived quality on satisfaction as well as the influence of satisfaction on destination loyalty with the context of medical tourism. The sub model is shown in Figure 2.18.

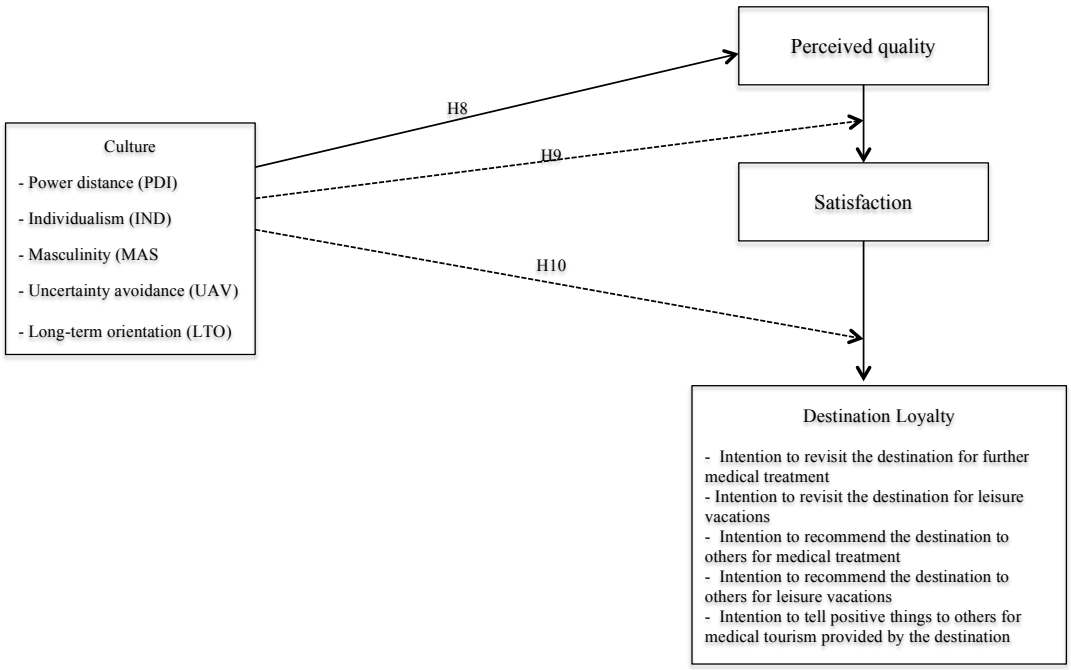


Figure 2.18 The role of culture in creating destination loyalty and its antecedents namely quality and satisfaction

Source: Developed by the researcher

The relationship between culture and service quality has received increasing interests regarding previous studies mentioned by several researchers (Winstead, 1997; Donthu and Yoo, 1998; Mattila, 1999, Furrer et al., 2000). The study of Heskett, Sasser, and Hart (1990) examined to emphasize psychographics in understanding service quality regarding the way people feel, think and behave. The finding presented that psychographics is strongly dependent on cultural elements in a multicultural environment. Another study stated by Mattila (1999), the study found that consumers along with Western culture are more likely to rely on the tangible

cues from the physical environment to evaluate service quality than their Asian counterparts. This idea is supported by several studies that indicated differences between cultures had been shown to limit the ability of service multinationals to expand their activities internationally (Kogut and Singh, 1988; Li, 1994; Li and Guisinger, 1992). Significantly, Furrer et al. (2000) examined the relationships between culture and service quality perception in the context of retail banking service. This study tended to test the relationship between perceived service quality by using the five SERVQUAL and the five cultural dimensions developed by Hofstede. Therefore, the following hypothesis will be proposed:

Hypothesis 8: There is a direct positive relationship between culture and quality perceived by medical tourists.

The second objective aims to study the moderating effect of culture in the influence of five dimensions of perceived quality on satisfaction as well as the influence of satisfaction on destination loyalty in the context of medical tourism. Previous studies have reviewed the role of culture as the moderator in the relationship between quality and satisfaction. For example, the study of Laroach et al. (2004) examined the effect of culture on the evaluation of service quality and satisfaction. The findings presented customers from Asian, namely Japan with high individualism are more likely to evaluate lower score than customers from Canada as well as the United States with high individualism concerning high-performance service quality. In contrast, customers from Japan with high collectivism are more likely to evaluate higher score than American and Canadian customers with high individualism. Another study attempted to investigate the influence of culture on the relationship between service quality and satisfaction in the context of a website involving purchase of a tourism service (Carmen et al., 2012). The results found that the effect of service quality on the visitors' satisfaction with their online

purchases is moderated by cultural dimensions including individualism/ collectivism as well as uncertainty avoidance. Thus, the researcher assumes that the influence of service quality perceived by medical tourists on their satisfaction will be affected by the moderating role of culture in six dimensions, namely power distance, individualism, masculinity, uncertainty avoidance, long-term orientation, and indulgence. The following hypothesis is therefore proposed:

Hypothesis 9: Culture positively moderates in the relationship between quality perceived by medical tourists and their satisfaction

Previous studies also indicated the role of culture affecting the influence of satisfaction on loyalty. The linkage between customer satisfaction and loyalty is regarded as the essential ingredient contributing the success of the business. A great deal of research has been devoted to understanding this linkage in the literature, however examining the role of culture in this linkage is quite limited, particularly in the context of medical tourism. This study, therefore, extends the literature by testing the role of culture as a moderator in this linkage, namely the relationship between satisfaction and loyalty. The existing literature in the mobile telecommunication services investigated that satisfaction has different effects on loyalty intention depending on national levels of survival/ self-expression values and secular-rational values. The results found that satisfaction has a greater impact on loyalty intentions when countries with higher on the survival/ self-expression continuum. Conversely, the traditional/ secular-rational values valuable had no statistically significant impact on the satisfaction-loyalty linkage while the fixed effect for a country is significant. Therefore, this study will propose the following hypothesis:

Hypothesis 10: Culture positively moderates in the relationship between medical tourists' satisfaction and their loyalty

The relationships between overall image, satisfaction and customer loyalty

The fourth sub-model attempts to examine the role of overall destination image and customer satisfaction on medical tourists' loyalty, as presented in Figure 2.19. It is important to examine the concept of image and its relation to the satisfaction obtained in order to determine visitors' intentions to revisit and to recommend the destination (Bigné *et al*., 2001; Cai et al., 2004; Yoon & Uysal, 2005). Destination image is considered one of the key elements of marketing activities, particularly in loyalty. In this study, overall image of the destination has been described as mental pictures a person holds about the characteristics of a destination including tourism infrastructure to cultural, natural and social attributes (Coshall, 2000; Beerli & Martin, 2004).

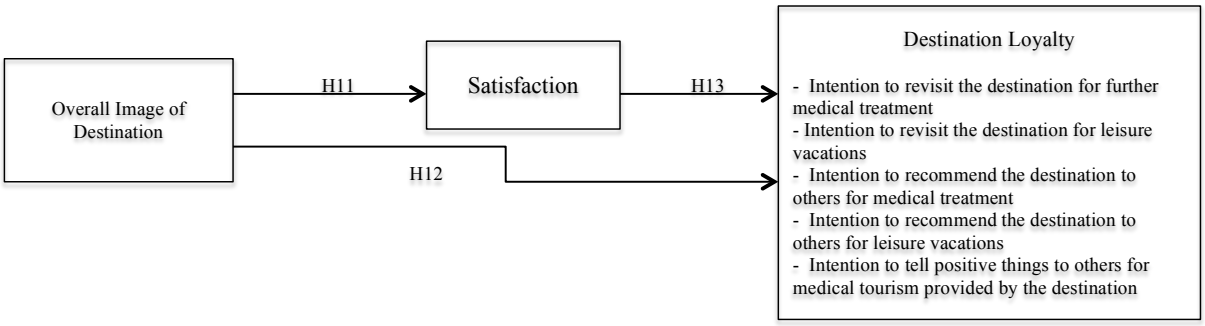


Figure 2.19 The relationships between overall image, satisfaction and consumer loyalty

Source: Developed by the researcher

Literature considers image discretely approached, as a necessary antecedent of loyalty. Perceived destination image varies among consumers, and positive destination image would improve satisfaction. The research revealed that the role of destination image as an independent variable influenced consumer behaviors including before, during and after visiting a destination (Mohamad et al., 2012; Chen and Tsai, 2007; Bigne, Sanchez and Sanchez, 2001; Chen and Hsu, 2000; Schroeder, 1996; Ross, 1993). Several studies have asserted for the significant role

of destination image in forming customers' satisfaction as well as their loyalty (Ramseook-Munhurruna and Naidooa 2015; Chen and Tsai 2007; Prayag and Ryan 2012). To begin with, the relationship between destination image and satisfaction has become popular more than fifteen years. The increasing significance of tourist demand traveling to numerous destinations is the result of the increased life standard. The destinations have to develop the image perceived by visitors so as to stay competitive destination. Several researchers in the literature have evidently supported the association between image and satisfaction. For example, a positive destination image perceived by individuals tends to a greater satisfaction level of tourists as well as a more positive behavioral intention (Lee et al., 2005). Oliver and Linda (1981) indicated that corporate image affected satisfaction and dissatisfaction while the study of Bigne et al. (2001) and Zins (2001) considered that the perception of an image is the function of the accumulated effect of consumers' satisfaction depending on the comparison between customers' expectations and the actual service. Andreassen and Lindestad (1998) have further asserted that the relationship between image and satisfaction is formed by the process explaining when consumers are satisfied with the product or service, the company image in their mind is improved as well as this firm image will directly influence satisfaction. Cohan (2012) identified that both emotion and cognitive image have an impact on destination loyalty and at the same time is considered the antecedent of satisfaction. Similarly, the positive link in the literature of tourism industry is well established for many types of destinations (Chon, 1990; Bigne et al., 2001; Bigne Alcaniz et al., 2005; Castro et al., 2007; Hernandez –Lobato et al., 2006; Cheng and Tsai, 2007; Kozak and Rimmington, 2000; Chi and Qu 2008; Xia et al., 2009.; Wang and Hsu, 2010; Prayag, 2009; Prayag and Ryan, 2011).

Furthermore, many researchers have confirmed the effect of destination image on consumer loyalty in the literature. It is undeniable that image seems to be a crucial factor deciding whether consumers will revisit a destination. Additionally, Bosque and Martin (2008) have noted that the influence of image on customer loyalty must be noticed because a positive image of the destination is the main cause of tourists' revisiting or recommending the destination to others. Numerous studies have indicated that the destination image with more attractive results in consumers' revisits in the same destination. For example, Li (2013) revealed that if the image is more positive, tourists are more likely to visit or revisit the destination. The positive relationship between image and loyalty has been highlighted in the study of Bosque and Martin (2008) and Yoon and Uysal (2005). The research by Mohamed et al. (2011), Yossamorn and Phokha (2012) and Bigne et al. (2001) have also demonstrated the positive destination image perceived by consumers positively influence the willingness of travelers to revisit or recommend the destination. Therefore, the empirical studies presenting the positive relationship between destination image and consumer loyalty have suggested by many researchers (Hunt, 1975; Pearce, 1982; Tasci and Gartner, 2007; Um et al., 2006; Prayag and Ryan, 2012; Yosamorn and Phokha, 2012).

Finally, the relationship between these three constructs, namely image, satisfaction, and loyalty has been investigated in a large number of previous studies (Mahadzirah et al., 2011; Carmen et al., 2007; Chia and Qu, 2008; Matzer and Fuller, 2008; Lee, 2009; Meng et al., 2011; Lee, 2009; Prayag, 2009; Cogban, 2012; Chi, 2912). For example, the study of Mahadzirah et al. (2011) examined the relationship between destination image concerning natural attraction and accessibility, satisfaction and loyalty among international tourists in Malaysia. The findings revealed that the destination image has a direct impact on tourists' satisfaction as well as

loyalty. Similarly, Chia and Qu (2008) have examined the link between destination image, satisfaction, and loyalty from hotel consumers in the Eureka Springs.

In conclusion, the aim of the present study is to investigate the association of uniqueness of medical tourism destination's image, satisfaction, and consumer loyalty. This states that a desirable medical tourism destination image leads to medical tourists satisfaction and loyalty for a particular destination, or medical tourism destination in this study. As discussed earlier, this can assume that when medical tourists who perceived stronger positive destination image will result in improving their satisfaction toward the destination. Moreover, medical tourists may be loyal to a destination because it is viewed as having a positive image among other consumers, especially in credence products and services and this alone may provoke some amount of unwillingness to switch (Wang, 2010). Thus, the following hypotheses can be inferred from the above discussion:

Hypothesis 11: There is a direct positive relationship between overall image of medical tourism destination and medical tourists' satisfaction

Hypothesis 12: There is a direct positive relationship between overall image of medical tourism destination and medical tourists' loyalty

Satisfaction and Loyalty

Satisfaction is defined as customers' overall evaluation about products and service fulfillment (Oliver 1997; Chen and Tsai 2007). Customer satisfaction is regarded as the most widely discussed independent variable in studies on customer loyalty (Ibanez, Hartman & Calvo, 2006; Auh and Johnson, 2005; Host and Knie-Anderson, 2004; Hellier, Gaursen, Rondey and Rechard, 2003). More specifically, the association between satisfaction and loyalty is

regarded as one of the most important relationships for marketing theory and practice because of the marketing effectiveness (Anderson et al. 2004; Bolton and Lemon 1999; Reichheld and Sasser 1990), the financial performance and their implications for businesses' current and future product- marketplace (Anderson et al. 1994, 2004; Anderson and Mittal 2000; Fornell 1992; Gruca and Rego 2005; Gupta and Zeithaml 2006). There are two controversial ideas in the literature of the influence of satisfaction on the success in destination marketing in terms of the choice of destination as well as the decision to revisit (Yoon and Uysal 2005). On the one hand, the study of Shankar et al. (2003) found that there is a negative relationship between satisfaction and loyalty. In other words, customers who are not highly satisfied are likely to be loyal while satisfied customers may not be loyal customers. On the other hand, most researchers have confirmed the positive relationship between satisfaction and customer loyalty. Anderson and Salisbury (2003) described customer as an attitude explaining a customer's perceptions from his or her overall experience while customer loyalty is related to a behavioral measure of future intentions to repurchase. Customer loyalty, viewed as a customer behavior occurs as a result of satisfaction, regarded as an attitude. Therefore, previous studies on the relationship between consumer satisfaction and loyalty have clearly confirmed a positive relationship between customer satisfaction and customer loyalty (Rust et al., 1995; Anderson 1996; Anderson et al. 1994; Fornell 1992; Fornell et al. 1996; Ping 1993; Taylor and Baker 1994).

In the field of tourism, customer satisfaction is one of the earliest factors used to explain customer loyalty for people tend to believe that there is a significant and positive relationship between customer satisfaction and destination loyalty. Loyalty signals customers' attitudes and behaviors towards the products and services received and their repeat usage (Shoemaker & Lewis, 1999; Baker & Crompton, 2000). Past studies have provided some evidence that

customer satisfaction has a positive influence on tourists' intentions to revisit and to recommend the destination (Baker and Crompton 2000; Petrick, 2004; Chen and Tsai 2007; Chi and Qu 2008; Prayag and Ryan 2012; Lee et al. 2007; Lee and Beeler 2009; Chen and Chen, 2010; Hutchison et al., 2009). Baker and Crompton (2000) argued that quality experience and high levels of customer satisfaction are the ways sustaining consumers' patronage due to these two achievements can contribute to visitor loyalty in terms of word-of-mouth endorsements and repeat visits ultimately influencing business performance. Another study by Prayag and Ryan (2012) explored this relationship by carrying out 705 international visitors who stay in hotels on the island of Mauritius and have confirmed the relationship between customer satisfaction and loyalty. Meanwhile, satisfaction plays a crucial role in the medical tourism industry because patient satisfaction refers to an interactive process reflecting patients' quality assessment on the medical services experienced, as indicated by Krisner and Federman (1997). Furthermore, Huei, Mee, and Chiek (2015) and Pakdil and Harwood (2005) pointed out that patient satisfaction is one of the main keys to success for the healthcare services providers. Huei, Mee, and Chiek (2015) have further supported the reasons how important of patient satisfaction in the medical tourism industry by providing several reasons. Satisfaction can maintain their relationships with the patients that mean satisfied patients are returned, consumers, also can identify areas of strength and weaknesses in the organizations in the medical tourism destination (Huei, Mee and Chiek, 2015) and finally can associate with the service providers' financial benefits (Aldaqal et al., 2012). Some empirical evidence in the healthcare and medical service has surfaced that satisfaction has a positive relationship to post-purchase behavior. For example, the study of Chaniotakis and Lymperopoulos (2009) found that a positive relationship between satisfaction and word-of-mouth by patients who have received maternity service in

Athen, Greece while Kim (2008) stated this relationship from customers who received medical service from a hospital in Seoul, South Korea. Choi et al. (2004) also asserted that the findings of their study presented all three factors, namely service quality, value and satisfaction affecting behavior intention in the context of healthcare service. To satisfy a customer is needed for medical tourism destinations to keeping them in the long term because loyal customers are less expensive than gaining new ones (Chen and Chen, 2009). Positive travel experiences in terms of services, products and other resources provided by the destination could induce positive word-of-mouth (WOM) recommendations as well as repeat visits (Oppermann, 2000; Yoon and Uysal, 2005; Chi and Qu, 2008). Moreover, loyal customers tend to recommend friends, relatives or other potential consumers to a service and product or service by word-of-mouth (Chi and Qu 2009). This study assumes that satisfied medical tourists may revisit a medical tourism destination, engage in positive word-of-mouth communication including recommending it to their friends, relatives, and others; and express favorable comments about the destination such as commending the destination and the product as well as service quality experience of the destination to their friends, family, relatives and others. Conversely, dissatisfied medical tourists may not return to the same medical tourism destination, may not recommend it to their family, friends, relatives, and others, and express unfavorable negative comments about a destination thereby damaging the destination's reputation (Reisinger and Turner, 2003).For these reasons, if medical tourists are satisfied, they tend to continue purchase as well as to create an attitudinal loyalty by recommending the product and service in the medical tourism destination through word of mouth. Based on the above discussion, the hypothesis would be postulated that:

Hypothesis 13: There is a direct positive relationship between medical tourists' satisfaction and loyalty toward medical tourism destination

The Moderating Effect of Risk

This set of relationship tends to investigate the moderating role of medical tourists' perceived risk on the relationship between overall image of medical tourism destination and satisfaction as well as the relationship between medical tourists' satisfaction and loyalty, as postulated in Figure 2.20.

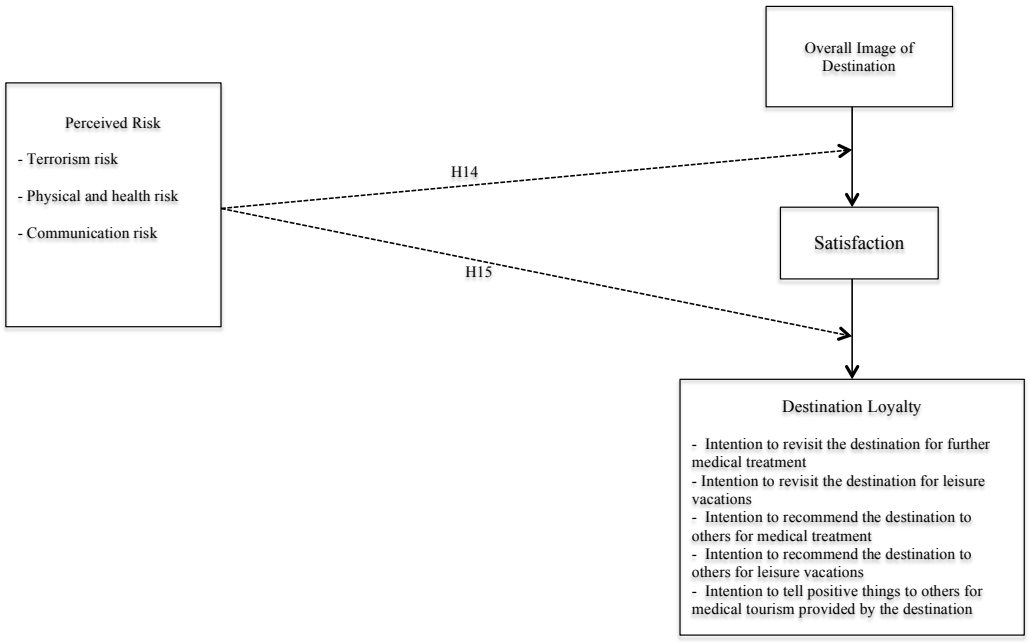


Figure 2.20 Perceived risk as a moderating role

Source: Developed by the researcher

Researchers broadly agree on the concept of perceived risk that plays a significant role in influencing consumer behavior (Boksberger et al., 2007; Conchar et al., 2004; González et al., 2006). Meanwhile, the research of perceived risk in understanding its antecedents, formation, and consequences has attracted wide attention in the literature of tourism industry.

However, the limited number of studies addressed the moderating role of perceived risk in the literature (Martin and Cameraro, 2009), in particularly perceived risk as a moderator on the antecedents leading to loyalty (Ranaweera, 2015). Similarly, the moderating role of perceived risk has received little or no attention in the tourism and medical tourism literature. Currás-Pérez and Sánchez-García (2012) claimed that satisfaction with a high level does not always move to an improvement of consumer loyalty because of the possible influence of moderating factors on the relationship between satisfaction and loyalty. Ranaweera et al. (2005) also argued that it is need to analyze the moderating effect of some of the customer's characteristics including perceived risk in order to further understand customer behavior. Campbell and Goldstein (2001) and Gurhan-Canli and Batra (2004) pointed out that perceived risk is more appropriate to define a global assessment as a moderator rather than risk as antecedents that form the overall evaluation of or satisfaction with a product (Angulo and Gil, 2007; Tuu and Olsen, 2009). Gürhan-Canli and Batra (2004) attempted to extend previous research by testing perceived risk a moderator, and the result found that perceived risk plays a major role in moderating the effects of corporate image on product evaluation. The study of Campbell and Goldstein (2001) found that perception of risk moderates the effect of incongruity on assessments and at the same time preferences for incongruity will not appear when risk is high. Therefore, customers tend to reduce the negative effect of risk by several methods including switching to other firms with low levels of risk (Yuksel and Yuksel, 2007), searching additional information (Mitchell, 1999) and careful evaluations of alternatives and product trials (Dowling and Staelin, 1994; Cho and Lee, 2006).

The tourism industry literature has provided empirical evidence for the moderating role of risk perceptions. For example, the moderating effect of perceived risk has been examined in the

relationship between overall satisfaction and behavioral intention in Thailand (Tavitiyaman and Qu, 2012). The finding reveals that tourists with low-risk perception in natural disasters are more likely to have greater overall satisfaction, positive destination image and behavioral intention than tourists with high perceived risk. Another study by Lu et al. (2016) has applied the Theory of Planned Behavior (TPB) as a framework with using perceived risk as a moderator to examine intention of international students to participate in leisure travel activities during their stay in Taiwan. The result presented that perceived risk served as a mediator in the relationship only between subjective norm and leisure intention. Additionally, risk refers to the possibility of loss and future uncertainty consequences and at the same time damaging perceived benefits (Dowling & Staelin, 1994). In this manner, consumer expectations, as well as satisfaction, would be formed with less stability when recognizing a high level of perceived risk. Bauer (1960) has supported a high level perceived risk can cause customers' unstable feeling. Thus, it can be assumed that when perceived risk increases, the power of predictive of satisfaction on loyalty decreases.

Therefore, the following hypotheses are formulated to test the moderating impact of perceived risk.

Hypothesis 14: Medical tourists' perceived risk negatively moderates in the relationship between overall of medical tourism destinations and medical tourists' satisfaction

Hypothesis 15: Medical tourists' perceived risk negatively moderates in the relationship between medical tourists' satisfaction and their loyalty

The Mediating Effect of Satisfaction

As mentioned by Huei, Mee and Chiek (2015), very few studies have investigated patient satisfaction as a mediator in the healthcare context. This study therefore aims to examine the role of satisfaction as a mediator between perceived quality and consumers' loyalty as well as between overall image and consumers' loyalty in the medical tourism industry. This approach considers consumer satisfaction as a mediator between perceived quality and loyalty intention as well as overall image and consumers' loyalty as shown in Figure 2.21.

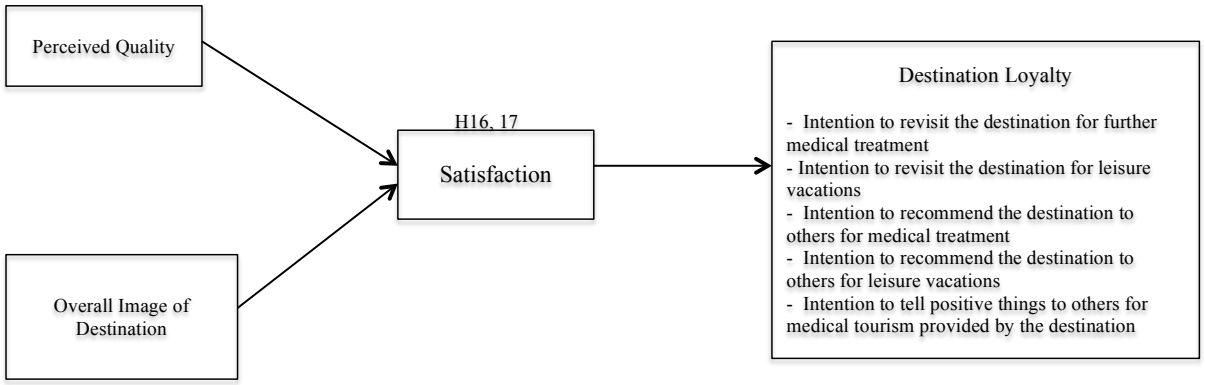


Figure 2.21 Satisfaction as a mediating role

Source: Developed by the researcher

Satisfaction as a mediator between perceived quality and customer loyalty

First, the present study explores the mediating role of satisfaction in the link between perceived quality and customer loyalty. There is a tremendous amount of empirical evidence to prove satisfaction as a mediating role in the relationship between quality and loyalty. Customer satisfaction as the mediating role between perceived quality and consumer loyalty has been proved by several researchers (Olsen, 2002; Yang & Tsai, 2007; Petnji et al., 2011). Bloemer

and Ruyter (1998) have proposed the indirect influence of quality on consumer loyalty through customer satisfaction. Dabholkar et al. (2000) have attempted to examine its consequences, antecedents, and mediators providing a deeper understanding of conceptual issues related to quality. A mediating effect of satisfaction was found on the relationship between service quality and behavior intentions. The researchers pointed out that the relevant factors related to customer satisfaction have better conceived as a mediator in the quality-loyalty relationship, in other words, quality perceived by customers result in their satisfaction which in turn loyalty intentions (Olsen, 2002; Yang & Tsai, 2007; Petnji et al., 2011) as well as future intentions (Kuo et al., 2009) are due to their satisfaction.

A growing literature in the field of healthcare services has provided evidence supporting the idea that patients or customers' perceived quality have a positive influence on satisfaction (Yoo, 2005; Cho et al., 2004; Wu, Liu & Hsu, 2008; Chou et al., 2005; Boshoff, 2004). Several researchers have asserted that patient satisfaction is the main key to explaining the relationship between perceived healthcare service quality and their loyalty intentions (Cho et al., 2004; Donabedian, 1996). Furthermore, the mediating role of satisfaction has been confirmed in the quality-loyalty association in many locations as presented by several studies. For example, the study of Lei and Jolibert (2012) focus on public hospital patients in Shanghai and confirm a mediation role of patient satisfaction in the relationship between perceived quality and patient loyalty. Another study in Malaysia by Aliman and Mohamad (2013) has provided evidence that local patients' satisfaction significantly mediates the relationship between their perceived quality of service in the hospitals and their intention to revisit. At the same time, the study of Murti et al. (2013) in India found that satisfaction among patients plays a substantial mediating role in the relationship between service quality and patients' behavioral intention in the private

hospitals. Additionally, many previous studies in the healthcare setting have supported that service quality in hospitals is the main cause of a positive influence on patient satisfaction which in turn, results in patients' intention to return or revisit for a particular service provider (Aliman and Mohamad, 2013; Alrubaiee and Alkaaida, 2011; Chaniotakis and Lymperopoulos, 2009; Choi et al., 2004; Murti, Deshpande and Srivastava, 2013; Vinagre and Neves, 2008; Wu, 2011). Therefore, the researcher assumes that if the quality of medical product and service perceived by consumers is confirmed, then medical tourists are satisfied. Subsequently, consumer loyalty is influenced by the degree of customer satisfaction.

Hypothesis 16: Medical tourists' satisfaction positively mediates the relationship between Quality perceived by medical tourists and their loyalty toward medical tourism destination

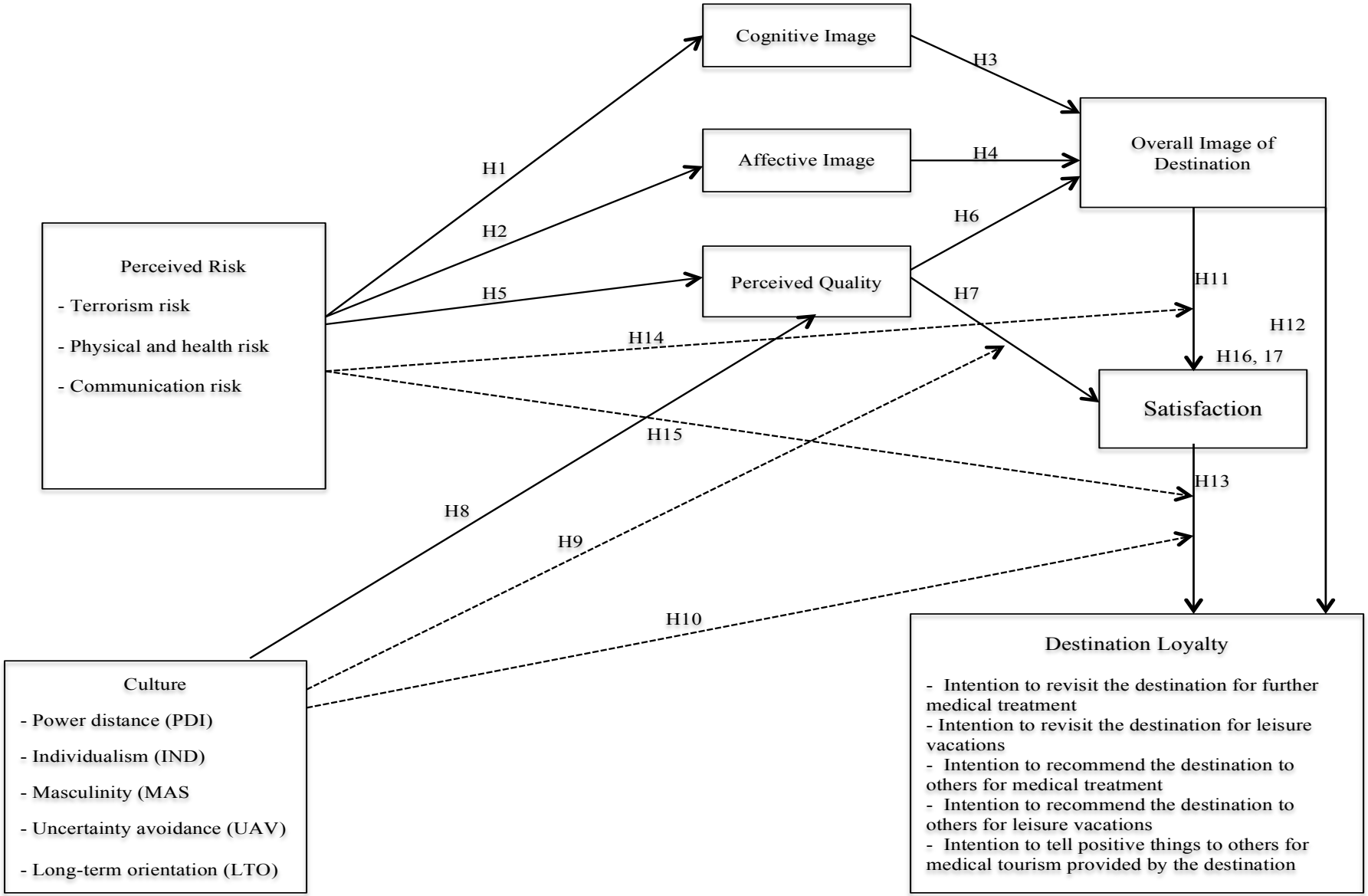
Satisfaction as a mediator between overall image and customer loyalty

Next, this study also seeks to determine the mediating role of satisfaction on the relation between the overall image of medical tourism destination perceived by consumers and their loyalty toward the destination. Chi and Qu (2008) pointed out that the causal relationships among destination image, tourist satisfaction and destination loyalty which is argued to be lacking in the tourism industry literature. Similarly, the context of medical tourism, no studies investigates the moderating role of satisfaction on the relationship between overall image and consumer loyalty. Some studies in the tourism industry advocate satisfaction play a significant mediating role in the behavioral model (e.g. Chen and Tsai, 2007; Chi and Qu, 2008; Tsung, 2009; Mahadzirah et al., 2011 and Kim et al., 2012). For example, Chen and Tsai (2007) posit that individuals having a favorable destination image would go through positive on-site

experiences, which in turn leads to greater satisfaction levels and destination loyalty. Supporting the above work, Chi and Qu, (2008) suggest that favorable destination image will result in higher tourist satisfaction level, which in turn influenced destination loyalty. A recent study by Mohamad et al. (2014) provides tenable evidence that satisfaction plays a significant role in governing the relationship between destination image and loyalty. This implies that the more favorable the image of Malaysia, the more likely tourists will choose Malaysia as their vacation destination. A positive evaluation of a destination deriving from positive travel experience would result in a positive image. Also, destination image exercises a positive influence on satisfaction. Tourist satisfaction improves as the destination has a favorable image and subsequently lead to a greater likelihood to return to the same destination and spread positive word of mouth to others. Based on the above premise, this study proposes the research hypotheses set out below:

Hypothesis 17: Customer satisfaction positively mediates the relationship between overall image perceived by medical tourists and their loyalty toward medical tourism destination

Finally, the proposed model is shown in Figure 2.22.


Cognitive Image
Affective Image
Perceived Quality
Overall Image of Destination
Satisfaction
Perceived Risk
- Terrorism risk
- Physical and health risk
- Communication risk
Culture
- Power distance (PDI)
- Individualism (IND)
- Masculinity (MAS
- Uncertainty avoidance (UAV)
- Long-term orientation (LTO)
Destination Loyalty
- Intention to revisit the destination for further medical treatment
- Intention to revisit the destination for leisure vacations
- Intention to recommend the destination to others for medical treatment
- Intention to recommend the destination to others for leisure vacations
- Intention to tell positive things to others for medical tourism provided by the destination
H1
H2
H3
H4
H5
H6
H7
H8
H9
H10
H11
H12
H13
H14
H15
H16, 17

2.9 Summary

In today's competitive medical tourism market, medical tourists have a wide variety of choices to choose medical products and service. As mentioned earlier, medical tourism is a significant revenue-generator for countries around the world served as medical tourism destinations. To sustain the competitive advantage of medical tourism destinations, customer loyalty seems to be a very important factor in attracting medical tourists to revisit as well as to recommend the destination to others including relatives, family and friends. Therefore, a through research-based in depth understanding of consumer behavior in the context of medical tourism is an area requiring greater research.

This study has attempted to contribute new information by developing a conceptual customer loyalty model applicable to medical tourism industry. The proposed model of this study demonstrates the relationships among four important factors: perceived risk, perceived quality, image and satisfaction associating to customer loyalty in the context of medical tourism. Subsequently, this study aims to test the moderating role of perceived risk in the relationship between overall image of the destination and satisfaction as well as between satisfaction and customer loyalty. Consequently, the study will investigate the mediating role of satisfaction in the relationship between perceived quality and customer loyalty as well as between satisfaction and customer loyalty.

Chapter 3
Research Methodology

3.1 Introduction

As quoted by Avisson (1988), it has to be understood that methodology seems to be the guideline relating to the entire process of the research. It is described as a structured set of steps, techniques, design products and processes, components and perspectives (Olle, 1991). Choosing the appropriate method is important for what the researcher can make conclusions about a phenomenon. However, the researcher should aware of the limits when choosing a research method including time, money, ethics, feasibility and availability to measure the phenomenon correctly. Therefore, the aim of this chapter is to discuss the research methodology used in order to address the research questions and hypotheses proposed in Chapter one and two. The guideline of this chapter is presented in Figure 3.1. More specifically, the chapter is to establish research design, qualitative approach, and quantitative approach. Consequently, ethical consideration and summary will be presented in this chapter.

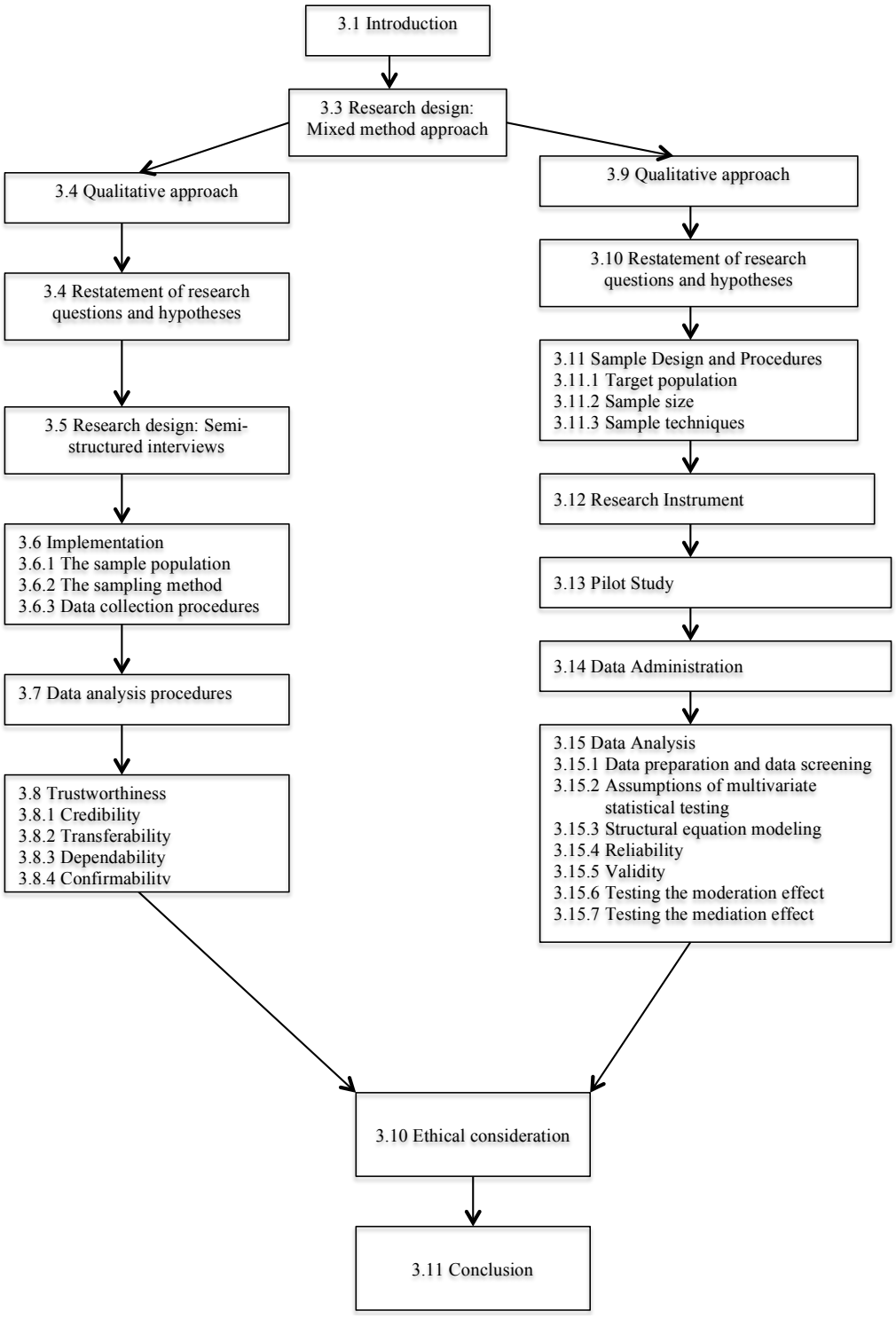


Figure 3.1 The guideline of Chapter 3

Source: Developed by the researcher

3.2 Research Design

Due to Parahoo (2004), a research design is defined as a plan describing where, when and how data is to be collected and analysed (Mutai, 2000). The research design offers a guideline or blueprint for conducting the research. Bayman (2010) has suggested that choosing a research design mainly depended on the nature of the research, its objectives, the research questions and hypotheses developed. More specifically, the research design can help the research to entail a series of rational decision-making choices about the research question (Sheikh, 2010). Furthermore, the design of a study will help to ensure that the data collection is the right information for the research problems (Bryman and Bell, 2011).

In order to select an appropriate research design in this study, it is worth understanding that several paradigms have been reviewed by researchers in the literature. Due to various perspectives of what research is as well as how the research relates to the knowledge being developed within and across disciplines, a research paradigm is regarded a guideline presenting how researchers carry out research as well as make decisions. According to Kuhn (1962), paradigm is described as "the set of common beliefs and agreements shared between scientists about how problems should be understood and addressed". Similarly, Guba (1990) indicated that paradigm is guided by "a set of beliefs and feelings about the world and how it should be understood and studied". Creswell (2013) often used a term of worldview instead of paradigm. Denzin and Lincoln (2001) and Guba (1990) characterized the beliefs into three categories including ontology (what is reality? Or the philosophical belief of researchers), epistemology (How do you know something? Or the problems that researchers encounter) and methodology (What tools do we use to know that reality?). Dill and Romiszowski (1997) further asserted the functions of paradigms in several ways. Paradigms help to define how the world works and at

the same time how knowledge is extracted from this world. Additionally, paradigm helps to refer how one is to think, write, and talk about this knowledge.

It is critical to be aware of the fact that paradigm can guide the discipline as well as the methodology used in the research papers. Similarly, several researchers indicate that a chosen paradigm guides the method of inquiry as well as the actions of the researcher (e.g. Guba and Lincoln, 1991; Neuman, 2006), in other words, each researcher belongs to a different discipline. It has to be understood that where the researchers' academic discipline belongs, how they create a holistic view of knowledge and at the same time the methodological strategies they use to discover it. Therefore, the researcher needs to select an appropriate paradigm before choosing the right methodology for the research. Numerous researchers have agreed that paradigm affects every stage of the research from deciding on the research problems to the analyzing and interpreting the data (Denzin and Lincoln, 2000; Mertens, 2005).

Postpositivism	**Constructivism**
• Determination • Reductionism • Empirical observation and measurement • Theory verification	• Understanding • Multiple participant meanings • Social and historical construction • Theory generation
Advocacy/Participatory	**Pragmatism**
• Political • Empowerment Issue-oriented • Collaborative • Change-oriented	• Consequences of actions • Problem-centered • Pluralistic • Real-world practice oriented

Table 3.1 Four worldviews used in research

Source: Creswell (2003)

Of these four paradigms, pragmatic paradigm will be most appropriate for the present study. The pragmatic paradigm is regarded as an effective way to confirm, cross-validate, or

corroborate findings within a single study (Creswell, 2003). While the literature suggested that the positivist or post-positivist paradigm prefers to use quantitative approaches (methods) in the collecting data and analyzing processes, the interpretivist/ constructivist paradigm tends to predominantly use qualitative methods (Silverman, 2000; Wiersmaan 2000; Cohen and Manion, 1994). As quoted by Cresswell (2003), the pragmatic paradigm allows the application of "multiple methods, different worldviews and different assumption as well as different forms of data collection and analysis in the mixed methods study" (p. 12). Pragmatism attempted to counter the link between epistemology and method; in other words, the concept of this paradigm seems to believe that quantitative and qualitative are compatible (Howe, 1988). Tashakkori and Teddlie (1998) further claimed that pragmatist approach and the paradigmatic assumptions underlying the research method are less important than the research question. Furthermore, the same authors stated that it is useful to make a judgment combining both quantitative and qualitative methods in the research. Therefore, a mixed-method has been regarded as one of the most popular methods for the researchers in recent days.

Based on the research questions of the present study lying on both quantitative and qualitative nature, the researcher believes that pragmatists do not see the world as an absolute unity. Moreover, pragmatists believe that researchers have to stop asking questions about the reality and the laws of nature (Cherryholmes, 1992). Conversely, they should understand an external world independent of the mind and that lodged in the mind. As a result, mixed methods will allow researchers to open the door to different worldviews, different assumptions, and many approaches for collecting as well as analyzing data rather than subscribing to either quantitative or qualitative research.

There are different strategies to combine both quantitative and qualitative methods. A concurrent triangulation strategy will be used in the present study. This strategy is described as a strategy that involves collecting quantitative and qualitative data simultaneously in order to confirm, cross-validate, or corroborate findings with a single study (Creswell, 2003), as presented in Figure 3.2.

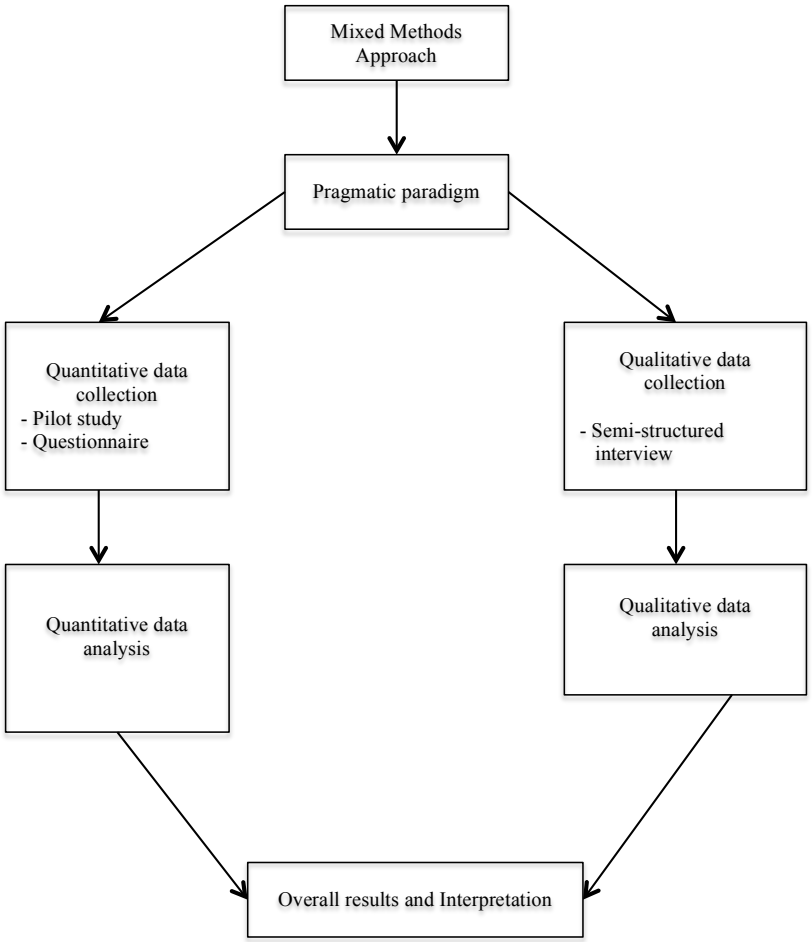


Figure 3.2 Concurrent Triangulation Strategy

Source: Adapted from Creswell (2003)

3.3 Qualitative approach

According to Strauss and Corbin (1990), qualitative research is defined as "any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification" (p. 17). This kind of research underlies a natural approach seeking to understand phenomena in a context-specific setting. For example, the researcher thinks real world setting that does not manipulate the phenomenon of interest (Patton, 2001). The same author further indicates that this approach produces results arriving from real world settings that state the phenomenon of interest unfold naturally. Therefore, the results from qualitative analysis presented a different type of knowledge rather than quantitative inquiry.

3.4 Restatement of Research Questions and hypotheses

In the qualitative phase, this study attempts to examine the underlying dimensions of risk perceived by international medical tourists. Thus, the following will be presented the research question.

Research question 1: What are the underlying dimensions of international medical tourists' risk perception toward Thailand as a medical tourism destination in terms of pre, during and post travelling?

More specifically, research question 1 is broken into:

Research question 1.1: Overall, what is the most influential risk affecting your loyalty toward Thailand as a medical tourism destination?

Research question 1.2: What dimensions of risk are they worried about before deciding travelling to Thailand for medical tourism?

Research question 1.3: What dimensions of risk have they experienced during their stay in Thailand for medical tourism?

Research question 1.4: What dimensions of risk will they receive after travelling in Thailand for medical treatment(s)?

3.5 Research design: Semi-structured interviews

For a qualitative approach, this section of the study aims to obtain multiple perspectives as well as to gain a deeper understanding of the study phenomenon (Creswell & Plano Clark, 2011). The present study attempts to explore the dimensions of perceived risk from the perspectives of medical tourists. The semi-structured interview will be selected as a technique to address the purpose of the qualitative phase. Flick (2002) indicated that a semi-structured interview is also called as a guided interview that widely used in social science research. This interview depends on a set of predetermined questions from the researcher but the wording and order of the questions can be modified regarding to the respondent's perception of what seems most appropriate, as recommended by Robson (2002). This type of interview ensures that the same information is pursued with each participant, but freedom exists to pursue new or unusual insights (Fontana & Frey, 2000). According to Creswell (2002, p. 205), "the advantage of this type of interviewing is that the predetermined close-ended responses can net useful information to support theories and concepts in the literature. The open-ended responses, on the other hand, can allow the participant to provide personal experiences that may be outside or beyond those identified in the close-ended options". Therefore, the semi-structured interviews will be used for collecting data due to this type of interview allows full explanation of the topic. Moreover, this type also retains a degree of structure ensuring most of the information obtained that is relevant and manageable. Moreover, some questions in this study are sensitive and personal, especially questions relating to some dimensions of risk perceived by medical tourists. Smithson (2008) has suggested that if the topic of study is related to personal, the semi-

structured interview has been regarded an appropriate technique rather than other types of qualitative approach such as focus groups. Henderson (2006) further explained that although the semi-structured interview can be time-consuming, biased, and inefficient, this method provides the richest data most effectively.

In order to ensure interview questions align with research questions as well as to construct an inquiry-based conversation, the researcher develops interview protocol and interviews questions adopted from the pattern developed by Lenggogeni (2014), as presented in Table 3.3 and 3.4.

Interview Protocol

Qualitative – Semi structured Interview

1. Introduction

The qualitative approach of this study attempts to obtain a deeper understand in multiple perspectives of international medical tourists toward Thailand as a medical tourism destination in terms of risk perception. In particular, questions in the qualitative research phase will include exploring the dimensions of risk perception including pre, during and post travelling to Thailand in order to obtain any medical treatment.

2. Purposes

The qualitative approach of this study will cover on the following aims:

2.1 To explore the overall risk perception influencing the participant on their loyalty toward Thailand as a medical tourism destination

2.2 To explore the underlying dimensions of international medical tourists' risk perception toward Thailand as a medical tourism destination in terms of pre, during and post travelling.

3. Target participant, Sampling technique and Location

3.1 Target participant: target respondents who are eligible on this study are international medical travellers in Thailand. More specifically, characteristics of these respondents have to fulfill two criteria: 1) travellers have to visit Thailand in order to obtain any types of medical treatment(s) from clinic/ hospital in Thailand and 2) they must to receive a direct or indirect engagement in any tourism activities during their stay in Thailand.

3.2 Sampling technique: The minimum target of quota sampling in this research is 6 people.

3.3 Location: Qualitative stage will be located in hospitals/ clinics in three main districts of medical tourism in Thailand including Bangkok, Phuket and Chiang Mai.

4. Data Collection

Interview Preparation Several steps that need to be completed by the interviewer before conducting the interview:

4.1 The researcher will contact in advance with the potential interviewee by person as well as explain information about the research and interview questions.

4.2 The researcher will ensure the eligibility of participant as mentioned earlier.

4.3 The researcher will determine the interview time and location.

4.4 The researcher will prepare the interview tools including interview questions, participant information sheet, informed consent form and voice recorder.

5. Interview

Several steps will be needed to complete on the interview day.

5.1 The interview will start with greeting and introduction of the interviewer

5.2 The interviewer will open the conversation by explaining an overview of the study, purpose of the research project as well as length of interview

5.3 The researcher will inform the ethical considerations of the study to the interviewees.

5.4 The researcher will ask the permission from the interviewees by handing in the participant information sheet, the agreement for the interview, the field note form (the interviewees' background), the informed consent form and finally confirming for audio recording before starting the interview.

5.5 The researcher will recommend that the interviewees can stop the recording at any time without asking for the reason.

5.6 The researcher will start the interview and the researcher will stop the interview whenever data reaches saturation point.

5.7 The researcher will ask the permission in order to contact the interviewees in the future for several reasons such as insufficient information.

5.8 Finally, the researcher will close the interview by giving a small gift to the interviewees so as to express the appreciation to contribute in this research project.

6. Checking the Interview Result

6.1 The interviewer will check whether the data is rich enough regarding to the purposes of the study as well as list of question. In case of the insufficient data, the interviewer will contact the interviewee by email in order to complete the information.

6.2 After that, the researcher will transfer the data to the password-protected computer for keeping the confidential recording and subsequently the data will be transcribed to hardcopy.

6.3 The researcher will analyse the interview by using the processes in qualitative analysis developed by Miles and Hubleman (1994).

7. Trustworthiness

The researcher will establish the trustworthiness of this study by conducting several techniques suggested by several qualitative researchers in the literature.

7.1 Credibility: Thick description refers to the elucidation of research in all the processes of the study including data collection, context of the study to production of the final report.

7.2 Transferability

7.3 Dependability: Code-recode strategy is described as the researcher codes the same data by giving one or two weeks of gestation period between each coding.

7.4 Confirmability: An audit trail

Table 3.3 Interview protocol

Source: Developed by the researcher

Interview Question for Medical Tourist

Introduction of interviewer and introductory question

1. Tell me about your opinion of Thailand in general?
2. Tell me about your opinion of Thailand as a tourist destination?
3. Tell me about your opinion of Thailand as a medical tourism destination?
4. What are the most influential factors that affect your decision to travel to Thailand for medical tourism?
5. Have you experience any types of risk when travelling?
6. If yes, how has this experience influenced your decision to travel to Thailand?

Main question

A. Overall, what is the most influential risk affecting your loyalty toward Thailand as a medical tourism destination?

B. Before travelling

B1: Tell me about what kind of risk or fear you feel before travelling to Thailand for medical treatments.

(Clarifying questions: - Can you expand a little on this?
- Can you tell me anything else?
- Can you give me some examples?)

B2: How strong is that kind of risk or fear in your view?

B3: What makes you more confident about travelling in Thailand for medical tourism?

C. During travelling

C1: Tell me about what kind of risk or fear has you experienced during your stay in Thailand for medical treatments.

(Clarifying questions: - Can you expand a little on this?
- Can you tell me anything else?
- Can you give me some examples?)

C2: How strong is that kind of risk or fear in your view?

D. Post travelling

D1: Tell me about what kind of risk or fear will you receive after travelling in Thailand for medical treatments.

(Clarifying questions: - Can you expand a little on this?
- Can you tell me anything else?
- Can you give me some examples?)

D2: How strong is that kind of risk or fear in your view?

Table 3.4 Interview questions
Source: Developed by the researcher

3.6 Implementation

The section of implementation will include three main areas including sample population, sampling method and data collection procedures.

The first area is the sample population. A sample is defined as a subset of a population using to represent the entire group in the study (Malhotra, 2009). There are the steps the researcher needs to consider in sampling procedures including population and sample size. Before selecting a sample of the study, the researcher should consider target population. The target population is described as the collection of elements or objects that possess about which inferences are to be made as well as the information sought by the researcher (Malholtra, 2007). The same author further argued that the target population should be defined in terms of elements, sampling units and time. The target population of this study therefore is international medical tourists who travel primarily to receive any medical treatment in Thailand. Based on the literature review, the main reason the researcher will select Thailand as the main destination for this study because Thailand is a major hub of medical tourism in Asia. More than 8 million people have traveled in oversea for medical and dental treatment each year. Out of these medical tourists, Thailand has been considered the world largest destination of medical tourism. In the year of 2015, the number of international tourists who obtained medical treatments from both private and public hospitals in Thailand was 1.8 million (Ministry of Tourism and Sports Thailand, 2015). Most international medical tourists seek medical treatments for everything from open-heart surgery to gender reassignment. The number of international medical tourists has made Thailand a popular destination for medical tourism contributing an estimated 2.81 billion in 2015, up to 10.2 percent (Medical Tourism Magazine, 2015).

Source	Type of research	Sample size
Morse (1994: 225)	Ethnography/ethno-science	30-50
Bernard (2000: 178)	Ethno-science, grounded theory	30-60
Creswell (1998: 64) 20-30; Morse (1994: 225)	Phenomenology	30-50
Creswell (1998: 64); Morse (1994: 225)	Qualitative research	5 to 25; at least six
Bertaux (1981: 35) adapted from (Guest et al., 2006)	Qualitative research	15 is the smallest acceptable sample
Charmaz (2006: 114)	Qualitative research	25 is adequate for smaller projects
Ritchie et al., (2003: 84)	Qualitative research	<50

Table 3.5 Type of research and sample size

Source: Mason (2010)

There are numerous aspects determining a sample size in qualitative research studies. Mason (2010) indicated that the limited to show what a sufficient sample size is. The same author highlights practical guidelines for recommended same sizes, as presented in Table 3.5. Guest et al. (2006) have further suggested that appropriate practical guidance is limited to estimate sample sizes as well as to robust research prior to data collection. Furthermore, sampling using the mixed method approach, a smaller sample needs to be selected for the qualitative data gathering stage and a larger sample for the quantitative data gathering stage (Creswell and Clark, 2011). Therefore, the participants of this study were 13 international medical tourists who seek medical treatment(s) in Thailand based on the recommended sample size suggested by Creswell (1998) and Morse (1994) that indicated the appropriate sample size should be between five and twenty-five subjects.

The following area in this section of the study is the sampling technique. There are various sampling methods that might be used to create a sample. It has been widely acknowledge that sampling methods consist of two main types, namely probability sampling and non-probability sampling. According to Zikmund (2003), probability sampling refers to members of the population have a known chance of being included in the sample while non-probability sampling is described as members of the population do not know the chance of being selected. Malhotra (2007) further indicated that each type classifies into several sampling techniques, as presented in Figure 3.3. Sekaran (2000) suggested that the findings from studies using any sampling techniques of probability sampling can be generalized to the population from which the sample is selected. In contrast, although any techniques in non-probability sampling do yield acceptable results at a much lower cost, the findings from this type cannot be generalized to the whole population (Davis, 2005).

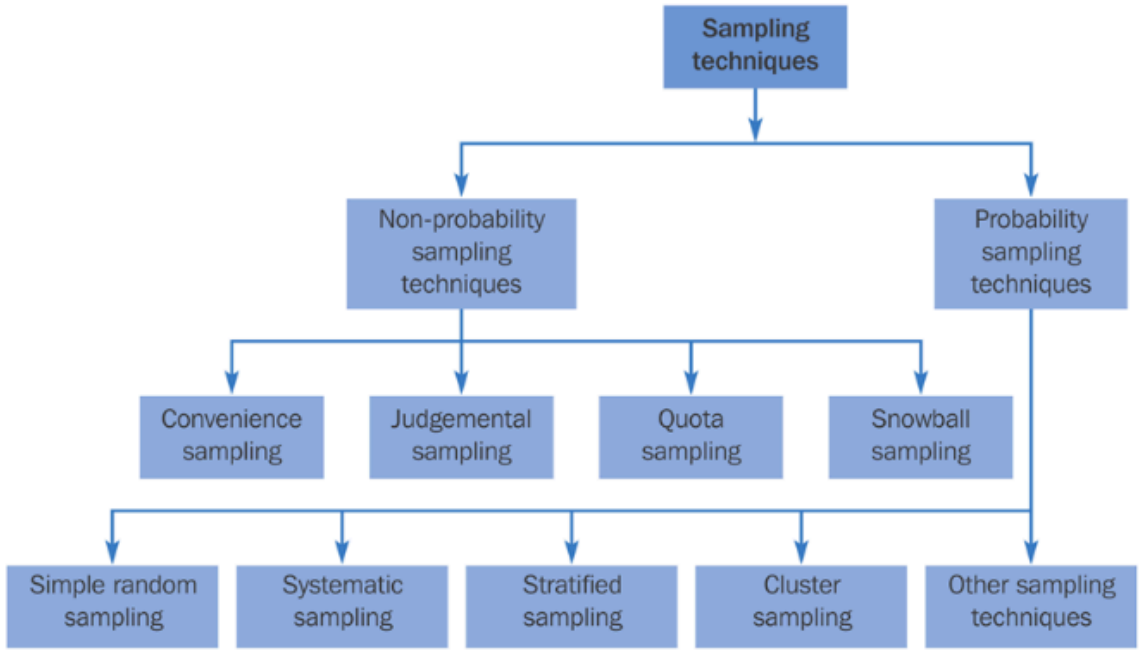


Figure 3.3 Classifications of Sampling Techniques

Source: Malhotra (2007)

Non-probability sampling technique was used in the present study because sampling is consistent with the assumptions as well as objectives. More specifically, convenience and judgmental samplings will be used in the present study. Convenience samplings refer to the non-probability sampling technique explaining the population will be selected on the basis of its convenience availability. It is an easy way for researchers to reach the target population and at the same time it is in expensive. Similarly, if members of the target population meet the requirements including geographical proximity, easy accessibility, the willingness to participate and availability at a given time, they will be included in the study (Dörnyei, 2007).

The last area of implementation is collection procedures. The qualitative research focuses on a semi-structured interview with face-to-face technique. The researcher contacted clinics/ hospitals in order to receive permission for asking their international patients with qualify two criteria as mentioned earlier. In other words, target respondents who are eligible for this study are international medical travelers in Thailand. More specifically, characteristics of these respondents have to fulfill two criteria: 1) travelers have to visit Thailand in order to obtain any types of medical treatment(s) from clinic/ hospital in Thailand and 2) they must receive a direct or indirect engagement in any tourism activities during their stay in Thailand. Respondents were firstly contacted after receiving permission from clinics/ hospitals that provide any medical treatment to international medical tourists. At the beginning, the potential respondents were asked to screen questions in order to ensure whether they meet the research criteria. After that, a convenient time, as well as a location, will be established to conduct the interview. Before starting interview, the participants would be asked to sign a consent form so as to provide permission in undertaking the interview and recording the conversation. Finally, the interview lasted about 20-40 minutes on average based on the schedule and availability of

each respondent.

The total of participants were 13 international medical tourists who seek any medical treatment in four selected provinces (2 participants in Chiang Mai, 3 participants in Bangkok, 3 participants in Chonburi and 5 participants in Phuket) in Thailand. Participants were given a gift incentive in order to thank for their effort in participating an interview.

3.7 Data Analysis Procedures

Qualitative data analysis is about making sense of collected data (Merriam, 1988). It is a complex process that involves "working with data, organizing them, breaking them into manageable units, synthesizing them, "searching for patterns, discovering what is important and what is to be learned, and deciding what you will tell others" (Bogdan and Biklen, 1992, p. 153). The processes of qualitative analysis developed by Miles and Hubleman (1994) will be adopted in this study in order to describe the main phases of data analysis including data reduction, data display and conclusion drawing and verification, as presented in Figure 3.5.

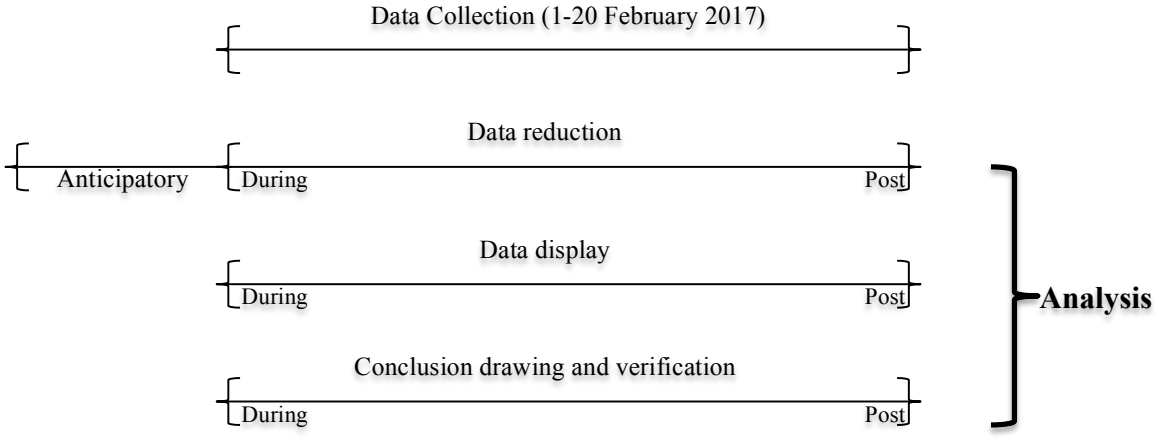


Figure 3.4 Qualitative data analysis

Source: Adapted from Miles and Huberman (1994)

The researcher analyzed data as soon as possible after the semi-interview has been conducted. More specifically, data was manually transcribed immediately after every interview session. The raw material came entirely from an audio-tape of thirteen interviewees as well as the researcher's written notes about the encounter. These two items became the data source for analysis. Finally, the recorded dialogue was transcribed into a document before reducing data in the subsequent step.

Data reduction

According to Miles and Huberman (1994), "Data reduction refers to the process of selecting, focusing, simplifying, abstracting, and transforming the data that appear in written up field notes or transcriptions" (p.10). The researcher began to read and re-read the transcribed interview several times in order to better understand the interviewees' perspectives as well as to search similarities and differences in themes. The code names were assigned into themes that were detected. Labels used to code data should be reflected by meaning of the text. Subsequently, the researcher organized them into categories of related patterns, ideas, topics and concepts emerging from the perspectives of participants.

Data display

Data display is the second step in the Miles and Huberman's (1994) model of qualitative data analysis. The data display refers to tools for showing the findings of data reduction. In other words, the data display is helped to incorporate information into a summary before drawing a conclusion. Display technique refers to several ways including an extended piece of text or a diagram, chart, or matrix. These displays can provide a new way of arranging and thinking about the more textually embedded data. For this study, the researcher used a piece of text as well as diagram in order to identify each theme or category. Additionally, the

researcher relied on form follows function, as suggested by Miles and Huberman (1994). That means particular techniques suggested that the researcher should dictate by the research questions as well as emergent concepts. Therefore, the researcher created data displays into each case, each individual and also across each case in hopes that would help to demonstrate findings across all available sources of information.

Conclusion Drawing and Verification

The final step of data analysis refers to draw initial conclusions regarding data displays. In other words, the researcher had to consider back to the meaning of analyzed data as well as to assess the implications for the research question. Subsequently, this conclusion is subjected to the step of verification. This process intended to verify the appropriateness of the results before labeling conclusive findings. Therefore, the researcher had to revisit the data as many times as necessary so as to verify these emergent conclusions. Generally, trustworthiness is used to verify the findings. The following indicated trustworthiness used in this study.

Trustworthiness

There is a definite difference to ensure the trustworthiness between a quantitative and qualitative approach. The "trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability" (Seale, 1999, p. 266) when the researcher establish good quality through reliability and validity in qualitative research. Reliability and validity have regarded as the main methods ensuring the trustworthiness of the inquiry findings in quantitative studies while qualitative researchers take into consideration dependability, credibility, transferability, and confirmability in order to the ensure trustworthiness of the rigor of qualitative findings (Schewandt, Lincoln and Guba, 2007). As suggested by Guba and Lincoln (2000), the qualitative approach in the present study will apply four main criteria so as

to ensure the trustworthiness including credibility, transferability, dependability, and confirmability. Shenton (2004) summarized four criteria of trustworthiness in the qualitative study, as presented in Table 3.6.

Quality criterion	*Possible provision made by researcher*
Credibility	Adoption of appropriate, well recognised research methods
	Development of early familiarity with culture of participating organisations
	Random sampling of individuals serving as informants
	Triangulation via use of different methods, different types of informants and different sites
	Tactics to help ensure honesty in informants
	Iterative questioning in data collection dialogues
	Negative case analysis
	Debriefing sessions between researcher and superiors
	Peer scrutiny of project
	Use of "reflective commentary"
	Description of background, qualifications and experience of the researcher
	Member checks of data collected and interpretations/theories formed
	Thick description of phenomenon under scrutiny
	Examination of previous research to frame findings
Transferability	Provision of background data to establish context of study and detailed description of phenomenon in question to allow comparisons to be made
Dependability	Employment of "overlapping methods"
	In-depth methodological description to allow study to be repeated
Confirmability	Triangulation to reduce effect of investigator bias
	Admission of researcher's beliefs and assumptions
	Recognition of shortcomings in study's methods and their potential effects
	In-depth methodological description to allow integrity of research results to be scrutinised
	Use of diagrams to demonstrate "audit trail"

Table 3.6 Four criteria for trustworthiness

Source: Shenton (2004)

More specifically, credibility is described as the confidence that can be placed in the truth of the research (Macnee and McCabe, 2008). Several qualitative researchers stated that not only credibility refers to a correct interpretation of original views of the participants, but also it establishes whether the research results represent plausible information drawing from the participants' original data (Graneheim and Lundman, 2004). The following credibility strategies adopted by a qualitative researcher to ensure rigor of the inquiry include member checking, time sampling, prolonged and varied field experience, interview technique, reflexivity or field journal, structural coherence and establishing the authority of researcher. This study

used thick description in this study. According to Li (2004), thick description "enables judgments about how well the research context fits other contexts, thick descriptive data, i.e. a rich and extensive set of details concerning methodology and context, should be included in the research report" (p. 305). The thick description refers to the elucidation of research in all the processes of the study including data collection, the context of the study and production of the final report. As noted by Shenton (2004), the thick description can help other researchers to replicate the study with similar conditions in other settings. Thus, the researcher will use thick descriptions in order to ensure creditability of the qualitative inquiry.

Another method in ensuring the trustworthiness of the inquiry findings in qualitative studies is transferability. Transferability is described as the degree to which the results of qualitative research that can be transferred to other contexts with other respondents – it is the interpretive equivalent of generalizability (Bitsch, 2005; Tobin & Begley, 2004). In other words, transferability will help to ensure the findings of qualitative studies that may be applicable or generalized to other populations or settings.

Dependability is the third criteria ensuring the trustworthiness in the inquiry findings of qualitative studies. Dependability that is analogous to reliability in the quantitative study is defined as "the stability of results over time" (Bitsch, 2005, p. 86). Dependability refers to the evaluation of the findings is involved with participants as well as the interpretation and recommendations of the study are supported by the receiving data for the informants of the study (Cohen et al., 2011). There are several strategies establishing dependability in the literature such as audit trail, a code-recode strategy, stepwise replication, triangulation and peer examination or iterator comparisons (Ary et al., 2010; Chilisa & Preece, 2005; Schwandt et al., 2007). Code-recode strategy will be used in ensuring the dependability of trustworthiness in

this study. The code-recoding is described as the researcher codes the same data by giving one or two weeks of gestation period between each coding (Chilisa & Preece, 2005). The findings from the two times of coding were compared so as to see whether the findings are the same or different. Ary et al. (2010) further explained that this strategy refers to code agreement that allows multiple observations by the researcher. The same author also indicated that the findings would enhance the dependability of the qualitative inquiry in the case of the coding findings are in agreement. Finally, this strategy would help the researcher to gain a deep understanding of the patterns of data and also improves the presentation of participants' narrations.

Confirmability is described as the extent to which the results of inquiry could be confirmed or corroborated by other researchers (Baxter and Eyles, 1997). Tobin and Begley (2004) stated that this strategy is related to establish the data and interpretation of the results that are not figments of the inquirer's imagination; in contrast, the results are apparently derived from the data. Previous studies have reviewed several strategies establishing confirmability of qualitative inquiry such as triangulation, an audit trial and reflexive journal (Bowen, 2009). An audit trail was applied in this study in order to ensure confirmability of the qualitative inquiry.

3.9 Quantitative approach

According to Creswell (1994), a quantitative approach refers to "an inquiry into a social or human problem, based on testing a theory composed of variables, measured with numbers, and analyzed with statistical procedures, in order to determine whether the predictive generalizations of the theory hold true" (p.2). Creswell (2002) further indicated that this approach is useful when attempting to test a theory or explain or identify factors that influence results. It is concerned with questions about How much? How many? How often? To what extent? (Yin, 2003). The quantitative approach will produce factual, reliable outcome data that is usually generalizable to some larger population (Denzin and Lincoln, 2000; Patton, 2002). In contrast, the results provide less detail on human behaviour, attitudes and motivation (Gorard, 2003).

3.10 Restatement of Research Questions and Hypotheses

The purpose of the quantitative approach of this study was to develop and evaluate a theoretical structural model for establishing a medical tourist's loyalty by using five main factors, namely risk, culture, destination image, quality and satisfaction affecting medical tourists' intention to revisit the destination as well as intention to recommend the destination to others.

Research question 2: Is there a significant relationship between a medical tourist's perceived risk and destination image?

Based on this research question, four hypotheses have been developed:

Hypothesis 1: There is a direct negative relationship between risk and cognitive image perceived by medical tourists

Hypothesis 2: There is a direct negative relationship between risk and affective image perceived by medical tourists

Hypothesis 3: There is a direct, positive relationship between cognitive image and overall image perceived by medical tourists

Hypothesis 4: There is a direct, positive relationship between affective image and overall image perceived by medical tourists

Research question 3: What is the nature of the relationships among risk, quality, overall image and satisfaction?

With regard to this research question, the following hypotheses will be proposed:

Hypothesis 5: There is a direct positive relationship between risk and quality perceived by medical tourists

Hypothesis 6: There is a direct positive relationship between quality and overall image perceived by medical tourists

Hypothesis 7: There is a direct positive relationship between quality perceived by medical tourists and their satisfaction

Research question 4: What is the role of culture in creating destination loyalty and its antecedents namely quality and satisfaction?

Based on this research question, the following hypotheses will be proposed:

Hypothesis 8: There is a direct positive relationship between medical tourists' culture and their perceived quality

Hypothesis 9: Culture positively moderates in the relationship between quality perceived by medical tourists and their satisfaction

Hypothesis 10: Culture positively moderates in the relationship between medical tourists' satisfaction and their loyalty toward medical tourism destination

Research question 5: What are the relationships between overall image of the destination and medical tourists' satisfaction on their loyalty toward medical tourism destinations?

Based on this research question, the following hypotheses will be proposed:

Hypothesis 11: There is a direct positive relationship between overall image of medical tourism destination and medical tourists' satisfaction

Hypothesis 12: There is a direct positive relationship between overall image of medical tourism destination and medical tourists' loyalty

Hypothesis 13: There is a direct positive relationship between medical tourists' satisfaction and their loyalty toward medical tourism destination

Research question 6: Is there the moderating role of medical tourists' perceived risk on the relationship between overall image of destination and satisfaction as well as the relationship between satisfaction and loyalty?

Based on this research question, the following hypotheses will be proposed:

Hypothesis 14: Medical tourists' perceived risk negatively moderates in the relationship between overall of medical tourism destinations and medical tourists' satisfaction

Hypothesis 15: Medical tourists' perceived risk negatively moderates in the relationship between medical tourists' satisfaction and their loyalty

Research question 7: Is there the mediating role of satisfaction between perceived medical product and service quality and consumer loyalty as well as between overall image of the destination and consumer loyalty?

Based on this research question, the following hypotheses will be proposed:

Hypothesis 16: Medical tourists' satisfaction positively mediates the relationship between Quality perceived by medical tourists and their loyalty toward medical tourism destination

Hypothesis 17: Customer satisfaction positively mediates the relationship between overall image perceived by medical tourists and their loyalty toward medical tourism destination

3.11 Sample Design and Procedures

A sample is defined as a subset of a population using to represent the entire group in the study (Malhotra, 2009). There are the steps the researcher needs to consider in sampling procedures including population, sample size, and sampling techniques.

Target population

Before selecting a sample of the study, the researcher should consider target population. The target population is described as the collection of elements or objects that possess the information sought by the researcher and about which inferences are to be made (Malholtra, 2007). The same author further argued that the target population should be defined regarding elements, sampling units and time. The target population of this study, therefore, was international medical tourists who traveled primarily to receive cosmetic surgery and other beauty procedures in Thailand. Based on the literature review, the reason the researcher selected Thailand as the main destination for this study because Thailand is a major hub of

medical tourism in Asia. There are about 8 million people traveling in oversea for medical and dental treatment each year. Out of these medical tourists, Thailand has been considered the world largest destination for medical tourism. In the year of 2015, the number of international visitors who obtained medical treatments from both private and public hospitals in Thailand was 1.8 million (Ministry of Tourism and Sports Thailand, 2015). Most international medical tourists seek medical treatments for everything from open-heart surgery to gender reassignment. The number of foreign medical tourists has made Thailand an attractive destination for medical tourism contributing an estimated 2.81 billion in 2015, up to 10.2 percent (Medical Tourism Magazine, 2015).

Sample size

As mentioned, a sample is a small set of a population that is used to draw conclusions about the bigger group. This allows the researcher to run smaller experiments and then use statistics to draw a conclusion about the population, saving time as well as money since the researchers did not have to test the whole population. As noted by Mesa et al. (2014), calculating an appropriate sample size is needed in any study since this may lead to reduce the probability of error, define the logistics of the study, respect ethical standards and improve its success when evaluated by funding agencies. In general, there is no consensus on the size of the sample to be included in any study. There are several ideas from several researchers explaining about the size of the sample in the quantitative study. Kline (2007) recommended that the bigger the size of the sample the better it is the consensus. While Bryman (2001) has suggested that the size of the sample should not be fewer than 100, Ntaumianis (2001) recommended a sample size of 200 or more participants should be included in the study which used factor analysis or a very complicated path model. Conversely, several researchers have argued that a

large sample size will have a preventable failure to reach the recruitment target (Lancaster et al., 2004) and at the same time it may be judged to be unethical as participants may be unnecessarily exposed to risks and burdens (Altman, 1980). Another researcher points that a small sample size will have an imprecisely estimated variance, which could impact on the design of a future definitive study (Julious, 2005).

There are various rules-of-thumb in determining sample size requirements for Structural Equation Modeling (SEM). A common rule of thumb is that SEM studies should include a minimum sample size of 100, suggested by Boomsma (1985). Similarly, Hair et al. (2006) suggested that sample size of SEM should be ranged from 100 to 200. The same authors further noted that sample size should be large enough or at least 5 times of the number of parameters. Another rule-of-thumb proposed by Bentler and Chou (1987) indicated that 5 or 10 observations per estimated parameter might be acceptable. The other rule-of-thumb noted that SEM studies should strive from 10 cases per variable (Nunnally, 1967). Therefore, the sample size of this study was 205 that met the aforementioned criteria. Since the total of constructs was 8 with 34 items in this study, an ideal minimum sample size would be 170 to 340 (N=170-340, or 5-10x34), as suggested by Hair et al. (2006) and Benlter and Chou (1987).

Sampling Techniques

There are various sampling methods that might be used to create a sample as explained in the section of the qualitative approach. This study, therefore, applied a convenience sampling to reach out the sample of this study. The convenience sampling was already explained in the qualitative phase.

Research Instrument

The questionnaire was used as the instrument of the quantitative study. Based on the review of related literature, the tool of the present study was developed regarding culture, perceived risk, destination image concerning cognitive, affective and overall image, satisfaction and destination loyalty. The questionnaire as the quantitative study instrument was developed based on prior studies employing well-established scales. The survey instrument contained scales measuring culture, perceived risk, destination image, perceived quality, satisfaction and destination loyalty. The respondents' demographic was also included in the questionnaire. The following table presented the definitions, a number of items and measures of constructs in this study (Table 3.7).

Variables	Definitions	Number of items	Sources of Scale for Measurement	Measurements
Behavioral loyalty	can be defined as a behavior that is shown by a consumer to a destination within the form of repeated purchased (Back and Parks, 2003)	2	Mechinda et al., 2009 Chen and Chen, 2010 Han and Hyun, 2015	1. I am willing to revisit Thailand for further treatment(s) 2. I am willing to revisit Thailand for leisure vacations
Attitudinal loyalty	refers to an attitude that is shown by a consumer to a destination within the form of recommend the destination to other consumers (Dick and Basu, 1994; Dimitriades, 2006)	3	Mechinda et al., 2009 Chen and Chen, 2010 Han and Hyun, 2015	3. I will recommend Thailand to others for medical treatment(s) 4. I will recommend Thailand to others for leisure vacations 5. I will tell others positive things about my experience in Thailand as a medical tourist
Perceived risk	is described as the likelihood of perception of an individual about the probability that a particular action will lead them to a situation exposed with danger more than acceptable limit, and will lead to influence travel-making (Mansfeld, 2006)			
	1. Terrorism risk: The likelihood of "the premeditated use or threat of use of extra normal violence or brutality by sub-national groups to obtain a political, religious or ideological objective through intimidation of a huge audience" (Enders and Sandler, 2002, p.145)	2	Sonmez, 1994	1. Medical tourists have a high probability of being targeted by terrorists in Thailand 2. I will not be intimidated by terrorism while seeking medical treatments as well as travelling in Thailand
	2. Physical and health risk: "the possibility that an individual's health is likely to exposed to risk, injury, and sickness because of conditions like laws and order, weather, and hygiene problems found during and after the tour" (Tsaur, Tzeng and Wang, 1997, p. 45)	5	Crooks et al., 2010 Tsaur et al., 1997 Roehl, 1988	3. There is a possibility of contracting infectious diseases in Thailand 4. There is a possibility that I will not able to obtain appropriate advice from regular doctors 5. It will be difficult to transfer patient information from a clinic/ hospital in Thailand to my home country 6. There is a possibility of physical danger, injury or sickness while seeking medical treatment in Thailand 7. There is a possibility that the desired medical treatment will not turn out as expected
	3. Communication risk: The likelihood of encountering communication problems with people at the destination before, during and after travelling	3	Yamamoto and Gill, 1999 Han and Weaver, 2003	8. I have concerns about having possible communication problems during my medical treatment(s) as well as travelling in Thailand 9. It is important that people whom I meet speak English during my period of medical treatment in Thailand 10. I will not have problems communicating with people I meet during my period of medical treatment in Thailand
Culture	is defined as "the collective programming of the mid which distinguishes the members of one group or category of people from another (Hofsfede, 1997, p.9) 1. Power distance (PDI) 2. Individualism (IDV) 3. Masculinity (MAS) 4. Uncertainty avoidance (UAV) 5. Long-term orientation (LTO) 6. Indulgence (IND)	1	Hofstede, 1991	National culture from the question asking about nationality of a respondent (What is your country of residence?)

Satisfaction	Refers to the consumer's overall evaluation about products and service fulfillment (Oliver, 1997; Chen and Tsai, 2007)	3	Oliver, 1980 Taylor and Baker, 1994 Han and Hyun, 2015	1. My decision to visit Thailand for medical treatment has been a wise one 2. I think that I did the right thing when I choose this destination for my medical treatment 3. I feel good about my decision to use medical tourism from the hospital/ clinic in Thailand
Overall Image of Destination	can be defined as mental pictures a person holds about the characteristics of a destination including infrastructure to cultural, natural and social attributes (Coshall, 2000; Beerli and Martin, 2004)	1	Baloglu and McCleary, 1999	1.Overall image of Thailand as a medical tourism destination
Cognitive Image	refers to the individual's beliefs and knowledge about the attributes of the destination (Beerli and Martín, 2004; Bauer, 1960).	5	Bologlu and McCleary, 1999 Chon et al., 1991 Echtner and Ritchie, 1993 Beerli and Martin, 2004	1. Well-developed general infrastructure (e.g. road highway, etc.) 2. Hospitality of local people 3. A variety of tourist attractions 4. Safe and secure environment 5. Good quality of life
Affective Image	refers to the evaluation stage, concerning the feelings that the individual associates with the place of visit (Beerli and Martín, 2004).	4	Russell and Pratt, 1980 Beerli and Martin, 2004	1. Arousing/ Sleepy 2. Exciting/ Gloomy 3. Pleasant/ Unpleasant 4. Relaxing/ Distressing
Perceived Quality	Zeithaml (1988) indicated the meaning of perceived quality as "the consumer's judgment about a product's overall excellence or superiority".	4	Han and Hyun, 2015 Pham, 2015	1. I believe overall quality of medical treatment and service at the hospital/ clinic in Thailand is great 2. Overall medical professionals and staff at the hospital/ clinic in Thailand 3. Overall quality of medical equipment used in the hospital/ clinic in Thailand 4. Waiting time in Thailand clinics/ hospitals is shorter than in my home country

Table 3.7 Definitions and measures of this study

Source: Developed by the researcher

In particular, each construct will be described.

Culture. Culture is the first construct in the proposed model in building destination loyalty in the context of medical tourism. A national culture will be used in this study from the question in demographic section (What is your country of residence?). The respondent nationality will append to the index of Hofstede through the lens of the 6-D Model. This model provides each score of the country ranging from 0-100 in six dimensions developed by Hofstede including power distance (PDI), Individualism (IDV), Masculinity (MAS), uncertainty avoidance (UAV), long-term orientation (LTO) and indulgence (IDG). The data are publicly available through "the lens of the 6-D Model" website (https://geert-hofstede.com/countries.html) for all of the countries in the sample.

Perceptions of risk. The present study depends on three main dimensions of perceived risk relating to medical tourism including perception of terrorism risk, physical and health risk, and communication risk using risk scales developed by Sonmez (1994), Crooks et al. (2010), Tsaur et al. (1997), Roehl (1988), Um and Crompton (1992), Yamamoto and Gill (1999), and Han and Weaver (2003). The perceived risk consisted of 10 items. All scales of three dimensions of perceived risk will be measured using five-point Likert scale items ranging from (1) strongly disagree to (5) strongly agree. The two items for terrorism risk was adapted to reflect medical tourists' behavior (e.g., Medical tourists have a high probability of being targeted by terrorists). Physical and health risk was measured with five items by asking how worried respondents are with injury and sickness because of conditions like laws and order, weather and hygiene during their traveling in Thailand for medical treatment(s) (e.g. There is a possibility of contracting the infectious disease in Thailand). The last dimension of risk was communication

risk measuring with three items (e.g. It is important that people whom I meet speak English during my medical tourism in Thailand).

Destination image. The cognitive, affective and overall image was included in this study. The overall image of the destination is operationalized by selecting an attribute from the overall scale by Baloglu and McCleary (1999) that is relevant to the study context (e.g. Overall image of Thailand as a medical tourism destination). This scale was measured by mean of a seven-point Likert scale with an anchor ranging from (1) strongly disagree to (7) strongly agree. Cognitive image of the destination was operationalized by using a four-item bipolar scale developed by Russell and Pratt (1980). The scale is measured by a five-point semantic differential scale including 1=sleepy and 5= Arousing, 1= Gloomy and 5=Exciting, 1=Unpleasant and 5=Pleasant, and 1=Distressing and 5=Relaxing.

Perception of quality. Perceived quality will be measured in this study developed from Pham (2015) and Han and Hyun (2015). The overall evaluation will ask respondents to evaluate four items of the quality of medical services by using a seven-point Likert scales anchored by (1) strongly disagree to (7) strongly agree.

Satisfaction. To measure the consumer's overall evaluation about products and service fulfillment, the researcher will ask the respondents to evaluate on a five-point scale the importance of the four items of satisfaction developed by Oliver (1980), Grace and O'Cass (2005) and Taylor and Baker (1994). All the elements range from (1) strongly disagree to (7) strongly agree (e.g. I believe that choosing this destination is usually a very satisfying experience).

Destination loyalty. Loyalty in this study includes both behavioral and attitudinal loyalty. In other words, destination loyalty is measured by asking respondents their intention to

revisit as well as the intention to recommend the destination with a scale developed by Mechida et al. (2009), Chen and Chen (2010) and Han and Hyun (2015). The five-item scale (e.g., Intention to revisit the destination for further medical treatment(s)) is measured using a seven-point Likert scale ranging from (1) strongly disagree to (7) strongly agree.

3.13 Data Administration

The quantitative and qualitative process research was conducted simultaneously to collect data from the target population. In other words, the present study collected data independently and after that combined at the end for interpretation and conclusions. A combination of quantitative and qualitative approach were used in this study in order to ensure the limitations of one type of data as well as to balance the strengths of another by integrating different ways of knowing.

For the quantitative research, a self-administered survey questionnaire was decided to use a paper-based survey in the present study. The researcher contacted clinics/ hospitals in four provinces in Thailand including Chiang Mai, Bangkok, Chonburi and Phuket to get permission and assistance in conducting the research. The staffs at clinics helped to pass out the survey questionnaires to their international customers. The participants who qualify as medical tourists and are age 19 years old or older were passed out the questionnaires. If medical tourists agree, the staffs/ the researcher clearly communicated that participation is completely voluntary and no negative consequences would occur if individuals decided not to participate. Enveloped will be provided for the participants in order to submit questionnaires anonymously. The researcher collected the survey questionnaires from the staffs. Then returned surveys were reviewed by the researcher to ensure valid responses and data from valid questionnaires have

been input into SPSS to be analyzed in generating a report. The total of 800 questionnaires were distributed in four selected provinces including Chiang Mai (100 questionnaires), Bangkok (150 surveys), Chonburi (200 surveys) and Phuket (350 surveys) in Thailand. The 209 questionnaires were returned with 205 usable responses. It indicated about 25.6 percent of response rate.

3.14 Data Analysis

Based on the research design as well as the research constructs, data analysis refers to a process interpreting the results of the study. In other words, data analysis is described as an analytic plan in order to provide responses to the research questions and draw conclusions from the collected data. As suggested by Cresswell (2007), there are several stages of data analysis guiding the researcher so as to achieve the research goal including selecting the appropriate analytical software, conducting pre-analytical tests, identifying specific statistical techniques, and presenting the findings. The following processes of analysis were presented in this study, as present in Figure 3.

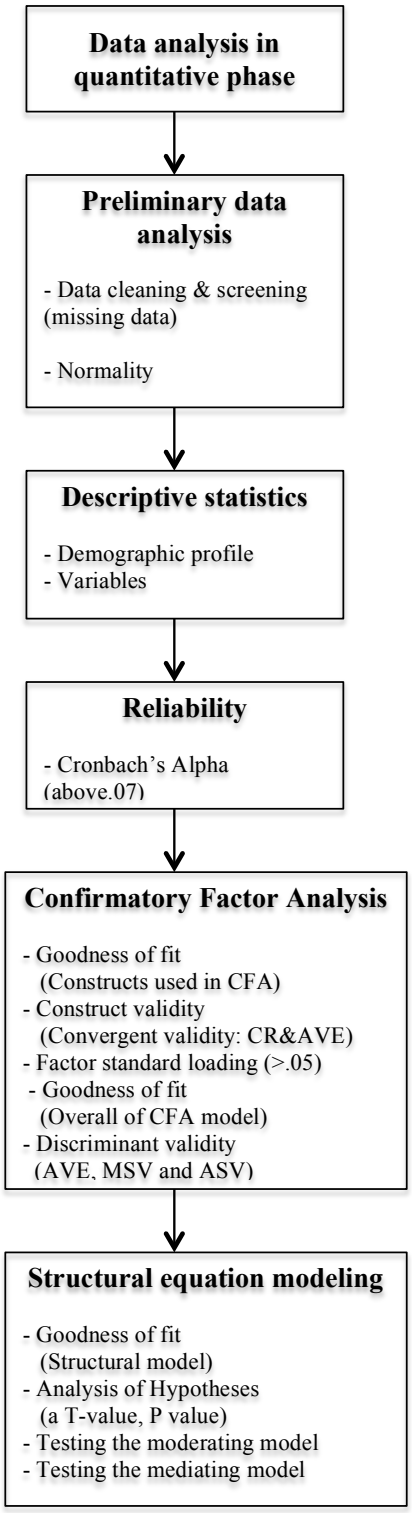


Figure 3. The outline of data analysis in quantitative phase

Preliminary data analysis

Data analysis refers to the process of entering the data, creating system files as well as cleaning the data. The researcher needs to ensure whether the raw data has been entered correctly because errors often occur (Hair et al., 2011) causing from both people and computer mistakes. Subsequently, misrepresenting the data from the mistake occurred can lead to significantly impact the findings of the study. Thus, all responses were rechecked against the original questionnaire through the data entering into the Statistical Package for the Social Sciences (SPSS) IBM version 23.0 to determine its accuracy. In other words, the guidelines indicated by several researchers have recommended that data will be examined for missing values and normality of distributions before any analysis of the data (Hair et al., 1998; Tabachnick and Fidell, 2001). Therefore, the section of primary data analysis included data cleaning, screening for missing data as well as normality.

Data cleaning

After entering the data into the SPSS program, the screening of data is used to examine for possible errors. According to Stylidis (2012), this process is the first step checking the accuracy of the responses in order to double check the data file in the SPSS program against the original responses gathered. Some mistakes will be identified and corrected through this process. The same author further explained that checking for values (responses) being outside the range of possible values for each variable is regarded as a second tool employed for data cleaning. Finally, only one out of range value attributing to a human error will be noticed and corrected in the SPSS data file after an examination of the minimum and maximum scores for each variable.

Data screening

The following step is to screen the data for missing values and checking the normality of the variables.

Missing data

According to Dong and Peng (2013), the missing data can have a significant impact on biased estimates of parameters, decreased statistical power, loss of information, increased standard errors and weakened generalizability of findings. There are several assumptions about missing data mechanisms including missing completely at random (MCAR), missing at random (MAR), and missing not at random (MNAR) (Robin, 1976). The first form, or MCAR exists when missing values are randomly distributed across all cases while another form, MAR is considered more common than the first one. In MAR, the missing values are not randomly distributed across observations but are distributed within one or more sub-samples. The other form of missing data mechanism is MNAR that occurs when the probability of missing depends on the missing value itself. There are estimation methods in SPSS that provide the researcher with certain statistical techniques to estimate the missing values. According to Acock (2005) as well as Little and Rubin (2002), there are several conventional approaches and more recent techniques handling missing data including listwise and pairwise deletion, mean substitution, expectation maximization (EM), multiple imputations and full information maximum likelihood.

As suggested by several researchers, data should be examined for missing values and normality of distributions before any analysis of the data (Hair et al., 1998; Tabachnick and

Fidell, 2001). For this study, the data had been keyed into SPSS by hand prior to conducting any tests. Frequency distributions for each variable in this study were run and examined in order to ensure the data were clean. A few keying errors were evident and subsequently the actual survey questionnaires corresponding with the survey coding number for the surveys that contained coding errors were pulled. The researcher run frequencies a second time in order to ensure the keying errors had been corrected. Therefore, serious problem was not found in the process of screening missing data.

Normality

The assumption of a normal distribution is described as the extent to "which all observations in the sample for a given variable are normally distributed" (Mertler & Vanatta, 2010, p. 30). Several graphical and statistical methods were used to examine the normality distribution of the observed variables using SPSS. Graphical methods included frequency histograms, normality plots, expected normal probability plots and expected normal probability plots. A visual inspection of these graphical methods did not reveal any violations of normality assumptions. The use of skewness and kurtosis are two statistical methods assessing the normality distribution of variables including in the study. Skewness is regarded as the measure of the symmetry of a distribution and kurtosis is the measure of the peakedness or flatness of distribution (Tabachnick & Fidell, 2001). Distribution is regarded to be normal when the values of skewness and kurtosis are equal to zero. However, there are no formal cut-off points on the levels of skewness and kurtosis to indicate when variables are no longer regarded as normal (Curran, West, & Finch, 1996). According to Tabachnick and Fidell (2001), skewness and kurtosis values should be within the range of - 2 to +2 when the variables are normally distributed. Monte Carlo simulations suggest that a skewness value smaller than 2.00 and a kurtosis value smaller than 7.00 can be considered normal; skewness values ranging from 2.00

to 3.00 and kurtosis values ranging from 7.00 to 21.00 are considered moderately non- normal, and skewness value greater than 3.00 and kurtosis value greater than 21.00 are considered extremely non-normal (Curran, West, & Finch, 1996). Kline (1998) suggests that variables with values of skewness greater than 3.00 are considered as extremely skewed, and variables with values of kurtosis greater than 8.00 are considered as having extreme kurtosis.

Reliability

The reliability is defined as the dependability of a scale or the extent to which a scale yields consistent results when the measurement is replicated (Neuman, 2006, Maholtra, 1999). It is acknowledged that the idea of reliability is related to the replicability or repeatability of results under a similar methodology from previous studies (Joppe, 2000). Concerning reliability, three types of reliability referring to quantitative study include the degree to which a measurement, given repeatedly, remains the same, the stability of a measurement over time; and the similarity of measurements within a given period (Kirk and Miller, 1986). The application of Cronbach's alpha will be used to test reliability in the present study. As recommended Hair et al. (2010), this is considered the most commonly applied estimate together with construct reliability that is often used in conjunction with structural equation modeling. A good level of reliability is over .7 indicating that the measures consistently represent the same latent construct and a value above .90 indicates 'excellent' reliability, as suggested by Kline (2005), Ullman (2007).

Structural Equation Modeling

Structural Equation Modeling (SEM) was adopted to analyze the data in the present study. SEM is a technique using various types of models to depict relationships among

observed variables and at the same time to achieve the goal of testing a theoretical model hypothesized by a researcher. More specifically, Structural Equation Modeling is a multivariate technique combining aspects of factor analysis and multiple regression that enables the researcher to simultaneously examine a series of interrelated dependence relationship among the measured variables and latent variables as well as between several latent constructs (Hair et al., 2006). The early development of SEM are derived from the work of Karl Jöreskog and his associates and regarded as one of the most important and influential statistical revolutions (Cliff, 1983). This allows various theoretical models to be tested in SEM to understand "how sets of variables define constructs and how these constructs are related to each other" (Schumacker & Lomax, 2004, p. 34). From a review of the literature, SEM is considered an appropriate method to analyze the data in this study because of ability in estimating and testing the relationships among constructs in this study. SEM is capable of taking a confirmatory approach rather than an exploratory one to the data analysis (Byrne, 2001). Moreover, SEM allows for the assessment and correction of measurement error due to ignoring measurement error will lead to bias in estimating parameters (Stage, 1988). Lastly, SEM allows for the use of multiple measures to represent constructs (Schumacker & Lomax, 2004).

In this study, the SEM two main stage procedures was applied to validate the measurement model and to fit the structural model. This section of analysis began with assessing the measurement model validity by conducting the confirmatory factor analysis (CFA). In other words, the researcher developed and specified the measurement model by identifying the indicator variables or items of each construct. Therefore, the level of model fit and construct validity of the measurement scale including convergent and discriminant validity

were revealed in this section. The researcher explained more information about validity in the following section.

Composite reliability (CR) and average variance extracted (AVE) were calculated in order to assess the reliability of individual construct by using the formula, as bellowed.

Composite reliability (CR):

$$CR = \frac{(\sum_{i=1}^{n} \lambda_i)^2}{(\sum_{i=1}^{n} \lambda_i)^2 + (\sum_{i=1}^{n} \delta_i)}$$

Average Variance Extracted (AVE):

$$VE = \frac{\sum_{i=1}^{n} \lambda_i^2}{n}$$

λ = the indicator loadings
θ = the indicator error variances
Σ = the summation of the indicators of the latent variable

After that, this stage tended to assess the measurement model validity by conducting the confirmatory factor analysis (CFA). According to Hair et al. (2006), three types of indicators can be used to assess the overall model fit, namely absolute fit classes measures, comparative fit measures and parsimonious fit measures. In particular, the absolute fit classes include the goodness-of-fit (GFI), standardized root mean square residual (SRMR) and root means square error of approximation (RMSEA) while comparative fit measures are nor-normed fit index (NNFI) and comparative fit classes index (CFI). The last type is Parsimonious fit measures

include χ2/ df ratio, normed incremental fit index (NFI), parsimony goodness of fit classes Index (PGFI) and critical N index (CN). The model fit will be measured as shown in Table 3.

Goodness –of-Fit Statistics	
Absolute Fit Measures	
Chi-square of estimate model	P>.05
Goodness-of-fit index (GFI)	.90
Root mean square residual (RMR)	.08
Root mean square error of approximation (RMSEA)	.08
Incremental Fit Measures	
Adjusted goodness-of-fit index (AGFI)	.85
Non0normed fit index (NNFI)	.90
Normed fit index (NFI)	.90
Parsimonious Fit Measures	
Parsimony goodness-of0fit index (PGFI)	.90
Parsimony normed fit index (PNFI)	.90
Comparative fit index (CFI)	.90
Incremental fit index (IFI)	.90

(Sources: Hair et al. (2010); Bagozzi & Yi. (1988))

Table 3.8 Fit indices and their acceptable thresholds

The other stage refers to specify the structural model. After the overall structural model had been evaluated, the relationship from one construct to another construct in the model was specified and reported at this stage. In other words, the proposed hypotheses were tested by examining the relationships between the endogenous and exogenous variables. The relationships between the constructs having an estimated t-value is greater than a certain critical value ($p<.05$ or $p<.01$, t-value=1.96). The null hypothesis associating estimated parameter is equal to 0 was rejected, as suggested by Mueller (1996). Instead, only the significant hypothesis was supported and explained the phenomenon of findings.

Validity

The validity refers to testing which differences in observed scale scores that reflect true differences among objects. The object characteristic is measured rather than a systematic or random error (Malhotra, 1996). The validity is described as the fit of the measure to the real world or the extent to which different scales are mutually exclusive and collectively exhaustive (Neuman, 2006). There are several ways to assess the validity of a scale such as content, face, concurrent, predictive, criterion, construct, convergent, discriminant and nomological. However, the researcher assessed the validity of scale used in the present study through construct validity and face or content validity. Construct validity refers to "the extent to which a set of measured items reflects the theoretical latent construct those items are designed to measure and is made up of four components termed as convergent, discriminant, nomological and face validity" (Hair et sl., 2010, p. 798). This study will examine two of these four components including discriminant and convergent validity. Convergent validity is described as an agreement between measures of the same construct assessed by different methods Campbell and Fisk, 1959). In other words, convergent validity is indicated by significant factor loading of each of the measurements at the appropriate stage (Cole, 1987). An essential condition for convergent validity is that indicators of each construct have to share a high proportion of common variance. The inter-correlations of a set of variables are at least moderate in magnitude, subsequently, they will be assumed to measure the same construct, and therefore convergent validity is confirmed (Kline, 2005). In other words, the magnitude and significance of the paths between a latent variable and its indicators can be examined to assess convergent validity (Anderson and Gerbing, 1988). The standardized factor loadings with critical ratios will be used to evaluate the convergent validity in the present study. As stated by Hair et al.

(2010), the standardized loading should higher than the proposed minimum level of .5 as well as critical ratios over 1.96 indicating convergent validity. Moreover, another tool used in the current study an indicator of convergent validity is the average variance extracted (AVE) (Fornekk and Lacker, 1981; Hair et al., 2010). The AVE should be higher than .5 regarding Fornell and Larcker (1981).

According to Anderson and Gerbing (1988), discriminant validity is conducted to ensure constructs are not measuring the same idea or concept. In other words, discriminant validity is tested to confirm that the constructed measure is empirically unique (Hair et al., 2010). Additionally, Farrell (2009) suggested that when there are high construct inter-correlations, it is a must to assess discriminant validity so as to have confidence in subsequent research findings. Discriminant validity assessment has become common practice in SEM studies (e.g., Shah and Goldstein 2006; Shook et al. 2004). If the researcher has some issues about discriminant validity in the study, variables in the study correlate more highly with variables outside their group factor than within their group factor. For example, the latent factor is better explained by other variables from a different group than its owned grouped variables. Several ways have been used to assess discriminant validity. This study relied on the recommendation of Hair et al. (2010) stating that discriminant validity was created when Maximum Shared Variance (MSV) and the Average Shared Squared Variance (ASV) are both presented in lower than the Average Variance Extracted (AVE) for all the constructs.

The other validity, face or content validity was conducted before the questionnaires were administered to the target population. The face validity is conducted to ensure the adequacy of the conceptual and operational definition of the measurement scale based on the theoretical background. To achieve the content validity, the measurement scales in each construct of this

study were determined by six experts in the field of tourism and medical tourism including American and Thai doctors, researchers in medical tourism and lecturers in department of hotel and tourism management. Thus, the content validity of the measurement scales was verified.

Testing the Mediator Effect

A mediator is described as a variable explaining the relation between a predictor and an outcome (Holmbeck, 1997; James and Brett, 1984). This means a mediator is a mechanism through which a predictor influences an outcome variable (Baron and Kenny, 1986). The present study will require a test of the mediating influence of satisfaction on the relationship between quality perceived by medical tourists and their loyalty (H16) as well as between overall image perceived by medical tourists and their loyalty. The mediating effects of satisfaction in the present study had been calculated as the product of standardized path coefficients of the predictor to mediator' path and the mediator to outcome path with mediation existing both paths contributing to indirect effect will be significant, as suggested by MacKinnon (2002).

Testing the Moderator Effect

This study will require a test of the moderating influence of culture on the relationship between perceived quality and satisfaction (H9) as well as between satisfaction and destination loyalty (H10). Moreover, the present study also investigates the moderating influence of perceived risk on the relationship between the overall image of destination and satisfaction (H14) as well as between satisfaction and destination loyalty (H15). Moderating variable refers to "the variable that moderates the effects of an independent variable on its dependent variable" (Zainudin, 2014, p.144). The moderating effect of variable of this study was tested by using AMOS software. The moderating analysis began with testing the effects of independent

variable on its dependent variable that must exist as well as significant. After entering a moderator, the causal effect should change because of some interaction effect between independent variable; in other words, the effect of independent variable on its dependent variable would increase or decrease.

3.15 Ethical consideration

Ethical concerns are important aspects of research while collecting data. As indicated by Jennings (2010), Ethics in research must be accounted for protecting the research participants' rights and the standing in the scientific community (Jennings, 2010). The researcher must comply with moral and professional obligations when conducting the research, even if the research is conducted with participants who are unaware or unconcerned with the ethics of the study (Neuman, 2011). For these reasons, the cover letter was attached to the questionnaire in order to ensure the purpose of the study is consistently and honestly in alignment with the data collection. As suggested by Creswell (2009), it is a need to establish trust and credibility between the researcher and the respondent while conducting the research. Furthermore, the respondent's right to confidentiality, anonymity, voluntary participation, protection from harm, and protection from any action are considered very important issues when answering the research questions (Jennigns, 2010). This was detailed in the consent form that was completed by all respondents prior to their involvement in the research. Also, the researcher must act professionally when conducting the research and inform potential respondents about their rights and the research objectives before beginning their survey. Also, participation in the research was voluntary, and they can withdraw at any stage before submission of the research. Finally, protecting and confidentiality for the qualitative approach are needed during the process of

coding the names and using pseudonyms for individuals and places to protect their identity (Creswell, 2009).

3.16 Summary

This chapter has mainly explained the methodology including research paradigms and justification, research design, a restatement of research questions and hypotheses, sample design and procedures, research instrument, pilot study, data administration, data analysis, ethical consideration, and conclusion. A pragmatic paradigm with a concurrent triangulation strategy will be adopted in the present study. In other words, the quantitative and qualitative processes have been conducted simultaneously to collect data from the target population.

The following chapter or Chapter 4 presented the findings from the semi-structured interview in the qualitative phase as well as the results of the questionnaire in the quantitative section.

Chapter 4

Findings

This chapter revealed the results of the study from participants relating the research questions composed for this study. This chapter presented, described, analyzed and interpreted the data from the qualitative as well as quantitative studies in a systematic manner. This chapter also describes and explains in detail the process, rationale, and purpose of the mixed methods research design. The mixed methods research design is applied in this research study in order to acquire a deeper overview of the extent of the medical tourism industry. This chapter is also divided into two main sections namely qualitative and quantitative research findings. A combination of qualitative and quantitative research methodologies is applied for the purpose of better and deeper overall responses leading to provide unexpected outcomes. Additionally, the reliability and validity of the measuring instrument are assured from a theoretical framework based on an extensive literature study as explained in Chapter Two and Three. Grounded in the conceptualization of the rather sophisticated research process that was made possible by the illustration of a mixed research model, the description of the research design and methods in Chapter Three represents the rationale for decisions and procedures pertaining to data collection and the deconstruction process.

4.1 ANALYSIS OF QUALITATIVE PHASE

Figure 4.1 The outline of data analysis in qualitative phase

ANALYSIS OF QUALITATIVE DATA

According to Gibbs (2007), qualitative data analysis has been considered a process transforming collected qualitative data, utilizing analytic procedures, into a clear, understandable, insightful, trustworthy and even original analysis. Furthermore, "..qualitative data analysis tends to be an ongoing and iterative process, implying that data collection, processing, analysis, and reporting are intertwined, and not necessarily a successive process" (Nieuwenhuis, 2007, p.99-100). Similarly, qualitative data analysis is the process of making sense from participants' opinions of situations, views, themes, corresponding patterns, regular similarities and categories (Cohen et al., 2007). The main focus of the study is to investigate the medical tourists experience concerning building risk before traveling to Thailand, during staying in Thailand and after traveling in Thailand for medical tourism. Therefore, the results of the semi-structured interviews from this section are intended to provide a more exploratory, holistic and qualitative understanding of the medical tourists' perspective on risks perceived at each stage of their medical travel experience.

Description of the population sample

The participants were 13 medical tourists who seek for medical treatments in four selected provinces in Thailand. The interviews lasted for 20 to 30 minutes with each participant identifying the risk before, during and after traveling in Thailand for medical treatments. The interviews were also based on the outline of the interview guide. Tools used for the interview were an audiotape and a notepad during the interview. The conversations were transcribed into documents and analyzed through the process, indicated in the previous chapter. The following section provides more details about the results.

The participants of this study were 13 international medical tourists in four selected provinces in Thailand. Of the 13 participants, 12 were women (92%) and one male (8%). The age range of participants was between 25-57 years old. Most of the participants sought cosmetic surgery treatment but only one participant traveled to Thailand for LASIK laser treatment. Finally, of the 13 participants, 5 participants were first-time medical tourists (61.5%) and 8 repeat medical tourists (38.5%). An overall profile of these international medical tourists is presented in Table 4.1, based on cosmetic treatments, Lasik, and check-ups.

Table 4.1 Profile of Interviewees

Interview	Gender	Age	Nationality	Medical treatment(s)	Times to travel for medical treatment(s)
1.	Female	45	American	Cosmetic treatment; Thermage, laser treatment	2
2.	Female	50	Australian	Cosmetic treatment; Facial fillers and wrinkle treatments)	1
3.	Female	40	Singaporean	Cosmetic treatment; Nose augmentation	3
4.	Female	57	American	Cosmetic treatment; Rejuvenating treatment, Fillers	1
5	Female	47	Australian	Cosmetic treatment; Derma fillers	1
6.	Female	39	American-Korean	Cosmetic treatment; Nano-cell treatment	2
7.	Female	55	British	Cosmetic treatment; Treatments of neck and wrinkles, facial treatment	2
8.	Female	33	Swedish	Cosmetic treatment; Lip augmentation, Botox	1
9.	Female	45	French	Liposuction	2
10.	Male	55	British	Lasik laser	1
11.	Female	37	Australia	Nose reconstruction	2
12.	Female	29	Taiwanese	Breast Augmentation	3
13.	Female	25	Chinese	Mandibular or V shape face	2

Qualitative Findings

There are many dimensions of perceived risk in the literature, as indicated in the previous chapter. The following reported qualitative results.

1. Risk or fear before traveling to Thailand for medical treatment

Medical tourism refers to traveling to other countries so as to obtain medical treatments. Many risks influence their thinking before traveling for medical procedures overseas. Participants were therefore asked to explain what kind of risk or fear they perceived before traveling to Thailand for medical treatments. The findings of this study showed that the strongest risks related to satisfaction with the experience as well as physical and health risks while communication risk and equipment risk were the two least related to the destination before traveling to Thailand for medical tourism.

Most of the medical tourists or 8 out of 13 participants believed that satisfaction risk and physical and health risk were the most important risk dimension in selecting Thailand for their medical tourism before traveling to Thailand. Their physical and health risk, and satisfaction risk were caused by several factors including the quality of product and service in medical treatment and the doctor. For example,

> *"I have been skeptical about beauty procedures in Thailand that I read reviews about botched jobs. So, I am scared the outcome of cosmetic treatment will not going well as expected."* (A 50 years-old Australian woman)

> *"This is my first time in Thailand and also for cosmetic treatment in overseas. Before traveling, I am scared about the quality of cosmetic treatment as well as how professional of the doctor there. Although I consulted with the doctor by email, I still fear about the results of treatment."* (A 33 years-old Swedish woman)

Another participant, a 25 years old Chinese woman traveled to Thailand for Mandibular angle resection (V-shape face surgery- Jaw reduction surgery). This was her second time seeking medical treatments in Thailand. She explained that last year she went to this clinic to get a nose job was very pleased with her outcome at a reasonable price. Before traveling to Thailand, she mentioned that the thing she was most scared about, was the result of surgery in this time.

> *"This surgery usually takes about 3 hours, and it will get more complicated with multiple procedures than nose jobs last year. So the thing I fear is the outcome of V shape surgery."*

Communication risk has been also considered for international medical tourists before traveling to Thailand for medical treatments. Three first-time medical tourists were scared to travel to a destination with people whose native language was totally different from theirs. This risk is one that has been perceived by many tourists who have encountered a language barrier when traveling to other countries. For example, a 55-years old man from the United Kingdom also explained his fear about the communication risk because this was the first time for him to visit Thailand. He explained:

> *"I am afraid of not being able to communicate because I don't know how Thai people, doctors or nurses can communicate in English. So, this fear refers to taking a step and also not knowing where my foot will land. Everything is unknown and unpredictable when traveling to other countries. I am concerned as to the language barrier in Thailand."*

Another risk perceived by international medical tourists was equipment risk. The 55 years-old man with his first time visit in Thailand intended to get Laser eye surgery in Bangkok. His was concerned about the equipment at the clinic because the newest and latest

equipment has been considered important to minimizing the risk of post-surgery complications, as explained.

> *"I did some research and discovered many eye surgeons and the equipment used for Lasik laser in Europe. I found they have outdated equipment to treat patients with a high-cost treatment. Compared with clinics in Bangkok, it doesn't make sense. Why am I going to pay more than twice in my country with old equipment? So, my only concern before going to Thailand is equipment and Lasik technique used in clinics. It is critical that I can have the latest laser technology and equipment with a low price, it will help to minimize the risk of post-surgery complications."*

2. Risk or fear during staying in Thailand for medical treatment

The participants were asked to identify perceived risk or fear that they are confronting or facing during their stay in Thailand for medical treatment. A variety of responses have described. The main themes the occurred following an analysis of the participants' responses was physical and health risk. Physical and health risk was revealed the most important risk affecting medical tourists' stay in Thailand for medical treatment. 8 participants in this study noted that the physical and health risk they were concerned about was related to several sources such as food and water, infection disease, and hygiene in restaurants and clinics. For example, one repeat medical tourist had a negative experience with food safety and proper hygiene practices at a restaurant located in Patong beach, Phuket because of her experience last year, as indicated.

> *"Last year, I went to a restaurant at Patong beach in Phuket. The food was very nice, but I found a cockroach hidden in Pad Thai. It's very disgusting, and it scared me. So, hygiene in the restaurant is the most important issue during my stay in Thailand."* (A 37 years-old Australian woman)

Another participant also has a concern about hygiene issue in restaurants but in the province of Chonburi.

> *".....but the issue I concerned was the cleanliness and hygiene. Two dogs were zooming around from kitchen to table. They are very dirty. Waiters kept touching them and also handle and serving guests..."* (A 45 years-old French woman)

Strange food has been considered a risk that tourists should be aware of when traveling to other countries and trying new foods. Two participants are scared of trying new foods and drinking water from the tap in Thailand due to online reviews. For example,

> *"I read reviews they suggested to avoid ice making from tap water and also to avoid eating at Thai street stalls, pushcarts or food vendors laying out for awhile. So if I don't want to spend time battling over the toilet, I should avoid them."* (A 57 years-old American woman)

During a stay in Phuket, the Chinese woman mentioned about the risk she concerned is a safety because she had to travel alone this time, as explained.

> *"I don't want to postpone my surgery. So, the question came up it can be safe for a single lady in Phuket. As you know, Phuket is too dangerous for tourists, but I don't want to change clinic for my surgery. Last time, I saw a fight between some foreigners and Tuk-Tuk drivers. Also, the motorcycle passenger attacked the tourist with a knife. So bad! But I think this thing happens everywhere in the world, not only in Phuket. So, I just avoid walking alone in the late night."* (A 25 years old Chinese woman)

The British man who had concerns about the language barrier fears before traveling to Thailand did have an issue with communication risk because when he arrived and went straight to the clinic, he had a very informative and lengthy discussion about services of Lasik treatment from the doctor at the clinic. Similarly, the American woman further explained that:

> *"The communication I concerned before traveling was not the risk when I met the doctor. The doctor answered all my questions and also is extremely helpful and patient with all my queries. Instead, I am scared of additional charges when having facial fillers. The doctor suggested me on how I could achieve the better results with my skin by adding treatment for wrinkles at the same time. The outcome would be better with my skin. Also, the doctor mentioned other additional services including drugs, supplies and additional procedures"* (A 57 years old American woman)

Another participant confirmed this issue that she confronted with hidden charges of medical treatments last time. She further explained that the doctor did not mention about this hidden charges before traveling via email. She intended to remodel the contours of her face, but she got the recommendation for the Thermage which was a higher cost and a bit painful. However, she was delighted and happy with the outcome of this medical treatment.

Therefore, physical and health risk as well as financial risk have been considered the most influential risk for medical tourists during their stay in Thailand.

3. Risk or fear after traveling to Thailand for medical tourism

The question asked participants to identify risk or fear after traveling to Thailand for any medical treatment(s). The majority of participants believe that follow-up care and the outcome or result of medical treatments were the most important issues after traveling to Thailand for medical care. The participants believed that if they developed any complications after their elected medical treatment(s) or surgery when leaving for their home countries, the follow-up is not only difficult but also expensive in their home countries. Although some participants have arranged for follow-up care with doctors before leaving to their home countries; they are mainly still concerned with this issue. When this finding was compared to the literature, perceived risk, physical and health risk, as well as satisfaction risk, have been considered the main risk

observed by international medical tourists following their medical treatment(s) in Thailand. Thus, physical and health risk is defined the possibility of physical danger, injury or sickness occurring after traveling for medical treatment that would have implications for the treatment initially sought. Below are the participants' responses to in the areas of the themes mentioned above.

> *"……My recovery for medical treatment takes about three weeks. That scared me a bit cause I will come back to Australia after getting Derma fillers."* (A 47 years-old Australian woman)

> *"The thing I fear is about emotion, my emotion because I don't know what I'm going to look like. I can't see the actual result since swelling goes down. It takes a while."* (A 37 years-old Australian woman)

Another participant noted that she was scared about contracting an infection after breast augmentation although the doctor informed her that an infection after this surgery is very rare in additional to the fact that the doctor would have prescribed to protect her from infection.

> *"It is not easy to deal with pain and swelling after surgery when returning home. I am scared that swelling will take longer than the doctor's suggestion and also more pain and soreness. Yah, I feel hopeless thinking about this long recovery."* (A 29-years old Taiwanese woman)

> *" What I am worried is the result of surgery. I asked the doctor that if I don't like it after two months. Can you fix it? The way he answered made me feel relieved that I can come back…."* (A 40 years-old Singaporean woman)

> *"I know the doctor is accurate, gentle and very professional about this surgery. But after this surgery, I still consider and scare of the result".* (A 45 years-old American woman)

For this time, the biggest risk faced by the Chinese woman after traveling to Thailand for this surgery was the postoperative care, as stated followed.

> *"It is normal to be afraid of postoperative care because this surgery involves bone shaping as told by the doctor, so pain, numbness, and swelling will be*

> *average for three to four weeks since the surgery. But I have only one week in Phuket before coming back to China. Although the doctor will provide me with medications like pain relievers, I am still worried about the outcome and negative effects. So I fear my recovery won't run smoothly."* (A 25 years old woman)

Two participants indicated that she perceived social address social risk and psychological risk after traveling to Thailand. Social risk refers to "the possibility that a trip to a particular destination will affect others' opinion of me" (Roehl & Fesenmaier, 1992, p. 18). The psychological risk is regarded as the possibility of not reflecting personality and self-image.

These participants have anxiety that they want to get everyone to like them as well as to think positively to them. Also, they were worried too much what others, including relatives and friends, will think about them after returning to their countries, as stated.

> *" I was worried my relatives and friends would notice when I return to my country cause I did not tell anyone. I just want to hide it til it gets better. I can't post a review on my Facebook. I don't want them to ask questions*." (A 25 years-old woman)

> *"The thing I fear is about emotion, my emotion because I don't know what I'm going to look like. I can't see the actual result since swelling goes down. It takes a while."* (A 37 years-old Australian woman)

Therefore, satisfaction risk, physical and health risk and social risk are all concerned of international medical tourists after traveling Thailand for medical tourism.

4. Risk affecting customer loyalty toward Thailand as a medical tourism destination

The participants were asked whether they would return to Thailand for a medical treatment or would they recommend Thailand to other friends, relatives, family or others. 10 out of 13 participants intended to visit Thailand for medical treatments in the future as well as to recommend clinics and Thailand to others who require medical treatments. The other

participants felt hesitant to return to Thailand because they did not have any experience of receiving medical treatment(s) in Thailand.

The final section attempted to identify risk perceived by medical tourists that affect their loyalty toward Thailand as a medical tourism destination. The literature pointed that perceived risk is the main predictor of destination preference and loyalty for visitors. It is undeniable that satisfaction risk was the most influential factor for international medical tourists. International medical tourist satisfaction is an explanation of how well the destination as well as clinic performed before, during and after staying in the destination. For this study, this included elements of medical products and service, how well and professional of doctors or staffs, how doctors and staffs handle customer quarries and solve the problems, their kindness, and helpfulness and the price of medical treatment. The literature indicated that customer satisfaction is not only an indication to ensure a customer loyalty, in other words, a satisfied customer is not always a loyal customer. However, medical tourists are most closely related to medical treatments along with unavoidable risks. Satisfied international medical tourists are important for medical tourism destinations. The results of this study revealed that repeated international medical tourists had been decided to travel Thailand again for medical tourism they satisfied with the results of medical treatment. Additionally, they recommend cosmetic treatments and surgery to friends and others who are willing to travel in oversea for any medical treatments. For example,

> *" Last time in two years ago I went to this clinic for a facelift without surgery and an injection that reduces fat in the face. The actual results would show a week later. I loved it. The fat from below the checks was pulled up onto the cheeks, and the skin was tightened through threads. I ever considered invasive surgery in other countries, but I was afraid of the result and the costs.*

So, I came back to Thailand for my younger look again." (A 55 years-old British woman*)*

Another participant mentioned her greatest concern about the quality of medical treatments happening before traveling as well as willing to revisit in the future, as indicated.

"It has been about 2-3 months before I was there. I still keep in contact with the doctor and the assistance. I have many questions about the quality of medical treatments. I mean equipment, hygiene, a standard of service because I am never in Thailand. If I satisfy with the result of treatment this time, surely will come back for another treatment. So, I think the quality of medical treatment is also the most important thing for me to travel Thailand again for cosmetic treatment in the future." (A 50 years-old Australian woman)

"I am very very happy and pleased with my result of anti-aging treatment. I can't express how happy I am. I would highly recommend this clinic to anyone who requires treatments. I will definitely return when we are due for more treatment in the future." (A 57 years-old American woman)

Another theme found in asking risk affecting international medical tourists was a financial risk. Financial risk is regarded the risk that the tourism will not be worth the cost, either in time or money (Moutinho, 2000). In this study, the participant has realized that if the cost of medical treatment is rising, she will not return to Thailand for medical care. She believed that medical tourism in Thailand is unable to provide value for money spent. Conversely, she will search other medical tourism destinations with lower cost. Therefore, price or cost of care has been considered a major risk in medical tourism, in other words, value for medical tourism money was equally important for them.

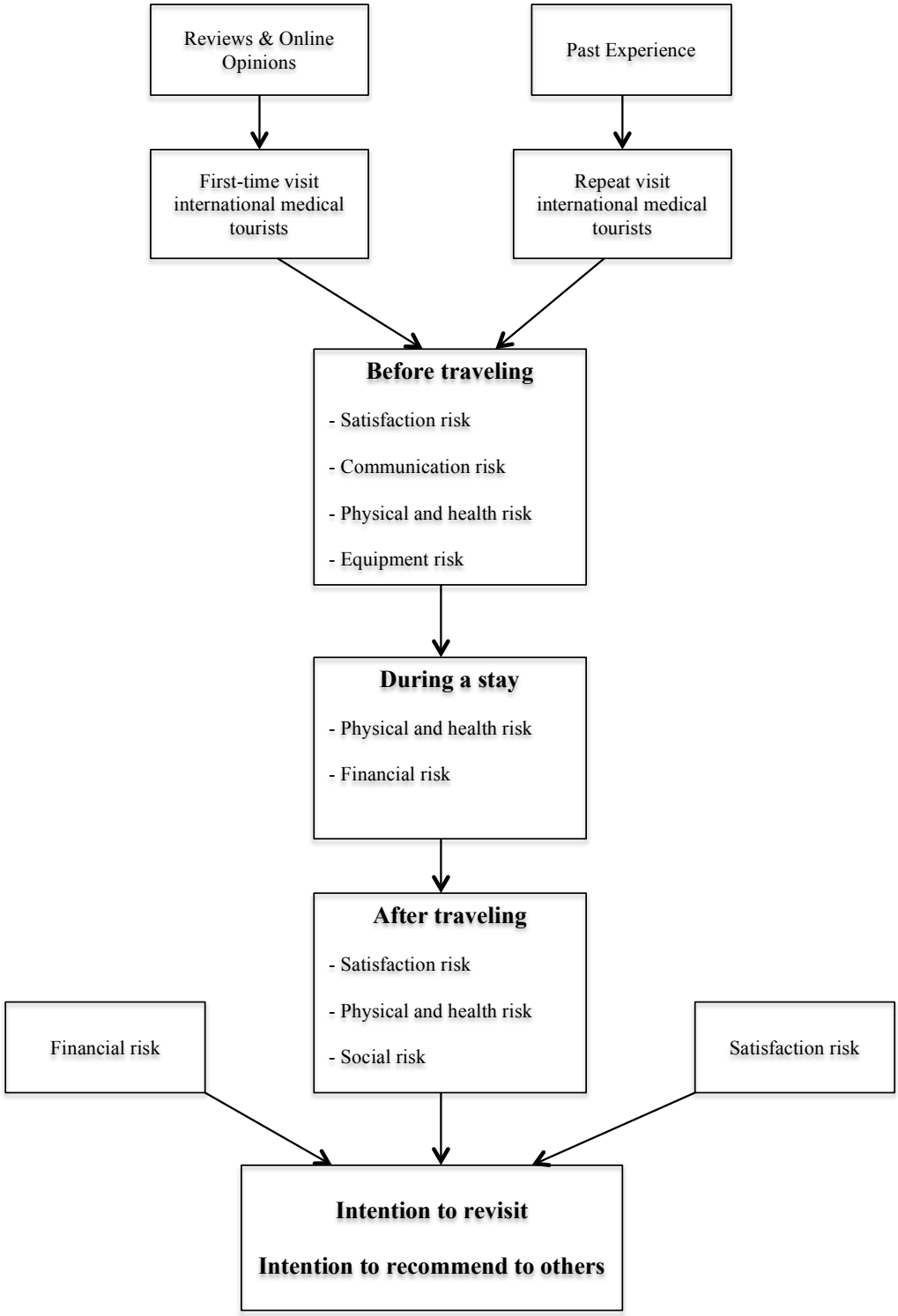


Figure 4. Conceptual Framework of perceived risks of international medical tourists before, during and after traveling Thailand and perceived risk affecting their loyalty

5. Conclusion

As suggested by several researchers, not only the interviewees provide information answering the research questions in the qualitative study but also the additional information presented the participants' perspectives. The first important thing from observing from the researcher is critical sources for medical tourists of selecting Thailand before traveling. There are the differences between first-time and re-visited visitors. From the interview findings, the researcher has realized the power of reviews as well as online opinions toward first-time visitors seeking for medical treatments in Thailand. Five first-time medical tourists in this study have chosen Thailand as a medical tourism destination based on reviews from their trusted inner circle. Online opinions became the primary factor in their decision-making. It can be assumed that the Internet greatly influences choices for a medical tourism destination. First-time medical tourists did not know everything about the destination. Thus, they tend to research information as well as online opinions via online reviews in order to get as much as possible information about medical treatments and destinations. Thus, first-time medical tourists believe this channel is the only way influencing their decision making to Thailand. In contrast, experience has been considered the main factor of selecting Thailand as a destination for revisited-medical tourists. Experienced international medical tourists may spend less time decision making than inexperienced ones since they have more knowledge and prior experience. At the same time, repeated international medical tourists tended to return to a familiar destination leading to decrease individual' risk perception. Therefore, it is important for destinations to focus on how to increase positive reviews and feedback as well as experience from current and future international medical tourists by constantly developing their tourism product and services in line with the increasingly popular trends in medical tourism.

The findings of this study showed that the strongest risk related to before traveling to Thailand as a medical tourism destination is satisfaction risk, while physical and health risk, financial risk and equipment risk were the three least related to the destination before traveling to Thailand for medical tourism. Subsequently, the participants were asked to identify risk or fear that they are confronting or facing during their stay in Thailand for medical treatment. A variety of responses have described. The main themes the occurred through analysis of the participants' responses was physical and health risk. Physical and health risk was revealed the most important risk affecting medical tourists' stay in Thailand for medical treatment, followed by financial risk. The third question asked participants to identify risk or fear after traveling to Thailand for any medical treatment(s). The majority of participants believe that follow-up care and the outcome or result of medical treatments were the most important issues after traveling to Thailand for medical care. Compared this matter with the literature in perceived risk, physical and health risk, as well as satisfaction, have been considered the main risk observed by international medical tourists after their traveling to Thailand in obtaining medical treatment(s). The participants were asked whether you will return to Thailand for a medical tourism destination or will recommend Thailand to other friends, relatives, family or others. 10 out of 13 participants intended to visit Thailand for medical treatments in the future as well as to recommend clinics and Thailand to others who require medical treatments. Finally, satisfaction risk was the most influential factor for international medical tourists' destination loyalty.

ANALYSIS OF QUANTITATIVE PHASE

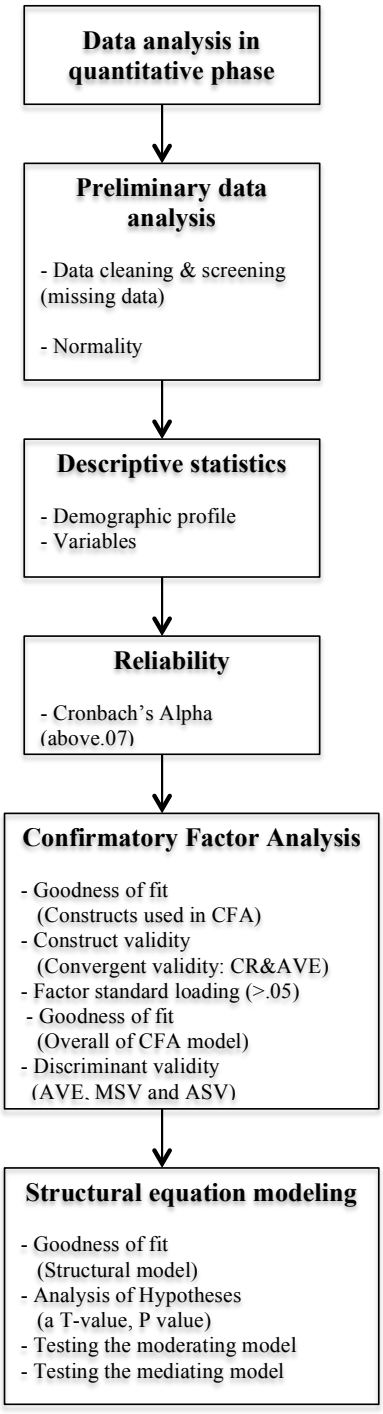


Figure 4. The outline of data analysis in quantitative phase

Reliability of Measurement Scales

Reliability is considered a fundamental issue in any measurement scale. Scale reliability refers to the proportion of variance attributing to the actual score of the latent construct (Gable and Keilty, 1998). Internal consistency is a typical measure in testing the reliability and at the same time indicates the homogeneity of items that comprise a measurement scale. The internal consistency reliability is a way to measure how well the items on the test are inter-correlated. Therefore, high inter-item correlations mean the elements of a scale have a strong relationship to the latent construct.

The most common internal consistency measure is assessed by Cronbach's alpha. In other words, it calculates the Cronbach's alpha along with the item-to-total correlation for each item that examines in the overall reliability of the measurement scale. Further analysis will be considered if a measurement range with a coefficient value above .70 is acceptable as an internally consistent scale. In contrast, if the measurement scale has a Cronbach's coefficient below .70, the scale is caused by several sources of measurement errors including administration errors, situational factors, inadequate sampling of items, the number of items, sample characteristics and logical errors in developing a measurement scale (Gable and Keility, 1998).

The Cronbach's alpha coefficients were calculated in SPSS 23.0 as an initial examination of the reliability for the proposed eight measurement scales in the study, as presented in Table 4.4. The acceptable value of Cronbach's alpha should be exceeded 0.7 (Hair, Black, Babin, & Anderson, 2010). Most of the measurement scales obtained an acceptable level of a Cronbach's Alpha above .70. In other words, the measurement scales are reliable and appropriate for further data analysis. Some measurement scales have a Cronbach's Alpha below .60. As indicated by Cronbach (1951), a Cronbach alpha of.60 with only 4-5 items is acceptable

since the internal consistency of scales is underestimated by the coefficient alpha with a low number of items. Therefore, the questionnaire achieved the Cronbach's alpha values being between .63 to .88 that indicated the survey had reliability.

Measurement Scale	Number of Items	Cronbach's Alpha
Risk	10	.88
Cognitive Image	5	.82
Affective Image	4	.65
Quality	4	.63
Satisfaction	3	.78
Loyalty	5	.67
Culture	6	.74

Table 4.3 Summary of the Measurement Reliability (Cronbach's Alpha)

4.5 Demographic Profile

The demographic characteristics of international medical tourists fit the target population well, as presented in Table 4.1. They tended to travel in Thailand for medical treatment as well as tourism activities. While about 65.4 percent of the medical tourists were female, 34.6 percent were male. The majority of international medical tourists, or 35.61 percent were 36-45 years old as well as 49.8 percent were single. For education, the majority of medical tourists, or about 62 percent earned a bachelor degree. Additionally, the majority of international medical tourists, or about 78 percent had annual income between 50,000-79,999. Most of them came from Europe and Scandinavia (24.88%), followed by Australia (22.44%), Asia (20.48%), North America (18.54), Middle East (9.76%) and Oceania (3.90%), respectively. Similarly, 26.34

percent of them were Australian and New Zealander, followed by European and Scandinavian (24.88%), Asian (20.48%), American and Canadian (18.54%), Middle Easterner (Arab-9.76%), respectively. For occupation, most of them or 25.6 percent were teacher/ instructor/ professor, while 25.6 percent while the following was self-employed (or 22.9%), professional/ technical position (15.1%) and clerical/ administrative/ secretarial (13.7%). Moreover, most of them or 63 percent had traveled to Thailand for medical treatment for first time. This is not consistent with the results in qualitative phase that presented most of the participants were repeated visitors. Finally, the majority of them or 41.70 percent has sought for cosmetic/ plastic/ reconstructive surgery, followed by dental surgery, or treatment (21.05%). This is consistent with the findings in qualitative phase that showed the majority of respondents traveled to Thailand for cosmetic and plastic surgery.

Profile	N	%
Gender		
Female	134	65.4
Male	71	34.6
Age		
19-25 years old	0	
26-35 years old	25	12.20
36-45 years old	73	35.61
46-55 years old	67	32.68
56-65 years old	34	16.58
Above 65 years old	6	2.93
Marital Status		
Single	97	47.3
Married	102	49.8
Separated/ Widowed/ Divorced	6	3.0
Highest Level of Education		
Less than high school		
High school		
Some college	7	3.4
Associate Degree	24	11.7
Bachelor Degree	127	62.0
Graduate Degree	46	22.4
Professional Degree	1	.5
Annual Income		
Under $20,000		
$20,000-49,999	4	1.9
$50,000-79,999	159	77.6
$80,000-99,999	20	9.8
$100,001-129,999	13	6.3
Above $130,000	9	4.4
Country of Residence		
Europe and Scandinavia	51	24.88
Australia	46	22.44
Asia	42	20.48
North America	38	18.54
Middle East	20	9.76
Oceania	8	3.90

Nationality	46	22.44
Australian	42	20.48
Asian	28	13.66
American	23	11.22
British	20	9.80
Middle Easterner	16	7.80
European	12	5.85
Scandinavian	10	4.90
Canadian	8	3.90
New Zealander		
Occupation		
Government Official/Military	20	9.8
Executive/ Managerial positions	13	6.3
Professional/ Technical positions	31	15.1
Self-employed	47	22.9
Teacher/ Instructor/ Professor	53	25.6
Clerical/ Administrative/ Secretarial	28	13.7
Production/ Manufacturing	5	2.4
Retiree/ Not in the work force	8	3.9
Medical Service Seeking		
Comprehensive medical check up	33	13.36
Cosmetic/ plastic/ reconstructive surgery	103	41.70
Dental surgery/ treatment	52	21.05
Sight treatment/ Lasik	39	15.79
Heart surgery	4	1.62
If other, please specify	16	6.48
	(247)	
Travel Time		
First time	129	62.93
2 times	60	29.27
3 times	15	7.31
More than 3 times	1	0.49

Table 4.1 Demographic Characteristics of International Medical Tourists

4.6 Descriptive Statistics

The mean scores and standard deviations were run for each of the variable in this study.

Variables	Mean	SD
Perceived Risk		
There is a possibility of unable to obtain appropriate advice from regular doctors (Physical and health risk)	4.22	.797
I have concerns about having possible communication problems during my medical treatment(s) as well as travelling in Thailand (Communication risk)	4.22	.764
I will not have problems in communication with others whom I meet during my medical Tourism in Thailand (Communication risk)	4.21	.772
There is a possibility of contracting infectious diseases in Thailand (Physical and health risk)	4.20	.654
It is important that people whom I meet speak English during my medical tourism in Thailand (Communication risk)	4.17	.665
There is a possibility of physical danger, injury or sickness while on medical tourism in Thailand (Physical and health risk)	4.10	.776
It will be difficult to transfer patient information from a clinic/ hospital in Thailand to my home country (Physical and health risk)	4.03	.798
I will not be intimidated by terrorism when having medical treatments as well as travelling in Thailand (Terrorism risk)	3.96	.867
Medical tourists have a high probability of being targeted by terrorists in Thailand (Terrorism risk)	3.91	.847
There is a possibility that the desired medical treatment will not turn out as expected	3.90	.527
Cognitive Image		
Well-developed general infrastructure (e.g. road highway, etc.)	4.26	.862
A variety of tourist attractions	4.17	.765
Safe and secure environment	4.16	.677
Hospitality of local people	4.15	.737
Good quality of life	4.03	.800
Affective Image		
Relaxing/ Distressing	4.12	.770
Exciting/ Gloomy	4.08	.774
Pleasant/ Unpleasant	4.00	.822
Arousing/ Sleepy	3.96	.865
Overall Image		
Overall image of Thailand as a medical tourism destination	5.03	1.27
Perceived Quality		
Overall medical professionals and staff at the hospital/ clinic in Thailand offer excellent services	6.20	.893
Waiting time in Thailand clinics/hospitals is shorter than in other countries	6.15	.926
I believe overall quality of medical treatment and service at the hospital/ clinic in Thailand is great	5.97	.954
Overall quality of medical equipment used in the hospital/ clinic in Thailand offers excellent product	5.76	.978
Satisfaction		
My decision to visit Thailand for medical treatment has been a wise one	6.05	.892
I think that I did the right thing when I choose this destination for my medical treatment	5.89	.882
I feel good about my decision to use medical tourism from the hospital/ clinic in Thailand	5.79	.834

Culture		
Individualism (IDV)	3.70	1.544
Masculinity (MAS)	3.57	.618
Indulgence (IND)	3.47	.751
Long-term orientation (LTO)	3.30	1.041
Power distance (PDI)	3.18	1.159
Uncertainty avoidance (UAV)	3.08	.991
Loyalty		
I will recommend Thailand to others for medical treatment(s)	6.09	1.119
I will tell others positive things about my experience in Thailand as a medical tourist	6.17	.700
I will recommend Thailand to others for leisure vacations	5.87	.874
I am willing to revisit Thailand for further treatment(s)	5.80	.998
I am willing to revisit Thailand for leisure vacations	5.55	.986

Table 4.2 Descriptive statistics

4.4 SEM analysis

The multivariate technique of Structural Equation Modeling (SEM) analyses was employed to test the validity of the study measurement as well as examine the relationships between the independent variables and destination loyalty as an outcome variable. SEM analyses are comprised of two main steps including the measurement model or confirmatory factor analysis (CFA) and the SEM. The measurement models are used to identify the relations between observed and unobserved variables. In other words, Ho (2006) states that the CFA or measurement model defines how the unobserved variables are assessed regarding the manifest variables. The other step, or the SEM or the structural model is used to specify the variables or is showed how exogenous or independent variables and endogenous variables are related, as noted by Hair et al. (2006).

As always, convergent and discriminant validity, as well as reliability, were necessary to establish when conducting a CFA. This section began with the single CFA models that assessed the level of model fit and construct validity of the measurement scale including convergent and discriminant validity. If the research has issues about convergent validity, then your variables do not correlate well with each other within their parent factor; i.e. the latent factor is not well explained by its observed variables. In other words, the CFA was conducted on every construct as well as measurement models. Additionally, composite reliability (CR) and average variance extracted (AVE) were calculated in order to assess the reliability of individual construct by using the formula, as bellowed. After factors had been demonstrated adequate validity as well as reliability, the SEM was performed to test the proposed hypothesis.

Composite reliability (CR):

$$CR = \frac{(\sum_{i=1}^{n} \lambda_i)^2}{(\sum_{i=1}^{n} \lambda_i)^2 + (\sum_{i=1}^{n} \delta_i)}$$

Average Variance Extracted (AVE):

$$VE = \frac{\sum_{i=1}^{n} \lambda_i^2}{n}$$

λ = the indicator loadings
θ = the indicator error variances
Σ = the summation of the indicators of the latent variable

The findings of the assessed individual CFA for all constructs are as followed.

Perceived risk. The first construct consisted of 3 items to measure participants' perceived risk. The initial CFA model with three items, including terrorism risk, physical and health risk and communication risk, fitted the data based on the goodness of fit indices. The CFA model fitted the data with χ^2= 14.316, p=.112,CMIN/DF=1.591, GFI=.981, RMR=.015, AGFI=.941, CFI=.993, RMSEA=.054. Therefore, all mentioned indices fitted the data well with values more than the recommended cut-off values.

The finding of the assessed construct validity of the perceived risk dimensions was satisfied, in other words, the standardized factor loading for all items were>.05 (ranged from .65 to .85), as shown in Table. Moreover, the finding presented that construct reliability among the seven remained items are satisfied. In other words, the result demonstrated that CR was >.07 indicating a good level of convergence or internal consistency among the items. Also, the AVE for all the elements exceeded the cutoff point of .05. Therefore, the measurement scale assessing the perceived risk in the study was reliable and valid.

Items	Standardized Factor Loading	CR	AVE
Perceived Risk			
Terrorism risk		**0.61**	**0.54**
Medical tourists have a high probability of being targeted by terrorists in Thailand	.76		
I will not be intimidated by terrorism when having medical treatments as well as travelling in Thailand			
Physical and Health Risk			
There is a possibility of contracting infectious diseases in Thailand	.82		
There is a possibility that I will not be able to obtain appropriate advice from regular doctors			
There is a difficulty in transferring patient information from clinic/ hospital in Thailand to his/ her home country			
There is a possibility of physical danger, injury or sickness while on medical tourism in Thailand			
There is a possibility that the desired medical treatment will not turn out as expected			
Communication Risk			
I have concerns about having possible communication problems during my medical treatment(s) as well as travelling in Thailand	.92		
It is important that people whom I meet speak English during my medical tourism in Thailand			
I will not have problems in communication with others whom I meet during my medical Tourism in Thailand			
Goodness –of-Fit Statistics			
Absolute Fit Measures			
Chi-square of estimate model	14.32 (df=9, p=.11)		
Goodness-of-fit index (GFI)	.98		
Root mean square residual (RMR)	.02		
Root mean square error of approximation (RMSEA)	.05		
Incremental Fit Measures			
Adjusted goodness-of-fit index (AGFI)	.94		
Non0normed fit index (NNFI)	1.0		
Normed fit index (NFI)	.98		
Parsimonious Fit Measures			
Parsimony goodness-of0fit index (PGFI)	.43		
Parsimony normed fit index (PNFI)	.42		
Comparative fit index (CFI)	.99		
Incremental fit index (IFI)	.99		

Table 4.4 Goodness of fit statistics of perceived risk

Culture. Culture construct made up of six items including power distance, individualism, masculinity, uncertainty avoidance, long-term orientation, and indulgence. The primary CFA model did not fit the data based on goodness-of-fit indices. Two items with factor loading <.05 were eliminated in order to modify the model. The CFA model with four remained items fitted the data with x2=3.93, p=.140, CMIN/DF=1.96, RMR=.01, GFI=.99, AGFI=.95, CFI=.96 and RMSEA=.07. The CMIN/DF, RMR, GFI, AGFI and CFI indices with the cutoff values fitted the data well. Moreover, the RMSEA was 0.69 showing that the proposed CFA model for culture perfect fit with the data.

The result of CFA model for culture showed that the construct validity was satisfied, as displayed in Table. All items had the standard loading >.05 (ranged from 0.71 to 0.97). The AVE value for all items exceeded the cutoff point of 0.5 that presented all items share a good proportion of variance of their underline dimensions. Additionally, the finding presented that the CR among the remaining items were > 0.70 (0.92) showing that adequate internal consistency among the measured items.

Items	Standardized Factor Loading	CR	AVE
Culture		**0.92**	**0.61**
Power distance	.51		
Individualism	.79		
Masculinity	.70		
Indulgence	.59		
Goodness –of-Fit Statistics			
Absolute Fit Measures			
Chi-square of estimate model	3.927 (df=2, p=.14)		
Goodness-of-fit index (GFI)	.99		
Root mean square residual (RMR)	.01		
Root mean square error of approximation (RMSEA)	.06		
Incremental Fit Measures			
Adjusted goodness-of-fit index (AGFI)	.95		
Non0normed fit index (NNFI)	.99		
Normed fit index (NFI)	.99		
Parsimonious Fit Measures			
Parsimony goodness-of0fit index (PGFI)	.19		
Parsimony normed fit index (PNFI)	.33		
Comparative fit index (CFI)	.99		
Incremental fit index (IFI)	.99		

Table 4.5 Goodness of fit statistics of culture

Cognitive Image. The third construct consisted of five items according to the cognitive image. The CFA model fitted the data well based on goodness-of-fit. The CFA model fitted the data with x2=1.75, p=0.782, CMIN/DF=.436, RMR=.01, GFI=.99, AGFI=0.98, CFI=1.0 and RMSEA=0.00. Thus, all mentioned indices fitted the data well with values more than the recommended cut-off values.

The result of CFA model for cognitive image items presented that the construct validity was satisfied, as shown in Table. All five items had the standard loading >0.5 ranging from 0.51 to 0.79. Although the AVE did not exceed the cutoff point of 0.5, the AVE value showed at 0.50. Finally, the result presented that the CR among the remaining items were > 0.70 (0.81) demonstrating that adequate internal consistency among the measured items.

Items	Standardized Factor Loading	CR	AVE
Cognitive Image		**0.81**	**0.50**
Well-developed general infrastructure (e.g. road highway, etc.)	.51		
Hospitality of local people	.79		
A variety of tourist attractions	.70		
Safe and secure environment	.59		
Good quality of life	.77		
Goodness –of-Fit Statistics			
Absolute Fit Measures			
Chi-square of estimate model	1.75 (df=4, p=.78)		
Goodness-of-fit index (GFI)	.99		
Root mean square residual (RMR)	.01		
Root mean square error of approximation (RMSEA)	.00		
Incremental Fit Measures			
Adjusted goodness-of-fit index (AGFI)	.99		
Non0normed fit index (NNFI)	.99		
Normed fit index (NFI)	.99		
Parsimonious Fit Measures			
Parsimony goodness-of0fit index (PGFI)	.26		
Parsimony normed fit index (PNFI)	.39		
Comparative fit index (CFI)	1.0		
Incremental fit index (IFI)	1.0		

Table 4.6 Goodness of fit statistics of cognitive image

Affective Image. The following construct made up of four items in order to measure quality for this study. The initial CFA model did not fit the data based on goodness-of-fit indices. The model was modified by eliminating one item presenting the CFA model with x2=.393, p=0.82, RMR=0.00, GFI=0.99, CFI=1.00 and RMSEA=0.000. The model fitted the data well with indices showing more than cutoff values. Thus, the proposed CFA model for affective image presented perfect fit with the data.

The finding of CFA model for affective image showed construct validity was satisfied, as shown in Table. All items in the affective image construct had the standardized factor loading >0.5 ranging 0.50 to .81. The AVE value exceeded the cutoff point of 0.5 presenting that these items in the construct of quality share a good proportion of variance of their underline dimensions. Additionally, the finding showed that the CR among the remained items was .67 showing adequate internal consistency among the measured items.

Items	Standardized Factor Loading	CR	AVE
Affective Image		**0.67**	**0.60**
Arousing/ Sleepy	.81		
Exciting/ Gloomy	.80		
Pleasant/ Unpleasant	.50		
Goodness –of-Fit Statistics			
Absolute Fit Measures			
Chi-square of estimate model	.393 (df=2, p=.82)		
Goodness-of-fit index (GFI)	.99		
Root mean square residual (RMR)	.00		
Root mean square error of approximation (RMSEA)	.00		
Incremental Fit Measures			
Adjusted goodness-of-fit index (AGFI)	.20		
Non0normed fit index (NNFI)	.99		
Normed fit index (NFI)	.99		
Parsimonious Fit Measures			
Parsimony goodness-of0fit index (PGFI)	.20		
Parsimony normed fit index (PNFI)	.33		
Comparative fit index (CFI)	1.0		
Incremental fit index (IFI)	1.0		

Table 4.7 Goodness of fit statistics of affective image

Quality. The following construct made up of five items in order to measure quality for this study. The initial CFA model did not fit the data based on goodness-of-fit indices. The model was modified by eliminating two items presenting the CFA model with x2=1.596, p=0.450, CMIN/DF=0.798, RMR=0.017, GFI=0.99, AGFI=0.98, CFI=1.00 and

RMSEA=0.000. The model fitted the data well with indices showing more than cutoff values. Thus, the proposed CFA model for quality presented perfect fit with the data.

The finding of CFA model for quality presented construct validity was satisfied, as shown in Table. All items in the quality construct had the standardized factor loading >0.5 ranging 0.73 to 1.01. The AVE value exceeded the cutoff point of 0.5 presenting that these elements in the construct of quality share a good proportion of variance of their underline dimensions. Additionally, the finding presented that the CR among the remained items was >0.70 (0.86) showing adequate internal consistency among the measured items.

Items	Standardized Factor Loading	CR	AVE
Perceived Quality		**0.86**	**0.68**
I believe overall quality of medical treatment and service at the hospital/ clinic in Thailand is great	1.01		
Overall medical professionals and staff at the hospital/ clinic in Thailand offer excellent services	.71		
Overall quality of medical equipment used in the hospital/ clinic in Thailand offers excellent product	.73		
Goodness –of-Fit Statistics			
Absolute Fit Measures			
Chi-square of estimate model	1.596 (df=2, p=.45)		
Goodness-of-fit index (GFI)	.99		
Root mean square residual (RMR)	.02		
Root mean square error of approximation (RMSEA)	.00		
Incremental Fit Measures			
Adjusted goodness-of-fit index (AGFI)	.98		
Non0normed fit index (NNFI)	.96		
Normed fit index (NFI)	.99		
Parsimonious Fit Measures			
Parsimony goodness-of0fit index (PGFI)	.30		
Parsimony normed fit index (PNFI)	.53		
Comparative fit index (CFI)	1.0		
Incremental fit index (IFI)	1.0		

Table 4.8 Goodness of fit statistics of perceived quality

Satisfaction. The next construct consisted of three items so as to measure satisfaction. The CFA model presented that the model fitted the data well with x2=0.609, p=0.737, CMIN/DF=0.010, RMR=0.010, GFI=0.99, AGFI=0.99, CFI=1.00 and RMSEA=0.000.

The result of CFA for satisfaction presented that the construct validity was satisfied, as shown in Table. All items had the standardized factor loading >0.5 ranging from 0.65 to 0.93. Moreover, The result showed that the CR was >0.7 (0.79) for all items indicating a good level of internal consistency or convergence among the items. Additionally, the AVE of all items in satisfaction exceeded the cutoff point of 0.5 (0.57). Therefore, the selected measurement scale assessing the satisfaction in the study was reliable and valid.

Items	Standardized Factor Loading	CR	AVE
Satisfaction		**0.79**	**0.57**
My decision to visit Thailand for medical treatment has been a wise one	.65		
I think that I did the right thing when I choose this destination for my medical treatment	.93 .65		
I feel good about my decision to use medical tourism from the hospital/ clinic in Thailand			
Goodness –of-Fit Statistics			
Absolute Fit Measures			
Chi-square of estimate model	.609 (df=2, p=.73)		
Goodness-of-fit index (GFI)	.99		
Root mean square residual (RMR)	.01		
Root mean square error of approximation (RMSEA)	.00		
Incremental Fit Measures			
Adjusted goodness-of-fit index (AGFI)	.99		
Non0normed fit index (NNFI)	.99		
Normed fit index (NFI)	1.0		
Parsimonious Fit Measures			
Parsimony goodness-of0fit index (PGFI)	.20		
Parsimony normed fit index (PNFI)	.43		
Comparative fit index (CFI)	1.0		
Incremental fit index (IFI)	1.0		

Table 4.9 Goodness of fit statistics of satisfaction

Loyalty. The last construct made up of five items measuring loyalty in the study. The primary CFA model with five items did not fit the data regarding goodness-of-fit indices. The model was modified by eliminating two items with factor loading <0.50. The CFA model with 3 remained items fitted the data well-representing x2=0.002, p=0.963, CMIN/DF=.002,

RMR=0.001, GFI=1.00, AGFI=1.00, CFI=1.00 and RMSEA=0.000. Thus, all values presented the model fit the data well.

The finding of the assessed construct validity of loyalty in this study was satisfied, as given in Table. The standardized factor loading for all items was >0.5 ranging from 0.65 to 0.80. The AVE value exceeded the cutoff point of 0.5 (0.52). Additionally, the finding presented the CR among the remained items is satisfied showing the CR was 0.77. Therefore, the loyalty construct for this study stated a good level of internal consistency or convergence among the items.

Items	**Standardized Factor Loading**	**CR**	**AVE**
Loyalty		**0.77**	**0.52**
I am willing to revisit Thailand for further treatment(s)	.71		
I am willing to revisit Thailand for leisure vacations	.65		
I will recommend Thailand to others for leisure vacations	.80		
Goodness –of-Fit Statistics			
Absolute Fit Measures			
Chi-square of estimate model	.002 (df=1, p=.96)		
Goodness-of-fit index (GFI)	1.0		
Root mean square residual (RMR)	.00		
Root mean square error of approximation (RMSEA)	.00		
Incremental Fit Measures			
Adjusted goodness-of-fit index (AGFI)	1.0		
Non0normed fit index (NNFI)	1.0		
Normed fit index (NFI)	1.0		
Parsimonious Fit Measures			
Parsimony goodness-of0fit index (PGFI)	.10		
Parsimony normed fit index (PNFI)	.43		
Comparative fit index (CFI)	1.0		
Incremental fit index (IFI)	1.0		

Table 4.10 Goodness of fit statistics of loyalty

Overall Model

The initial theoretical model examined the results of RMR=.06, GFI=.84, AGFI=.81, NFI=.76, IFI=.89, CFI=.88 and RMSEA=.06. The goodness-of-fit statistics presented the initial model fitted that data somewhat well. However, the finding showed that the initial theoretical model was not acceptable as a well-fitting model to the data.

The review of modification indices suggested that the primary model could be developed so as to present a better model fit to the data. The modification Index provided by AMOS suggested the model fit could be improved by correlating for pairs of errors. As indicated by Jöreskog (1993), every correlation between error terms has to be justified and interpreted. Therefore, the four pairs of errors in the initial SEM model were correlated in order to improve the model fit. More specifically, the first was between item COM9 (*It is important that people whom I meet speak English during my medical tourism in Thailand*) and COM10 (*I will not have problems in communication with others whom I meet during my medical tourism in Thailand)*. The second pair of errors was correlated in items between COM8 (*I have concerns about having possible communication problems during my medical treatment(s) as well as traveling in Thailand)* and TER2 (*I will not be intimidated by terrorism when having medical procedures as well as traveling in Thailand*). Subsequently, the third was items between PHY6 *(There is a possibility of physical danger, injury or sickness while on medical tourism in Thailand*) and TER1(Medical tourists have a high probability of being targeted by terrorists in Thailand. Consequently, the researcher correlated the pair of errors between item COG1 (*Well-developed general infrastructure*) and COG4 (*Safe and secure environment*). Thus, the four error correlations improved in a good fit of the measurement model. The modified measurement model illustrated the good fit of model presenting x^2 =281.669 ($p<.05$), RMR=.05,

GFI=.90, AGFI=.87, CFI=.97, IFI=.97 and RMSEA=.03. The differences of goodness-of-fit statistics between initial and revised models were presented in Table 4.6.

Goodness –of-Fit Statistics	Initial Model	Revised Model
Absolute Fit Measures		
Chi-square of estimate model	629.598 (p<.05)	281.669 (p>.011)
Goodness-of-fit index (GFI)	.84	.90
Root mean square residual (RMR)	.06	.05
Root mean square error of approximation (RMSEA)	.06	.03
Incremental Fit Measures		
Adjusted goodness-of-fit index (AGFI)	.81	.87
Non0normed fit index (NNFI)	.98	.88
Normed fit index (NFI)	1.0	.87
Parsimonious Fit Measures		
Parsimony goodness-of0fit Index (PGFI)	.69	.70
Parsimony normed fit index (PNFI)	.67	.73
Comparative fit index (CFI)	.88	.97
Incremental fit index (IFI)	.89	.97

Table 4.11 Goodness-of-fit statistics between initial model and revised model

Discriminant validity

This study relied on the recommendation of Hair et al. (2010) stating that discriminant validity was established where Maximum Shared Variance (MSV) and the Average Shared Squared Variance (ASV) are both lower than the Average Variance Extracted (AVE) for all the constructs. The results showed that both MSV and ASV were found to be lower than the AVE scores for all of the constructs in this study. Thus, it can be considered that scale possessed discriminant validity.

Items	AVE	MSV	ASV
Perceived Risk	.54	.003	.020
Culture	.61	.002	.018
Cognitive Image	.46	.017	.079
Affective Image	.60	.017	.190
Quality	.68	.096	.170
Satisfaction	.79	.034	.210
Loyalty	.52	.013	.179

AVE=Average Variance Extracted
MSV= Maximum Shared Squared Variance
ASV= Average Shared Squared Variance

Table 4.12 Discriminant Validity of the study

The validity and reliability of measures used for the measurement model had been established regarding previous discussion. Similarly, the modified measurement model illustrated good fit. It was therefore stated that the hypothesized model that investigated the predictive validity of these constructs was ready to determine.

4.5 Structural Model and Analysis of Hypotheses Testing

After assessing the measurement model, the structural model is typically determined. Weston and Gore (2006) mentioned that equations in the structural portion of the model had specified the hypothesized relations among latent variables. This section provided the overall fit of the proposed model to the data and at the same time tested the significance of the hypothesized relationships among variables, as presented in figure 4.1. The table of the goodness of fit of the structural model was shown in Table 4.13.

Table 4.13 Goodness-of-fit statistics of structural model

Goodness –of-Fit Statistics	**Structural Model**
Absolute Fit Measures	
Chi-square of estimate model	288.64 (p=.115)
Goodness-of-fit index (GFI)	.91
Root mean square residual (RMR)	.07
Root mean square error of approximation (RMSEA)	.02
Incremental Fit Measures	
Adjusted goodness-of-fit index (AGFI)	.88
Non0normed fit index (NNFI)	.88
Normed fit index (NFI)	.87
Parsimonious Fit Measures	
Parsimony goodness-of0fit Index (PGFI)	.73
Parsimony normed fit index (PNFI)	.76
Comparative fit index (CFI)	.99
Incremental fit index (IFI)	.99

The results revealed that he model fitted the data well based on goodness-of-fit. The values of AGFI (.88) and NFI (.87) were slightly below the recommended cut-off value (.90). But the other values of the SEM model fitted the data with X^2 =288.64, p=0.115, RMR=.07, GFI=.91, CFI=.99, IFI=.99 and RMSEA=0.02. Thus, the model is acceptable with the data.

The total of 27 items were used in SEM analysis with perceived risk (3 items), culture (4 items), cognitive image (5 items), affective image (3 items), overall image (1 item), quality (3 items), satisfaction (3 items) and loyalty (3 items). The proposed hypotheses were tested by examining the relationships between the observed and unobserved variables. If the relationships between the constructs having an estimated t-value is greater than a certain critical value (p=<.05, t-value=1.96), the null hypothesis associating estimated parameter is equal to 0 was rejected, as suggested by Mueller (1996). Instead, the hypothesized was supported. Thus, Table 4 and Figure 4.14 presented the quantitative results.

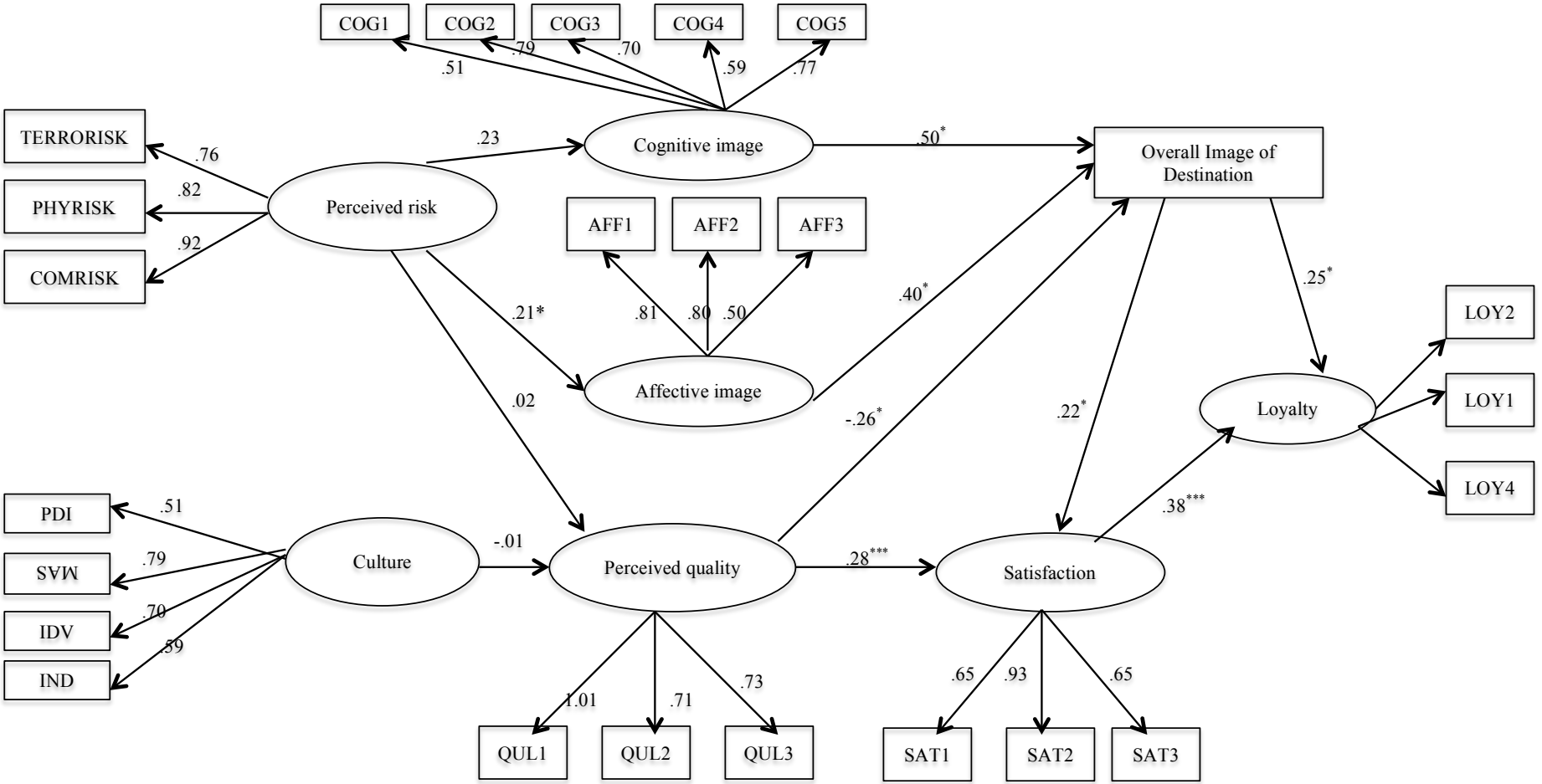


Figure 4.1 Results of the SEM model

Path	Estimate	T-value	P-value	Hypothesis result
H1: Risk → Cognitive image	.023	.333	.74	Not supported
H2: Risk → Affective image	.213	2.590	*	Supported
H3: Cognitive image → Overall image	.502	2.400	*	Supported
H4: Affective image → Overall image	.398	1.833	*	Supported
H5: Risk → Quality	.019	.185	.85	Not supported
H6: Quality → Overall image	-.258	-2.224	*	Supported
H7: Quality → Satisfaction	.277	3.406	***	Supported
H8: Culture → Quality	-.005	-.052	.96	Not supported
H11: Overall image → Satisfaction	.227	2.153	*	Supported
H12: Overall image → Loyalty	-.252	-1.804	*	Supported
H13: Satisfaction → Loyalty	.379	3.172	***	Supported

* Significant at $p<0.05$, *** Significant at <0.01

Table 4.14 Results of hypotheses analysis

As mentioned in the previous chapter, the first sub-model highlights the relationship between risk and image in terms of the cognitive, affective and overall image perceived by international medical tourists. This sub-model proposed four hypotheses and all hypotheses were supported. The results of SEM analysis are presented in Figure 4.2.

Hypothesis 1: There is a direct negative relationship between risk and cognitive image perceived by medical tourists

Hypothesis 2: There is a direct negative relationship between risk and affective image perceived by medical tourists

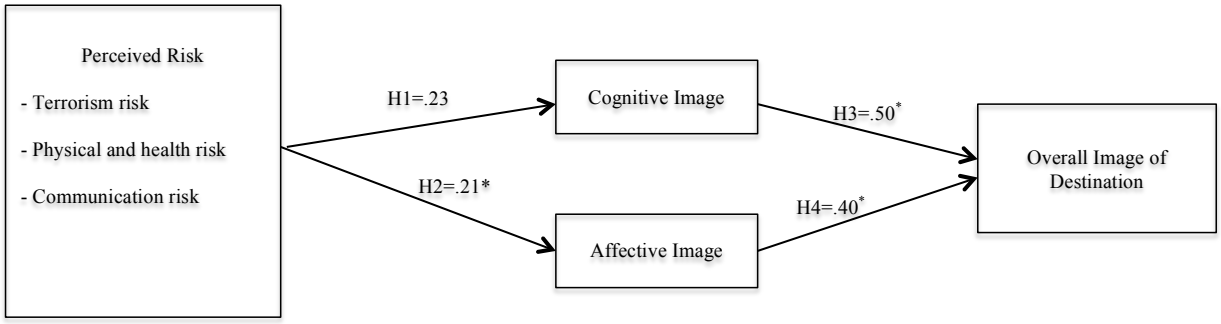


Figure 4.2 Results of the relationships between perceived risk and image

The finding of the SEM analysis revealed that the path from perceived risk and the cognitive image was insignificant (β=.23, t-value=.33, p=.74). The finding did not support the hypothesis in fact that perceived risk is negatively related to the cognitive image. Thus, the hypothesis 1 was not supported. Conversely, the result of SEM analysis showed that the structural coefficient, as well as t-values associated with perceived risk and affective image, was significant (β=.154, t-value=2.590, p<.05). Therefore, hypothesis 2 was supported.

Hypothesis 3: There is a direct, positive relationship between cognitive image and overall image perceived by medical tourists

Hypothesis 4: There is a direct, positive relationship between affective image and overall image perceived by medical tourists

Hypotheses 3 and 4 investigated the relationships between cognitive and affective image and overall image. The results of SEM analysis supported hypothesis 3, presenting a t-value of 2.400, which was statistically significant at the .05 level. Similarly, hypothesis 4 was supported with a t-value of 1.833 as well as this hypothesis was statistically significant at the .05 level.

The next sub-model attempted to examine the relationships among risk, quality, overall image perceived by medical tourists and their satisfaction. This sub-model included three hypotheses, as followed.

Hypothesis 5: There is a direct positive relationship between risk and quality perceived by medical tourists

Hypothesis 6: There is a direct positive correlation between quality and overall image perceived by medical tourists

Hypothesis 7: There is a direct positive relationship between quality perceived by medical tourists and their satisfaction

The results of SEM analysis showed that only two hypotheses were supported (See Figure 4.3). More specifically, the structural path estimate showed that perceived risk had no a significant positive influence on perceived quality with β=.02, a t-value=.185 and p>0.01. Thus, hypothesis 5 was not supported. Similarly, hypothesis 6 was supported with a β of -.26, t-value =-2.224 and was significant at the .05 level. This finding suggests that as perceived by

international medical tourists positively influences their overall image of the destination. Finally, quality as perceived by medical tourists had a significant influence on their satisfaction at the 0.001 level with a β 0f .27.

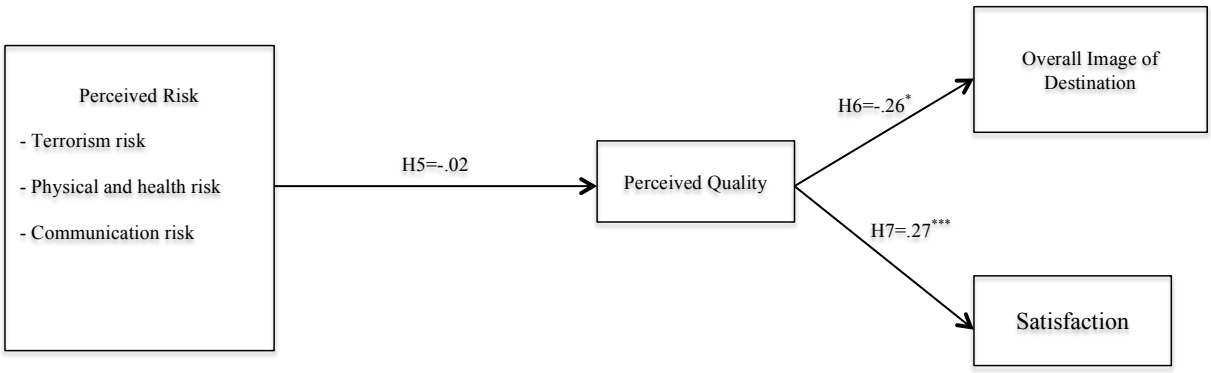


Figure 4.3 Results of the relationships among risk, quality, image and satisfaction

The third sub-model investigated the relationship between culture and quality perceived by international medical tourists, as followed.

Hypothesis 8: There is a direct positive relationship between medical tourists' culture and their perceived quality

This section only reports on hypothesis 8 as Hypothesis 9 and 10 were analyzed in the following section that explores the moderating effect of culture, as presented in Figure 4.4. The finding of the SEM analysis did not support hypothesis 8, as the model had an insignificant, β of -.005 and a t-value=-.052 that was not statistically significant at the .05 and .001 level. Therefore, international medical tourists' culture was not found to influence on their perceived quality.

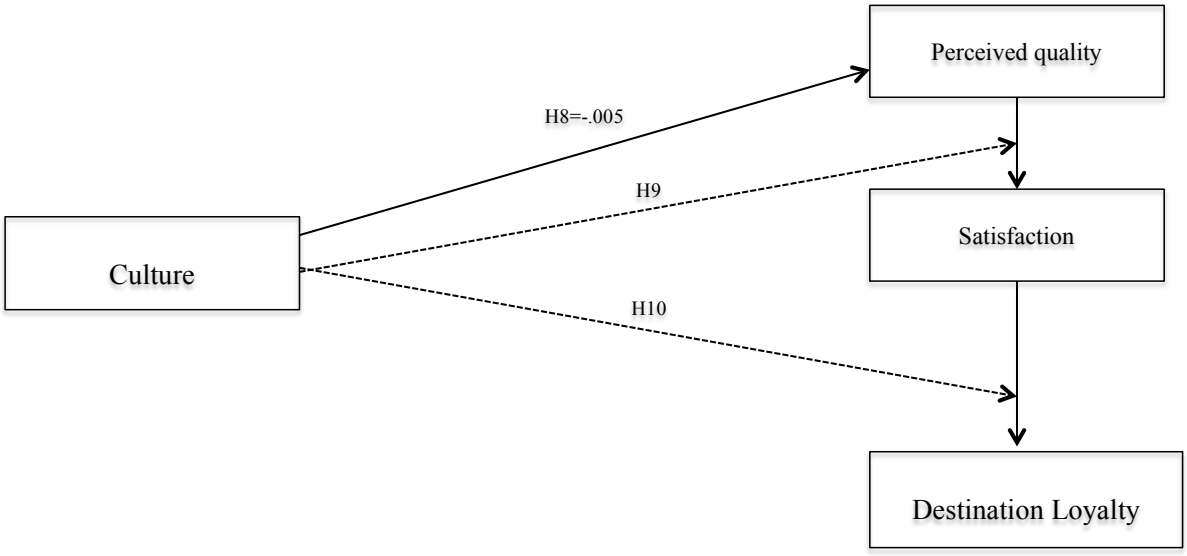


Figure 4.4 Results of the relationships among culture, quality, satisfaction and loyalty

The fourth sub-model as presented in Figure 4.5 attempted to examine the relationships among three constructs including overall image, satisfaction and destination loyalty. Subsequently, three hypotheses were proposed in this sub model, as followed.

Hypothesis 11: There is a direct positive relationship between overall image of medical tourism destination and medical tourists' satisfaction

Hypothesis 12: There is a direct positive relationship between overall image of medical tourism destination and medical tourists' loyalty

Hypothesis 13: There is a direct positive relationship between medical tourists' satisfaction and their loyalty toward medical tourism destination

The results of SEM analysis showed support for the relationship between overall image and satisfaction (>.05). Destination loyalty was positively affected by overall image perceived by international medical tourists, as indicated by the β of -0.25 and a t-value of -1.804 (p<.05). Similarly, medical tourists' destination loyalty was affected by their satisfaction (β of.38 and a t-value of 3.172, p>.05). This relationship presented a significant result at the level of 0.01. The proposed path relationship from overall image to destination satisfaction was also supported in the model with a β of .23 and a t-value of 2.153. Therefore, hypothesis 11, 12 and 13 were supported at the level of 0.05 and 0.01.

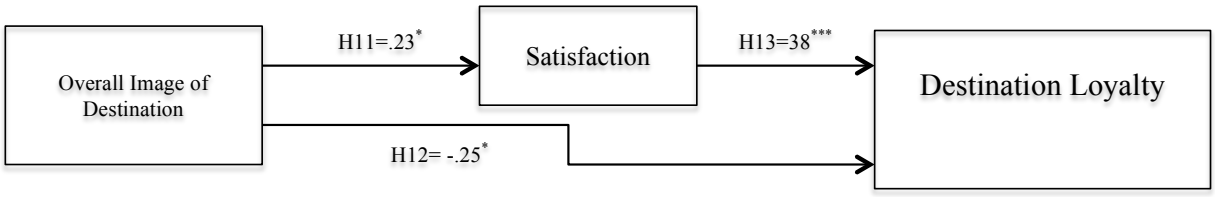


Figure 4.5 The relationship among overall image, satisfaction and destination loyalty

Results of Moderating Effect of Culture and Perceived Risk

This study tested the moderating role of culture and perceived risk among the constructs in the proposed model. More specifically, the following hypotheses were examined to test the moderating effect of culture on the relationship between perceived quality and satisfaction as well as satisfaction and loyalty.

Hypothesis 9: Culture positively moderates in the relationship between quality perceived by medical tourists and their satisfaction

Hypothesis 10: Culture positively moderates in the relationship between medical tourists' satisfaction and their loyalty toward medical tourism destination

Before testing the hypotheses in this section, the results revealed the model fitted the data well based on the goodness-of-fit indices where, X^2 =.167 (p=.92), GFI=1.0 AGFI=.99, CFI=1.0 and RMSEA=.05. Subsequently, the results revealed that the moderating effects of culture on the relationship between quality and their satisfaction was not supported with a t-value of 1.863 (p=.062), as shown in Table 4.15.

	Estimate	**S.E.**	**C.R.**	**P**
Quality → Loyalty	.063	.033	1.923	.055
Culture →Loyalty	-.357	.302	-1.182	.237
QualityxCulture →Loyalty	-.004	.002	-1.863	.062

Table 4.15 Regression Weights: the moderating effect of culture (Quality→Loyalty)

In contrast, the path coefficient of the satisfactionxculture →loyalty relationship was significant with a t-value of 2.149 and p<.05. Next, the path coefficient for the culture →loyalty relationship was not significant with a t-value of -1.182 and p>.05, and similarly, the path coefficient of satisfaction →loyalty was also not significant with a t-value of 1.908 and p >.437. Therefore, the findings supported hypothesis 10 because the main effect was not significant after entering the moderator in the model, as presented in Table 4.16.

	Estimate	**S.E.**	**C.R.**	**P**
Satisfaction → Loyalty	.408	.038	1.908	.437
Culture →Loyalty	-.357	.302	-1.182	.237
SatisfactionxCulture →Loyalty	.044	.021	2.149	.032*

Table 4.16 Regression Weights: the moderating effect of culture (Satisfaction→Loyalty)

Hypothesis 14: Medical tourists' perceived risk negatively moderates in the relationship between overall image of medical tourism destinations and medical tourists' satisfaction

Hypothesis 15: Medical tourists' perceived risk negatively moderates in the relationship between medical tourists' satisfaction and their loyalty

This next section tested the moderating effect of risk on the relationship between overall image and satisfaction as well as the relationship between satisfaction and loyalty. The path coefficient of overall imagexrisk →satisfaction relationship was significant with a t-value of 2.650 and p<.05. Subsequently, the path coefficient for the risk →satisfaction relationship was not significant with a T-value of 1.440 and p>.05. Finally, the path coefficient for overall image →satisfaction was significant with a t-value of -3.13 and p <.002. Therefore, hypothesis 14 was partially supported because the main effect was significant after the moderator entering the model, as presented in Table 4.17.

	Estimate	**S.E.**	**C.R.**	**P**
Overall Image → Satisfaction	-.405	.130	-3.130	.002*
Risk → Satisfaction	.166	.210	1.440	.170
Overall ImagexRisk →Satisfaction	.012	.004	2.650	.008*

Table 4.17 Regression Weights: the moderating effect of risk (Overall image→Satisfaction)

The path coefficient of the satisfactionxrisk →loyalty relationship was significant with a t-value of 85.258 and p<.01. Next, the path coefficient of the risk →loyalty relationship was not significant with a t-value of 1.590 and p>.05. And the path coefficient of the satisfaction →loyalty was also not significant with a t-value of 3.725 and p <.01. The finding supported the partial moderating role of risk between satisfaction and loyalty. Therefore, hypothesis 15 was partially supported because the main effect was significant after the moderator entering the model, as presented in Table 4.18.

	Estimate	S.E.	C.R.	P
Satisfaction → Loyalty	.274	.074	3.725	***
Risk → Loyalty	.175	.690	1.590	.210
SatisfactionxRisk →Loyalty	.034	.001	85.258	***

Table 4.18 Regression Weights: the moderating effect of risk (Satisfaction→Loyalty)

Results of the mediating effect of satisfaction

The last section attempted to test the mediating role of satisfaction among satisfaction, perceived quality, overall image and destination loyalty. This section proposed the role of satisfaction as a mediator in the relationship between perceived quality and destination loyalty as well as the relationship between overall image and destination loyalty, as posited in the following hypotheses.

Hypothesis 16: Medical tourists' satisfaction positively mediates the relationship between Quality perceived by medical tourists and their loyalty toward medical tourism destination

Hypothesis 17: Customer satisfaction positively mediates the relationship between overall image perceived by medical tourists and their loyalty toward medical tourism destination

Before testing the hypotheses in this section, the results revealed the model fitted the data well based on goodness-of-fit. The values presented Chi-square=.689 (p=.71), GFI=.99, AGFI=.99, CFI=.94, IFI=1.0 and RMSEA=.03. The results presented that the path coefficient of the quality →loyalty was not significant with a t-value of .054 and p>.05. Subsequently, when entering satisfaction in the model, the path coefficient of the quality →satisfaction was

significant with a t-value of 5.323 and p<.01. Consequently, the finding supported that satisfaction had significant and direct effects on loyalty. The path coefficient of the satisfaction→loyalty was significant with a t-value of 3.725 and p<.01. That means satisfaction was a medicating variable in the relationship between quality and loyalty since the effect of quality on loyalty was not longer significant after entering satisfaction in the model, as presented in Table 4.19. Therefore, Hypothesis 16 was supported.

	Estimate	S.E.	C.R.	P
Quality → Loyalty	.004	.068	.054	.957
Quality → Satisfaction	.305	.057	5.323	***
Satisfaction →Loyalty	.274	.074	3.725	***

Table 4.19 Regression Weights: the mediating effect of satisfaction (Satisfaction→Loyalty)

Additionally, the findings presented that the path coefficient of overall image →loyalty was not significant with a t-value of -.825 and p>.05. Subsequently, when entering satisfaction in the model, the path coefficient of the overall image →satisfaction was not significant with a t-value of -.368 and p>.05. Consequently, the path coefficient of the satisfaction→loyalty was significant with a t-value of 3.725 and p<.001. That means satisfaction was not a medicating variable in the relationship between overall image and loyalty. Therefore, Hypothesis 17 was not supported, as shown in Table 4.20.

	Estimate	S.E.	C.R.	P
Overall image → Loyalty	-.103	.125	-.825	.410
Overall image → Satisfaction	.-.040	.112	-.368	.713
Satisfaction →Loyalty	.274	.074	3.725	***

Table 4.20 Regression Weights: the mediating effect of satisfaction (Overall image →Loyalty)

Summary for the results of the quantitative analysis

The quantitative findings revealed that risk had a negative impact on affective image but not on the cognitive image. In turn, both cognitive and negative image had a positive impact on overall image of the medical tourism destination. Additionally, the results presented that there was not a direct positive relationship between risk and quality. Similarly, the findings did not support a direct positive relationship between culture and quality. Conversely, the findings confirmed that there was a direct positive relationship between quality and overall image as well as satisfaction. The results also indicated that there was a direct positive relationship between overall image of the destination and satisfaction as well as destination loyalty. Finally, satisfaction had a direct positive impact on destination loyalty.

The results of the moderating effect of culture presented that there was a significant moderating effect of culture on the impact of satisfaction on loyalty but not on the impact of quality on satisfaction. For the moderating effect of risk, the findings revealed that risk partially moderated the relationship between overall image and satisfaction as well as the relationship between satisfaction and destination loyalty.

The findings of the mediating effect of satisfaction revealed that satisfaction positively mediated the relationship between quality and destination loyalty but not on the relationship between overall image and destination loyalty.

Therefore, the findings of hypotheses testing of the study were summarized in the following table.

Hypothesis	Results
H1: There is a direct negative relationship between risk and cognitive image perceived by medical tourists Perceived risk → Cognitive Image	**Not supported**
H2: There is a direct negative relationship between risk and affective image perceived by medical tourists Perceived risk → Affective Image	**Supported**
H3: There is a direct positive relationship between affective image and overall image perceived by medical tourists Affective Image → Overall Image	**Supported**
H4: There is a direct positive relationship between cognitive image and overall image perceived by medical tourists Cognitive Image → Overall Image	**Supported**
H5: There is a direct positive relationship between perceived risk and quality of medical tourists Perceived Risk → Quality	**Not supported**
H6: There is a direct positive relationship between quality and overall image perceived by medical tourists Quality → Overall Image	**Supported**
H7: There is a direct positive relationship between quality perceived by medical tourists and their satisfaction Quality → Satisfaction	**Supported**
H8: There is a direct positive relationship between culture and quality perceived by medical tourists Culture → Quality	**Not supported**
H9: Culture positively moderates in the relationship between quality perceived by medical tourists and their satisfaction	**Not supported**
H10: Culture positively moderates in the relationship between medical tourists' satisfaction and their loyalty	**Supported**

H11: There is a direct positive relationship between overall image perceived by medical tourists and their satisfaction Overall Image → Satisfaction	**Supported**
H12: There is a direct positive relationship between overall image perceived by medical tourists and their loyalty Overall Image → Loyalty	**Supported**
H13: There is a direct positive relationship between satisfaction of medical tourists and their destination loyalty Satisfaction → Loyalty	**Supported**
H14: Medical tourists' perceived risk negatively moderates in the relationship between overall image of medical tourism destination and their satisfaction	**Partially supported**
H15: Medical tourists' perceived risk negatively moderates in the relationship between their satisfaction and destination loyalty	**Partially supported**
H16: Medical tourists' satisfaction positively mediates the relationship between quality perceived by medical tourists and their destination loyalty	**Supported**
H17: Medical tourists' satisfaction positively mediates the relationship between overall image perceived by medical tourists and their destination loyalty	**Not supported**

Summary

This chapter presented an analysis of the qualitative and quantitative study and reported the results of the research study. The following chapter provided a summary of the dissertation including results, implications, limitations and future research studies.

Chapter V
Conclusion and Discussion

The final chapter attempted to present the summary of results, discussion and managerial and theoretical implications of the results. Subsequently, the limitations of the study as well as suggestions for future research were presented.

5.1 Discussion

The purpose of the study was to develop as well as evaluate a theoretical structural model for establishing a medical tourist's loyalty by incorporating five important constructs including risk, culture, image, quality, and satisfaction. More specifically, the seven main objectives were proposed, as followed: 1) to investigate how the underlying dimensions of international medical tourists' perceived risk 2) to investigate the relationship between perceived risk and destination image in terms of cognitive, affective and overall image perceived by medical tourists 3) to examine the relationships among risk, quality, overall image perceived by medical tourists and their satisfaction 4) to examine the role of culture in creating loyalty and its variables namely quality and satisfaction 5) to explore the role of overall image and satisfaction on consumer loyalty toward the medical tourism destination 6) to test the moderating role of medical tourists' perceived risk on the relationship between overall image of destination and satisfaction as well as the relationship between satisfaction and loyalty and 7) to examine the mediating role of satisfaction between perceived medical product and service quality and consumer loyalty as well as between overall image of the destination and consumer loyalty. Therefore, this study proposed seven research questions with 17 hypotheses.

This study applied a mixed-method approach to evaluate and assess the aforementioned objectives. Specifically, this study collected and analyzed quantitative and qualitative data simultaneously in a single study to address the research questions. This approach provided a

better understands into a phenomenon than either the quantitative or qualitative approach, as suggested by Creswell (2009). The following reviewed and discussed the findings regarding the research questions.

5.2 Perceived risk toward Thailand before traveling, during staying and after traveling

Medical treatment usually has risks attached whether you have it in your country or elsewhere. There are several warnings for medical tourists who consider medical treatments abroad. Although this will save those lots of money, there are the possible risks, complications and so on. The first research question, therefore, focused on the underlying dimensions of international medical tourists' perceived risk toward Thailand as a medical tourism destination concerning before traveling, during staying and after traveling. The semi-structural interview was applied in this study with 13 interviewees who were international medical tourists in four main provinces including Chiang Mai, Bangkok, Chonburi, and Phuket in Thailand.

The results of qualitative phase presented that there are the differences between first-time and repeat visit visitors. From the interview findings, the researcher has realized the power of reviews as well as online opinions toward first-time visitors seeking for medical treatments in Thailand. Some participants have chosen Thailand as a medical tourism destination based on reviews from their trusted inner circle. Online opinions became the primary factor in their decision-making. Unsurprisingly, social media play a crucial role in decision making to travel. As noted by Fotis et al. (2012), word-of-mouth on social media has high credibility rather than from mass media marketing as well as official tourism websites. First-time medical tourists did not know everything about the destination. They tend to research information as well as online opinions via online reviews in order to get as much as possible information about medical treatments and destinations. This is consistent with a previous study indicating social media

have gained trust and also are more valued as information sources (Starbird, Palen, Hughes & Vieweg, 2010). Thus, first-time medical tourists believe this channel is the only way influencing their decision making to Thailand.

In contrast, experience has been considered the main factor of selecting Thailand as a destination for revisited-medical tourists. Experienced international medical tourists may spend less time decision making than inexperienced ones since they have more knowledge and prior experience. As noted Vogt and Andereck (2003), experience plays a major role in influencing the decision-making process. In contrast, Bettman and Park (1980) claimed "inexperienced consumers may spend more time evaluating levels of attributes as they try to develop criteria for choice than consumers with more knowledge and experience" (p. 234). At the same time, repeated international medical tourists tended to return to a familiar destination leading to decrease individual' risk perception. Similarly, Sonmez and Graefe (1998) asserted that experience in traveling increases tourists' intention to travel the same destination again as well as increase their willingness to discover other risky areas.

Therefore, it is important for destinations to focus on how to increase positive reviews and feedback as well as experience from current and future international medical tourists by constantly developing their tourism product and services in line with the increasingly popular trends in medical tourism.

Participants most often identified that multiple risks happened before traveling to Thailand to obtain medical treatments. International medical tourists indicated that any surgery or medical procedures had involved risks, but to travel in oversea with having surgery or medical procedures may have even more risks than in their home country. The findings of this study showed that the strongest risk related to before traveling to Thailand as a medical tourism

destination was satisfaction risk while communication risk, financial risk, and equipment risk were the three least related to the destination before traveling to Thailand for medical tourism. The results of this section revealed that most of the international medical tourists perceived satisfaction risk as the most influential factor before traveling to Thailand for medical care. Their satisfaction risk was caused by several factors including the quality of product and service in medical treatment and the doctor. The medical procedures as well as the quality of medical treatments were also considered the most important caused risks from most of the participants or international medical tourists, particularly first-time visitors. Product and service quality is considered an important dimension of the medical tourism industry because medical tourists concern more about the quality of product and service before leaving their home countries for medical treatments. This is consistent with the study of Gill and Singh (2011) mentioned that besides of price, the quality of health care is recognized as an important determinant for medical tourists because some people believe that if something is offered at lower cost, they might not receive better quality. Similarly, the UNWTO states that safety and security as a determinant of quality tourist product and service (UNWTO, 2013). Communication risk has been considered the other important factor was influencing international medical tourists before traveling to Thailand. The literature in the context of medical tourism stated that language barriers pose the primary challenge in the medical tourism industry. The country may offer highly sophisticated medical systems and professional doctors. However, if the people related to medical treatments and procedures including physicians, nurses or other staff cannot understand the language of the medical tourists. That means both the medical tourists and the medical staff cannot communicate or difficult to describe the process and procedures of medical care. Sometimes there is a fearful state of mind for foreign patients about traveling so far away from home to

unknown culture place (Mochi et al., 2013). Similarly, this is supported by the study of Basala and Klenosky (2001) that identified the language as an indicator influencing visitors' choice of prospective destination. This is because either visitors' fluency or lack of fluency in the language at a destination can cause a barrier in traveling oversea. Therefore, the destination should consider for the training of English for staffs or stakeholders in the medical tourism industry.

The following question asked international medical tourists to address their perceived risk during a stay in Thailand. Surprisingly, there are only two risk dimensions perceived by medical tourists including physical and health risk and financial risk. Tsaur, Tzeng & Wang (1997) defined physical risk as the possibility that an individual's health is likely to be exposed to risk, injury, and sickness because of conditions like weather, and hygiene problems found during traveling. In this study, the physical and health risk was primarily caused by several factors such as food and water, infection disease, and hygiene in restaurants and also at clinics. The healthcare providers and clinics should be aware that safety and quality control are the most important increments for medical tourists. The results of this study implied that medical tourists tended to consider using medical treatments from experienced and professional clinics that offer a full range of medical care with safety and quality on the ground. As indicated by Jones (2008), different individuals identified safety in a variety of ways. Some medical tourists defined safety as the safety of the procedures and cleanliness in the hospital or facility while others refer to the water used to prepare the food served to the patients and his or her family. Similarly, Merav et al. (2008) indicated the quality of the water; the air and hygienic standards are considered the important issues to address the quality of the hospital environment. The same authors mentioned that these conditions may be quite different from patients' expectations and

may compromise their convalescence in some countries. Therefore medical tourists should carefully assess the quality and the standards that they expect and have been promised. The literature also indicated that the environment outside the hospital should be considered. According to the World Health Organization (2008), the report revealed that in 2006 from 132 countries illustrated that only 23.5% or 31 countries have less 100% screening for at least one of four common infection markers including HBV, HCV, HIV, HCV, and syphilis. The WHO indicated that a significant number of countries cannot complete information regarding the screening process or sometimes the testing process may not be complete as well as lack a quality assurance mechanism. In actually, medical tourist perceived risk become higher through their travel to another country, rather than gaining an improved state of health.

There is an example from the study of Sharma (2013) stated that hospitals in India failed to provide the hygienic medical facilities and room services including healthful food to the patient; as a result, Indian hospitals are loosing the trust of foreign patients. It is a critical challenge for potential medical tourists to select the best possible destination for the particular service needed. Therefore, the government and other related stakeholders in medical tourism play a crucial role in improving the status of medical tourism in Thailand to decrease the level of risk perceived by international medical tourists during their stay in Thailand for medical treatments.

The subsequent question asked participants to identify risk or fear after traveling to Thailand for any medical treatment(s). The majority of participants believe that follow-up care and the outcome or result of medical treatments were the most important issues after traveling to Thailand for medical care. The participants believed that if they get any complications after medical treatment(s) or surgery when leaving to their home countries, the follow-up is not only

difficult but also expensive in their country of origin. Although some participants have arranged for follow-up care with doctors before leaving to their home countries; they are mainly still concerned with this issue. Compared this matter with the literature in perceived risk, physical and health risk, as well as satisfaction risk, have been considered the main risk observed by international medical tourists after their traveling to Thailand in obtaining medical treatment(s). The follow-up care has been considered the most influential factor was leading to their fear of traveling to Thailand for medical tourism. This issue has realized an important issue in the medical tourism industry that caused to reduce the demand and number of medical tourists. This was consistent with the study of Jones (2008) that mentioned that the doctors and medical staffs should provide and detail the treatment given, complete records of medical treatments for medical tourists before leaving to their countries.

There are several complications from the medical treatments that present at present. For example, in South Korea, the risk, as well as the number of cases relating to serious medical accidents, have been increased because many medical tourists have plastic surgery there (Caretourism, 2015). Medical tourists who traveling oversea in seeking for medical treatment are also exposed to infections that they never confront in their countries leading to health risk when returning home. As recommended by the American College of Surgeons, medical tourists should get a complete set of medical treatments in other countries before returning their home countries. Also, they should determine an insurance coverage in case of complications resulting from an oversea surgery.

The final question attempted to identify risk perceived by medical tourists that affect their loyalty toward Thailand as a medical tourism destination. The literature pointed that perceived risk is the primary predictor of destination preference and loyalty for visitors. It is

undeniable that satisfaction risk was the most influential factor for international medical tourists. International medical tourist satisfaction is an explanation of how well the destination as well as clinic performed before, during and after staying in the destination. For this study, this included elements of medical products and service, how well and professional of doctors or staffs, how physicians and staffs handle customer quarries and solve the problems, their kindness, and helpfulness and the price of medical treatment.

5.3 Quantitative Phase

The following sections illustrated the results and discussion based on between the objective 2 to 7. These parts combined several theories including risk, culture, destination image, quality, satisfaction and destination loyalty as a theoretical model. The confirmatory factor analysis (CFA) as well as structural equation modeling (SEM), presented the appropriate measurement model and structural model. The results were as shown.

Perceived risk and the destination image

The literature has recognized that risk should be studied with destination image due to crisis management team as well as destination managers need to alter negative perception and reinforce positive perceptions (Sonmez, 1998). Chew and Jahari (2014) further explained that researchers, as well as practitioners, need to understand these relationships better because perceived risk might have on tourists' perceived destination image and travel choices. A positive destination image helps to attract visitors to the destination. In contrast, tourists' negative awareness concerning safety and security present at the destination can prove disastrous for its ability to attract visitors (Resinger & Mavondo, 2005).

The findings of this study did not support the hypothesis in that fact that international medical tourists' perceived risk was not negatively related to their perceived cognitive image. Conversely, the results supported the hypotheses that risk perceived by international medical tourists was negatively related to their affective image. This was consistent with several previous studies. The literature indicated that the lower the perceived risk by tourists the more the destination will be perceived as familiar and attractive to tourists (San Martin and Del Bosque, 2008). Some scholars also asserted that insecurity and perceived risk directly affect destination image (Georges, 2010; Qi, Gibson & Zhang, 2009; Sonmez and Graefe, 1998;). Other studies attempted to investigate the relationship between each of perceived (e.g. disaster risk, socio - psychological risk, health risk, financial risk) and destination image in both cognitive and affective image. For example, several Hsu and Lin (2006) physical risk perceived by tourists as a serious consequence during their traveling can significantly influence tourists' subjective perception of the destination leading to confer higher overall perceived travel risk. Subsequently, the perceived risk would create a negative image of the destination. Moreover, Lehto et al. (2008) pointed out that events of natural disaster, or perceived disaster risk, have a significant influence on tourists' affective (feeling) responses and in turn develop negative destination image. A more recent study by Chew and Jahari (2014) has confirmed the relationship between perceived travel risk and destination image. Therefore, it can be indicated that perceived risk has a negative correlation on the only affective image in the context of medical tourism.

The subsequent hypotheses were supported on a direct negative relationship between the cognitive image as well as affective image, and overall image of a destination perceived by international medical tourists. These results are consistent with previous studies stating that

destination image consists of a holistic image component (overall image), and an attribute component (cognitive and affective image) dominantly draws upon attributes through the formation of cognitive and affective images, while the combination of these images form the overall image, as noted by Tasci and Gartner (2007). Moreover, it has for a long time been supported that cognitive and affective image are strongly associated in forming the overall image of the destination (Baloglu & McClearly, 1999; Beerli & Martin, 2004; Hosany & Uysal, 2006). Therefore, the researcher stated that both cognitive and affective image have a positive correlation on an overall image in the field of the medical tourism industry.

Perceived risk and quality

The study attempted to extend the research of the relationship between risk and quality in the medical tourism industry. A better understanding of international medical tourists' perception of risk and quality is required if the industry is going to be successful in the global market. Medical tourism is highly sensitive to the perception of danger and lack of safety. Medical tourism's primary goal is to fulfill people's travel desire and expectations regarding both traveling and medical treatment. It is needed that successful medical tourism development is subject to the reduction of risks associated with in a destination. Product and service quality is considered an important dimension of the medical tourism industry because medical tourists concern more about the quality of product and service before leaving their home countries for medical treatments.

The results reveal that there was not a direct positive relationship between risk and quality perceived by international medical tourists. The result is in line with the study of Thuy and Chi (2015) which have examined the relationship between perceived risk as a

multidimensional framework and perceived quality. The finding showed that the effect of financial risk did not affect the perceived quality of the consumers. Similarly, the study of Bettman (1973) indicated the unfavorable relationship between perceived risk and perceived quality. Thus, the researcher confirmed that there was not a direct positive relationship between risk and quality perceived by international medical tourists.

Perceived quality and Image

This study proposed to test the relationship between quality and overall image perceived by international medical tourists, as indicated in the following hypothesis. The results supported the hypothesis in the fact that quality perceived by international medical tourists positively influences their perceived overall image of Thailand as a medical tourism destination. The results of this study were in line with the most of the literature which indicated that there is a direct positive relationship between perceived quality and destination image (e.g. Aydin & Ozer, 2005; Zins, 2001; Selres, 1993). In this manner, if medical tourists have experience with the good quality of both product and service in medical tourism destinations, they are more likely to have a good image of that destinations.

Perceived Quality and Satisfaction

This relationship is considered one of the most frequently used constructs in performing an evaluation of products or services in the literature (Zeithaml, 1988; Babin and Griffin 1998; Oliver, 1997). However, further studies are needed to confirm it in the literature of medical tourism. Therefore, the researcher attempted to extend the literature on the relationship between quality and customer satisfaction in the context of medical tourism. In this study, the hypothesis was supported that quality perceived by international medical tourists had

a significant influence their satisfaction. This result was consistent with most of the previous studies in several fields. For example, Olsen (2002, 2005) stated that perceived quality and satisfaction are highly intercorrelated (Bitner & Hubbert 1994; Churchill & Surprenant 1982). Most of the marketing researchers indicated that perceived quality affects to satisfaction (Dabholkar et al. 2000; Oliver 1997), in turn influencing purchasing behavior (Johnson and Gustafsson 2000; Oliver 1999, Olsen 2002, 2005). In the context of service marketing, Parasuraman and Zeithaml (1994) argued that the spectator's perceptions for the core product and the secondary services can exist as precedents to customers' satisfaction and their behavioral intention. Other researchers also asserted that quality is the primary factor of satisfaction in explaining consumers' behavioral intention (Ting, 2004; Han and Hyun, 2006; Ryu and Han, 2010). This relationship has been further confirmed in studies of the health care service industry (Andaleeb, 2000; Chaniotakis and Lymperopoulos, 2009; Naidu, 2007). In the medical tourism sector, several researchers have confirmed the association between perceived quality and medical tourists' satisfaction. For example, Han and Hyun (2015) have focused on perceived medical quality and perceived service quality. The findings presented perceived medical quality and service quality significantly and positively affected customer satisfaction. Another study proposed by Lertwannawit and Gulid (2011) investigated the relationship between service quality, namely tangibility, responsiveness, empathy, assurance and reliability and satisfaction. The result found that service quality has a positive relationship with satisfaction. Similarly, Huei, Mee and Cheik (2015) confirmed that perceived service quality has a positive direct effect on patient satisfaction. Therefore, the result of this study has confirmed that perceived product and service quality associated with customer satisfaction. It can be stated that if perceived quality in both product and service in the context of medical

tourism is confirmed, medical tourists will be satisfied.

Culture and Quality

Culture is one of the most important factors in the context of the medical tourism industry as medical tourism destinations hope to develop service quality in order to satisfy a diverse customer base in hopes to remain competitive in a globalized medical tourism industry. Culture has been recognized one of the most effective complicated elements that medical tourism destinations need to understand to provide great service quality, to satisfy customers as well as to build consumer loyalty towards following the needs of consumers in different cultures. The results of this study did not support the hypothesis testing the relationship between international medical tourists' culture and their perceived quality. This was not in line with several previous studies. For example, the study of Heskett, Sasser, and Hart (1990) examined to emphasize psychographics in understanding service quality concerning the way people feel, think and behave. The finding presented that psychographics is strongly dependent on cultural elements in a multicultural environment. Another study stated by Mattila (1999), the study found that consumers along with Western culture are more likely to rely on the tangible cues from the physical environment to evaluate service quality than their Asian counterparts. Therefore, it can be stated that there was not a direct relationship between culture and quality in the medical tourism industry.

Overall destination image, satisfaction, and loyalty

Determine visitors' intentions to revisit and to recommend the destination has been regarded as the important relationship in the literature (Bigné et al., 2001; Cai et al., 2004; Yoon & Uysal, 2005). Several studies have asserted for the significant role of destination image in

forming customers' satisfaction as well as their loyalty (Ramseook-Munhurruna & Naidooa 2015; Chen & Tsai 2007; Prayag & Ryan 2012). The results of this study supported the hypothesis presenting the relationship between overall image and satisfaction. In other words, there is a direct positive relationship between the overall image of medical tourism destination and medical tourists' satisfaction. This is in line with several studies in the literature having evidently supported the association between image and satisfaction. For example, a positive destination image perceived by individuals tends to a greater satisfaction level of tourists as well as a more positive behavioral intention (Lee et al., 2005). Andreassen and Lindestad (1998) have further asserted that the relationship between image and satisfaction is formed by the process explaining when consumers are satisfied with the product or service, the company image in their mind is improved as well as this firm image will directly influence satisfaction. Therefore, the researcher confirmed that there was a direct positive relationship between overall image perceived by international and their satisfaction.

Similarly, the results supported the hypothesis in the fact that overall image perceived by international medical tourists positively related to their loyalty. This is in line with several previous studies confirming the effect of destination image on consumer loyalty. The image seems to be a crucial factor deciding whether consumers will revisit a destination. Additionally, Bosque and Martin (2008) have noted that the influence of image on customer loyalty must be noticed because a positive image of the destination is the main cause of tourists' revisiting or recommending the destination to others. Numerous studies have indicated that the destination image with more attractive results in consumers' revisits in the same destination. For example, Li (2013) revealed that if the image is more positive, tourists are more likely to visit or revisit the destination. The positive relationship between image and loyalty has been highlighted in the

study of Bosque and Martin (2008) and Yoon and Uysal (2005). The research by Mohamed et al. (2011), Yossamorn and Phokha (2012) and Bigne et al. (2001) have also demonstrated the positive destination image perceived by consumers positively influence the willingness of travelers to revisit or recommend the destination. Moreover, the empirical studies presenting the positive relationship between destination image and consumer loyalty have suggested by many researchers (Hunt, 1975; Pearce, 1982; Tasci & Gartner, 2007; Um et al., 2006; Prayag & Ryan, 2012; Yosamorn & Phokha, 2012). For these reasons, the researcher has confirmed that there was a direct positive relationship between overall image and loyalty in the context of medical tourism.

The final hypothesis in this section was supported the relationship between destination loyalty and satisfaction. This is consistent with previous studies. Past studies have provided some evidence that customer satisfaction has a positive influence on tourists' intentions to revisit and to recommend the destination (Baker & Crompton 2000; Petrick, 2004; Chen & Tsai 2007; Chi & Qu 2008; Prayag & Ryan 2012; Lee et al. 2007; Lee & Beeler 2009; Chen & Chen, 2010; Hutchison et al., 2009). Baker and Crompton (2000) argued that quality experience and high levels of customer satisfaction are the ways sustaining consumers' patronage due to these two achievements can contribute to visitor loyalty in terms of word-of-mouth endorsements and repeat visits ultimately influencing business performance. Another study by Prayag and Ryan (2012) explored this relationship by carrying out 705 international visitors who stay in hotels on the island of Mauritius and have confirmed the relationship between customer satisfaction and loyalty. Meanwhile, satisfaction plays a crucial role in the medical tourism industry because patient satisfaction refers to an interactive process reflecting patients' quality assessment on the medical services experienced, as indicated by Krisner and Federman (1997). Furthermore,

Huei, Mee and Chiek (2015) and Pakdil and Harwood (2005) pointed out that patient satisfaction is one of the main keys to success for the healthcare services providers. Huei, Mee and Chiek (2015) have further supported the reasons how important of patient satisfaction in the medical tourism industry by providing several reasons. Satisfaction can maintain their relationships with the patients that mean satisfied patients are returned consumers, also can identify areas of strength and weaknesses in the organizations in the medical tourism destination (Huei, Mee and Chiek, 2015) and finally can associate with the service providers' financial benefits (Aldaqal et al., 2012). A number of empirical evidence in the healthcare and medical service has surfaced that satisfaction has a positive relationship to post-purchase behavior. For example, the study of Chaniotakis and Lymperopoulos (2009) found that a positive relationship between satisfaction and word-of-mouth by patients who have received maternity service in Athen, Greece while Kim (2008) stated this relationship from customers who received medical service from a hospital in Seoul, South Korea. Choi et al. (2004) also asserted that the findings of their study presented all three factors, namely service quality, value and satisfaction affecting behavior intention in the context of healthcare service. To satisfy customer is needed for medical tourism destinations in order to keeping them in the long term because loyal customers are less expensive than gaining new ones (Chen and Chen, 2009). Positive travel experiences in term of services, products and other resources provided by the destination could induce positive word-of-mouth (WOM) recommendations as well as repeat visits (Oppermann, 2000; Yoon and Uysal, 2005; Chi and Qu, 2008). Moreover, the loyal customer tends to recommend friends, relatives or other potential consumers to a service or product by acting as free word-of-mouth advertising agents (Chi & Qu 2009). Therefore, this study confirmed that satisfied medical tourists may revisit a medical tourism destination, engage in positive word-of-mouth

communication including recommending it to their friends, relatives and others; and express favorable comments about the destination such as commending the destination and the product as well as service quality experience of the destination to their friends, family, relatives and others. Conversely, dissatisfied medical tourists may not return to the same medical tourism destination, may not recommend it to their family, friends, relatives and others, and express unfavorable negative comments about a destination thereby damaging the destination's reputation (Reisinger & Turner, 2003). For these reasons, if medical tourists are satisfied, they tend to continue purchase as well as to create an attitudinal loyalty by recommending the product and service in the medical tourism destination through word of mouth.

The moderating effect of culture

This study tested the moderating effect of culture in the influence of perceived quality on satisfaction as well as the impact of satisfaction on destination loyalty in the context of medical tourism. The results did not supported the first hypothesis showing the moderating effect of culture on the relationship between quality perceived by international medical tourists and their satisfaction. The result was not in line with previous studies reviewing the role of culture as the moderator in the relationship between quality and satisfaction. For example, the study of Laroach et al. (2004) examined the effect of culture on an evaluation of service quality and satisfaction. The findings presented customers from Asian, namely Japan with high individualism are more likely to evaluate lower score than customers from Canada as well as the United States with high individualism regarding high-performance service quality. In contrast, customers from Japan with high collectivism are more likely to evaluate higher score than American and Canadian clients with high individualism. Another study attempted to investigate the influence of culture on the relationship between service quality and satisfaction in the

context of a website involving a purchase of a tourism service (Carmen et al., 2012). The results found that the effect of the service quality on the visitors' satisfaction with their online purchases is moderated by cultural dimensions including individualism/ collectivism as well as uncertainty avoidance. Thus, the researcher assumes that the influence of service quality perceived by medical tourists on their satisfaction will not be affected by the moderating role f culture in six dimensions, namely power distance, individualism, masculinity, uncertainty avoidance, long-term orientation, and indulgence. Therefore, the researcher did not confirm a significant moderating effect of culture on the impact of quality on satisfaction in the context of medical tourism.

The researcher attempted to extend the literature of medical tourism by testing the moderating effects of culture on the relationship between satisfaction and loyalty that is quite limited. The result supported the moderating role of culture on the impact of satisfaction on destination loyalty. This finding was in line with the existing literature in the mobile telecommunication services investigated that satisfaction has different effects on loyalty intention depending on national levels of survival/ self-expression values and secular-rational values. The results found that satisfaction has a greater impact on loyalty intentions when countries with higher on the survival/ self-expression continuum. Conversely, the traditional/ secular-rational values valuable had no statistically significant impact on the satisfaction-loyalty linkage while the fixed effect for the country is significant. Therefore, the researcher confirm the moderating role of culture on the impact of international medical tourist satisfaction on their loyalty.

The moderating effect of risk

This study investigated the moderating role of medical tourists' perceived risk on the relationship between the overall image of medical tourism destination and satisfaction as well as the relationship between medical tourists' satisfaction and loyalty. The result of this study partially supported the moderating effect of risk on the relationship between overall image perceived by international medical tourists and their satisfaction. Similarly, the hypothesis testing the moderating effect of risk on the relationship between satisfaction and loyalty was partially supported.

The findings were in line with the literature that claimed that a high level of satisfaction does not always affect on an improvement of customer loyalty because of the possible influence of moderating factors on the relationship between satisfaction and loyalty (Currás-Pérez & Sánchez-García, 2012). Gürhan-Canli and Batra (2004) have tested the moderating role of risk and the result found that perceived risk played an important role in moderating the effects of corporate image on product evaluation. The study of Campbell and Goldstein (2001) found that perception of risk moderates the effect of incongruity on evaluations and at the same time preferences for incongruity will not appear when risk is high. Therefore, customers tend to reduce the negative effect of risk by several methods including switching to other firms with low levels of risk (Yuksel & Yuksel, 2007), searching additional information (Mitchell, 1999) and careful evaluations of alternatives and product trials (Dowling & Staelin, 1994; Cho & Lee, 2006). Therefore, it can be partially confirmed the moderating role of risk perceived by international medical tourists on the relationship between the overall image and satisfaction as well as the relationship between satisfaction and loyalty in the context of medical tourism.

The mediating effect of satisfaction

This study examined the role of satisfaction as a mediator between perceived quality and consumers' loyalty as well as between overall image and consumers' loyalty in the medical tourism industry. The results supported the hypothesis in the fact that satisfaction positively mediates the relationship between perceived quality and destination loyalty. This finding was in line with previous studies. Customer satisfaction as the mediating role between perceived quality and consumer loyalty has been proved by several researchers (Olsen, 2002; Yang and Tsai, 2007; Petnji et al., 2011). The researchers pointed out that the relevant factors related to customer satisfaction have better conceived as a mediator in the quality-loyalty relationship, in other words, quality perceived by customers result in their satisfaction which in turn loyalty intentions (Olsen, 2002; Yang and Tsai, 2007; Petnji et al., 2011) as well as future intentions (Kuo et al., 2009) are due to their satisfaction. At the same time, several researchers have confirmed the mediating role of satisfaction in the context of healthcare. Patient satisfaction is the main key to explaining the relationship between perceived healthcare service quality and their loyalty intentions (Cho et al., 2004; Donabedian, 1996). Furthermore, the mediating role of satisfaction has been confirmed in the quality-loyalty association in many locations as presented by several studies. For example, the study of Lei and Jolibert (2012) focus on public hospital patients in Shanghai and confirm a mediation role of patient satisfaction in the relationship between perceived quality and patient loyalty. Another study in Malaysia by Aliman and Mohamad (2013) has provided evidence that local patients' satisfaction significantly mediates the relationship between their perceived quality of service in the hospitals and their intention to revisit. At the same time, the study of Murti et al. (2013) in India found that satisfaction among patients plays a substantial mediating role in the relationship between

service quality and patients' behavioral intention in the private hospitals. Additionally, many previous studies in the healthcare setting have supported that service quality in hospitals is the primary cause of a positive influence on patient satisfaction which in turn, results in patients' intention to return or revisit for a particular service provider (Aliman & Mohamad, 2013; Alrubaiee & Alkaaida, 2011; Chaniotakis & Lymperopoulos, 2009; Choi et al., 2004; Murti, Deshpande & Srivastava, 2013; Vinagre & Neves, 2008; Wu, 2011). Therefore, the researcher confirmed the mediating role of satisfaction on the relationship between quality perceived by medical tourists and their destination loyalty.

The final hypothesis was not supported by the results stating that satisfaction positively mediated the relationship between overall image perceived by international medical tourists and their destination loyalty. The finding was not consistent with several previous studies. Chen and Tsai (2007) posit that individuals having a favorable destination image would go through positive on-site experiences, which in turn leads to greater satisfaction levels and destination loyalty. Supporting the above work, Chi and Qu, (2008) suggest that favorable destination image will result in higher tourist satisfaction level, which in turn influenced destination loyalty. A recent study by Mohamad et al. (2014) provides reliable evidence that satisfaction plays a major role in governing the relationship between destination image and loyalty. This implies that the more favorable the image of Malaysia, the more likely tourists will choose Malaysia as their vacation destination. A positive evaluation of a destination deriving from active travel experience would result in a positive image. Also, destination image exercises a positive influence on satisfaction. Tourist satisfaction improves as the destination has a favorable image and subsequently lead to a greater likelihood to return to the same destination and spread positive word of mouth to others. Therefore, it cannot be confirmed the mediating

role of satisfaction on the relationship between overall image perceived by international medical tourists and their destination loyalty.

5.5 Implications of the research findings

An understanding of how medical tourism destination loyalty can be sustained and enhanced in successful destination planning and management in an increasingly saturated market. The findings of this study may contribute to integrating as well as creating value-added medical tourism destinations to achieve greater destination competitiveness. This section provided several useful implications drawn from the results of the study in both theoretical and practical implications for medical tourism industry.

From a theoretical standpoint, loyalty is of considerable interest to both practitioners and academics in the field of hospitality management and at the same time there is fairly limited study in medical tourism destinations' loyalty based on the review of previous literature. The findings of this study are expected to make major contributions to the existing theory. More specifically, the result of the study is expected to be extending the understanding of consumer loyalty, risk, image, quality and satisfaction in the context of medial tourism industry. Besides, the study attempts to integrate model of risk, image, culture, quality, satisfaction and post purchase behavior in order to establish a structural model for medical tourism industry in hopes that this model can explain medical tourists' loyalty in terms of revisit as well as recommend the destination to others applicable to medical tourism industry. Importantly, the results of relationships between variables in the study add new knowledge to the existing body of literature on medical tourism industry. In particular, the relationship between risk and affective image presents risk has a significant influence on medical tourists' affective or feeling responses and in turn develops negative relationship. Furthermore, the findings have theoretical

implications in terms of developing the impacts of both cognitive image and negative image on overall image of the medical tourism destination. The relationship between quality and overall image is also established to extend the literature of medical tourism industry from the finding of this study. This relationship presented that the medical product and service as perceived by international medical tourists can lead to a positive overall image of the medical tourism destination. According to a limited number of research studies, this study indicated that there was a significant moderating effect of culture on the impact of medical tourists' satisfaction and their destination loyalty. Similarly, the moderating role of risk was partially supported in the relationship between medical tourists' satisfaction and overall image of the destination as well as the relationship between their satisfaction and destination loyalty.

From a practical standpoint, the stakeholders in any destination need a better understand of factors influencing international medical tourists in building their loyalty in terms of intention to revisit and intention to recommend destination to others. Furthermore, the results in both quantitative and qualitative sections have confirmed that physical and health risk is the most important issue as perceived by international medical tourists. This dimension of risk is caused by the medical product and service. The finding also provides that risk has a direct negative impact on affective image.

The results of the study provide important implications of strategies to develop and enhance effort for their product and services so as to keep consumer loyalty. Furthermore, the findings can provide useful information for destinations that seek to keep their market share and their consumer loyalty, in order to develop more effective strategies related to decrease consumer' perceived risk, to develop quality of product and service, destination image, and consumer satisfaction.

5.6 Limitations and suggestions for future research

Several imitations to this study not only were found, as expected in all research but also should be addressed to encourage more research in the future.

This study examined the structural relationships of medical tourism destination loyalty from international medical tourists' perspectives. The surveyed and interviewed data were only collected in four provinces including Bangkok, Chiang Mai, Chonburi and Phuket in Thailand. Different findings and conclusions in terms of the dimensions of relationships among the constructs in this study may differ slightly or even significantly because of the geographically limited survey and interview. Additionally, medical tourists in other destinations or countries may have different attitudes, perceptions and behavior regarding to medical tourism destination loyalty. The findings of the study are not intended to be generalizable to other medical tourism destinations in other geographic locations. For future studies, other locations and countries should be investigated in order to illustrate how different or similar findings.

Another limitation to the study is related to self-reported bias. It is undeniable that the survey and interview cannot be independently conducted. Although the researcher took what participants said at face value during interviewing as well as the collecting data process, data also contained self-reported bias coming from the researcher's experiences and poor memory recall.

This study is somewhat limited in terms of its variables and constructs used in this study. These variables as well as constructs were selected based on the researcher's experience and literature review. However, other critical or important variables and constructs may to achieve further insights of medical tourism destination loyalty. Therefore, further studies should be considered other variables and constructs in the future research.

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APPENDIX A

SURVEY QUESTIONNAIRE

Information Letter for Research Study

"The role of culture, risk, image and quality on destination loyalty: Perspectives from international medical tourists toward Thailand as a medical tourism destination"

Dear participants:

You are invited to participate in a research study to investigate factors influencing loyalty and revisit intentions of international medical tourists. The study is being conducted by Sarinya L. Thayarnsin, under the direction of Dr. Alecia C. Douglas in Auburn University; Hotel and Restaurant Management Program (HRMT). You are invited to participate because you qualify as a medical tourist and are age 19 or older.

What will be involved if you participate? If you decide to participate in this research study, you will be asked to fill out a questionnaire anonymously. Your total time commitment is estimated to be approximately ten minutes.

Are there any risks or discomforts? There are no foreseeable risks associated with participating in this study.

Are there any benefits to yourself or others? There are no identified benefits for you as a respondent.

Will you receive compensation for participating? No, participation is totally on a volunteer basis.

Are there any costs? There are no costs to you taking part this study. Thank you for your time.

If you change you mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with the program in the college of Human Science at Auburn University.

If you have questions about this study, please contact Sainya L. Thayarnsin at slt0018@auburn.edu or Dr. Alecia C. Douglas at acd0011@auburn.edu.

If you have any questions concerning your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or email at IRBadmin@auburn.edu or IRBChair@auburn.edu.

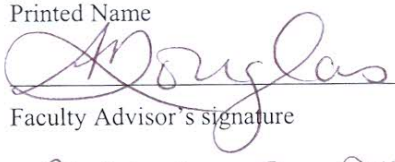
HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE ~~AS YOUR A~~GREEMENT TO DO SO. THIS IS YOURS TO KEEP.

10/03/2016

Investigator's signature Date

Sarinya L. Thayarnsin

Printed Name



10/3/2016

Faculty Advisor's signature Date

ALECIA C DOUGLAS

Printed Name

The role of risk, image and quality on destination loyalty: Perspectives from Thai international medical tourists toward Thailand as a medical tourism destination

This survey includes **SIX different parts**. Please answer all of them. Thank You.

Part One: Perceived Risks

The following is a list of perception of medical tourism in Thailand. Please indicate your level of agreement to each of the following items regarding the **perception** level of risks of medical tourism in Thailand 1 = Strongly disagree, and 5 = Strongly agree

	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
	1	2	3	4	5
Terrorism risk					
1. Medical tourists have a high probability of being targeted by terrorists in Thailand					
2. I will not be intimidated by terrorism when having medical treatments as well as travelling in Thailand					
Physical and health risk					
3. There is a possibility of contracting infectious diseases in Thailand					
4. There is a possibility of unable to obtain appropriate advice from regular doctors					
5. There is a difficulty in transferring patient information from clinic/ hospital in Thailand to his/ her home country					
6. There is a possibility of physical danger, injury or sickness while on medical tourism in Thailand					
7. Potential health problems are a concern if I go on a medical tourism to Thailand					
Communication risk					
8. I have concerns about having possible communication problems during my medical treatment(s) as well as travelling in Thailand					
9. It is important that people whom I meet speak English during my medical tourism in Thailand					
10. I will not have problems in communication with others whom I meet during my medical Tourism in Thailand					

Part Two: Destination Image

How important do you think the following medical tourism destination image in Thailand?

The following is a list of medical tourism destination image. Please indicate your level of important to each of the following items regarding the **importance** level of medical tourism destination image in Thailand 1 = Not at all important, and 5 = extremely important

	How important?				
	Not at all important	Slightly important	Important	Very important	Extremely important
	1	2	3	4	5
Cognitive image					
11. Well-developed general infrastructure (e.g. road highway, etc.)					
12. Good quality and services of hospitals or clinics					
13. Safe and secure environment					
14. Good quality of life					

Please indicate your level of agreement about the following items associated with your perception of medical tourism destination in Thailand.

Affective image	Extremely	Very	Neutral	Very	Extremely	
15. Arousing						Sleepy
16. Exciting						Gloomy
17. Pleasant						Unpleasant
18. Relaxing						Distressing

Please rate your perception of overall image of Thailand as a medical tourism destination with 1= very negative and 7= very positive

Statements	Level of agreement						
	Very negative	Negative	Somewhat negative	Neither positive or negative	Somewhat positive	Positive	Very positive
	1	2	3	4	5	6	7
19. Overall image of Thailand as a medical tourism destination							

Part Three: Perceived Quality

The following is a list of medical tourism perceived quality. Please indicate your level of agreement to each of the following items 1 = Strongly disagree, and 7 = Extremely agree

Statements	Level of agreement						
	Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Extremely agree
	1	2	3	4	5	6	7
20. I believe overall quality of medical treatment and service at the hospital/ clinic in Thailand is great							
21. Overall medical professionals and staff at the hospital/ clinic in Thailand offer excellent services							
22. Overall quality of medical equipment used in the hospital/ clinic in Thailand offers excellent products							
23. Waiting time in Thailand clinics/hospitals is shorter than in other countries							

Part Four: Satisfaction

The following is a list of satisfaction toward Thailand as a medical tourism destination. Please indicate your level of satisfaction to each of the following items 1 = Strongly disagree, and 7 = Extremely agree

Statements	Level of satisfaction						
	Completely dissatisfied	Mostly dissatisfied	Somewhat dissatisfied	Neither satisfied or dissatisfied	Somewhat satisfied	Mostly satisfied	Completely satisfied
	1	2	3	4	5	6	7
24. I believe that choosing Thailand is usually a very satisfying experience							
25. My decision to visit Thailand for medical treatment has been a wise one							
26. I think that I did the right thing when I choose this destination							

Part Five: Medical tourists' loyalty

The following is a list of medical tourists' loyalty toward Thailand as a medical tourism destination. Please indicate your level of agreement to each of the following items 1 = Strongly disagree, and 7 = Extremely agree

Statements	Level of agreement						
	Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Extremely agree
	1	2	3	4	5	6	7
27. I am willing to revisit Thailand for further treatment(s)							
28. I am willing to revisit Thailand for leisure vacations							
29. I will recommend Thailand to others for medical treatment(s)							
30. I will recommend Thailand to others for leisure vacations							

31. I will tell others positive things about medical tourism provided by Thailand							

Part Six: Demographic Characteristics

1. What is your gender?

- ☐ Female
- ☐ Male

2. Year of birth 19____

3. What is your marital status?

- ☐ Single
- ☐ Married
- ☐ Separated
- ☐ Divorced
- ☐ Widowed

4. What is your highest level of education?

- ☐ Less than high school
- ☐ High School or equivalent
- ☐ Some College
- ☐ Associate's Degree
- ☐ Bachelor's Degree
- ☐ Graduate Degree
- ☐ Professional Degree

5. Please state your annual personal income in US Dollar

- ☐ 10,000 and below
- ☐ 10,001-30,000
- ☐ 30,001-60,000
- ☐ 60,001-100,000
- ☐ 100,001-200,000
- ☐ More than 200,001

6. What is your country of residence?

- ☐ United Arab Emirates
- ☐ Singapore
- ☐ USA
- ☐ Japan
- ☐ Indonesia
- ☐ China
- ☐ Other (Please specify_____)
- ☐ Australia
- ☐ Hong Kong
- ☐ UK
- ☐ Germany
- ☐ Malaysia
- ☐ Taiwan
- ☐ More than 200,001

7. Employment Status

- ☐ Unemployed
- ☐ Freelance Professionals
- ☐ Business Owners
- ☐ Employed with temporary contract
- ☐ Corporate Firms Employees
- ☐ Other (Please specify_____)

8. For what reasons are you interested in travelling abroad for medical treatments?

- ☐ To cure an illness
- ☐ For cosmetic surgery
- ☐ To improve my health
- ☐ To have a medical check up

9. How many visits have you made to Thailand during the last 5 years?

- [ ] First visit
- [ ] Second visits
- [ ] Third visits
- [ ] More than 3 visits

10. What are your main factors that will affect your consideration of your next visit?

- [ ] Hospital/ Clinic
- [ ] Doctor/ specialist
- [ ] Hospital/ clinic facilities
- [ ] Hospital/ clinic services