

**FACTORS INFLUENCING TOURIST'S PREFERENCES
TOWARD MEDICAL TOURISM IN THAILAND**



**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE GRADUATE SCHOOL
MASTER OF BUSINESS ADMINISTRATION
STAMFORD INTERNATIONAL UNIVERSITY
ACADEMIC YEAR 2013**

The Research has been approved by
Stamford International University
The Graduated School

Title Factors Influencing Tourist's Preferences Toward Medical Tourism in Thailand

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Academic year: 2013

Abstract

The aspiration of this research is to analyse the factors which influence the motivation, and potential behaviour of medical tourists in choosing medical tourist destination. In pursuit of this objectives, the study examines the motivation of individuals from reliable sources to engage in medical tourism. These issues are worthy of thorough study for two reasons. Firstly, contemporary medical tourism, which typically involves patients from developed countries being attracted to developing countries for seeking the quality medical services at cheaper prices. Secondly, medical tourism of Thailand has the potential to be the important factor in sustaining the competitive advantage in the tourism market.

The present study primarily collects data from questionnaire of potential medical tourists, director at Samitivej, and Executive of Tourism Authority of Thailand. It complemented with data from a hardcopy written survey. The population from which the sample is drawn for these surveys includes individuals who: have an interest in travelling abroad for medical reasons in Thailand, travel agencies specialising in medical tourism, and Thai medical health-care providers.

The study also finds that prospective medical tourists are particularly motivated to consider four destination attributes in choosing a medical-tourism destination: (i) saving potential; (ii) quality of care; (iii) hygiene issues; and (iv) safety, and security. For those who would like to conduct the research in the area of medical tourism should conduct the research on each source markets as each of them has their own healthcare system.

Keywords: Motivation, and potential behavior of tourists, Medical tourism in Thailand, Tourism market

ACKNOWLEDGMENT

I would like to a special thanks goes to Dr. Ake Choonhachatrachai, who always give advices for me. He has promptly answered my questions, and given useful guiding in my search for various articles. I want to express my gratitude to Dr. Apitep Saekow, the advisor of the Master Business Administration at Stamford University. His friendship, and her support have been, and still are beyond any possible rationalisation. And then, there are all those who have contributed in shaping my mind, and attitude towards study, and research, even from long ago, since the very beginning of my education. Probably, they do not know or do not think that what they did was important, but they play a crucial role in the success of the whole enterprise.

I have really enjoyed the opportunity to be a part of a stimulating research, I have always felt welcome at Stamford University, and Library of Congress, and my gratitude has gone to a very service-minded, and professional librarian. I wish to express my appreciation for the support from colleagues, and friends. I hope that you will welcome me as part of your research team also in the future. I make only a very few exceptions. As well as the whole family, who tolerated my efforts with incredible patience.

At the end I also want to thank my mother who always encourages me to continue studying, and to my friends for my enormous knowledge, and thereby is an inspiration to continuous learning. Expressing acknowledgments to supervisors appears to be a courteous customary habit. The reader may think the same in the present case. I know this it is not just a formal expression of appreciation. And I am not able to find the right words to communicate my feelings. So, again: thanks.

Kanokporn Tanomwong

CONTENTS

	Page
ABSTRACT	i
ACKNOWLEDGMENT	ii
CONTENTS	iii
LIST OF TABLES	viii
LIST OF FIGURES	xi
CHAPTER 1 INTRODUCTION	1
1.1 Background to the study.....	1
1.1.1 Service industry.....	1
1.1.2 General tourism.....	1
1.1.3 Medical tourism's Thailand.....	2
1.2 Research question, theoretical framework, and hypotheses.....	5
1.2.1 Research question.....	5
1.2.2 Research objectives.....	6
1.2.3 Theoretical framework.....	6
1.2.3.1 Medical tourism.....	6
1.2.3.2 Destination Choice.....	7
1.2.3.3 Destination Image.....	8
1.2.4 Hypotheses.....	10
1.3 Justification for the study.....	11
1.3.1 Potential economic significance of medical tourism to Thailand.....	12
1.3.2 Lack of research into the whole destination choice process of medical tourist.....	12
1.4 Methodology.....	13
1.4.1 Population for the study.....	13
1.4.2 Preliminary assessments of survey instrument.....	13
1.4.3 Data collection, and sample.....	13
1.4.4 Data processing.....	14

CONTENTS (Cont.)

	Page
1.5 Limitation of the study.....	14
1.6 Definition of terms.....	15
CHAPTER 2 LITERATURE REVIEW.....	17
2.1 Medical tourists.....	18
2.1.1 Definition, and nature of medical tourism.....	18
2.1.2 Demand, and supply factors in medical tourism.....	19
2.1.3 Motivations of prospective medical tourism.....	22
2.1.4 Marketing of medical tourism.....	24
2.2 Destination Choice.....	27
2.2.1 Involvement, and destination choice.....	27
2.2.2 Motivation, and destination choice.....	29
2.2.3 Information search, and destination choice.....	30
2.2.4 Evaluation of alternative destinations.....	34
2.3 Destination image.....	38
2.3.1 Definition of destination image.....	38
2.3.2 Role of destination image in choice of destination.....	38
2.3.3 General Characteristics of a destination image.....	39
2.3.3.1 Multiple nature.....	39
2.3.3.2 Complex nature.....	39
2.3.3.3 Relativistic nature.....	39
2.3.3.4 Dynamic nature.....	40
2.3.4 Components of destination image.....	40
2.3.4.1 Induced components of destination image.....	41
2.3.4.2 Autonomous components of destination image.....	41
2.3.4.3 Influence of various image agents.....	42
2.3.4.4 Influence of recipient's characteristics.....	42
2.4 Factors that influence destination choice.....	42
CHAPTER 3 RESEARCH METHODOLOGY.....	51

CONTENTS (Cont.)

	Page
3.1 Research Design.....	51
3.1.1 Definition, and types of research design.....	51
3.2 Survey design.....	52
3.2.1 Types of variables, and measures.....	52
3.2.2 Individual variables.....	53
3.2.3 Validity, and reliability of scales.....	70
3.3 Data analysis.....	70
CHAPTER 4 DATA ANALYSIS.....	71
4.1 Data collection process.....	71
4.2 Profiles of respondents.....	71
4.3 Descriptive analysis of variables.....	75
4.3.1 Health locus of control.....	78
4.3.1.1 Internal health locus of control.....	78
4.3.1.2 Chance locus of control.....	78
4.3.1.3 People health locus of control.....	79
4.3.2 Attitude towards health-care system in home country....	80
4.3.2.1 Attitude towards cost of medical care.....	80
4.3.2.2 Attitude towards waiting time, and procedure.....	81
4.3.3 Availability of desired medical treatment in home country.....	81
4.3.4 Motivation to engage in medical tourism.....	82
4.3.5 Medical tourism destination attributes.....	82
4.3.5.1 Quality of care.....	82
4.3.5.2 Saving potential.....	83
4.3.5.3 Safety, and security issues.....	84
4.3.5.4 Tourism Opportunity.....	85
4.3.5.5 Hygiene issues.....	85
4.3.5.6 Accessibility of destination.....	86
4.3.6 Level of product familiarity.....	86

CONTENTS (Cont.)

	Page
4.3.6.1Familiarity with procedures.....	86
4.3.6.2Familiarity with Thailand as a medical tourism destination.....	87
4.3.7Search behaviour	87
4.3.8Information sources.....	88
4.3.8.1Induced image agents.....	88
4.3.8.2Autonomous image agents.....	88
4.3.8.3Organic image agents.....	89
4.3.9Perceived risk	89
4.3.9.1Functional risk.....	90
4.3.9.2Financial risk.....	90
4.3.9.3Health risk.....	90
4.3.9.4Physical risk.....	90
4.3.9.5Satisfaction risk.....	91
4.3.9.6Psychological risk.....	91
4.3.9.7Political risk.....	91
4.3.9.8Social risk.....	91
4.3.9.9Time risk.....	91
4.3.10Consideration set.....	91
4.3.11Images of hygiene level of potential destinations.....	91
4.3.11.1Image of hygiene level of Thailand.....	92
4.3.12Image of safety, and security of potential destinations.....	92
4.3.12.1Image of safety, and security of Thailand.....	92
4.3.13Intention to visit.....	92
4.3.13.1Intention to Thailand.....	92
4.4Hypothesis testing.....	93
4.4.1Subsidiary research question 1.1.....	93
4.4.2Subsidiary research question 1.2.....	98

CONTENTS (Cont.)

	Page
4.4.3Subsidiary research question 1.3.....	106
CHAPTER 5 CONCLUSIONS, AND RECOMMENDATIONS.....	111
5.1Conclusions	111
5.2The findings of research.....	111
5.2.1Subsidiary research question 1.1.....	111
5.2.2Subsidiary research question 1.2	113
5.2.3Subsidiary research question 1.3.....	117
5.3Implications for theory.....	119
5.3.1Tourists external information search behaviour.....	120
5.3.2Tourists reliance on information sources.....	120
5.3.3Evaluation of alternative destinations.....	121
5.4Implications for practitioners.....	122
5.4.1Use of information sources.....	122
5.4.2Leverage points for promotional message.....	123
5.5Recommendation.....	123
REFERENCES.....	125
APPENDICES.....	133
APPENDIX A A INFORMATION SHEET, AND SURVEY QUESTIONNAIRE.....	134
APPENDIX B QUESTIONNAIRE.....	136
APPENDIX C ITEM TO TOTAL, AND INTER ITEM CORRELATIONS OF INTERNAL HEALTH OF CONTROL.....	146
APPENDIX D INTER-ITEM, AND ITEM TO TOTAL CORRELATIONS OF HEALTH LOCUS OF CONTROL.....	149
APPENDIX E INTER-ITEM, AND ITEM TO TOTAL CORRELATIONS OF PEOPLE HEALTH LOCUS OF CONTROL.....	151
APPENDIX F INTER-ITEM, AND ITEM TO TOTAL CORRELATIONS OF ATTITUDES TOWARDS COST OF MEDICAL	153

CONTENTS (Cont.)

	Page
APPENDIX G INTER-ITEM, AND ITEM TO TOTAL CORRELATIONS OF ATTITUDES TOWARDS PROCEDURE INVOLVED WITH MEDICAL CARE.....	155
APPENDIX H INTER-ITEM, AND ITEM TO TOTAL CORRELATIONS OF INDUCED IMAGE AGENTS.....	157
APPENDIX I INTER-ITEM, AND ITEM TO TOTAL CORRELATIONS OF AUTONOMOUS IMAGE AGENTS.....	159
APPENDIX J INTER-ITEM, AND ITEM TO TOTAL CORRELATIONS OF ORGANIC IMAGE AGENTS.....	161
APPENDIX K INTER-ITEM, AND ITEM TO TOTAL CORRELATIONS OF QUALITY OF CARE.....	163
APPENDIX L INTER-ITEM, AND ITEM TO TOTAL CORRELATIONS OF SAVING POTENTIAL.....	169
APPENDIX M INTER-ITEM, AND ITEM TO TOTAL CORRELATIONS OF SAFETY, AND SECURITY ISSUES.....	171
APPENDIX N INTER-ITEM, AND ITEM TO TOTAL CORRELATIONS OF HYGIENIC ISSUES.....	174
APPENDIX O INTER-ITEM, AND ITEM TO TOTAL CORRELATIONS OF ACCESSIBILITY OF MEDICAL TOURISM DESTINATIONS.....	176
BIOGRAPHY.....	181

LIST OF TABLES

	Page
Table 1.1 Tourist arrivals in Thailand (2006-2007).....	3
Table 1.2 Comparison of medical costs provided in Thailand, Singapore, India, and the USA.....	4
Table 1.3 Foreign Tourists in Thailand (July 2013).....	5
Table 1.4 Extensiveness of Healthcare Systems in Developed Countries.....	10
Table 3.1 Summary of variables, and measurement scales.....	54
Table 3.2 Questions asked to assess Variable 1 ('Availability of desired medical treatment in home country').....	55
Table 3.3 Items used to measure Variable 2('Attitude towards health-care system in home country').....	56
Table 3.4 Items used to measure Variable 3 ('Health locus of control').....	57
Table 3.5 Items used to measure Variable 4 ('Importance of destination attributes').....	60
Table 3.6 Question asked to assess Variable 6 ('Motivation to engage in medical tourism').....	64
Table 3.7 Questions asked to assess Variable 7 ('Level of product familiarity').....	65
Table 3.8 Items used to measure Variable 8 ('Perceived risk').....	66
Table 3.9 Items used to measure Variable 9 ('Importance of information sources').....	67
Table 4.1 Presents a summary of the demographic characteristics of the final sample respondents.....	72
Table 4.2 Summarises the respondents objectives in travelling abroad for medical reasons.....	74
Table 4.3 Presents a descriptive analysis, (and normality of distribution) of all the composite variables used in the study.....	75
Table 4.4 Descriptive analysis of non-composite variables.....	77

LIST OF TABLES (Cont.)

	Page
Table 4.5 Factors that influence level of motivation of individuals to engage in medical tourism.....	94
Table 4.6 ANOVA of availability of desired medical treatment, and motivation to engage in medical tourism.....	96
Table 4.7 Multiple linear regression of factors influencing motivation to engage in medical tourism.....	98
Table 4.8 Medical tourism destination attributes.....	99
Table 4.9 Analysis of variance of familiarity with medical procedures, and confidence in choosing a medical tourism destination.....	100
Table 4.10 Kruskal-Wallis, and Mann-Whitney U tests of confidence in choosing a destination, and familiarity with Thailand as a medical destination...	101
Table 4.11 ANOVA of perceived risks, and confidence in choosing a medical tourism destination.....	102
Table 4.12 Kruskal-Wallis test of perceived risks, and confidence in choosing a medical tourism destination.....	103
Table 4.13 Correlations between perceived risks, and information from insurance Companies, and personal doctors.....	104
Table 4.14 Mean scores of three image agents, and correlations with visit intention to Thailand.....	105
Table 4.15 Correlations between information from medical tourism authorities, and intention to visit Thailand.....	106
Table 4.16 Correlations between destination attributes, and visit intentions.....	107
Table 4.17 Correlations between image of a information about medical tourism..	109
Table 4.18 Correlations between image of hygiene level, and intention to visit.....	109
Table 4.19 Correlations between image of safety, and security, and intention.....	110

LIST OF FIGURES

	Page
Figure 2.1 Outline in Chapter 2.....	17
Figure 2.2 Research Conceptual Framework.....	50



CHAPTER 1

INTRODUCTION

This study examines the tourism industry in Thailand, with particular emphasis on the role of medical tourism in sustaining growth in tourism despite a decline in the competitive edge previously enjoyed by Thailand in the leisure tourism market. Chapter1 introduces the research question, theoretical framework, and hypotheses for the present study. In doing so, the chapter presents a synopsis of the relevant literature, and a preliminary conceptual model for the study. The chapter also provides a justification of the research topic, and an overview of the methodology.

Finally, the chapter delimits the research temporally, geographically, and theoretically.

1.1 Background to the study

1.1.1 Service industry

It is an industry in that part of the economy that creates services rather than tangible objects. Service industry companies are involved in retail, transport, distribution, food services, as well as other service-dominated businesses. Also called service sector, tertiary sector of industry. Economists divide all economic activity into two broad categories, goods, and services. Goods-producing industries are agriculture, mining, manufacturing, and construction; each of them creates some kind of tangible object. It includes everything else: banking, communications, wholesale, and retail trade, all professional services such as medicine, engineering, computer software development, nonprofit economic activity, all consumer services, and all government services, including defense, and administration of justice. A services dominated economy is characteristic of developed countries. In less developed countries most people are employed in primary activities.

1.1.2 General Tourism

The last 50 years have seen a growing interest in tourism, and related topics by the academic world. Having developed into the most predominant sector in world's economy, tourism could not have been ignored by the community of researchers. Explaining the phenomenon of tourism, its effects, its influence, and relationships

with other sectors of human activity, and attempts at forecasting future developments, and behaviours have increased in importance with significant numbers of people involved in such research. The position of researchers in the tourism field is at times difficult. Practitioners of other disciplines charge them with being too soft, too application oriented, and of not having been able (yet) to build up a rational, and uniform theoretical framework. On the other hand, people involved in day by day operational activities accuse them of flying too high, and wasting time in fooling around with models, and conjectures without producing much of practical use in helping with the problems they face. As a very recent field of investigation, tourism is still trying to find a reasonable compromise between these two extremes.

The boundaries of the tourism, and travel industry are indefinite. Tourism brings together segments from a number of different activities with a wide variety of products, services exhibiting little homogeneity, and with different technologies used in the production process. It may be questioned whether it should even be classified as an industry by itself in the traditional sense of manufacturing or trade (Nordin, 2003). Moreover, reflecting changes in wider society, in the last few years tourism has become an extremely dynamic system. Introduction of flexible organisational structures, fast changing customer behavior, and strong impacts from the development of transportation technologies have exerted a formidable pressure on the whole sector.

1.1.3 Medical Tourism's Thailand

Tourism, and its related industries have long been one of Thailand's major revenue generating sectors. The country has established itself as a destination for international tourists that provides value for money, entertainment, and beaches; in addition, Thailand has become a popular venue for so called MICE travel (meeting, incentives, convention, and exhibition) (Service Promotion Department, 2007). However, one of the country's competitive advantages leveraging on its natural attractions is now declining as new destinations emerge with more pristine environments, and local communities. Nevertheless, in 2008, Thailand continued to target rising tourist arrivals with the aim of attracting 15.7 million international tourists to generate more than AUD\$20,000 million (Service Promotion Department, 2007). The country thus aimed to continue to position itself as a world class destination by offering existing, and new attractions to a higher paying clientele

(Service Promotion Department, 2007). Alternative forms of tourism including business, and health tourism were designated as potential growth areas that would enable Thailand to withstand the increasingly intense competition from other destinations selling more conventional tourism products.

Table 1.1 Foreign Tourists in Thailand (2009- 2013)

Month	2009	2010	2011	2012	2013p	Δ(%)56/55*
January	1,269,978	1,605,505	1,805,947	1,992,158	2,241,184	+12.50
February	1,138,220	1,614,844	1,802,476	1,853,736	2,328,297	+25.60
March	1,237,132	1,439,401	1,702,233	1,895,560	2,259,237	+19.19
April	1,085,293	1,108,209	1,552,337	1,686,268	2,013,012	+19.38
May	923,918	826,610	1,407,407	1,546,888	1,846,403	+19.36
June	954,772	964,959	1,484,708	1,644,733	2,056,241	+25.02
July	1,094,658	1,275,766	1,719,538	1,815,714	2,223,685	+22.47
August	1,149,288	1,270,883	1,726,559	1,926,929	-	-
September	1,040,538	1,214,810	1,486,333	1,611,754	-	-
October	1,209,473	1,316,806	1,422,210	1,801,147	-	-
November	1,361,574	1,478,856	1,291,548	2,143,550	-	-
December	1,684,997	1,819,751	1,829,174	2,435,466	-	-
Totals	14,149,841	1,593,640	19,230,470	2,235,390	14,968,059	+20.37

Source : www.tourism.go.th, 2013: online

In this regard, both the volume, and revenue generated by foreign medical tourism patients in Thailand had previously shown significant increases; for example two digit annual growth in revenue was experienced over several years and in 2005 Thailand generated revenue of AUD\$1100 from 1.28 million foreign patients (Strategic and Marketing Magazine, 2007, Service Promotion Department, 2007). In recognition of the potential for further growth in medical tourism, Thailand decided to promote this form of tourism in two categories: (i) medical treatment (conventional medical operations, and treatment); and (ii) health, and beauty therapy (traditional therapies for general well being, such as Thai massages, spa, and yoga) (Strategic and

Marketing Magazine, 2007). Thailand has since promoted both categories of health tourism products aggressively to a range of potential medical tourists including general tourists, health tourists, diplomats in Thailand, and neighbouring countries, and expatriates in Thailand and neighbouring countries.

Table 1.2 Comparison of medical treatment costs provided in Thailand, Singapore, India, and the USA

Procedure	USA insurer's cost	USA retail price	India	Thailand	Singapore
Angioplasty	28,058.10- 40,528.37	57,262- 62,506.34	12,007.43	14,190.60	14,190.60
Gastric bypass	30,255.46- 43,701.60	52,382.98- 75,664.30	12,007.43	16,373.77	16,373.77
Heart bypass	59,754- 86,312.71	133,630.20- 193,030.43	10,915.85	13,099.02	21,831.70
Heart valve Replacement	77,940.26- 112,581.71	173,917.86- 251,215.18	10,370.06	11,461.64	14,190.60
Hip Replacement	19,995.26- 28,825.48	47,789.59- 69,029.65	9,824.26	11,461.64	14,190.60
Hysterectomy	10,469.36- 15,122.82	22,285.80- 32,189.75	3,165.60	4,912.13	N/A
Knee Replacement	19,241.37- 27,793.94	44,326.01- 64,078.22	9,278.47	10,915.85	14,190.60
Mastectomy	10,669.15- 15,411	25,880.39- 37,382.42	8,186.89	9,824.26	13,535.65

Note : All costs expressed in .Australian dollars (AUDS) converted from USD\$ at rate of AUD\$ 1.09158 per USD\$ 1.00

Source : Unmesh, Baker, Montlake, Daniels and Holmes, 200

1.2 Research question, research objective, theoretical framework, and hypotheses

1.2.1 Research question

The fundamental research question to be addressed by this study can therefore be posed as follows:

1. What are the factors influencing tourists's preferences toward medical tourism in Thailand?
2. How do people choose a destination to receive their desired medical treatment?
3. How do they perceive Thailand as a medical tourism destination?
4. What kind of information do they seek when deciding on their choice of destination?

Table 1.3 Foreign Tourists in Thailand (July 2013)

Country of Nationality	2013		2012		Δ (%) 13/12
	Number	%Share	Number	%Share	
East Asia	1,461,060	65.70	1,083,025	58.62	+34.91
ASEAN	665,969	29.95	513,051	28.44	+29.81
Brunei	1,241	0.06	973	0.04	+27.54
Cambodia	47,357	2.13	37,179	2.21	+27.38
Indonesia	48,179	2.17	31,878	2.01	+51.14
Laos	108,704	4.89	86,360	4.09	+25.87
Malaysia	235,451	10.59	186,514	11.68	+26.24
Myanmar	14,562	0.65	9,987	0.62	+45.81
Philippines	26,093	1.17	22,074	1.52	+18.21
Singapore	87,947	3.96	61,958	3.77	+41.95
Vietnam	96,435	4.34	76,128	2.51	+26.67
China	445,184	20.02	263,412	14.57	+69.01
Hong Kong	64,217	2.89	50,389	2.23	+27.44
Japan	121,000	5.44	107,180	5.81	+12.89
Korea	112,778	5.07	104,928	5.40	+7.48
Taiwan	44,831	2.02	38,702	1.96	+15.84
Others	7,081	0.32	5,363	0.20	+32.03

Source : www.tourism.go.th, 2013: online

This fundamental research question is addressed in detail by this study. The aim of the study is thus to identify the factors that influence the decision of prospective medical tourists regarding their choice of destination. The purpose of

identifying these factors is to assist decision makers in developing policies that will be successful in promoting medical tourism in Thailand. Subsidiary research questions to be addressed thus include:

Firstly, the researcher is Thai, which provides obvious advantages in terms of personal knowledge of the issues involved, and ease of access to relevant data.

Secondly, because every destination has a distinct, and established image, research on destination choice should always be destination specific.

1.2.2 Research objectives

The objectives of this research can be stated as follows:

to determine the factors that motivate people to engage in medical tourism in Thailand;

to determine the factors that effect on medical tourism; and

to specify criteria that prospective medical tourists use to evaluate alternative medical tourism destinations.

1.2.3 Theoretical framework

Full details of the theoretical framework of the study are provided in Chapter 2. For them present introductory purposes, the three main theoretical concepts relevant to the theoretical framework of this study are briefly introduced. These three concepts are: (i) *medical tourism*; (ii) *destination choice*. (iii) *destination image*. Each of these is introduced (in brief) below; a fuller exploration of these concepts can be found in Chapter 2.

1.2.3.1 Medical tourism

According to Awadzi and Panda (2005), the term medical tourism refers to the offshore provision of medical services in combination with the other tourism opportunities by using comparative cost advantage as the leverage point. This definition of medical tourism assumes that prospective medical tourists are motivated by economic reasons in choosing to receive their desired medical treatment (both obligatory, and elective) in overseas countries (Jones and Keith, 2006). The trend towards such medical tourism has been made possible by the significant improvements that have occurred in the medical services of many developing countries in terms of facilities, equipment, and human resources; these developments have been accelerated by the privatisation of the health-care sectors in these

developing countries (Garcia-Altes, 2004, Awadzi and Panda, 2005). According to Awadzi and Panda (2005), prospective medical tourists include: (i) the uninsured (those who choose not to insure against health-care costs because they perceive insurance policies to be too high); (ii) the underinsured (those whose insurance policies do not cover the expenses that they actually incur); and (iii) the uninsurable (those whose health conditions, and therapies do not meet the criteria for insurance policies in their country of residence). People in these three categories are more likely to search for alternatives in countries where costs are lower (Awadzi and Panda, 2005, Marlowe and Sullivan, 2007).

1.2.3.2 Destination choice

The choice of a destination is a high involvement decision associated with a high level of risk (Jang and Cai, 2002). Prospective tourists typically apply significant mental effort in making a destination decision in order to reduce the level of perceived risk (Zaichkowsky, 1985, Hawkin, 2001). Several authors have noted that the choice of a destination is primarily determined by the tourist's *motivation* to travel; in other words, a destination is chosen to satisfy the particular motivation of a given tourist (Mansfeld, 1992, Um and Crompton, 1990). In the case of medical tourists, the motivation is to find the desired medical treatment of requisite quality at lower cost. The whole destination choice process in medical tourism is therefore determined by these two parameters of *quality*, and *cost*. In evaluating alternative destinations, prospective tourists utilise certain so called decision rules (Hanlan, 2006, Mansfeld, 1992). Such decision rules can be categorised into two types: (i) compensatory rules; and (ii) non-compensatory rules (Mansfeld, 1992, Purdue and Meng, 2006). In the case of medical tourists, the first parameter noted above (quality of care) can be classed as a non-compensatory rule, whereas the second parameter (lower costs) can be categorised as a compensatory rule. To reduce the level of perceived risk, prospective tourists engage in both an *internal* information search, and an *external* information search (Gursoy, 2003). An internal information search is based on prior knowledge of alternative destinations (Gursoy and McCleary, 2004); if such prior knowledge enables prospective tourists to make a decision on a destination with confidence, they tend not to engage in an external information search (Wirtz and Mattila, 2003, Gursoy, 2003). External sources of information can be broadly

categorised into four groups: (i) travel professionals; (ii) word-of-mouth information; (iii) marketing communication; and (iv) destination-specific literature (Baloglu and McCleary, 1999). According to Bieger and Laesser (2004), prospective tourists who are making a riskier destination choice tend to rely on information from travel professionals. However, in the case of medical tourists, it is more likely that they would tend to rely on word of mouth information from doctors, and insurance companies, rather than information from other external sources.

1.2.3.3 Destination image

The third theoretical concept of importance to this study is *destination image*, which refers to the attitudes, impressions, beliefs, knowledge, prejudices, imagination, and thoughts that potential tourists hold with respect to destinations (Echtner and Ritchie, 1993, Hawkin et al., 2001, Belch, 2001, Gallarza et al., 2002). Destination image can be understood as a holistic image of a destination's attributes as determined by the prospective tourists motivation to travel (Chon, 1991, Purdue, 2000).

Such a destination image plays a critical role in destination choice; indeed, several authors have contended that, given a certain motivation to travel, the chosen destination is likely to be the one that portrays the most positive image with regard to the tourist's activities of interest (given equivalent levels of facilitating elements) (Purdue and Meng, 2006, Tasci and Gartner, 2007). Because motivation determines the formation of a destination image, any inconsistencies between the elements of a destination image, and the tourist's desires creates difficulties for the marketing of a given destination. In the case of medical tourism, if Thailand is to be successful as a preferred destination, it must be perceived: (i) as being advanced in medical technologies; and: (ii) as offering value for money. Any elements of the destination image that are not consistent with these parameters are unlikely to project a positive influence on the destination choice of prospect medical tourists.

Destination image is formed from the information that prospective tourists receive from a variety of information sources. According to Tasci and Gartner (2007), these sources can be categorised into three types: (i) induced image agents; (ii) autonomous image agents; and (iii) organic image agents. The first type of information utilised in forming a destination image that provided by induced image

agents refers to the marketing communication activities (both overt, and covert) of destinations or service providers (Beerli and Martin, 2004).

The second type of information utilised in forming a destination image that provided by organic image agents refers to social channels that provide information about a destination on an informal basis (including idiosyncrasies about the destination) (Beerli and Martin, 2004). In this regard, word of mouth communication exerts a strong normative influence through peer pressure and reference groups (Na et al., 2006). Information from organic image agents also includes first hand experience that makes a previously held image more realistic, and nuanced thus providing the potential tourist with greater confidence in making a destination choice (Tasci and Gartner, 2007).

The third type of information utilised informing a destination image that provided by autonomous image agents refers to information that is outside the control of destinations, including news, documentaries, and guidebooks (Beerli and Martin, 2004). Through random exposures to information about a destination from such autonomous image agents, prospective tourists can actually come to hold an image about a destination long before they are even motivated to travel.

In general, information from organic, and autonomous image agents tends to be more credible, and trustworthy than information from induced image agents (Hawkin et al., 2001, Tasci and Gartner, 2007). In particular, information from organic, and autonomous image agents that refer to the aspects of a destination that are directly relevant to the activities of interest to the prospective tourist exert the strongest influence in image formation (Sonmez and Sirikaya, 2002). In the case of medical tourists, who often lack previous knowledge about a potential medical tourism destination, information from autonomous image agents regarding such matters as political unrest, natural disasters, and hygiene levels can have a strong influence on image formation (Chon, 1991, Beerli and Martin, 2004).

Table 1.4 Extensiveness of Healthcare Systems in Developed Countries

Country	Life Expectancy	Infant Mortality	Physician per 1000 people	Nurses per 1000 people	Per capita expenditure on health (USD)	Health care costs as a percent of GDP	% of government revenue spent on health	% of health costs paid by government
Australia	80.5	5.0	2.47	9.71	2519	9.5	17.7	67.5
Canada	80.5	5.0	2.14	9.95	2669	9.9	16.7	69.9
France	79.5	4.0	3.37	7.24	2981	10.1	14.2	76.3
Germany	80.0	4.0	3.37	9.72	3204	11.1	17.6	78.2
Japan	82.5	3.0	1.98	7.79	2662	7.9	16.8	81.0
Sweden	80.5	3.0	3.28	10.24	3149	9.4	13.6	85.2
UK	79.5	5.0	2.30	12.12	2428	8.0	15.8	85.7
USA	77.5	6.0	2.56	9.37	5711	15.2	18.5	44.6

Source : (Canadian Institute for Health Information, 2007)

1.2.4 Hypotheses

On the basis of the theoretical framework briefly presented above, thirteen hypotheses are proposed by the present study to address the research question posed below:

What are the factors influencing tourist's preferences toward medical tourism in Thailand?

The thirteen hypotheses that seek to address this research question can be stated as follows. (Please note that certain undefined terms in the hypotheses are explained below in subsection 1.5.)

Hypothesis H1: People who engage in medical tourism tend to possess a high level of internal health.

Hypothesis H2: People who engage in medical tourism think that medical care in their countries of residence.

Hypothesis H3: People engage in medical tourism because they do not want to wait to receive medical treatment in their countries of residence.

Hypothesis H4: People engage in medical tourism because the desired medical treatment is not available in their countries of residence.

Hypothesis H5: When choosing a destination, prospective medical tourists place is more important on destination attributes related to quality of care, and potential cost saving than attributes about tourism opportunities.

Hypothesis H6: Prospective medical tourists with a low level of familiarity tend to engage in a high level of external search.

Hypothesis H7: Prospective medical tourists with a high level of perceived risk tend to engage in a high level of external search, especially from doctors, and insurance companies.

Hypothesis H8: Induced image produced by relevant medical tourism authorities is important in choosing a destination for medical tourism.

Hypothesis H9: Quality of care is a non compensatory rule; that is, prospective medical tourists tend to avoid destinations that are perceived to be inferior in terms of the quality of medical care that they provide.

Hypothesis H10: Potential for cost saving is a compensatory rule; that is prospective medical tourists are willing to sacrifice certain attributes for a greater potential for cost saving.

Hypothesis H11: The image of a destination with regard to search a information about medical tourism has a positive effect on medical tourists intention to visit.

Hypothesis H12: The image of a destination with regard to hygiene has a positive effect on medical tourists intention to visit.

Hypothesis H13: The image of a destination with regard to safety, and security has a positive effect on medical tourists intention to visit.

These thirteen hypotheses are tested according to the methodology described in Chapter 3.

1.3 Significance of the study

Although medical tourism is increasing, and has become a significant potential source of foreign revenue to developing countries, the relative newness of the

phenomenon means that the number of studies on the topic remains limited. The justification for the present study of medical tourism in the Thai context thus rests on two main reasons: (i) the potential economic significance of medical tourism for Thailand; and (ii) the general lack of research on destination choice in medical tourism.

1.3.1 Potential economic significance of medical tourism to Thailand

Thai medical services are among the most developed in Asia; indeed, continuous development of these services has meant that they are now comparable with the standards of medical services in developed countries (Harryono, 2006). An increasing number of Thai private hospitals with sophisticated medical facilities now offer high quality medical treatment by certified doctors, together with a high nurse to patient ratio (Awadzi and Panda, 2005, Harryono, 2006, Ramirez de Arellano, 2007). In response to a shrinkage in local demand that resulted from the Asian economic crisis of the late 1990s, these high quality private hospitals began to shift their focus to medical tourism markets from foreign countries. To realise the potential of medical tourism in terms of the national agenda, it will be necessary for the government sector, and the private sector to work collaboratively in attracting medical tourists by offering the right product, and establishing an appealing destination image. A thorough understanding of the behaviour of medical tourists is an indispensable aspect of this endeavour. The findings of the present study will thus assist Thai decision-makers at all levels to fulfill their roles in seeking to outperform competing destinations in attracting medical tourists.

1.3.2 Lack of research into the whole destination choice process of medical tourists

Because the phenomenon of people from developed countries travelling to developing countries for medical reasons is relatively new, no quantitative research has yet been conducted into the destination choice behaviour of medical tourists. Most of the studies that have been conducted in this area have examined the motivation of medical tourists, and/or the capacity of potential destinations (Vadanabha, 2007, Ramirez de Arellano, 2007, Norra, 2007, Harryono, 2006). However, no research has covered the *whole decision-making process* of prospective medical tourists in choosing a destination for their medical tourism. The present study, which does cover

the whole decision-making process, should therefore prove to be very useful for both destination-promotion organizations, and health-care providers in performing their marketing functions in Thailand.

1.4 Methodology

As noted above, the aim of this research was to identify the factors that influence the destination choice of prospective medical tourists to Thailand. In pursuit of this objective, a quantitative, and qualitative questionnaire survey, was adopted as the methodology for the study. The methodology is described in full in Chapter 3; a broad outline follows.

1.4.1 Population for the study

It was decided that persons eligible to be participants in this research would be those who: (i) have an interest in travelling abroad for medical reasons; and (ii) are proficient in the English language. Given that the first criterion an interest in medical tourism is not directly observable, it was decided that information search behaviour about medical tourism would be adopted as a proxy for indicating a person's interest in medical tourism. The first criterion for the population for this study was therefore fulfilled by people who have acquired information about medical tourism from travel agencies specialising in medical tourism, and/or the sales offices of Thai medical health-care providers.

1.4.2 Preliminary assessments of survey instrument

Before administering the main survey, preliminary assessments of the reliability, and validity of the proposed questions in the survey were undertaken by; the questionnaire of tourists in Thailand.

the questionnaire of director at Samitivej.

the questionnaire of Executive of Tourism Authority of Thailand.

In response to the feedback received from these preliminary assessments, some minor changes were made to the questionnaire.

1.4.3 Data collection, and sample

The questionnaires for the actual survey were distributed to eligible respondents with tourists, Hospital provider, and Tourism Authority of Thailand. The surveys offer advantages in terms of speed, and response rate, and it has been argued that such surveys are especially appropriate in developed economies. Complementing

the survey, the same tourism, and health care offices, and agencies (noted above) were also provided with hard copies of the written survey, along with pre-paid postage envelopes, for use by any potential respondent who preferred to complete the survey in this format.

A sampling size of 300 completed questionnaires was determined to be adequate for all the statistical analyses to be undertaken in this study (Maholtra, 1999, Manning and Munro, 2007). Incomplete questionnaires were assigned with a missing value, but clearly inadequate, and/or inconsistent cases were disqualified (Maholtra, 1999).

1.4.4 Data processing

After coding, outliers were identified by using box-plot, and Mahanobis distance to ensure a normal distribution of responses. Scales were then transformed, as appropriate, in accordance with the nature of the items. Composite variables were then computed for further analysis using statistical software. Statistical techniques adopted in this study included Pearson's correlation coefficient, analysis of variance, principal component analysis, and multiple linear regression (Manning and Munro, 2007). Full details of the statistical analyses used in the study are reported in Chapter 4.

1.5 Limitation of the Research

Like most medical tourism researches, there are some matters in the present study which must be meticulously taken into account of interpreting the findings.

Firstly, it cannot be expected that the research will address, and/or obtain not all real information of the medical tourism because the research is focused on Thailand where the respondents are restricted to those who have acquired the information about medical tourism in Thailand through offshore offices of the Tourism Authority of Thailand, and/or the offices of Thai health-care providers. The study is, therefore, somewhat tended to be biased towards the respondents who might have been interested in Thailand as a medical tourism destination.

Secondly, the questionnaire is restrictively framed with a focus on Thailand, and its major competitor destinations which are compared. Moreover, it can be noticed that prospective medical tourists might have felt constrained in making observations about other destinations with some condition.

Thirdly, the research is a descriptive study in which actual choice behavior may not be observed. The study, therefore, does not explore the influence of situational factors that might influence decision about destination choice, and intention to visit.

1.6 Definition of terms

Full explanations of the terminology used in this thesis are provided in Chapter 2. However, for the present introductory purposes, the operational definitions of key terms used in the study are provided below.

Health locus of control

In accordance with Callaghan (1998), the term health locus of control is understood in this study to refer to a person's perception of their capacity to control their own health. The concept is comprised of three sub-concepts: (i) internal health locus of control; (ii) chance health locus of control; and (iii) people health locus of control (Wallston et al., 1994). The significance of the concept for the present study is that health locus of control has been shown to have an influence on the inclination of individuals to adopt certain health related behaviour, including medical tourism (Moshki et al., 2007).

Product familiarity

In accordance with Gursoy and McClear (2004), product familiarity is taken to refer to the perceived knowledge that individuals have about products, services or destinations. Such product familiarity influences information-search behaviour because individuals who are familiar with activities, and destinations tend to rely on the knowledge stored in their longterm memory to support their decision-making (Wirtz and Mattila, 2003).

Perceived risk

The term perceived risk is taken to refer to a sense of loss associated with a decision, and/or a cognitive conflict between expectation, and outcome (Bieger and Laesser, 2004, Mitchell, 1999). The significance of perceived risk for the present study is that the risk inherent in any decision must be handled before the decision can be made (Bettman, 1973). To do so, decision-makers engage in an external information search with a view to reducing the perceived risk to a manageable level (Mitchell, 1999).

Destination image

In accordance with Echtner and Ritchie (1993), a destination image is defined as a mental representation of the attributes, and potential benefits of a given destination. In other words, a destination image refers to what a person knows, and feels about the capacity of a destination to be a solution to a recognised problem (Hawkin et al., 2001, Purdue, 2000). Destinations with a more positive destination image have a greater likelihood of being chosen as a final destination (Purdue and Meng, 2006).



CHAPTER 2

LITERATURE REVIEW

It presents a review of the literature dealing with the two main theoretical concepts relevant to this research topic: (i) medical tourism; (ii) destination choice; (iii) destination image. The chapter also explores the relationships that exist among these main theoretical concepts within the context of Thai medical tourism.

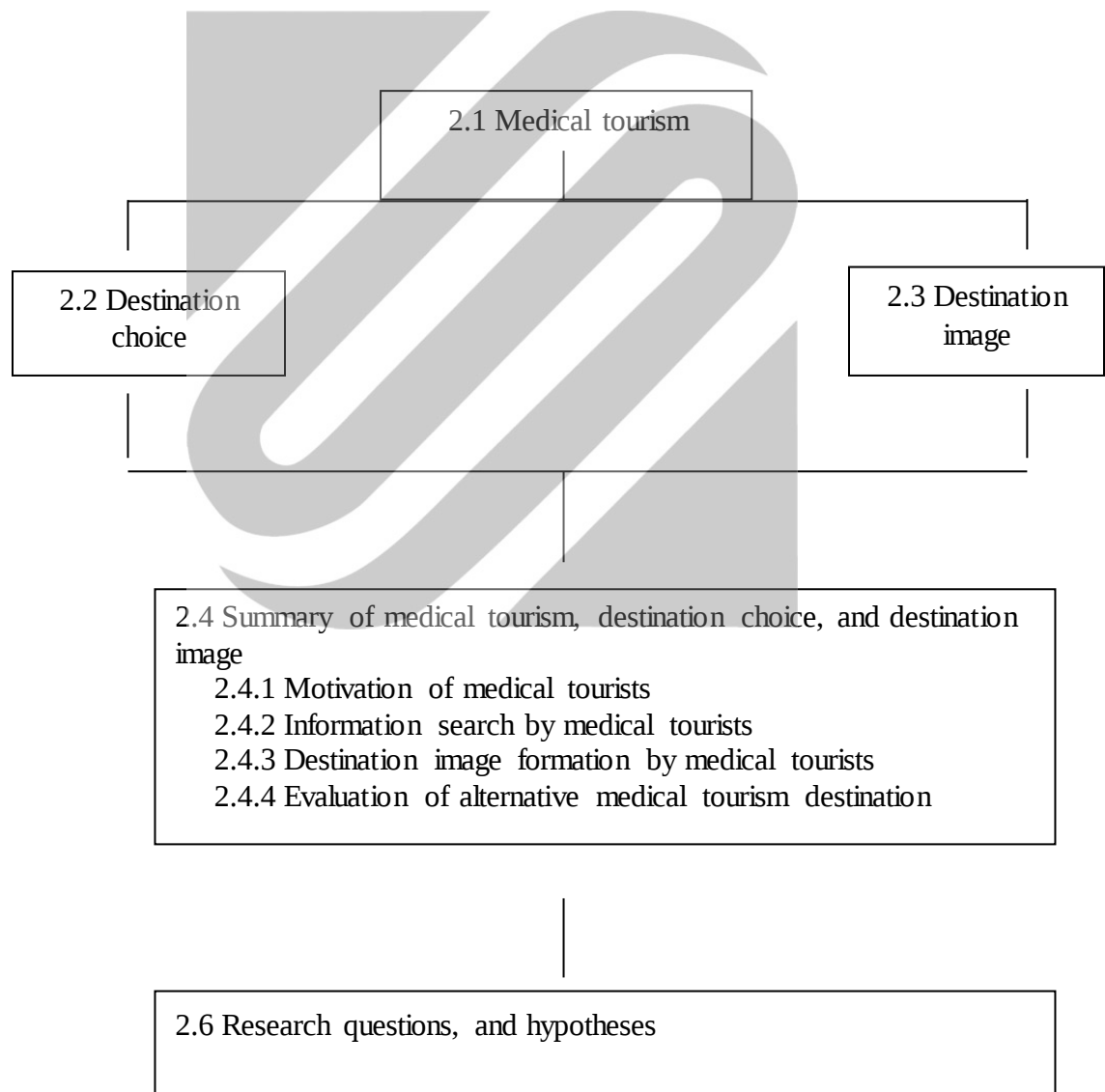


Figure 2.1 Outline Chapter 2

2.1 Medical tourism

2.1.1 Definition, and nature of medical tourism

From a destination perspective, medical tourism can be defined as the offshore provision of medical services, in combination with other conventional tourism products, by leveraging a comparative cost advantage (Awadzi and Panda, 2005, Percivil and Bridges, 2006). Destinations or countries that choose to pursue such medical tourism openly promote their health-care services, and facilities, in addition to their other conventional tourism attributes (Marlowe and Sullivan, 2007). From the perspective of the tourists, the aim of engaging in medical tourism is to obtain obligatory or elective medical treatment in a country other than their countries of residence (Connell, 2006, Jones and Keith, 2006, Percivil and Bridges, 2006). The term obligatory treatment refers to urgent, unscheduled therapy for serious illnesses, whereas the term elective treatment refers to scheduled non-essential therapies; in both cases, medical tourists choose to obtain treatment in a foreign country because the desired therapies are unavailable, illegal, costly or associated with an unacceptable waiting time in the home countries (Jones and Keith, 2006, Strategic and Marketing Magazine, 2007). Medical tourism is not a new concept. In ancient times people travelled to various spas, hot springs, and rivers seeking cures, and/or rejuvenation (Goodrich, 1994). More recently, people from developing countries have travelled to developed countries seeking more sophisticated medical treatment (Awadzi and Panda, 2005).

However, the contemporary trend is now in the opposite direction as an increasing number of patients from developed countries travel to developing countries to receive medical treatment. This reversal of the older trend is mainly due to the increasing costs, and other limitations of the health-care systems in Western countries (Marlowe and Sullivan, 2007, MacReady, 2007, Deloitte, 2008, McDowall, 2006). Moreover, in recent years, many developing countries have made significant advances in their medical services (Vadanabha, 2007). Doctors, and nurses in these developing countries are increasingly well trained to international standards as medical education in these countries has adopted the methods, and requirements of Western medical education; in addition, many health professionals in developing countries have been trained abroad in Western universities (Awadzi and Panda, 2005). Another factor of

importance in enhancing the standards of medical care in developing countries has been the large number of modern, privately owned facilities that have been established in these countries. These private clinics possess the latest technologies, and are able to offer a range of complex medical procedures at lower cost than in developed countries (Garcia-Altes, 2004, M2 Presswire, 2008). These developments together with trade liberalization, and ease of international travel Fletcher and Brown (2002), constitute what Awadzi and Panda (2005), have termed the third world advantage.

2.1.2 Demand, and supply factors in medical tourism

The *demand* for medical tourism comes from people in developed countries seeking medical care in developing countries for reasons of cost, and availability (Awadzi and Panda, 2005, Moody, 2007). One of the fundamental reasons for this demand is the existence of regulatory constraints in most developed countries that forbid the presence of foreign operators, and investment in the health-care sector, thus limiting the capacity of domestic health-care systems to supply services in terms of both infrastructure, and human resources (Garcia-Altes, 2004). Moreover, these regulatory constraints lead to a lack of real competition in the healthcare sector in many developed countries which has the potential to increase the price of medical procedures, and insurance premiums, lower the quality of services to consumers, and increase bureaucratic complexity (Connell, 2006). These capacity constraints, and lack of competition cause inconvenience to prospective patients in many developed countries (Delinsky, 2005, Awadzi and Panda, 2005). Long waiting lists, high costs, and excessive bureaucracy tend to make the health-care systems in developed countries inaccessible to many people, and increase demand for alternative sources of medical services (Garcia-Altes, 2004, Awadzi and Panda, 2005).

In addition to these restraints on supply in developed countries, there is a demographic trend in virtually all Western countries for people to live longer, and seek better health. As a consequence, more people from a range of socio-demographic groups in these countries are actively seeking quality health-care services that are cost-effective, and accessible (Caballero, Danell and Mougomba, 2006, Garcia-Altes, 2004, Awadzi and Panda, 2005, Marlowe and Sullivan, 2007, Ramirez de Arellano, 2007). Ageing baby boomers (those born soon after the end of World War II) have

redefined the conventional view of the elderly (Kotler and Keller, 2006). Despite their chronological age, baby boomers still live active lives, and care about their appearance. These people who often have high disposable incomes, are increasingly likely to consume aesthetic products, and seek cosmetic services (Garcia-Altes, 2004, Kotler and Keller, 2006, Delinsky, 2005).

Moreover, the increased demand for cosmetic services in Western countries is not restricted to the older generations; for example, Botox injections have now become popular among young adults, and teenagers (Healy, 2008). This greater demand for cosmetic surgery now pervades all age cohorts, but meeting such demand is usually outside the scope of government policies, and insurance coverage. Prospective medical tourists thus choose to obtain overseas treatment (both obligatory, and elective) because such treatments are unavailable or difficult to access (or even illegal) in their countries of residence (Jones and Keith, 2006).

In summary, the demand for medical tourism is driven by changing demographics, economic factors (fees, and insurance costs), and the limited availability, and accessibility of many medical services in developed countries. On the *supply* side, the rapid developments in the medical services of various developing countries in terms of human resources, and facilities represent an appealing alternative to prospective medical tourists (Connell, 2006). The medical competence of doctors, and nurses in many developing countries is now comparable to developed countries as a result of Westernised medical education in developing countries, and an increasing trend for health professionals to undertake training abroad (Jones and Keith, 2006). The standards, and outcomes of medical procedures offered in developing countries are now comparable to those pertaining in the medical tourists countries of residence (Jones and Keith, 2006). Therefore, people from developed countries are more confident in receiving medical treatments in developing countries. The increasing privatisation of the health-care sector in developing countries has also enhanced the growth of medical tourism as both investment, and the employment of highly trained professionals continues to grow in the private sector (Awadzi and Panda, 2005, Connell, 2006, Ramirez de Arellano, 2007). The emergence of privately owned medical facilities with access to the most sophisticated medical technology has

brought about a significant improvement in the standards of facilities (Connell, 2006, Goodrich, 1994, Department of Export Promotion Jakarta Office, 2007).

Although the cost of medical treatment in these privately owned facilities is much higher than the cost of similar treatment charged by state-owned organisations for domestic health-care services in developing countries, the overall lower cost of living in these countries (compared with developed economies) means that the relative costs incurred by medical tourists from developed countries is extremely competitive compared with costs they would incur for the same services in their home countries (Awadzi and Panda, 2005, Connell, 2006). Indeed, the comparative cost advantage in developing countries allows private health-care providers in these countries to design pampering services that are very attractive to medical tourists (for example, in terms of relatively high nurse/patient ratios) while still remaining much cheaper compared to similar procedures in developed countries (Connell, 2006). The effect of these demand, and supply factors in medical tourism has been facilitated by significant changes in the global business environment in recent years. These changes include: increasing globalization, and trade liberalisation, enhanced communication through digital technologies, increasing economic deregulation in developing countries, and a greater propensity for Westerners to travel abroad (Awadzi and Panda, 2005, Fletcher and Brown, 2002).

As the demand for overseas medical treatment has increased, prospective medical tourists no longer perceive difficulties in travelling abroad. Higher levels of education, greater disposable income, and increased media exposure of foreign countries has increased the propensity of Westerners to travel to developing countries (Delinsky, 2005). These lifestyle, and demographic changes in developed economies together with the increasing ease of international air travel have facilitated the demand for medical tourism. Digital technology has also played a crucial role in enabling real-time communication, and diffusion of information. This has meant that prospective medical tourists are more knowledgeable about medical procedures, and the availability of various services to address the health problems that they are facing (Awadzi and Panda, 2005, Caballero-Danell and Mougomba, 2006, Fletcher and Brown, 2002).

In addition, digital technology has facilitated networking among both providers, and consumers of health-care services across borders (Jones and Keith, 2006). Free trade liberalization, and deregulation has also facilitated the flow of production factors across borders including people, medical supplies, and therapeutic devices (Percivil and Bridges, 2006, Fletcher and Brown, 2002). The importation of medical supplies, and devices has been facilitated by deregulation, and improved travelling logistics have made transportation of people, and equipment quicker, and more accessible (Fletcher and Brown, 2002, Lovelock, 2001).

2.1.3 Motivations of prospective medical tourists

Medical tourists include a broad range of people who travel to receive medical treatment abroad. Apart from people from developed economies, medical tourists can also include the so-called *élite* from developing countries, and foreign expatriates residing in neighbouring countries (Ramirez de Arellano, 2007). Prospective medical tourists include: (i) the *uninsured* (people who choose not to insure their health, usually because they cannot afford the insurance policies); (ii) the *underinsured* (those whose insurance policies do not cover the expenses that are really incurred when they receive medical treatment); and (iii) the *uninsurable* (those who do not meet the criteria to buy insurance policies or whose preferred medical treatment is unrecognised or prohibited in their own countries) (Moody, 2007, Awadzi and Panda, 2005, Marlowe and Sullivan, 2007, Connell, 2006, Cosh, 1997). Americans, in particular, are said to be susceptible to unexpected, and excessive medical, and dental expenses (Pedersen, 2007, Marlowe and Sullivan, 2007, York, 2008). Corporations are also one of the targets of medical tourism (Marlowe and Sullivan, 2007, Moody, 2007, Smith and Forgione, 2007). Many of these companies have to pay large medical bills as part of the fringe benefits they provide to their employees. In many cases these involve complicated, and costly medical procedures. It can be attractive for these firms to refer employees who require complicated procedures to offshore medical service providers. Retirees who choose to spend their lives as long-stay tourists in foreign countries can also be targeted as potential customers of medical tourism (Norra, 2007, Pedersen, 2007, Connell, 2006, Business Line (The Hindu), 2009).

Some countries, such as Japan, and Singapore, actually encourage their citizens to retire abroad, and these retirees often require medical care on a frequent

basis (Connell, 2006). The adoption of medical tourism by these various groups of people can be either preventive behaviour or protective behavior (Carter and Kulbok, 2002). Individuals who engage in such preventive or protective health behaviours are motivated to do so by a variety of environmental factors (Carter and Kulbok, 2002). These include health locus of control, social support, income, education, and health status.

In particular, health locus of control which refers to an individual's perception of personal ability to control his or her health Wallston (1994), Moshki (2007) is important in the context of medical tourism. If a person believes that he or she has a high degree of control over personal health, that person is said to possess a high level of internal health locus of control; such people are more motivated to engage in healthy behaviour (Wallston, 1994). Social support is also an important influence on an individual's motivation to engage in healthy behaviour; individuals who are satisfied with their social support are more likely to engage in health enhancing activities (Callaghan, 1998). In general, the literature suggests that people who have an internal locus of control, good social support, a high level of education, and a large income are more likely to engage in healthy behaviours.

However, a desire to achieve, and maintain good health does not fully explain the motivation for a person to engage in medical tourism. As noted above, people seek treatment overseas for a range of other reasons. These include economic motivations, a desire to minimise the waiting time for treatment, and the availability (and legality) of certain therapies. Other motivations include a desire for anonymity, and an agreeable recuperation environment (Business Line, 2009, Macready, 2007, Deloitte, 2008, Anonymous, 2009, Connell, 2006). Of these, economic factors, availability, and waiting times appear to be the dominant factors in motivating people to adopt medical tourism.

In summary, the target clientele of medical tourism are primarily the uninsured, underinsured, and ninsurable from developed countries. In addition, potential medical tourists include expatriates, long stay tourists, the so-called *élite* from developing countries, corporate firms, and insurance companies that wish to refer people to foreign countries under the arrangements of their health-care coverage. The motivations for such people seeking medical treatment overseas are primarily

economic factors, availability of particular therapies, and a desire to minimise waiting time.

2.1.4 Marketing of medical tourism

Many developing countries, including Thailand, now see medical tourism as a lucrative market, and are attempting to attract medical tourists from all over the world (Connell, 2006, Chinai and Goswami, 2007, Chow, 2009). As a result, medical tourism in such countries as Thailand, and India has shown two digit growth per annum in recent years (Connell, 2006). Medical tourism in India is expected to be worth USD\$1 billion by 2012, and revenue from foreign patients to Thailand rose from USD\$900 million in 2004 to USD\$1.25 billion in 2005 (Connell, 2006, Ramirez de Arellano, 2007, Service Promotion Department, 2007). Given the large amounts of money involved, competition among developing countries for medical tourists is expected to intensify (Connell, 2006, Chow, 2009).

In view of the motivations for medical tourism noted above, the two major leverage points for medical tourism destinations in attracting medical tourists are likely to be: (i) price; and (ii) quality of service (Awadzi and Panda, 2005, MacReady, 2007). Prospective destinations are therefore striving to upgrade their medical services, and adopt Western protocols to cater to the needs of foreign patients (Connell, 2006, Strategic and Marketing Magazine, 2007). Some destinations are also attempting to position themselves as specialists in particular technologies, and therapies (Connell, 2006, Chow, 2009). South-East Asia has emerged as the region with the greatest potential for medical tourism; indeed, four of the world's main medical tourism destinations (Thailand, Singapore, Malaysia, and the Philippines) are in South-East Asia (Department of Export Promotion (Manila Office), 2008). Some countries, such as Taiwan, Singapore, Iran, and Korea are not only positioning themselves as medical tourism destinations but are also being targeted by competing destinations as potential sources of medical tourists (Choo, 2002, Department of Export Promotion (Jakarta Office), 2007, Department of Export Promotion (Manila Office), 2008, Korea Health Industry Development Institute, 2007).

In the case of Singapore, which is seeking to leverage its internationally accredited infrastructure, and resources Chow, (2009), M2Presswire, (2008), 571,000 medical tourists visited the country in 2007. Singapore expects this number to

increase to one million visitors (generating more than USD\$1 billion dollars) per annum by 2012 (Chow, 2009, Choo, 2002). Singapore offers the latest medical technologies (Chow, 2009), but the country's major disadvantage is the cost of its health-care services, which is the highest among Asian medical tourism destinations (Choo, 2002, M2Presswire, 2008). Taiwan (Chinese Taipei) promotes itself as a medical tourism destination by using small-scale procedures as its main selling point (Department of Export Promotion (Manila Office), 2008).

However, Taiwan is also a potential source of medical tourists to other countries. Despite the imposition of a compulsory health insurance plan for all citizens, Taiwanese people are still required to spend large sums of money for procedures that are not covered by the obligatory health plan. There are thus opportunities for other Asian medical tourism destinations, including Thailand, to attract Taiwanese people to visit their countries for medical services (Department of Export Promotion (Manila Office), 2008).

However, the two main obstacles to success in promoting Thailand as a potential medical tourism destination for Taiwanese people are the language barrier, and the apparently negative perceptions of Thai medical standards held by Taiwanese people (Department of Export Promotion (Manila Office), 2008). Korea aims to be a preferred medical tourism destination by leveraging its ranking as 14th in the world in terms of the standards of its medical services (Korea Health Industry Development Institute, 2007). Korea receives 30,000 foreign patients per year. These people travel to Korea for therapies that offer a blend Western, and Oriental medicine.

However, Korea is also a potential source of medical tourists to other countries. Despite the fact that health insurance is obligatory for all Koreans, many Koreans travel overseas for therapies that are outside the scope of coverage of the national insurance policies. In view of the ASEAN–South Korea free trade agreement, Thailand is well placed to compete for these potential medical tourists (Thai News Services, 2009).

Although Iran positions itself as a medical tourism destination, it suffers from certain negative images about the quality of care such as reports of complications arising from surgeons also giving anaesthetics while simultaneously attempting to perform cosmetic-surgery procedures. In terms of being a potential source of medical

tourists to other countries, it is of interest that one-tenth of young Iranian females are reported to have had, or currently be seeking, cosmetic-surgery procedures (McDowall, 2006). The Asian countries that position themselves only as receptive medical tourism destinations include Thailand, India, Malaysia, Indonesia, and the Philippines (Department of Export Promotion, McDowall, 2006, Choo, 2002, M2Presswire, 2008). Although India suffers from an adverse image with respect to sanitation, and the standard of its health-care industry, the government has been seriously promoting the country as a medical tourism destination by leveraging its relative cost advantages (M2Presswire, 2008, Chinai and Goswami, 2007); for example, in 2006, the Indian government introduced a specific type of visa for medical tourists, and their companions in order to facilitate their visits. Indian health-care providers blend conventional medical therapies with traditional Ayurvedic therapies (Chinai and Goswami, 2007), Business Line, (2009), which has led to some success as reflected in the high-paying clientele that India has attracted.

In particular, with a view to attracting Muslim medical tourists, Malaysia promotes Islamic practices among its health-care providers (Awadzi and Panda, 2005). In the case of Indonesia, expatriates, diplomats, and the so-called *élite* have long been accustomed to travelling to other countries (mainly Singapore) to receive medical treatment because there is no private health care in the country, and the standards of medical practice, and public health-care facilities are generally poor (Department of Export Promotion (Jakarta Office), 2007).

This obviously provides opportunities for other developing countries to offer medical tourism services to certain Indonesians. Developing countries outside Asia are also active in pursuing this lucrative market. Developing countries are not alone in pursuing the medical tourism market. While continuing to generate medical tourism for other countries, developed countries (such as Canada and Australia) are simultaneously courting medical tourists (Weaver, 2008, Cosh, 1997).

Nevertheless, the country also courts medical tourists from the United States by leveraging its own relative cost advantages, and the short distance between the two countries (Cosh, 1997). The Australian medical tourism market has also grown significantly within the past five years, despite the fact that an increasing number of Australians are now travelling to developing countries for medical care as a result of

the relative cost advantage (Weaver, 2008). The lower cost of surgical procedures in Asian countries, and the relatively cheap travel from Australia to those countries, make medical tourism appealing to Australians despite certain concerns about the quality of care being offered (Weaver, 2008). In particular, cosmetic-surgery procedures are popular among Australian medical tourists.

In terms of marketing, it should not be assumed that one offering appeals equally to all prospective medical tourists. Indeed, prospective medical tourists from different countries tend to have particular preferences for certain destinations; for example, whereas medical tourists from Europe are inclined towards India, and Thailand, Westerners who are resident in Asia tend to prefer Malaysia, and Singapore over other Asian destinations (Connell, 2006). As with all marketing, the success of a medical tourism destination thus depends on accurate customer segmentation, careful targeting, and adept positioning (Kotler and Keller, 2006, Decrop, 2000). In the case of the medical tourism market, segmentation should primarily be based on: (i) types of health conditions; and (ii) income (Goodrich, 1994).

In addition, the marketing of medical tourism should take account of the opportunities provided for corporate firms, and insurance companies to offer enhanced benefits to their employees/clients at lower costs (Marlowe and Sullivan, 2007). However, marketers should recognise that insurance companies, and corporate firms harbour several concerns about the services being offered. These concerns include quality of care, saving potential, sponsor liability, travel related exposure, and tax implications (Marlowe and Sullivan, 2007).

2.2 Destination choice

2.2.1 Involvement, and destination choice

Choosing a destination is a multi-step decision-making process in which different individuals invest varying levels of effort, depending on their level of involvement (Crompton, 1992, Hawkin, 2001, Hudson, 1999, Decrop, 2000). The concept of involvement refers to the *personal relevance* of a particular good or service (or a particular purchase situation) to a given individual; this personal relevance is, in turn, determined by personal motivation, and interest at a particular point in time (Zaichkowsky, 1985). Such involvement is an antecedent for other purchase-related variables including information search, learning, perception of brand

image, evaluation of alternatives, and ultimately, a decision on brand preference (Swarbrooke and Horner, 2007, Hawkin, 2001, Crotts, 2000, Hudson, 1999, Decrop, 2000, Goosens, 2000). Customers who have *low levels of involvement* engage only in an internal search to support their decision-making (Hawkin, 2001). This process has been called nominal decision-making. Such nominal decision-making is typically applied to three types of purchase: (i) low-involvement purchases; (ii) repeat purchases; and (iii) brandloyal purchases (Hawkin, 2001, Friedrichs and Opp, 2002).

Although the choice of medical tourism destination is typically a high involvement decision, medical tourism destinations, and health-care providers can nonetheless benefit from brand loyal purchasing if they manage their customer relationships, and service encounters effectively (Hawkin, 2001, Decrop, 2000). Customers who have *medium levels of involvement* typically engage in limited external search activities, in addition to the internal search noted above (Hawkin, 2001). In making their choices, relatively few criteria are taken into consideration, and there is typically a low level of post purchase dissonance. Such limited decision-making might be employed in making decisions regarding certain emotional or environmental needs such as a response to boredom or a desire for novelty (Hawkin, 2001). Customers who have *high levels of involvement* engage in so-called extended decision-making regarding the products or services that they purchase. These high-involvement customers engage in extensive internal, and external searches and take many criteria into account in making their decisions (Hanlan, 2006). A high degree of information search typically involves a complex process in which multiple decision rules are applied (at different levels of importance) to evaluate the various alternatives under consideration (Hawkin, 2001, Decrop, 2000). After the purchase decision has been made such customers often still have doubts about the wisdom of their decision, and continue to receive information about the alternatives that they did not choose.

Post-purchase dissonance is thus a relatively common occurrence, and an important factor to be taken into consideration regarding possible repeat purchases, and dissemination of word of mouth opinions (Turley and LeBlanc, 1995)., Zaichkowsky (1985) noted that high involvement customers engage in more search activities, and extended problem solving behaviour, whereby they consciously evaluate alternatives, perceive more pronounced brand differences, and have stronger

brand preferences within a given product category. In terms of making a destination choice for medical tourism, it can be assumed that the level of involvement will be high, and that people will usually engage in extended decision-making to reduce the risk of making a wrong decision about an important personal issue (Goosens, 2000, Prentice, 2006).

2.2.2 Motivation, and destination choice

Motivation, which has a determining role in the whole decision-making process (Hanlan, 2006, Moutinho, 1987, Seddighi and Theocharous, 2002), can be defined as the needs, and/or desires that induce certain actions, and behaviour (Moutinho, 1987, Mansfeld, 1992, Fodness, 1994, Awaritefe, 2004). As such, motivation is the major antecedent factor in making a purchase Jang and Cai, (2002), and the basis for information search behaviour, evaluation of alternatives, and post-purchase evaluation (Hanlan, 2006, Hawkin, 2001, Seddighi and Theocharous, 2002). Motivation can be understood as consisting of push factors, and pull factors. Push factors are the intrinsic drivers or goals of making a choice among alternatives, whereas pull factors are the attributes of the various alternatives that are perceived as satisfying the push factors (Jang and Cai, 2002, Dann, 1981, Botha, 1999, Mansfeld, 1992, Goosens, 2000).

In the case of medical tourism, a thorough understanding of these push factors, and pull factors enables destination managers to know: (i) what stimulates the demand for medical tourism; and (ii) what attracts people to certain destinations (Baloglu and Uysal, 1996, Klenosky, 2002). McCabe (2000) contended that people travel because of two major motivations: (i) a desire to escape; and (ii) a desire to seek. Crompton (1979) identified seven leisure motivations (escape from a mundane environment; exploration for oneself; relaxation; prestige; regression; enhancement of kinship; and social interaction) as push factors that internally motivate people to travel. Crompton (1979) also identified two other leisure motivations (novelty, and education) as pull factors; that is, destination attributes that draw prospective tourists towards certain destinations according to their intrinsic needs.

The relationship between the two types of factors can be explained in terms of so called means, and ends theory whereby prospective tourists use destination attributes as a means of achieving their ends (in accordance with intrinsic motivation)

or reducing tensions caused by any discrepancy that exists between their actual state, and their desired state (Klenosky, 2002, Hawkin, 2001, Moutinho, 1987). In leisure tourism, a choice of destination involves a twofold decision: (i) a decision as to whether to go on a trip; and (ii) a decision on where to go (Um and Crompton, 1990).

The first is largely determined by the push factors of motivation whereas the second is largely determined by pull factors. Similarly, in the context of medical tourism, prospective tourists have first to decide whether they are willing to travel to other countries to receive the desired medical procedures; only after making this decision do prospective tourists begin the process of selecting a particular medical tourism destination on the basis of whether the attributes of the destination are likely to satisfy their needs (Um and Crompton, 1990). Prospective medical tourists therefore exert considerable effort in searching for information about the quality, availability, and cost of the medical services available in different destinations (Um and Crompton, 1990, Mansfeld, 1992, Hyde, 2008). Evaluation of these attributes is clearly more important to medical tourists than other attributes that are essentially irrelevant to their medical needs.

2.2.3 Information search, and destination choice

The term information search refers to a person's retrieval of the knowledge (either stored in memory or acquired) that is required to make a correct decision (Gursoy, 2003, Gursoy and McCleary, 2004). Once prospective tourists are motivated by push factors to make a decision regarding a travel goal, they begin the information-search phase of the decision-making process. They first engage in an internal search of long-term memory, followed by an external search of other sources of information if they feel that the information retrieved from the internal search is insufficient (Um and Crompton, 1990, Hensher, 1999, Moutinho, 1987, Gursoy and McCleary, 2004). Because decisions regarding a choice of destination typically involve high involvement, prospective tourists usually engage in an extensive external search (Mansfeld, 1992, Crotts, 2000, Hawkin, 2001, Zaichkowsky, 1985). As a result of such an external search, any previously held image of a destination tends to change as a consequence of exposure to new information, and the high level of involvement (Hawkin, 2001, Um and Crompton, 1990). An external search can involve informal,

and/or formal sources of information. *Informal* information sources typically involve social contacts with friends, and family members (Mansfeld, 1992, Belch, 2001).

Although such informal information usually lacks a high level of credibility, it is often ranked highly in terms of trustworthiness. Prospective tourists therefore tend to depend on this type of information throughout the decision-making process (Swarebrooke and Horner, 1999, Wirtz and Mattila, 2003, Dholakia, 2000, Molina and Esteban, 2006, Mansfeld, 1992). *Formal* sources of information include a broad range of marketing resources generated by specific destinations, and tourism intermediaries (Kozak, 2007, Mansfeld, 1992). According to Mansfeld (1992), this type of formal information is ranked highly in terms of both credibility, and quality. In making an internal search, prior knowledge about a destination serves as a convenient starting point for prospective travellers (Purdue, 2000).

In the context of medical tourism, it can thus be assumed that positive direct experience of a given destination will influence the confidence that a consumer places in the destination, even if the information accumulated from the previous experience might not be directly relevant to medical tourism. In this regard, the concept of product knowledge is important. Product knowledge has been posited as a multi-dimensional construct that is comprised of: (i) product familiarity (the degree of experience a prospective tourist has with a destination or a perception of how much they know about the attributes of the destination); and (ii) product expertise (objective knowledge about the ability of a product to perform specific tasks) (Gursoy, 2003, Wirtz and Mattila, 2003, Punj and Srinivasan, 1989). The relationship of *product familiarity*, and external search behaviour is said to be in the form of U-shape; that is, prospective visitors with either very low or very high familiarity tend to engage more extensively in external search behaviour (Gursoy, 2003).

However, these two groups of potential tourists require different types of information (Gursoy, 2003, Wirtz and Mattila, 2003). Potential visitors with low familiarity require easy-to-understand information that enables comparisons to be made with other alternatives; in contrast, potential visitors with high familiarity require more detailed information from destination-specific sources that focuses on certain important attributes (according to the motivation to travel) (Gursoy, 2003, Hyde, 2008). In the case of medical tourism, it can therefore be assumed that

prospective tourists with different levels of product familiarity will rely on different sources, and types of information. With regard to *product expertise*, a prospective tourist with a high level of such expertise tends to rely on an internal search because he or she is already confident about having the level of knowledge required to make a correct decision (Wirtz and Mattila, 2003). According to Bieger and Laesser (2004) contemporary leisure tourists seeking external information now tend to rely more heavily on information from brochures or Internet websites, rather than the traditional reliance on information from travel agents.

However, in the case of potential visits to remote destinations, prospective leisure tourists still tend to rely on travel agents because the tourists have limited product knowledge, and perceive that a greater risk is associated with a decision to visit such a location (Bieger and Laesser, 2004, Mansfeld, 1992). Nevertheless, whatever their primary source of information, it has been shown that the majority of prospective tourists do not rely on only one source of information; rather, they use information from various sources in combination (Crotts, 2000, Mansfeld, 1992). The significance of these findings for medical tourism is that prospective medical tourists are typically faced with a scenario similar to a potential visit to a remote location, there is a relatively high perceived risk, and limited knowledge about the product (the medical procedures involved, and the standards of care in foreign countries). It is therefore reasonable to hypothesize that potential medical tourists will be less likely to rely on information provided by brochures, and other marketing materials, and more likely to rely on local experts (doctors, and insurance companies). In marketing a destination as a preferred medical tourism destination, it would therefore be reasonable to assume that networking, and relationship management will tend to be of great importance. Information facilitates decision-making because, among other things, it serves to reduce perceptions of risk (Mansfeld, 1992, Hawkin et al., 2001, Crotts, 2000). The higher the risk perceived by decision-makers, the more likely it is that they will engage in extensive information-search activities (Bieger and Laesser, 2004, Mansfeld, 1992, Gursoy, 2003, Sonmez and Graefe, 1998). Given the high involvement, and perceptions of risk associated with medical tourism as compared to leisure tourism, it is therefore reasonable to expect that medical tourists will engage in extensive information search activities, and exert a high level of mental effort in

processing information about the procedures involved, and the attributes of various medical tourism destinations (Moutinho, 1987, Gursoy and McCleary, 2004, Hanlan, 2006). Medical tourism destination marketers therefore need to ensure that adequate information about the costs, and standards of care of the medical services being offered is available to prospective visitors. To facilitate their potential clients search behaviour, this information should be presented in a manner that is accessible, and easy to understand. Destination marketers should also appreciate that the time that elapses between a decision on a destination, and the actual travel allows for the possibility of so called post purchase dissonance (that is, doubt about the wisdom of the purchase decision) (Crompton, 1992, Hawkin, 2001).

After a destination has been chosen, prospective tourists continue to be exposed to information about the chosen destination, which might make them doubt the wisdom of their choice (Crompton, 1992, Mansfeld, 1992, Purdue and Meng, 2006). Indeed, after the decision has been made, some prospective medical tourists might actively continue to search for even more information about both the procedures that are envisaged, and other aspects of the destination to complement the information that they had previously acquired before the decision was made.

A choice set is shaped by a combination of internal factors (motivation, lifestyle, prior knowledge), and external factors (marketing efforts through marketing mixes) (Crompton, 1992, Biehal and Chaakravarti, 1986, Um and Crompton, 1990, Sirakaya and Woodside, 2005). Because these internal, and external factors can vary, different choice sets are formed for different decisions aimed at solving different problems (Mansfeld, 1992, Turley and LeBlanc, 1995). Indeed, a given individual can form different choice sets to solve the same problem as he or she comes to possess different previous experience, and different knowledge about possible destinations, and their attributes (Purdue and Meng, 2006, Botha, 1999).

The initial choice set is formed soon after an individual is motivated to make a destination choice. All of the known alternatives that might offer potential solutions to the problem at hand form the initial choice set (Mansfeld, 1992, Botha et al., 1999, Huybers, 2005). This initial choice set for consideration is formed as a result of an internal search that excludes alternatives that are perceived to be unable to satisfy the person needs or are perceived to be outside any economic or time constraints that

might apply (Crompton and Ankomah, 1993, Molina and Esteban, 2006, Crompton, 1992). Being included in the initial choice set for consideration obviously plays a crucial role in determining a destination's ultimate likelihood of success. Destinations that are not included in the initial consideration set have little chance of subsequently becoming the ultimate choice (Ankomah, 1996, Crompton and Ankomah, 1993, Woodside and Sherrell, 1977). Initial awareness of a destination is thus a crucial factor in achieving success in the decision-making process (Biehal and Chaakravarti, 1986, Woodside and Lysonski, 1989, Millman and Pizam, 1995). Indeed, a positive relationship between the level of awareness of a destination, and the intention to visit has been established in empirical studies (Woodside and Lysonski, 1989). Subsequent choice sets, which are also known as evoked sets or late consideration sets, are formed as more information is added as a result of external. Inclusion in a late consideration set obviously increases the chance of a destination being ultimately selected as the destination of choice (Woodside and Sherrell, 1977). According to Purdue and Meng, (2006), for a destination to be included in the evoked set, prospective tourists must perceive it as meeting attribute requirements, and must form positive attitudes towards it. In contrast, rejected alternatives usually suffer because the consumer has adverse perceptions regarding price, availability, and risks (Purdue and Meng, 2006, Hawki, 2001, Fischhoff, 2004).

The concept of a consideration set has several pertinent implications for medical tourism. Firstly, it is very important for destination marketers to create awareness of their destination as a viable alternative as the initial consideration set is being formed by internal information search (Crompton and Ankomah, 1993, Turley and LeBlanc, 1995); such initial awareness is closely aligned with the notion of destination image. Secondly, destination marketers must appreciate that all consideration sets are dynamic in nature. A destination might belong to one choice set but subsequently move to other sets as further information is added to the decision-making process (Turley and LeBlanc, 1995). In such a dynamic decision-making environment, marketing communication strategies, and activities obviously assume great importance.

2.2.4 Evaluation of alternative destinations

In evaluating alternatives to form a late consideration set or to make a final

destination selection, prospective tourists assign *utility* to various attributes of a destination on the basis of needs, experience, and constraints (Crouch and Louviere, 2004). In the case of medical tourism, the success rate of medical procedures, and hygiene factors are likely to be regarded as having more utility than traditional touristic attractions when making a decision on a choice of destination. Assuming that decision-makers are rational agents, alternatives with the *highest weighted average utility scores* are likely to be chosen (Purdue and Meng, 2006, Erasmus, 2001). From an economic perspective, contended that the demand for a destination is a function of several factors including consumer preference, expenditure impediments, price, quality of services, information (including marketing communication), and the emergence of new destinations. Of these factors, price, and expenditure impediment can be objectively measured, whereas the others are rather more intangible in nature (Walker and Ben-Akiwa, 2002). It is thus apparent that any exploration of the notion of comparative utility necessarily involves some concepts that can be directly measured, and others that can only be measured indirectly.

The process of choosing a destination can be analysed in terms of so-called information integration theory (ITT), which postulates that decision-makers proceed through the process of decision-making by making a series of value judgments (Sonmez and Graefe, 1998). These value judgments include perceptions of the physical reality of a destination's attributes, together with the formation of an overall destination image (Sonmez and Graefe, 1998). This theoretical framework assumes that a holistic judgment is made about a destination, and its image and that this holistic judgment has a significant influence on the destination choice behaviour of prospective tourists.

As noted above, the choice of a medical tourism destination is associated with a higher degree of perceived risk to personal health, and well-being, and hence a higher level of involvement, than that associated with other types of destination choice. The risks to which marketers should pay particular attention, and strive to minimise are not the objective, and measurable risks; rather, the subjective or perceived risks, regardless of whether they correspond to objective reality, represent the real issues of concern to marketers (Sonmez and Graefe, 1998). In assessing such risks, a useful approach is offered by so called protective motivation theory (PMT)

Sonmez and Graefe (1998) which refers to the cognitive processes of a decision-maker in making a risky decision. According to PMT, decision-makers not only apply their mental efforts to seeking information, but also evaluate each alternative in terms of risk-avoidance behaviour (Sonmez and Graefe, 1998, Bieger and Laesser, 2004, Fodness and Murray, 1997).

Therefore, the extent to which individuals act as rational decision-makers largely depends on the intensity of a threat, the probability of the threat occurring, and the individual's coping responses (Sonmez and Graefe, 1998). Risk can be defined as the expectation of loss, and/or cognitive conflicts between expectation, and possible outcomes (Mitchell, 1999, Bieger and Laesser, 2004). Such risk can be categorised into two types: (i) inherent risk (which refers to the intensity of threat that is inherently associated with a given category of service or product); and (ii) handled risk (which refers to the probability of threat associated with a particular purchase choice or buying situation) (Mitchell, 1999). In the case of choosing a medical tourism destination, prospective consumers usually perceive that both types of risks are high; that is, they typically perceive that the risk associated with the decision is high in both intensity, and probability of occurrence.

Moreover, they usually believe that they possess little or no capacity to control or cope with the risk consequences of their decision. Prospective medical tourists therefore tend to exert a high degree of mental effort, and personal resources to making the best-possible decision. Faced with these circumstances, prospective medical tourists typically set decision rules (or guidelines) for accepting or rejecting alternatives according to their motivations (Purdue and Meng, 2006, Hanlan, 2006). Such decision rules can be broadly categorized into two types: (i) compensatory rules (which allow for tradeoffs between different destination attributes); and (ii) non-compensatory rules (which do *not* allow for such tradeoffs) (Mansfeld, 1992). Choices of a leisure destination are usually decided by compensatory rules; that is, the choice is the result of balancing all desirable attributes according to the motivation to travel (Moutinho, 1987). In these cases, the chosen destination is the one that yields the highest weighted average utility level compared with other alternatives in the consideration set (Purdue and Meng, 2006, Mansfeld, 1992).

In contrast, non-compensatory rules play a more prominent role in choosing a medical tourism destination; in other words, this decision involves greater weight being given to non-compensatory attributes (about which no trade-off is allowed). Nevertheless, both types of decision rules *are* utilised in performing this choice (Crouch and Louviere, 2004, Mansfeld, 1992). Once alternative destinations have been assessed according to the criteria imposed by the non-compensatory rules, compensatory rules are then applied in the consideration process (Mansfeld, 1992). These factors include time, demographic variables (such as income, and education), actual experience with the destination, and cultural distance (Moshin and Ryan, 2004, Ng, 2007, Seddighi and Theocharous, 2002).

For example, the effects of demographic factors on destination choice have been studied by Moshin and Ryan (2004), who contended that age, gender, and income all influence the choice of a tourism destination (although it should be noted that the authors were unable to demonstrate statistically significant relationships). Seddighi and Theocharous (2002), who examined several internal factors in their study, reported that age appeared to be the most influential factor in the evaluation of destination attributes, and destination choice.

With regard to cultural distance, which refers to the degree of cultural dissimilarity between countries, Ng et al. (2007) found that a negative correlation does exist between cultural distance, and an intention to visit. In explaining this negative correlation, it has been argued that a small cultural distance between two countries reduces perceived risk in terms of cultural values, and idiosyncrasies (Ng et al., 2007, Fletcher and Brown, 2002). Marketers of medical tourism destinations should therefore be prepared to take a variety of approaches when marketing destinations to prospective tourists from different cultures. It is apparent from the above discussion that destination marketers (of both leisure destinations, and medical tourism destinations) should seek to create an offering that matches both the external factors, and internal factors that determine destination choice. In doing so they should take into account such factors as income, age, cultural distance, and the time constraints of target tourists.

2.3 Destination image

2.3.1 Definition of destination image

Although the term destination image has been defined in various ways, and there is no consensus on the details of the concept (Gartner, 1993), most scholars are in general accordance with Hunt's (1975) description of image as being constituted by the perceptions of prospective tourists about the elements such as climate, people, and culture that influence the attractiveness of a destination. In a similar vein, Mackay described image as a compilation of impressions, and Bojanic (1991) defined destination image as the impressions that people hold about a country in which they do not reside. Echtner and Ritchie, (1993) described a destination image as an impression or perception of a place based on a mental representation of the attributes, and potential benefits of the destination. Other authors have emphasised the *selectivity* of the concept. For example, Tasci and Gartner (2007) described image as a mental representation of a place on the basis of selected information cues stated that the image of a product or service is formed from inferences as a result of relatively few message elements from a vast amount of information in the message milieu.

2.3.2 Role of destination image in choice of destination

Like all images, destination images are formed, and stored in the memory of prospective tourists as a composite of discursive memories about a stimulus (Philips and Jang, 2007, Boush and Jones, 2006) (Chon, 1990, Echtner and Ritchie, 1993). This destination image is then utilised when a decision about choosing a destination is to be made (Echtner and Ritchie, 1993, Purdue, 2000). In forming such an holistic attribute based image, discursive memories are used to evaluate a destination on the criteria of most importance to the consumer in order to form an evoked set of alternatives for consideration.

To change the image held by tourists, marketing strategies must be carefully considered to ensure that convincing positive information is provided through the various marketing channels. (Larsen and George, 2006, Molina and Esteban, 2006, Tasci and Gartner, 2007). Research has shown that the greater the discrepancy between the communicated information, and the previously held image, the higher is the probability that such information will actually be remembered. However, care should be taken because it has also been shown that information that does not conform

to the core beliefs of recipients is likely to produce cognitive dissonance (Kotler and Gartner, 2004, Reynold, 1965).

2.3.3 General characteristics of a destination image

Gallarza et al. (2002), who conducted a review of the literature on destination image, concluded that all such images can be described as: (i) complex; (ii) multiple; (iii) relative; and (iv) dynamic. Each of these general characteristics is discussed in detail below.

2.3.3.1 Multiple nature

A destination image can be formulated with a variety of objectives in mind including destination marketing, sustainable development, and destination management (Gallarza et al., 2002). Moreover, any analysis of the construct must take account of the fact that a holistic destination image is derived from the prospective tourist's perception (and discursive memories) of various destination attributes. The way in which each individual attribute is portrayed in constituting the composite image must be carefully managed by destination marketers who should be aware of the multiple nature of any destination image. ((Chi and Qu, 2008); (Gallarza et al., 2002).

2.3.3.2 Complex nature

In analysing a destination image, it is important to appreciate its complex nature. Because prospective tourists come from different backgrounds, and have had different life experiences, they tend to perceive, and interpret phenomena, including a destination's image, in different ways (Baloglu and McCleary, 1999). In addition, their motivations will differ, which adds another layer of complexity to a destination image complex (Gallarza et al., 2002, Sirgy and Su, 2000). In the context of medical tourism, these differences in background, and motivation inevitably mean that medical tourists are unlikely to hold the same image of a destination as that held by leisure tourists.

2.3.3.3 Relative nature

Any destination image is relative because it necessarily stands in comparison to the images of other destinations. Moreover, no single object (including a destination) is perceived in the same way by everyone because people from different backgrounds, and motivations take different attributes of the object into account in

forming their perception of it. (Gallarza et al., 2002, Hong et al., 2006). Prospective visitors with different lifestyles, interests, and opinions are therefore likely to hold different images of the same destination. Image can thus be used for psychographic segmentation (Kotler and Keller, 2006).

Moreover, it has been shown that visitors with different images about a destination use different criteria, and exhibit different behaviours in making a destination selection. Destination image can therefore also be used as a basis for behavioural segmentation (Kotler and Keller, 2006).

2.3.3.4 Dynamic nature

Because any destination image is subject to changing influences, and circumstances, it should be managed to ensure that it responds appropriately to the changing environment, and competition. Marketers must be aware of these influences, and adapt their tactics accordingly (Gallarza et al., 2002).

2.3.4 Components of destination image

Image is a dynamic phenomenon that is developed from the tourist's cognitive, and affective impressions of various image elements. The term cognitive image refers to objective knowledge about the destination, whereas an affective image refers to a person's feelings about the various attributes of the destination, and the destination as a whole (Echtner and Ritchie, 1993, Tasci and Gartner, 2007, Walmsley and Young, 1998, Baloglu and McCleary, 1999, Beerli and Martin, 2004, Baloglu and Brinberg, 1997).

The two types of image components interact to form a composite overall image of the destination. As with attitudes towards all high-involvement purchasing decisions, the *cognitive* components of a destination image act as antecedents to the affective components (Baloglu and Brinberg, 1997, Baloglu and McCleary, 1999, Sonmez and Sirikaya, 2002, Beerli and Martin, 2004). People thus tend to form an initial evaluative perception of a phenomenon according to what they know about it (Ajzen, 2001). If the information about a destination is positive, and consistent with their core values, and personal goals at a given point in time, there is a high probability that the image that is formed regarding that destination will be strong, and positive.

The *affective* image of a destination is usually based on the motivation to travel. Tourists selectively attend to the cognitive components of a destination before forming attitudes about whether the attributes are likely to satisfy the needs that have motivated them to travel (Philips and Jang, 2007, Tasci and Gartner, 2007). Prospective medical tourists thus form an affective image by first attending to information about such destination attributes as quality of care, and potential for savings, rather than opportunities to travel. The marketing of a destination will be successful only if the information portrayed by these three types of image agents is consistent, and effective (Baloglu and Brinberg, 1997). Each of these three types of image agents is discussed in more detail below.

2.3.4.1 Induced components of destination image

Induced image agents portray the image as intended by the destination through all forms of marketing communication activities undertaken by the destination itself, and by other tourism, and hospitality organisations located in the destination. The information provided by induced agents is thus under the control of the destination, and presumably in accordance with the overall positioning strategy (Ibrahim and Gill, 2005, Foley and Fahy, 2004). Beerli and Martin (2004) subdivided induced image into two sub categories: (i) overt (which refers to direct marketing communication activities such as advertising, and sales promotion); and (ii) covert (which refers to associated activities to promote a positive image, such as cause related activities, and public-relations exercises). An important aspect of induced image is the notion of destination brand. A destination brand implies promises given by the destination to tourists with a view to inducing certain beliefs to the ultimate advantage of the destination (Radisic and Mihelic, 2006).

2.3.4.2 Autonomous components of destination image

Autonomous image agents are information sources that are beyond the control of destinations. These sources of information include news, documentaries, and guidebooks (Beerli and Martin, 2004). In this regard, negative images derived from issues not directly related to tourism can result in a negative overall image, and a reduced intention to visit (Sonmez and Sirikaya, 2002). Destination image is significantly influenced by autonomous image agents because information from these sources can cause some aspects of an image to be formed long before prospective

tourists even begin to think about visiting a destination. For example, the images conveyed in films, and documentaries can have a positive or negative effect on public perceptions of a destination (Larsen and George, 2006).

2.3.4.3 Influence of various image agents

Studies have shown that tourists consider that the information gained from organic, and autonomous agents is more credible, and trustworthy than information from induced image agents. Autonomous information about political unrest, and natural catastrophes can be very influential, especially if potential tourists lack previous personal knowledge of the destination (Hawkin et al., 2001, Tasci and Gartner, 2007).

2.3.4.4 Influence of recipient's characteristics

The characteristics of recipients including socio-demographic factors, motivation, and prior. Knowledge can influence the way in which people comprehend, and interpret information; these factors thus have the potential to affect image formation.

However, empirical evidence has failed to establish statistically significant relationships between the socio-demographic characteristics of prospective tourists, and destination image formation (Some scholars have continued to assert that differences do exist in the destination images formed by tourists of different demographic groups; however, it would seem that these assertions merely reflect the conventional wisdom about the behaviours of particular groups of tourists.

Culture is another internal factor that appears to influence the formation of a destination image. Culture, which can be generally defined as a set of beliefs, and ways of life consistently held by the members of a society, appears to influence perceptions, impressions, and interpretation of information (Tasci and Gartner, 2007). It is thus a factor to be considered in assessing the images formed by people from different backgrounds; however, culture is not believed to be the most important factor that influences the formation of a destination image.

2.4 Factors that influence destination choice

Choice has been defined as a transformation of motivation in purchasing action (Buhalis, 2000). The destination choice is made by alternative evaluation based on individual preferences, and goals, while evaluation of tourist product is based on

individual evaluative criteria (Moutinho, 1987). Factors that influence consumer behaviour can be internal, and external to the individual. Among the internal determinants are social, and personal, while the external ones include confidence in the travel agency, the overall image of alternatives, previous travel experience, travel constraints (time, cost, etc), degree of perceived risk, etc. Among the major influences of individual travel behaviour are family, reference groups, social classes, culture, and subculture that determine individual's personality, learning, motivation, perception (of alternatives), and attitudes (Moutinho, 1987). Eilat and Einav (2004) add destination risk to be one of the factors that influence destination choice, which, according to him, is important for both developed, and less developed countries, while fashion, common boarder, common language, and distance are also important determinants especially in less developed countries.

To understand consumer behaviour, it is necessary to examine the complex interaction of many influencing internal, and external factors. Moutinho's study (1987) deals with determinants of behaviour, culture, and reference group influences, the relationships between individuals, and their environments, perceived risks, and family decision processes. Numerous literature studies identify social, cultural, personal, and psychological factors that influence destination choice. Cultural factors consist of culture, sub-culture, and social class. Many researchers have noticed significance of culture. Culture is a set of beliefs, values, ideas, attitudes, and customs that characterise a particular society (cited in Moutinho, 1987). Consumer behaviour is gradually determined by his/her culture. Culture with its norms, and standards guide a consumer's behaviour (Moutinho, 1987).

Cultural norms have an impact on both tourists expectations, and their perceptions of received service quality. People from different cultural background have different image perceptions of a destination. According to culture affects not only the way in which people experience, and interpret goods, and services, but it has also an impact on decision-making process, and destination choice. Understanding of cultural particularities of a target group can explain, and forecast tourists behaviour. The influence of culture, and cultural differences on customer behaviour have been analysed in a variable marketing literature (cited in Weiermair, 2000). Among the social factors are reference groups, family, roles, and status. Reference groups -

family, religion, ethnic groups, trade union, neighbourhood etc - can be classified by primary (personal contact with a group), and secondary (occasionally), formal (trade union), and informal (neighbourhood) (Moutinho, 1987).

Personal factors include age, life cycle stage, occupation, economic circumstances, lifestyle, and personality. Psychological factors are perhaps the most complex, difficult to understand, and consist of motivation (theories of human motivation: Marshall, Freud, Veblen, Herzberg, Maslow), perception, learning, beliefs, and attitudes. Another important determinant of tourist's behaviour towards destinations, and services is the tourist's self-image what a person thinks he or she is, and what a person wants to be. There is a relationship between self-image, and product image that determines tourist's behaviour towards destinations, and services. Perception, and cognition influence the evaluation, and judgemental process. Attitude, and intention, created by learning, and experience are other important concepts in tourists behaviour discussions (Moutinho, 1987). The importance of previous travel experience in the destination choice has got wide discussions between the researchers. Many of them consider previous experience on the destination to be a significant factor in the destination selection process. Thus, Woodside and Lysonski (1989) and Opperman (1997) include previous destination experience in the tourist's variables that influence destination awareness, and preferences. On contrast, Mansfeld (1992) as well as Chon (1990) and Opperman (1997) consider that previous travel experience is a significant factor at the motivation, and information stage of the destination selection process rather than the actual destination choice. Similarly, Gnoth (1997, Opperman (1997) and Sirakaya (1996), and do not include previous destination travel experience in the factors that affect travel choice. Crompton (1992) and Opperman (1997) also do not consider previous experience important however he mentions unpleasant personal experience set as significant factor in the decision-making process of the tourists. According to them the influence of past travel behaviour on destination choice, and destination loyalty are not significant, however tourists with more travel experiences tend to be more confident about the destination they selected Sonmez and Graefe's (1999).

Tourist Variables

Propose of travelling

Age

Income

Marketing Variables

Product

Price

Place

Promotion

People

Physical environment

Process

Psychological factors

Knowledge

Belief

Value

Tourist variables

Purpose of travelling

When people plan to travel, and have leisure time most likely there is a rationale beyond it. One of the main reasons why many people love to go out of town or travel to other countries is because of love, yes, you heard it right love is the reason, know why? Hundreds, and even thousands of people around the world indulge in long distance romantic relationships. And obviously, at some point in time or at least once or twice in a year these lovers need to see each other, and these lovers are more than willing to travel for hour's even days just to see their lover, and spend some time together, so they need to travel.

So now you understand why love is one of the main reason people travel a lot. Aside from romance another reason why people travel from time to time is to relax, we are all aware that if you just go to work, and spend no time to play or relax then it is not a good idea at all. Travelling is really a big help for us to release the stresses we everyday experience at the office. Imagine yourself away from the office, and having a good time at a location with a very nice weather just like in the beach, isn't it relaxing.

Age

It refers to ageing, the effect of time on a person, age (geology), age (model theory), and an aspect of mathematical model theory.

Income

It is the consumption, and savings opportunity gained by an entity within a specified timeframe, which is generally expressed in monetary terms. However, for households, and individuals, “income is the sum of all the wages, salaries, profits, interests payments, rents, and other forms of earnings received... in a given period of time.” In the field of public economics, the term may refer to the accumulation of both monetary, and non-monetary consumption ability, with the former (monetary) being used as a proxy for total income.

Lifestyle

It is the typical way of life of an individual, group or culture. The term was originally used by Austrian psychologist. The term was introduced in the 1950 as a derivative of that of style in modernist art. The term refers to a combination of determining intangible or tangible factors. Tangible factors relate specifically to demographic variables, i.e. an individual's demographic profile, whereas intangible factors concern the psychological aspects of an individual such as personal values, preferences, and outlooks. In geographical terms, a rural environment as opposed to an urban metropolis would yield different results. This factor is most important as even within the urban scope a particular neighborhood acts as a determinant due to varying degrees of affluence, and proximity to open spaces.

Marketing variables

What is significant about services is the relative dominance of intangible attributes in the makeup of the “service product” Services are a special kind of product. Therefore the marketing mix has seen an extension, and adaptation into the extended marketing mix for services, also known as the 7P's. The essential elements of product, promotion, price, and place remain but three additional variables people, physical evidence, and process are included to 7-Ps mix. In this service marketing mix, the authors choose product, price, and promotion as the main target elements to analyze these two cases. Marketing are those activities associated with getting buyers

to purchase the product, including the channel selection, advertising, pricing, etc (quick mba website).

The 7 P's of service marketing

Product

Product is not only the tangible, physical entity that can be buying, and selling but should be viewed in several levels (Kotler, 2003). In this research, Hospitality products need to fulfill customers needs on several levels as follows:

Core product is the core benefit that the company provides, and makes it valuable to the customers (Kotler, 2003). It is a thing that is produced or grown, usually for sale, and a thing produced during a natural, industrial process, and chemical. Facilitation product is the services or goods that must be present for the customer to use the core products, and make customers can get some use out of it (yeeyan website). For example, service includes installation, customer support, complaint resolution, repair. Augmented product is referred to as the activities includes create warm atmosphere, and increase customers interaction with the service organization, and between each other (yeeyan website).

Price

Pricing strategy is referred to set a specific price for a product or service. It defines price as the amount of money that customers have to pay to get the product. Somebody may think that a low price is necessary to attract customers, but we should realize that the price is not the only element that customer concerned. Pricing strategy can divided into two parts: price determination, and price administration (university-essays website). Price determination can be defined as the processes, and activities which involved in consideration of relative prices of products, and differences in price for similar products of differing grades, and qualities to arrive at a price for a product. Price administration is the activities including making basic prices, and particular sales fit to each other. Some element need to concern such as geographic locale, position of distribution channel members, and so on (university-essays website).

Place

Place are those associated activities that mainly based on sales, communications, and so on to make the product available to the targeted customer.

Promotion

Promotion strategy is referred to as the processes, and activities that requires interaction between two or more people or groups, messages, media, and receivers to persuades targeted customers to buy their products or service by communicating the benefits, and values of its products with customers (Kotler and Armstrong, 2004). The communication includes the information communication that aim to gain the positive response from the targeted customers. The most effective way to deliver a message is advertisement, and sales presentation, and the destination is both the customers, and the potential consumer (University-essays website).

People

Various kinds of persons, who take part in the service activities, no matter directly or indirectly, comprise the marketing mix. (Booms & Bitner, 1981) Professional persons, customers, managers make the whole service process increase the value. Company must well manage their workers in the process of operation for guarantee the quality of the service. During the operation, and service toward to the customers, the behaviors, and attitudes of the workers bring various feelings, and feedbacks of the customers. Comfortable perception could bring the good word of mouths of the customers, and that could help the company build the good image.

Physical environment

Physical evidence refers to the design, and layout of the hotels, which can prove the levels, and power of the hotels. It is a tangible thing which includes the design of the rooms, the layout of the furniture in the rooms, the high-tech equipment in the meeting rooms.

Process

A series of activities in the process of operating a hotel are process. And the workers, and customers are the important elements in the hospitality marketing process (Booms & Bitner, 1981).

Psychological factors

Knowledge

Knowledge is a familiarity with someone or something, which can include facts, information, descriptions or skills acquired through experience or education. It can refer to the theoretical or practical understanding of a subject. It can be implicit

(as with practical skill or expertise) or explicit (as with the theoretical understanding of a subject); it can be more or less formal or systematic. It involves complex cognitive processes: perception, communication, association, and reasoning; while knowledge is also said to be related to the capacity of acknowledgment in human beings.

Belief

It is the psychological state in which an individual holds a conjecture or premise to be true. Dispositional, and occurrent belief concerns the contextual activation of the belief into thoughts (reactive of propositions) or ideas (based on the belief's premise).

Value

It is a set of consistent ethic values (more specifically the personal, and cultural values), and measures used for the purpose of ethical or ideological integrity. A well defined *value system* is a moral code. (Spaargaren, G. and B. VanVliet. 2000).

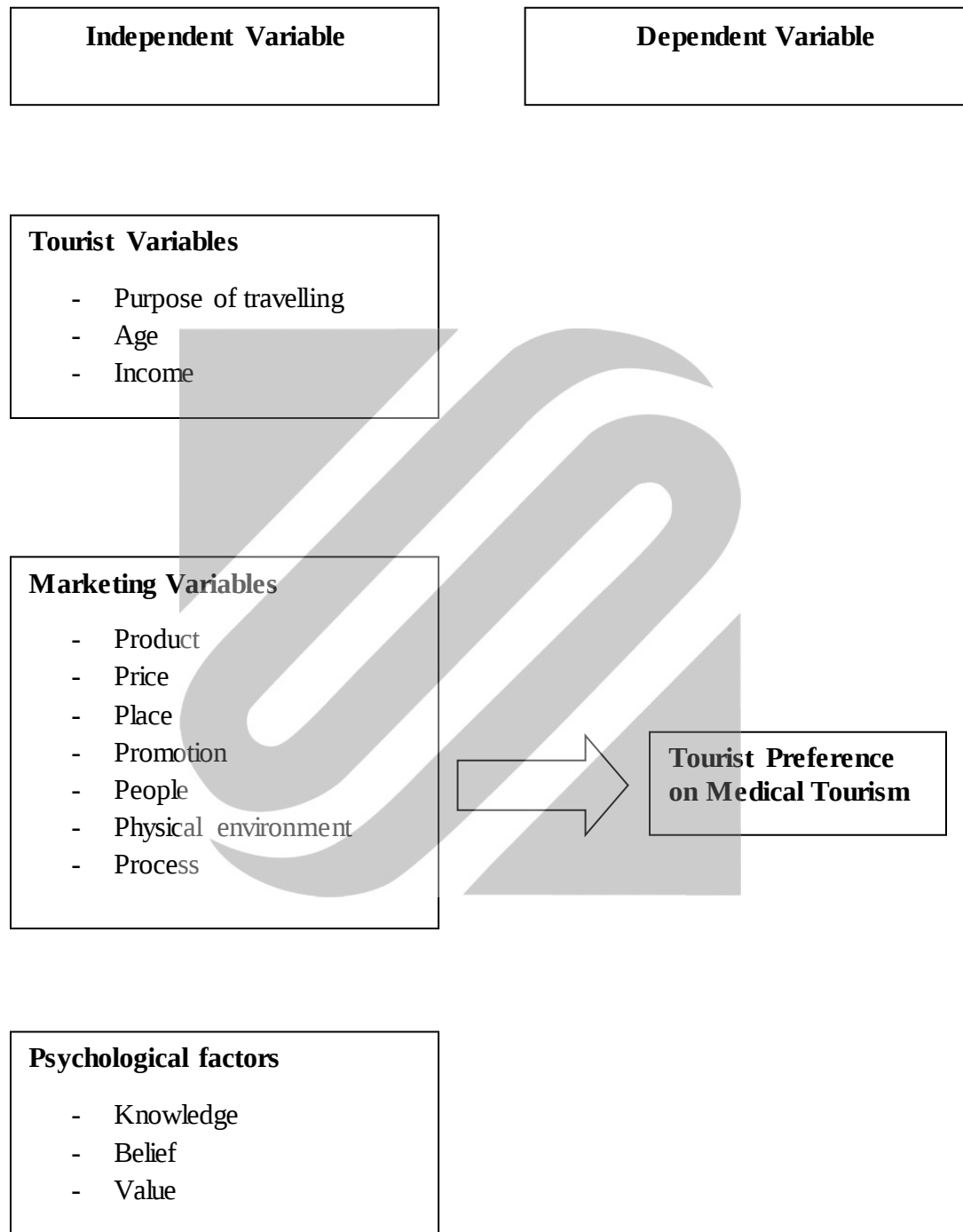


Figure 2.2 Research Conceptual Framework

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research design

3.1.1 Definition, and types of research design

A research design is a structure or blueprint that details the procedures to be followed in a research project to obtain the desired information (Davis, 2005, Maholtra, 1999). A research design involves: (i) identification of the information that is required to address the research question; (ii) design of any exploratory/descriptive/ research required before undertaking the substantive research; (iii) definition of constructs, scaling procedures, and measurement techniques; (iv) development of appropriate questionnaires; (v) consideration of sampling issues; and (vi) plan for data analysis (Maholtra, 1999). In making these decisions, tradeoffs are often necessary with regard to reliability, and validity as a consequence of economic, and time constraints, and limited access to certain types of information (Davis, 2005). Research designs can be classified into two types: (i) exploratory research (which aims to provide insights, and general understanding of the research situation at hand); and (ii) conclusive research (which aims to assist decision-makers with the determination, evaluation, and selection of tasks in a given situation). The present study clearly belongs to the latter type as it helps destination marketers in making a better managerial, and marketing decision regarding medical tourism. Research designs for such conclusive research can be further subdivided into two subgroups:

(i) descriptive research designs (which aim to explain or describe something relevant to the research questions); and (ii) causal research designs (which aim to identify the causal relationships existing between variables) (Maholtra, 1999). This research can also be argued that it is a descriptive research as seeks to provide a general description of the decision-making process of medical tourists in choosing a destination. In the context of marketing research, descriptive research involves consideration of the characteristics of markets, the characteristics of customers, and their perceptions, and attitudes.

According to this involves consideration of the so called 6Ws: who, what, when, where, why, and how. Such descriptive research in a marketing context can be undertaken by two survey methods: (i) cross-sectional surveys; and (ii) longitudinal surveys (Maholtra, 1999). Cross-sectional surveys collect data from one or more samples at a given point in time, whereas longitudinal surveys collect data from one or more samples at several points in time. The present research design adopts across-sectional approach as the opinions, and experiences of a broad group of prospective medical tourists was desired, in addition to time, and resource constraints.

3.2 Survey design

3.2.1 Types of variables, and measures

The 13 hypotheses proposed at the end of Chapter Two contained 13 variables. Of these 13 variables:

Nine variables can be identified as *independent* variables (that is, variables that affect other variables): (i) health locus of control; (ii) attitude towards health-care system in home country; (iii) availability of desired medical treatment in home country; (iv) importance of destination attributes; (v) level of product familiarity; (vi) importance of information sources; (vii) perceived risk; (viii) image of hygiene level of destination; and (ix) image of safety, and security of destination;

Three can be identified as *intervening* variables (that is, variables that both affect, and are affected by, other variables): (i) motivation to engage in medical tourism; (ii) information search behaviour; and (iii) consideration sets; and

One identified as a *dependent* variable (that is, a variable that is affected by other variables): intention to visit.

Different types of variables require different scaling techniques. By convention, four levels of measurement can be utilised:

Ratio scales: These possess all the qualities of the other scales, plus an absolute zero; all statistical techniques are applicable to the data from this type of scale (Maholtra, 1999, Davis, 2005). None of the variables in the present study were suitable for ratio scales.

Nominal scales: These classify objects on a mutually exclusive basis with numbers or symbols that serve only as labels. The only statistical techniques applicable to nominal scale data are counting techniques (Davis, 2005, Maholtra,

1999). Three of the variables in the present study were suitable for nominal scales: (i) availability of desired medical treatment in home country; (ii) information search behaviour; and (iii) consideration sets.

Ordinal scales: These enable variables to be compared in cases where unknown differences exist between the rankings of items belonging to different variables (Davis, 2005). Apart from counting techniques, statistical techniques based on percentiles are applicable to ordinal-scale data (Maholtra, 1999). None of the variables in the present study were suitable for ordinal scales.

Interval scales: These enable variables to be compared in cases where known differences exist between the rankings of items belonging to different variables. Interval scales are usually characterised by numerically equal intervals, (and an arbitrary zero) (Maholtra, 1999, Davis, 2005). A variety of statistical techniques can be applied with interval scales (Maholtra, 1999). Ten of the variables in the present study were suitable for interval scales: (i) health locus of control; (ii) attitude towards health-care system in home country; (iii) motivation to engage in medical tourism; (iv) importance of destination attributes; (v) level of product familiarity; (vi) importance of information sources; (vii) perceived risk; (viii) image of hygiene level of destination; (ix) image of safety, and security of destination; and (x) intention to visit.

Table 3.1 Summarises the 13 variables, and the type of measurement scale used for each in this study. A detailed description of the operationalisation of individual variables in the present study is provided below. A copy of the final survey is provided in Appendix 1.

3.2.2 Individual variables

Variable 1: Availability of desired medical treatment in home country

Prospective medical tourists are motivated to depart overseas for medical treatment if their desired treatment is unavailable in their home country. Availability of desired medical treatment in the home country is thus an independent variable of motivation to adopt medical tourism. For the purposes of the present study, this variable was defined as follows:

Availability of desired medical treatment in the home country is defined as the availability of a person's desired medical treatment in their country of origin.

Table 3.1 Summary of variables and measurement scales

No.	Variable	Type of Variable	Measurement level	Source of scale for present study
1	Availability of desired medical treatment in home country	Independent	Nominal	Self-developed
2	Attitude towards health-care system in home country	Independent	Interval	Self-developed
3	Health locus of control	Independent	Interval	(Wallston et al., 1994)
4	Level of product familiarity	Independent	Nominal	(Sonmez and Sirikaya, 2002)
5	Motivation to engage in medical tourism	Independent	Nominal	(Sonmez and Sirikaya, 2002)
6	Information search behavior	Independent	Nominal	(Gursoy, 2002)
7	Importance of destination attributes	Independent	Interval	Self-developed
8	Perceived risk	Independent	Interval	(Sonmez and Graefe, 1998)
9	Importance of information sources	Independent	Interval	(Beerli and Martin, 2004)
10	Image of safety, and security of destination	Independent	Interval	Self-developed
11	Image of hygiene level of destination	Independent	Interval	Self-developed
12	Consideration sets	Independent	Nominal	(Woodside and Lysonski, 1989)
13	Intention to visit	Independent	Interval	(Sonmez and Graefe, 1998)

Table 3.2 Questions asked to assess Variable 1 ('Availability of desired medical treatment in home country')

Question	Alternatives
1. For what reasons do you wish to travel abroad for medical treatment? [You may tick all alternatives that apply to your case.]	A. To cure an illness B. To improve my health C. For cosmetic surgery D. To have a medical check-up E. I would not consider travelling abroad for a medical reason
2. Is this particular treatment covered by your current health plan?	A. Yes; fully covered B. Yes; partially covered C. No; not covered
3. Is such a treatment available in your home country/country of residence?	A. Yes B. No C. Don't know

Variable 2: Attitude towards health-care system in home country

People are more likely to be motivated to engage in medical tourism if they believe that the cost of medical care in their home country is unaffordable, the waiting time is too long, and/or the desired medical treatment is unavailable. The more negative a person's attitude towards the health-care system in the home country, the higher is the likelihood that he or she will adopt medical tourism. Attitude towards healthcare system in home country is thus an independent variable of motivation to engage in medical tourism.

For the purposes of the present study, this variable was defined as follows:

Attitude towards health-care system in home country is defined as an overall psychological representation of medical care in the home country in terms of cost, and waiting time. Because there has been no previous quantitative study of consumer behaviour in medical tourism, a 9 item scale for measuring this variable was developed specifically for the present study on the basis of the relevant academic literature on medical tourism. Respondents were asked to indicate their disagreement

with the statements shown in Table 3.3 on a 7-point Likert-type scale (1 = strongly disagree; 7 = strongly agree).

Table 3.3 Items used to measure Variable 2(‘Attitude towards health-care system in home country’)

Factor	Item
Cost	1. The cost of medical treatment in my home country is very high
	2. I might get myself into financial difficulty if I have to pay for my desired medical treatment
	3. My health-care plan does not cover all the treatment I need
	4. I have to spend a fortune to receive certain treatment in my home country
	5. Even for a serious illness, if I choose to receive certain treatment at home I have to pay part of the cost
Waiting time	6. My health condition will become much worse while I am waiting to receive treatment at home
	7. Health care in my home country requires a lot of paper work to be done, and the system functions too slowly
	8. The health-care system in my country requires me to take too many steps to receive the medical treatment I need

Variable 3: Health locus of control

If an individual perceives that he or she has control over personal health, and well-being, that person is said to have an internal locus of control; such a person is more prone to engage in healthy behaviour. In contrast, those who perceive that their health, and well-being are determined by external factors are said to have an external locus of control (Callaghan, 1998, Wallston et al., 1994); such a person is less prone to engage in healthy behavior. Health locus of control is thus an independent variable of motivation to engage in medical tourism. For the purposes of the present study, this variable was defined as follows:

Health locus of control is defined as an individual’s perception of his or her ability to control personal health, and well-being as a result of: (i) the person’s own internal drive (internal health locus of control); (ii) the influence of significant others

(people health locus of control); and/or (iii) chance (chance health locus of control). With regard to measuring this variable, developed the concept of health locus of control, and a scale called the Multidimensional Health Locus of Control (MHLC) for measuring it. For instance, (i) Internal Health Locus of Control (IHLC); (ii) People Health Locus of Control (PHLC); and (iii) Chance Health Locus of Control (CHLC). The MHLC scale consists of 16–24 items that can be adopted or modified to suit specific research needs. Respondents are asked to state their degree of agreement with statements pertaining to these items on 6-point Likert-type scale. The scale has been demonstrated to be highly reliable, with all subscales yielding Cronbach's alpha values greater than or equal to 0.70. However, the measurement of health locus of control on 6-point Likert-type scale does not allow neutral attitude with even number of items with negative, and positive attitudes. Therefore, 7-point scale was chosen in this study in order to allow respondents to express their neutral attitude.

In the present study, 16 statements taken from the MHLC were reworded to enhance their relevance to the specific context of motivation to engage in medical tourism. Respondents were asked to indicate their degree of agreement with these 16 statements on a 7-point Likert-type scale (in which 1 = strongly disagree; 7 = strongly agree). Table 3.4 Lists the 16 items used to measure the variable of health locus of control in this study.

Table 3.4 Items used to measure Variable 3 ('Health locus of control')

Item	Subscale
1. I can have better health by engaging in healthier behaviours	Internal health locus of control
2. Whether I have good or bad health is my own responsibility	
3. I have full control over how my health can be improved	
4. My current condition is the result of my choice of how I live my life	
5. My current health condition is the result of my own unhealthy behavior	
6. I deserve credit if my health gets better, and blame if it gets worse	
7. If I choose to live a healthier life, I should get healthier	
8. I am fully responsible for what happens in my life	
9. My imperfect health conditions happen to me by chance	Chance

Table 3.4 Items used to measure Variable 3 ('Health locus of control')
(Cont.)

Item	Subscale
10. If I have regular medical check-ups, I am less likely to have any health problems	People health locus of control
11. Following a doctor's advice strictly is the best way to keep myself healthy	
12. Other people play a big role in my health condition	
13. The type of support I receive from other people determines how healthy I am	
14. Regarding my health, I should only do what my doctors tell me to do	
15. Health professionals are responsible for my health condition	

Variable 4: Importance of destination attributes

When people are making decisions to satisfy motivation, attributes that are consistent with their motivation are cognitively evaluated before the whole destination is affectively evaluated as a potential solution (Philips and Jang, 2007). The variable of importance of destination attributes is thus an independent variable of information search for evaluation of alternatives. For the purposes of this study, the variable of importance of destination attributes was defined as follows:

The importance of attributes is defined as the relative degree of importance that prospective medical tourists attach to various attributes of a destination when making a choice of destination for receiving offshore medical treatment. There is a vast literature on the measurement of destination attributes. The number of such attributes, including functional attributes, and psychological attributes, can be vast which poses significant problems for the subsequent analysis of data. The collected data are therefore usually assessed by combining items into factors, and conducting a factor analysis. Because most studies in the literature have been conducted in the context of leisure tourism, relatively few of the scales are directly applicable to the present study although has asserted that destinations can bundle medical-tourism products with conventional tourism products.

Nevertheless, attributes such as scenic beauty, and cultural heritage are barely relevant to the current context. Other attributes such as those related to safety,

security, and hygiene are more relevant, and can be adopted (with appropriate modification) in the present context. For the purposes of the study, it was therefore decided to develop an original list of attributes that are genuinely relevant to the motivation to travel for medical tourism. In developing this list of attributes it was noted that contended that medical tourists, and health-plan sponsors pay attention to quality of care, potential for savings, and travel exposure claimed that safety, and security issues can create serious problems for destinations in attracting prospective tourists. Drawing on these suggestions from the literature, it was apparent that potential for savings, and quality of care are attributes that are directly related to medical tourists; moreover, safety, and security, hygiene, the accessibility of a destination, and tourism opportunities are attributes that are probably of significance for medical tourists in choosing a medical tourism destination.

As a result of this review of the literature, 41 destination attributes were identified as being pertinent to medical tourism. These 41 attributes were categorised into six factors: (i) quality of care; (ii) potential for savings; (iii) safety, and security; (iv) hygiene; (v) tourism opportunities; and (vi) accessibility. To validate the proposed scale, expert opinions in the field of tourism, and medical tourism were solicited. These experts were asked to review the proposed list of attributes, and add or subtract any that they believed were missing or irrelevant. Both experts found the 6 attributes appropriate for exploring their saliencies to the medical tourism destination choice. Respondents in the substantive study were asked to respond to items on a 7-point Likert-type scale (in which 1 = strongly disagree; 7 = strongly agree). Table 3.5 provides a full list of the 41 items, (and the six factors into which they were eventually categorised).

Table 3.5 Items used to measure Variable 4 ('Importance of destination attributes')

Item	Subscale
1. My ideal medical tourism destination has many international standard hospitals with certified doctors, and surgeons	Quality of care
2. My ideal medical tourism destination has many international standard hospitals with high success rates of treatment	
3. My ideal medical tourism destination has surgeons who are educated abroad	
4. My ideal medical tourism destination has many international standard hospitals that specialize in my desired medical treatment	
5. My ideal medical tourism destination has many hospitals that are equipped with the most sophisticated medical equipment	
6. My ideal medical tourism destination has many hospitals that are affiliated with medical institutions, and schools of international repute	
7. My ideal medical tourism destination has hospitals that provide care with a high ratio of registered nurses per patient	
8. My ideal medical tourism destination has health-care professionals who are fluent in several languages, including my native language	
9. My ideal medical tourism destination has various hospitals that have been accredited by institutions of international repute, including Joint Commission for Accreditation of Healthcare Organisations (JCAHO)	
10. My ideal medical tourism destination has a high level of infrastructure, such as luxurious hotels	
11. My ideal medical tourism destination has hospitals that coordinate with health-care providers in my home country so that I can be assured about quality of care	
12. My ideal medical tourism destination has hospitals that guarantee results of the treatment, and are willingness to act in accordance with all relevant laws	

Table 3.5 Items used to measure Variable 4 ('Importance of destination attributes') (Cont.)

Item	Subscale
13. My ideal medical tourism destination provides the same medical treatment at a much lower cost than my home country	Potential for saving
14. My ideal medical tourism destination provides my desired medical treatment at a lower cost than other destinations	
15. My ideal medical tourism destination provides accommodation service at an affordable cost	
16. My ideal medical tourism destination can be accessed from my home country at low cost	
17. My ideal medical tourism destination has much lower cost of living than my home country	
18. My ideal medical tourism destination offers overall lower cost (combining the costs of medical treatments, and all other travel costs)	
19. My ideal medical tourism destination is safe to travel to alone	
20. My ideal medical tourism destination has a low crime rate	Safety, and security
21. My ideal medical tourism destination is safe to walk on the street alone	
22. My ideal medical tourism destination is politically stable	
23. My ideal medical tourism destination has few natural disasters	
24. My ideal medical tourism destination has good security systems in buildings (fire evacuation systems, surveillance cameras, etc.)	
25. My ideal medical tourism destination has a safe environment	
26. My ideal medical tourism destination has no international conflicts	
27. My ideal medical tourism destination is not targeted for attack by	
28. My ideal medical tourism destination has a safe transportation	
29. My ideal medical tourism destination has hospitals that guarantee	

Table 3.5 Items used to measure Variable 4 ('Importance of destination attributes') (Cont.)

Item	Subscale
30. My ideal medical tourism destination has a level of hygiene similar to that of my own country	Hygiene
31. My ideal medical tourism destination is safe to buy food, and drinks from general food vendors	
32. My ideal medical tourism destination has no epidemic diseases	
33. My ideal medical tourism destination has hygiene levels among health-care providers that are comparable with those in my country	
34. My ideal medical tourism destination has beautiful beaches	Tourism opportunities
35. My ideal medical tourism destination has great scenic beauty	
36. My ideal medical tourism destination has authentic historical sites	
37. My ideal medical tourism destination has good shopping facilities	
38. My ideal medical tourism destination has a variety of bars, and nightclubs	Accessibility
39. My ideal medical tourism destination has direct flights from where I live	
40. My ideal medical tourism destination has an easy immigration policy	
41. My ideal medical tourism destination has a good transportation system	

Variable 5: Information search behaviour

Information search refers to an individual's self-instruction to retrieve prior knowledge about a prospective purchase (internal search) or consult external sources of information about the prospective purchase (external search). If the prior knowledge retrieved from an internal search does not enable individuals to make a confident choice decision, they are motivated to engage in external search with a view to refining their consideration set. Information search behaviour is thus an intervening

variable between motivation, and consideration set. For the purposes of the present study, this variable was defined as follows:

Information search behaviour is defined as self-instruction to engage in internal, and external searches for information pertinent to: (i) procedures associated with particular medical treatment; and (ii) potential medical tourism destinations. To assess whether respondents relied on an internal search or an external search in choosing a destination, simply asked the respondents if they had made decisions based on their prior knowledge; a positive response signified an internal search, whereas a negative response was taken to indicate an external search. A similar assessment was adopted in the present study. Respondents were asked if their prior knowledge had made them confident in choosing a destination, and a health-care provider for their desired medical treatment. Three alternative responses were provided: yes; no; and not sure. A yes, response was taken to indicate an internal search, whereas a no, response was taken to signify an external search.

Variable 6: Motivation to engage in medical tourism

The degree to which people are motivated to engage in medical tourism is likely to be positively correlated with the health locus of control, attitude towards existing health-care systems in the home country, and availability of a desired medical treatment in the home country. Motivation also influences information search for evaluation of alternative destinations (Mansfeld, 1992). This variable can therefore also be posited as an independent variable for information search behaviour in the evaluation of alternatives. It is thus arguable that the variable of motivation can be considered to be an *intervening* variable because it is the dependent variable for the three variables noted above while also being an independent variable for search behaviour for evaluation of alternative destinations. For the purposes of the present study, this variable was defined as follows:

Motivation to engage in medical tourism is defined as the degree to which a prospective medical tourist is motivated to consume medical tourism products. With regard to measuring this variable, most previous studies of motivation to travel have sought to differentiate among various types of motivation by asking respondents about the perceived importance of various factors using Likert-type scales, and then analysing the data by principal component analysis. However, given that the major

motivation for medical tourists to travel is already apparent that is, a desire for medical treatment of comparable quality at a more economical cost Connell (2006) there is little need to explore the nature of the motivation itself; rather, the relevant question in the context of medical tourism is the *level of motivation* to adopt medical tourism. The present study therefore measured the variable of motivation in terms of the *level* of motivation. In the present study, respondents were asked to rate their level of interest in travelling abroad for medical treatment on a 7-point Likert-type scale (in which 1 = not at all interested; 7 = very interested). Table 3.6 shows the question used to measure the level of motivation of respondents in adopting medical tourism.

Table 3.6 Question asked to assess Variable 6 ('Motivation to engage in medical tourism')

Question	Alternatives
How interested are you in receiving medical treatment in an overseas country?	1. Not at all interested 2. Uninterested 3. Somewhat uninterested 4. Indifferent 5. Somewhat interested 6. Interested 7. Very interested

Variable 7: Level of product familiarity

There is a U-shaped relationship between product familiarity, and the information search behaviour of prospective tourists; that is, prospective tourists with high levels of familiarity, and those with low levels of familiarity tend to rely on external search, whereas tourists with moderate levels of familiarity tend to rely on internal search. The variable of level of product familiarity is thus an independent variable of the search behaviours of prospective medical tourists. For the purposes of this study, this variable was defined as follows:

Level of product familiarity is defined as the perception that prospective medical tourists have about: (i) their knowledge of the procedures involved with their desired medical treatment; and (ii) their knowledge of Thailand as a medical tourism destination measured the level of familiarity with a destination using a one item scale.

Other scholars have measured familiarity with destinations by assessing the ability of respondents to recognize, and recall various marketing communication. In the present study, respondents were asked to rate their degree of familiarity with the procedures involved with their medical treatment, and their degree of familiarity with Thailand as a medical tourism destination using two 7-point Likerttype scales (in which 1 = very unfamiliar; 7 = very familiar). Table 3.7 shows the questions, and alternative responses used to measure this variable.

Table 3.7 Questions asked to assess Variable 7 ('Level of product familiarity')

Question	Alternatives
How familiar do you consider yourself to be with the procedures involved with your desired medical treatment?	1. Very unfamiliar 2. Quite unfamiliar 3. A little unfamiliar 4. Unsure 5. A little familiar 6. Quite familiar 7. Very familiar

Variable 8: Perceived risk

Because medical tourism involves personal health, and well-being, prospective medical tourists tend to perceive that the level of risk involved in making a choice of destination is high. The level of perceived risk is thus an independent variable for information search behaviour. For the purposes of the present study, this variable was defined as follows:

The perceived risk is defined as the perceived uncertainty associated with the choice of a medical tourism destination. Most studies of tourism have measured the level, and types of perceived risk by asking respondents to indicate the level of perceived risk associated with various purchasing situations on Likert-type scale. Table 3.8 Respondents were asked to indicate the importance that they attached to different types of risk associated with overseas travel for medical treatment on a 7-point Likert-type scale (in which 1 = very unimportant; 7 = very important).

Table 3.8 Items used to measure Variable 8 ('Perceived risk')

Type of risk	Item
Satisfaction	1. Possibility that travelling overseas for medical treatment will not provide a satisfactory outcome
Physical risk	2. Possibility of physical danger or injury due to accident
Social risk	3. Possibility that my choice of destination will affect other people's opinion of me
Financial risk	4. Possibility that overall costs (treatment, and other expenses) will not provide potential for large savings
Psychological risk	5. Possibility that travelling overseas for medical treatment will not match myself image
Health risk	6. Possibility that my health condition will worsen as a result of travelling to a foreign country
Time risk	7. Possibility that travelling abroad for desired medical treatments will take much longer than I expect
Functional risk	8. Possibility that the desired medical treatment will not turn out as expected
Political instability risk	9. Possibility of becoming involved in political turmoil during my stay in a foreign country

Variable 9: Importance of information sources

The initial image of a destination is usually formed by information randomly received from organic, and autonomous source. It is subject to change as prospective medical tourists actively consult information from induced sources to assist their decision-making process. Importance of information sources is thus an independent variable of evaluation of alternatives, and intention to visit. This variable was defined for the purposes of the present study as follows; Importance of information sources is defined the relative importance accorded by potential medical tourists to various external sources of information (induced, organic, and autonomous) that provide information relevant to procedures involved with medical treatment, and potential medical tourism destinations, measured the relative importance of information

obtained by tourists from three types of image agents: (i) organic image agents (friends, and family members).; (ii) autonomous image agents (news reports, documentaries, guidebooks, articles); and (iii) induced image agents (travel agency staff ,brochures, advertising campaigns, and the Internet).

The relative importance of each was measured on 7-point Likert-type scale. Because the motivation of medical tourists, and the structure of the medical tourism industry are different from that of leisure tourism, some modification of the items used by is required for application in the present context. Respondents were therefore asked to indicate the importance that they attached to various information sources using a 7-point Likert-type scale (in which 1 = not at all important; 7 = extremely important). Table 3.9 lists the items used to measure this variable.

Table 3.9 Items used to measure Variable 9 ('Importance of information sources')

Image agents	Information source
Induced	1. Information from brochures about medical tourism produced by national authorities of potential destinations 2. Information from brochures produced by medical-care providers in potential destinations 3. Advertising campaigns by destinations about medical tourism 4. Personal selling by staff of travel agencies specialising in medical tourism 5. Information from health insurance policy providers
Autonomous	6. Information from Internet websites 7. News about medical services in potential destinations 8. Reports about medical services in potential destinations 9. Documentaries about medical services in potential destinations
Organic	10. Articles about medical services in potential destinations 11. Information from family, and friends 12. Information from personal doctors

Variable 10: Image of safety, and security of destination

Like the previous variable, the image of safety, and security held by potential medical tourists might cause a destination to be chosen or rejected because it can impinge on quality of care. This variable is thus another independent variable for intention to visit. This variable was defined for the purposes of the present study as: Image of safety, and security of a destination is defined as the perception of prospective medical tourists about overall safety, and security levels in potential medical tourism destinations. The scale for measuring this variable was also self developed. Respondents were asked to rate their perception of the safety, and security of Thailand on a 7-point Likert-type scale (in which 1 = not at all safe, and secure; 7 = extremely safe, and secure).

Variable 11: Image of hygiene level of destination

Although it is only indirectly relevant to the technical quality of care, the level of hygiene does signify the general standard of practice of health-care providers in a particular destination, and is believed to be a factor in prospective medical tourists choosing to reject certain medical tourism destinations. This variable is therefore an independent variable of intention to visit. For the purposes of the present study, this variable was defined as follows:

Image of hygiene level of destination is defined as the perception of medical tourists regarding the overall level of hygiene that exists in a potential medical tourism destination. Because this variable has not been explored quantitatively in any previous studies, the scale for the present context was therefore self developed. Respondents were asked to rate their perception of the overall hygiene levels of Thailand, and its competing medical tourism destinations on a 7-point Likert-type scale (in which 1 = very unhygienic; 7 = very hygienic).

Variable 12: Consideration sets

An initial consideration set is formed from prior knowledge about a product or a service of interest. As a result of active information search, which is normally the case with products with high involvement, and high perceived risk, the initial consideration set is changed, and a late consideration set is formed. Consideration set is thus an intervening variable because it functions as an independent variable of

intention to visit, and a dependent variable of information search. For the purposes of the present study, this variable was defined as follows:

Consideration set is defined as a set of destinations of which prospective medical tourists are aware as acceptable potential medical tourism destinations. Most previous studies that have examined this variable have simply used open-ended questions, and free choice by asking respondents to state the names of destinations belonging to a consideration set (or different subsets of a consideration set). Some have also explored the reasons for naming these destinations. In the present study, respondents were asked a single open-ended question in which they were requested to state the destinations that first come to mind when considering travelling abroad for medical treatment.

Variable 13: Visit intention

The destination that prospective tourists intend to visit is arguably the alternative that is perceived to be the best solution to satisfy the tourists needs given the situational circumstances. Because this study is constrained temporally, and economically, visit intention was used as a surrogate for actual choice behaviour. For the purposes of this study, the variable was defined as follows:

Visit intention is defined as a prospective medical tourist's likelihood of choosing a destination for his or her desired medical treatment used a 4-point Likert type scale to measure intention to visit Turkey. This measure was adapted to the context of medical tourism for the present study. Measuring variables of interval measurement which are intangible in nature with even number item does not allow neutral attitude. Besides, all variables of interval measurement in this research are measured by using 7-point item scales which allow precise findings, and neutral attitudes. Respondents were therefore asked to indicate the likelihood that they would visit Thailand for medical treatment on 7-point Likert-type scale (in which 1 = very unlikely; 7 = very likely).

Demographic factors

Most studies in the field of tourism, and hospitality have failed to demonstrate significant associations between demographic factors, and destination choice. For example, examined such variables as age, gender, income, marital status, and education, but found no significant relationship between destination choice, and any

of these socio-demographic factors except for income. Nevertheless, it was deemed appropriate in the present study to include all of these factors, as well as country of residence, and employment status.

3.2.3 Validity, and reliability of scales

The term reliability refers to the dependability of a scale or the extent to which a scale yields consistent results when the measurement is replicated. The term validity refers to the fit of the measure to the real world or the extent to which different scales are mutually exclusive, and collectively exhaustive. Some degree of validity, and reliability was assured for the scales proposed for the present study because most of the scales were adapted from previous studies conducted by reputable scholars. Self-developed scales were based on a review of the literature, and input from experts in the field; pilot studies were conducted to assess (and, if necessary, to improve) their validity, and reliability.

3.3 Data analysis

With regard to the first of these, some returned questionnaires were excluded from the sample after data collection had been concluded. These included: (i) incomplete questionnaires with insufficient data for further analysis; and (ii) disqualified questionnaires from respondents who chose option. With regard to editing the questionnaires, those with partially incomplete data were assigned missing values (as appropriate), and checked for consistency of responses. Inconsistent surveys were also disqualified, and excluded from the sample. Coding then proceeded by assigning values to the responses reported by respondents. These were then recorded in accordance with the SPSS (version 14) software statistical program. After coding, each of the variables was checked for a normal distribution. Outliers for nominal variables were detected using boxplot, and cases outside the three-box range were excluded from the analysis for that particular nominal variable. Multivariate outliers for interval, and ratio variables were detected by calculating Mahalanobis distance; these were fixed as appropriate.

CHAPTER 4

DATA ANALYSIS

4.1 Data-collection process

Data collection for the main study occurred between 25 January 2014 to 28 February 2014. This was conducted with the assistance of certain appropriate gatekeepers: (i) international offices of the Tourism Authority of Thailand; (ii) sales representative offices of Thai health-care providers in foreign markets; and (iii) travel agencies specialising in medical tourism. These messages contained an information sheet (Appendix A).

In total, 337 completed questionnaires were collected; of these, 13 incomplete cases in which respondents had not answered several parts of the questionnaire were excluded from the analysis. The 323 valid completed questionnaires were returned, which resulted in a response rate of 14.04%. The 14.04 % response rate is considered acceptable as no incentive was offered to respondents. Normally, consumer survey with no incentive offered to respondents yields lower than 10% response rate while the response rate with consumer survey with incentives, and follow ups can be as high as 26.54. The valid questionnaires were then screened to ascertain whether they met the predetermined parameters of: (i) interest in medical tourism; and (ii) proficiency in English. (People Pulse, 2010).

Of the 323 questionnaires, 13 respondents had chosen option E (I would not consider travelling abroad for medical reasons) of question 1 (For what reasons are you interested in medical tourism?). These 13 were also discarded, which led to a final total of 310 valid cases for inclusion in the analysis (representing a usable response rate of 13.5%).

4.2 Profiles of respondents

The demographic characteristics of respondents were assessed in terms of age, marital status, country of residence, income, gender, education, employment, and purposes of medical visit. It is apparent that there were slightly more female respondents (53.2%) than male respondents. The largest group of respondents were 31–40 years of age (37.4%), followed by those who were aged 41–50 years (25.8%),

and those aged 18–30 years (20.00%). The relative under-representation of older respondents is probably explained by the survey.

In terms of marital status, single respondents represented the largest group (43.2%), closely followed by married respondents (41%).

Table 4.1 Presents a summary of the demographic characteristics of the final sample respondents

Demographic characteristic	Number of respondents	Proportion of sample
Male	145	46.8%
Female	165	53.2%
18-30 years old	62	20.0%
31-40 years old	116	37.4%
41-50 years old	80	25.8%
51-60 years old	38	12.3%
61-70 years old	13	4.2%
71 years, and older	1	0.3%
Single	134	43.2%
Married	127	41.0%
Cohabiting	17	5.5%
Divorced	17	5.5%
Separated	5	1.6%
Australia (country of origin)	53	17.1%
United Arab Emirates (country of origin)	52	16.8%
United States of America (country of origin)	32	10.3%
United Kingdom (country of origin)	31	10.0%
Hong Kong (country of origin)	28	9.0%

Table 4.1 Presents a summary of the demographic characteristics of the final sample respondents (Cont.)

Demographic characteristic	Number of respondents	Proportion of sample
USD\$10,000 or less (annual income)	28	9.0%
USD\$10,001-30,000 (annual income)	62	20.0%
USD\$30,001-60,000 (annual income)	129	41.6%
USD\$30,001-60,000 (annual income)	53	17.1%
USD\$60,001-100,000 (annual income)	25	8.1%
USD\$100,001-200,000 (annual income)	13	4.2%
More than USD\$ 200,001(annual income)		
Educated up to and including high school	21	6.8%
College diploma	46	14.8%
Bachelor's degree	125	40.3%
Master's degree	100	32.3%
Doctorate	18	5.8%
Corporate firm employee	124	40.0%
Business owner	65	21.0%
Freelance professional	29	9.4%
Employed with temporary contract	28	9.0%
Unemployed	11	3.5%
Other	53	17.1%

Most respondents (approximately 60% in all) were in either the upper-middle socioeconomic stratum (with 41.6% of respondents earning USD\$30,001–60,000 annually) or the lower-middle socio-economic stratum (with 20% earning USD\$10,001–30,000 annually).

Another 17.1% of respondents had an annual income of USD\$60,001–100,000. Most respondents were well educated, with 40.3% having obtained a bachelor's degree, and 32.3% having a master's degree. In terms of employment status, 40% of respondents were employed full-time by corporate firms, whereas 21% owned businesses.

Table 4.2 Summarises the respondents objectives in travelling abroad for medical reasons. Respondents were asked to choose one or more alternatives that applied to their situation. Because they were allowed to state more than one objective, the total number of answers is thus greater than the number of respondents (377 answers; 122.8% of valid cases).

Objective of travelling abroad	Number	Proportion of responses	Proportion of cases
To cure an illness	106	28.1%	34.5%
For cosmetic surgery	96	25.5%	31.3%
For medical check up	94	24.9%	30.6%
To improve health	81	21.5%	26.4%
Total	377	100.0%	22.8%

It is apparent from Table 4.2 that the largest group of respondents were interested in curing their illnesses (28.1% of responses), followed by cosmetic surgery (25.5%), and medical check-ups (24.9%). The least-reported alternative was health improvement (21.5%).

4.3 Descriptive analysis of variables

Table 4.3 Presents a descriptive analysis, (and normality of distribution) of all the composite variables used in the study.

Variable		Mean	Standard deviation	Number of constituent items	Z-score	Cronbach's alpha
Health locus of control	Internal health of control	5.91910	0.68332	8	1.297	0.894
	Chance health locus of control	3.2045	1.08654	3	3.913*	0.792
	People health locus of control	3.8642	0.85145	6	3.0797	0.858
Attitude towards health-care system in home country	Cost	3.0144	1.12246	5	5.203*	0.810
	Procedures	3.7607	1.21754	4	1.014	0.859
Information Sources	Induced	4.8655	0.88632	5	3.1086	0.832
	Autonomous	5.1482	0.75625	4	0.1014	0.877
	Organic	5.5975	0.81914	3	3.2463	0.770

Table 4.3 Presents a descriptive analysis, (and normality of distribution) of all the composite variables used in the study. (Cont.)

Variable		Mean	Standard deviation	Number of constituent items	Z-score	Cronbach's alpha
Medical Tourism destination attributes	Quality of care	5.6128	0.77149	7	3.0724	0.836
	Saving potential	5.5395	0.90965	3	2.6811	0.726
	Safety issues	5.1390	0.87162	9	0.224	0.896
	Tourism opportunities	4.0603	1.15994	5	2.0144	0.834
	Hygiene issues	5.5372	0.79142	4	3.1449	0.703
	Accessibility	4.9447	1.08613	2	2.471	0.715

* Z-score is higher than 3.29; Transformation is applied

Table 4.4 Descriptive analysis of non-composite variables

Variable		Mean	Standard deviation	Z-score
Motivation to engage in medical tourism		5.5065	0.85424	0.3116
Familiarity	With procedures	4.05001	1.38531	3.1956
	Involved with desired medical care			
	With Thailand as a medical tourism destination	4.5845	1.75046	4.1159
Perceived risks	Functional risk	5.8304	0.9641	4.43478
	Financial risk	5.3895	1.01962	2.2174
	Health risk	5.0098	1.27863	4.0000
	Physical risk	4.8344	1.37541	3.963
	Satisfaction risk	5.6578	1.12502	3.9347
	Psychological risk	3.5537	1.58253	0.9420
	Political risk	4.0358	1.47756	1.5072
	Social risk	3.2345	1.49120	1.1449
	Time risk	4.3420	1.28608	1.9927
Image of safety, and security of potential destinations	Thailand	4.7296	1.21288	4.5507
Intention to visit	Thailand	5.1246	1.46950	5.86231

4.3.1 Health locus of control

As noted above, the variable of health locus of control was measured on three sub-scales: (i) internal health locus of control (IHLC); (ii) chance health locus of control (CHLC); and (iii) people health locus of control (PHLC).

4.3.1.1 Internal health locus of control

IHLC was measured by asking respondents to indicate their degree of agreement/disagreement with eight items on a seven-point Likert-type scale. The scores for these eight items were checked for validity using principal component analysis, inter-item correlations, and item-to-total correlations (as shown in Appendix 2). One factor was extracted with an eigenvalue greater than 1.00 (KMO = 0.896), and Bartlett's test for sphericity was significant ($\chi^2 = 1255.143$; $df = 28$; $p < 0.05$).

All items were related to each other, and the composite variable at satisfactory levels (inter item correlation = 0.30; item to total correlation = 0.50) (Manning and Munro, 2007). The composite variable was thus judged to be valid. The variable was also reliable, as indicated by Cronbach's alpha value of 0.894, which was greater than the critical value of 0.70. The mean score for the composite variable was 5.91910 on a scale of 1 to 7 (standard deviation 0.68332). It can therefore be argued that respondents had a high level of IHLC. The score was checked for normality of distribution by using z-score (division of skew value by skew error value). The z-score of this composite variable was 1.927, which was within the critical value of 3.29 for a sample size greater than 300. The scores of the IHLC variable were therefore normally distributed.

4.3.1.2 Chance health locus of control

CHLC was measured by asking respondents to indicate their degree of agreement/disagreement with four items using a seven-point Likert-type scale. The variable was checked for validity using principal component analysis, inter item correlations, and item to total correlations. One factor was extracted with an eigenvalue greater than 1.00 (KMO = 0.684), and Bartlett's test for sphericity was significant ($\chi^2 = 292.081$; $df = 3$; $p < 0.05$). The constituent items correlated with the composite variable, and with each other at satisfactory levels (item-to-total correlation = 0.50; inter item correlation = 0.30). The variable was also checked for reliability. It was found that excluding one item (I am destined to have the health problems I

currently suffer from) from the composite variable would increase its reliability from 0.739 to 0.792. (Manning and Munro, 2007, Fox, 1997). The composite variable CHLC was therefore computed by averaging the scores of the three remaining items. The variable was thus both reliable, and valid. The mean score for the composite variable was 3.2045 on a scale of 1 to 7 (standard deviation 1.08654), with Cronbach's alpha value 0.792. This finding suggests that respondents had quite a low level of CHLC. The z-score, which was used as the indicator of normal distribution of variables of interval measurement, was 3.913. This was greater than the acceptable value of 3.29. Transformation of the score was thus required to ensure that the variable qualified for parametric statistical techniques that require scores to be normally distributed. Square root transformation was applied to the composite variable, and the z-score of the transformed variable was below the critical value of 3.29. (mean = 1.7647; standard deviation = 0.30085; z-score = 0.1231) The square root transformation of the composite variable was used for subsequent analysis.

4.3.1.3 People health locus of control

PHLC was measured by asking respondents to state their degree of agreement/disagreement with six statements on a seven-point Likert-type scale. The variable was checked for validity by inter-item correlation, item-to-total correlation, and principal component analysis to ensure that the six constituent items were homogeneous. One component was extracted with an eigenvalue greater than 1.00 (KMO = 0.854), and Bartlett's test for sphericity was significant ($\chi^2 = 759.507$; $df = 15$; $p < 0.05$). Constituent items correlated with the composite variable, and with each other at satisfactory levels (inter-item correlation = 0.30 and item-to-total = 0.50). The composite variable was also very reliable, as indicated by a Cronbach's alpha value of 0.858. Deleting any of the constituent items did not make the composite more reliable. The composite variable PHLC was thus computed by averaging the scores of the six constituent items. The mean score of the composite variable was 3.8642 on a scale of 1 to 7 (standard deviation 0.8515). It can be thus argued that respondents did not really believe that other people can influence their health. The score of the composite variable was normally distributed, as indicated by a z-score of 3.07, which was less than the critical value of 3.29 for a sample larger than 300. (Manning and Munro, 2007, Bryman and Duncan, 2004).

4.3.2 Attitude towards health-care system in home country

Attitudes towards health-care systems in the home country were assessed in terms of: (i) attitudes towards cost; and (ii) attitudes towards waiting time, and procedures.

4.3.2.1 Attitude towards cost of medical care

Respondents were asked to indicate (on a seven-point Likert-type scale) their degree of agreement/disagreement with five statements about the affordability of the costs of medical care in their home country. The scores of the five items were recoded so that low scores signified negative attitudes towards the affordability of the cost of medical care in the respondents home country whereas high scores indicated positive attitudes. The composite variable was checked for validity by item-to-total correlation, inter-item correlation, item-to-total correlation, and principal component analysis. One factor with an eigenvalue greater than 1.00 was extracted (KMO = 0.7902), and Bartlett's test for sphericity was significant ($\chi^2 = 504.320$; $df = 10$, $p = 0.00$).

Constituent items were correlated with the composite variable, and with each other at satisfactory levels (item-to-total correlation = 0.50, inter-item correlation = 0.30). The composite variable was highly reliable, as indicated by a Cronbach's alpha value of 0.810. (Manning and Munro, 2007, Tabachnick and Fidell, 1996). The composite variable was computed by averaging the scores of the five constituent items. The mean score of the composite variable was 3.0144 on a scale of 1 to 7 (standard deviation 1.2254). Because low scores indicated an adverse opinion, this finding suggests that respondents tended to believe that the cost of medical care in their home country were *not* affordable.

In terms of normality of score distribution, the z-score of the composite variable was 5.203, which was greater than the critical value of 3.29 for a sample size larger than 300. Log transformation was therefore applied to the composite variable. The mean score of the log-transformed composite variable was 1.0322 (standard deviation 0.3832), and the z-score was 2.4928, which was less than the critical value of 3.29 for a sample size larger than 300. The log-transformed variable was therefore used for subsequent analyses that required variables to be normally distributed.

4.3.2.2 Attitudes towards waiting time, and procedures

Respondents were asked to indicate (on a seven-point Likert-type scale) their degree of agreement/disagreement with four statements about waiting times, and administrative procedures in the health-care system in their home country. The scores of the four items were recoded so that low scores signified negative attitudes. The composite variable was checked for validity using item-to-total correlation, inter-item correlation, and principal component analysis. One factor with an eigenvalue greater than 1.00 was extracted (KMO = 0.765), and Bartlett's test for sphericity was significant ($\chi^2 = 643.032$; $df = 6$; $p = 0.00$). Constituent items correlated with the composite variable, and with each other at satisfactory levels (item-to-total correlation = 0.50; inter-item correlation = 0.30). (Manning and Munro, 2007, Bryman and Duncan, 2004). The composite variable was also highly reliable, as indicated by a Cronbach's alpha value of 0.859.

Although the deletion of one item would have increased Cronbach's alpha from 0.859 to 0.860, the improvement would have been trivial. All four items were therefore retained in the composite variable. The mean score of the composite variable was 3.7607 on a scale of 1 to 7 (standard deviation 1.2175). This suggests that respondents tended to believe that they had to wait for a long time, and/or pass through several steps to receive the desired medical treatment. Scores of the composite variable were normally distributed, as indicated by the z-score of 1.014, which was less than the critical value of 3.29 for a sample size larger than 300. This composite variable thus satisfied the assumption of normality.

4.3.3 Availability of desired medical treatment in home country

Respondents were asked to state their belief about the availability of desired medical treatment in their home country by selecting one of three alternatives (yes, no, or don't know). It was found that 72.3% of respondents believed that their desired medical treatment was available in their home country, 16.1% believed that it was not available, and 11.6% did not know. Respondents were also asked whether their desired medical treatment was covered by their health-insurance plan. They were asked to select one of three alternatives (covered, partially covered, or not covered). It was found that 51.3% of respondents stated that their desired medical treatment was

not covered by their health plan, 34.2% stated that it was partially covered, and 14.5% stated that it was covered.

4.3.4 Motivation to engage in medical tourism

Respondents were asked to indicate their level of motivation (on a seven-point Likert-type scale) regarding their involvement in medical tourism. The mean score for this variable was 5.5065 (standard deviation 0.8542), which indicates that respondents were quite strongly motivated to travel abroad for medical reasons. Scores of this variable were normally distributed, as indicated by the z-score of 0.3166, which was less than the critical value of 3.29 for a sample size larger than 300).

4.3.5 Medical tourism destination attributes

Six attributes of medical tourism destinations were measured: (i) quality of care; (ii) saving potential; (iii) safety, and security issues; (iv) overall hygiene levels; (v) tourism opportunities; and (vi) accessibility.

4.3.5.1 Quality of care

Respondents were asked to indicate their degree of agreement/disagreement (on a seven-point Likert-type scale) with regard to 10 items about quality of medical treatment. The composite variable was checked for validity using item-to-total correlation, inter-item correlation, and principal component analysis. Three items failed to correlate with each other at a satisfactory level (greater than 0.30 for a composite variable).

The remaining seven items were checked again for validity using inter-item correlation, item-to-total correlation, and principal component analysis. The composite variable, and the remaining seven items correlated with each other at satisfactory levels (greater than 0.50). Inter-item correlations of the seven items were also satisfactory (greater than 0.30). Principal component analysis led to one factor being extracted with an eigenvalue greater than 1.00 (KMO = 0.869), and Bartlett's test for sphericity was significant ($\chi^2 = 680.473$; $df = 21$, $p = 0.00$). This factor accounted for 50.779% of variance of the data set. The composite variable was also checked for reliability using Cronbach's alpha. The result was 0.870, which indicates high reliability. The composite variable was thus both valid, and reliable. By averaging the seven items, the mean score for the composite variable was 5.6128 on a scale of 1 to 7 (standard deviation 0.77149), which indicates that respondents

considered the quality of medical care in foreign countries to be quite important. The z-score of 3.0724 indicated that the scores of this composite variable were normally distributed. (Manning and Munro, 2007).

4.3.5.2 Saving potential

Respondents were asked to indicate their degree of agreement/disagreement (on a seven-point Likert-type scale) with four items related to saving potential of travelling abroad for medical reasons.

The composite variable was checked for validity using inter-item correlation, item-to-total correlation, and principal component analysis. Although item-to-total correlations of the composite variable, and its four constituent items were greater than the 0.50 critical value, one particular item (my ideal medical tourism destination has a much lower cost of living in comparison to my home country) did not correlate with two items (my ideal medical tourism destination provides the same medical treatment at a much lower cost than my home country, and my ideal medical tourism destination provides my desired medical treatment at a lower cost compared to other destinations) at a satisfactory level (correlation < 0.30). In addition, reliability check using Cronbach's alpha indicated that the alpha value would increase from 0.701 to 0.726 without this particular item. The item was therefore excluded from the composite variable computation.

The new composite variable (with the aberrant item excluded) was checked for validity using inter-item correlation, item-to-total correlation, and principal component analysis. The constituent items correlated with each other, and with the composite variable at satisfactory levels (correlation > 0.50 for item-to-total correlation, and > 0.30 for inter-item correlations) (Manning and Munro, 2007, Hair et al., 1998). Principal component analysis extracted one factor with an eigenvalue greater than 1.00 (KMO = 0.671), and Bartlett's test for sphericity was significant ($\chi^2 = 193.03$; df = 3; $p=0.00$). The composite variable was also checked for reliability using Cronbach's alpha. The result was 0.726, which indicates that the composite variable was reliable (Manning and Munro, 2007, Hair et al., 1998).

The mean score of the composite variable was computed by averaging the mean scores of the three constituent items. The mean score was 5.5395 on a scale of 1 to 7 (standard deviation 0.90965), which indicates that respondents believed that the

saving potential associated with medical tourism was quite important in choosing a medical tourism destination. The z-score of the composite variable was 2.6811, which was less than the critical value of 3.29 for a sample size larger than 300. This indicated that the composite variable was normally distributed (Tabachnick and Fidell, 1996).

4.3.5.3 Safety, and security issues

Respondents were asked to indicate their degree of agreement/disagreement (on a seven-point Likert-type scale) with 10 statements regarding safety, and security issues at a medical tourism destination. The composite variable was checked for validity using item-to-total, and inter-item correlations, as well as principal component analysis.

Although item-to-total correlations between the ten constituent items, and the composite variable were satisfactorily (correlation > 0.50), one particular item (my ideal medical tourism destination is safe to travel to alone) did not correlate with several other constituent items (my ideal medical tourism destination has a low crime rate; my ideal medical tourism destination is safe to walk on the street alone; my ideal medical tourism destination has few natural disasters; my ideal medical tourism destination is not targeted for attack by terrorists; and my ideal medical tourism destination has a safe transportation system) at satisfactory levels (correlation < 0.30).

In addition, reliability testing by Cronbach's alpha indicated that deleting this particular item would improve the reliability level by increasing Cronbach's alpha from 0.891 to 0.896. The aberrant item was therefore excluded from the composite variable calculation. The composite variable, and its remaining nine constituent items correlated satisfactorily (correlations > 0.50), and the nine constituent items were also correlated at satisfactory levels (correlations > 0.30). Principal component analysis extracted one factor with an eigenvalue greater than 1.00 (KMO = 0.916), and Bartlett's test for sphericity was significant ($\chi^2 = 1296.252$; $df = 36$; $p = 0.00$). This factor accounted for 55% of the variance of the data set. Cronbach's alpha for the composite variable was 0.896, which indicated a high level of reliability. The composite variable was thus shown to be valid, and highly reliable. The mean score of the composite variable was 5.1390 on a scale of 1 to 7 (standard deviation 0.87126),

which indicates that respondents considered safety, and security issues to be quite important when making a choice of medical tourism destination. The z-score of the composite variable (0.224) was less than the critical value of 3.29 for a sample size larger than 300. (Manning and Munro, 2007, Tabachnick and Fidell, 1996).

4.3.5.4 Tourism opportunity

Respondents were asked to indicate their degree of agreement/disagreement (on a seven-point Likert-type scale) with five items relevant to tourism opportunities offered by a medical tourism destination. The composite variable was checked for reliability using item-to-total, and inter-item correlations. The composite variable was correlated with its five constituent items at satisfactory levels (correlations > 0.50). The constituent items also correlated with each other satisfactorily (correlations > 0.30).

Principal component analysis extracted one factor with an eigenvalue greater than one (KMO = 0.823), and Bartlett's test for sphericity was significant ($\chi^2 = 575.710$; $df = 10$; $p = 0.00$). This factor accounted for 60.483% of variance of the data set. Cronbachs alpha indicated that the composite variable was highly reliable ($\alpha = 0.834$). The composite variable was computed by averaging the scores of the five constituent items. The mean score for the composite variable was 4.0603 on a scale of 1 to 7 (standard deviation 1.15994), which suggests that respondents considered tourism opportunities offered by potential destinations to be neither important nor unimportant in selecting a medical tourism destination. The z-score of 2.0144 indicated that the scores of the composite variable were normally distributed.

4.3.5.5 Hygiene issues

Respondents were asked to indicate their degree of agreement/disagreement (on a seven-point Likert-type scale) with four items related to the hygiene of a medical tourism destination. The composite variable, and its four constituent items correlated with each other at satisfactory levels (correlations > 0.50). All constituent items correlated with each other at satisfactory levels (correlations > 0.30). Principal component analysis extracted one factor with an eigenvalue greater than 1.00 (KMO = 0.728), and Bartlett's test for sphericity was significant ($\chi^2 = 210.57$; $df = 6$; $p = 0.00$). This factor accounted for 52.994% of variance of the data set. Cronbach's alpha value was 0.703, which indicated that the composite variable was reliable. The

composite variable was thus both valid, and reliable. The composite variable was computed by averaging the scores of the four constituent items. The mean score of the composite variable was 5.5732 on a scale of 1 to 7 (standard deviation 0.79142), which suggests that hygiene issues were quite important to respondents in choosing a medical tourism destination. The z-score of 3.1449 suggests that the scores of the composite variable were normally distributed.

4.3.5.6 Accessibility of destination

Respondents were asked to indicate their degree of agreement/disagreement (on a seven-point Likert-type scale) with two items related to accessibility of a medical tourism destination. The composite variable, and the two constituent items correlated with each other at satisfactory levels (correlations > 0.50). The two constituent items also correlated satisfactorily with each other (correlation > 0.30).

Principal component analysis extracted one factor with an eigenvalue greater than 1.00, which accounted for 77.871% of variance of the data set. Because there were only two items taken into consideration, the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy, which was 0.50, was less than the critical value of 0.60. However, Bartlett's test for sphericity was significant ($\chi^2 = 114.425$; $df = 1$; $p = 0.00$). Cronbach's alpha value for the composite variable was 0.715, which indicates that it is reliable. The composite variable was thus shown to be both valid, and reliable. The composite variable was computed by averaging the scores of the two constituent items. The mean score of the composite variable was 4.9446 on a scale of 1 to 7 (standard deviation 1.08616), which suggests that respondents considered accessibility to be neither important nor unimportant in choosing a medical tourism destination. The z-score of the composite variable was 2.4637, which indicates that the scores of the composite variable were normally distributed.

4.3.6 Level of product familiarity

Familiarity with a medical tourism destination was assessed in terms of: (i) familiarity with the procedures associated with the desired medical treatment; and (ii) familiarity with alternative medical tourism destinations.

4.3.6.1 Familiarity with procedures

Respondents were asked to indicate (on a seven-point Likert-type scale) their degree of familiarity with the procedures associated with their desired medical

treatment. The mean score of this variable was 4.0500 (standard deviation 1.38531), which suggests that respondents were neither familiar nor unfamiliar with the procedures associated with their desired medical treatment. The scores of this variable were normally distributed, as indicated by the z-score of 3.1956, which was less than the critical value of 3.29 for a sample size larger than 300.

4.3.6.2 Familiarity with Thailand as a medical tourism destination

Respondents were asked to indicate (on a seven-point Likert-type scale) their degree of familiarity with Thailand as a medical tourism destination. The mean score of the variable was 4.5845 (standard deviation 1.7505), which suggests that respondents were neither familiar nor unfamiliar with Thailand as a medical tourism destination.

Although there was no outlier detected, scores for this variable were not normally distributed, as indicated by the z-score of 4.1159, which was greater than the critical value of 3.29 for a sample larger than 300. This variable was therefore treated with non-parametric statistical techniques in subsequent analyses.

4.3.7 Search behaviour

Search behaviour was measured by a proxy variable by asking respondents to indicate whether they felt confident in choosing a medical tourism destination, given their current level of knowledge. This was assessed by requesting an answer to one question from three alternatives (yes, no, and not sure). The rationale for the proxy variable was that less confident respondents can be assumed to engage in a search for more information.

Approximately one-third of respondents (35%) stated that they were confident in choosing a medical tourism destination, and about a quarter (24%) were not confident. The remainder (41%) were unsure whether they were confident about choosing a medical tourism destination. Because it can be assumed that individuals who lack confidence about making a choice decision are more likely to engage in external information search, most of the respondents (65%) in the present study (that is, the total of those who were not confident, and those who were unsure) are likely to undertake an active search for information about medical procedures, and prospective destinations from external information sources.

4.3.8 Information sources

Three external sources were assessed: (i) induced image agents; (ii) autonomous image agents; and (iii) organic image agents.

4.3.8.1 Induced image agents

Respondents were asked to indicate (on a seven-point Likert-type scale) the importance that they attached to information from six induced image agents.

The composite variable was checked for validity, and reliability. Although item-to-total correlations of the composite variable were satisfactory (correlations > 0.50), inter-item correlations between one particular item (information from non-commercial websites) failed to correlate with two other items (advertising campaigns developed by destinations about medical tourism; and personal selling by staff of travel agencies specialising in medical tourism) at satisfactory levels (correlations < 0.30).

In addition, reliability analysis showed that deleting this particular item would increase Cronbach's alpha from 0.826 to 0.832. This item was therefore deleted from the composite variable. The new composite variable was computed by averaging the scores of the remaining five constituent items. Both item-to-total correlation (> 0.50), and inter-item correlation (> 0.30) showed satisfactory results. Principal component analysis extracted one factor with an eigenvalue greater than 1.00 (KMO = 0.779), and Bartlett's test for sphericity was significant ($\chi^2 = 639.322$; $df = 10$; $p = 0.00$). This factor accounted for 60.387% of variance of the data set. Cronbach's alpha (0.832) indicated that the composite variable was highly reliable. The composite variable was thus shown to be both valid, and reliable. The mean score of composite variable was 4.8655 on a scale of 1 to 7 (standard deviation 0.88632), which suggests that respondents considered information from induced image agents to be neither important nor unimportant in choosing a medical tourism destination. The z-score of 3.1086 indicates that the scores of this composite variable were normally distributed.

4.3.8.2 Autonomous image agents

Respondents were asked to indicate (on a seven-point Likert-type scale) the importance that they attached to information from four autonomous image agents. Item-to-total correlations of the composite variable, and its four constituent items were satisfactory (correlations > 0.50). Inter-item correlations also showed

satisfactory results. Principal component analysis extracted one factor with an eigenvalue greater than one ($KMO = 0.807$), and Bartlett's test for sphericity was significant ($\chi^2 = 679.796$; $df = 6$; $p = 0.00$).

This factor accounted for 73.227% of variance of the data set. This composite variable was also highly reliable, as indicated by Cronbach's alpha value of 0.877. This composite variable was thus shown to be both valid, and reliable. The composite variable was calculated by averaging the scores of the four constituent items. The mean score of the composite variable was 5.1482 on a scale of 1 to 7 (standard deviation 0.7563), which suggests that respondents considered information received from autonomous image agents as being quite important in choosing a medical tourism destination. Scores of this composite variable were normally distributed, as indicated by the z-score of 0.1014. (Tabachnick and Fidell, 1996, Manning and Munro, 2007).

4.3.8.3 Organic image agents

Respondents were asked to indicate (on a seven-point Likert-type scale) the importance that they attached to information from three organic image agents. The composite variable, and its three constituent items correlated with each other at satisfactory levels (correlations > 0.50), and the constituent items also correlated with each other satisfactorily (correlations > 0.30).

Principal component analysis extracted one factor with an eigenvalue greater than one ($KMO = 0.666$), and Bartlett's test for sphericity was significant ($\chi^2 = 236.621$; $df = 3$; $p = 0.00$). This factor accounted for 68.695% of variance of the data set. The composite variable was reliable, as indicated by Cronbach's alpha value of 0.770. The composite variable was thus both valid, and reliable. The composite variable was computed by averaging the scores of the three constituent items. The mean score of the variable was 5.5975 on a scale of 1 to 7 (standard deviation 0.8527), which suggests that the respondents considered information from organic image agents to be quite important in choosing a medical tourism destination. The scores of this composite variable were normally distributed, as indicated by a z score of 3.2464.

4.3.9 Perceived risk

Nine aspects of perceived risk were measured separately by asking respondents

to indicate the importance that they attached to each on a seven-point Likert-type scale. One item was used to measure each element of perceived risk.

4.3.9.1 Functional risk

The mean score for the variable functional risk was 5.8304 (standard deviation 0.9641), which suggests that respondents considered functional risk to be quite important in choosing a medical tourism destination.

Although no outlier was detected, the scores of this variable were not normally distributed, as indicated by the z-score of 4.4348, which was greater than the critical value of 3.29 for a sample size larger than 300. This was probably due to so-called ceiling effects. This variable was therefore treated with non-parametric methods in subsequent analyses.

4.3.9.2 Financial risk

The mean score for the variable financial risk was 5.3896 (standard deviation 1.0196), which suggests that respondents considered financial risk to quite important in choosing a medical tourism destination. The scores of this variable were normally distributed, as indicated by the z-score of 2.2174.

4.3.9.3 Health risk

The mean score for the variable health risk was 5.0098 (standard deviation 1.1250), which suggests that respondents considered health risk to be quite important in choosing a medical tourism destination.

Although no outlier was detected, the scores of this variable were not normally distributed, as indicated by the z-score of 4.00. This variable was therefore treated with nonparametric statistical methods in subsequent analyses.

4.3.9.4 Physical risk

The mean score for the variable physical risk was 4.8344 (standard deviation 1.37541), which suggests that respondents considered physical risk to be neither important nor unimportant in choosing a medical tourism destination.

Although no outlier was detected, the scores of this variable were not normally distributed, as indicated by the z-score of 3.963, which was greater than the critical value of 3.29 for a sample size larger than 300. This variable was therefore treated with nonparametric statistical methods in subsequent analyses.

4.3.9.5 Satisfaction risk

The mean score for the variable satisfaction risk was 5.6787 (standard deviation 1.1250), which suggests that respondents considered satisfaction risk to be quite important in choosing a medical tourism destination.

Although no outlier was detected, the scores of this variable were not normally distributed, as indicated by the z-score of 3.9347. This variable was therefore treated with non-parametric statistical methods in subsequent analyses.

4.3.9.6 Psychological risk

The mean score for the variable psychological risk was 3.5537 (standard deviation 1.5825), which suggests that respondents considered psychological risk to be quite unimportant in choosing a medical tourism destination. As indicated by the z-score of 0.9420, the scores of this variable were normally distributed.

4.3.9.7 Political risk

The mean score for the variable political risk was 4.03578 (standard deviation 1.47756), which suggests that respondents considered political risk to be neither important nor unimportant in choosing a medical tourism destination. As indicated by the z-score of 1.5072, the scores of this variable were normally distributed.

4.3.9.8 Social risk

The mean score for the variable social risk was 3.2345 (standard deviation 1.4912), which suggests that respondents considered social risk to be quite unimportant in choosing a medical tourism destination. Scores for this variable were normally distributed, as indicated by the z-score of 1.1449.

4.3.9.9 Time risk

The mean score for the variable time risk was 4.3420 (standard deviation 1.2861), which suggests that respondents considered time risk to be neither important nor unimportant in choosing a medical tourism destination. The scores for this variable were normally distributed, as indicated by the z-score of 1.9927.

4.3.10 Consideration set

An open-ended question invited respondents to name as many medical tourism destinations of which they were currently aware.

4.3.11 Images of hygiene level of potential destinations

Respondents were asked to indicate their perception of the hygiene level of

Thailand, and its competing medical tourism destinations on a seven-point Likert-type scale.

4.3.11.1 Image of hygiene level of Thailand

The mean score for this variable was 5.0675 (standard deviation 0.9236), which suggests that respondents perceived Thailand to be quite hygienic. The scores for this variable were normally distributed, as indicated by the z-score of 3.1304, which was less than the critical value of 3.29 for a sample size larger than 300.

4.3.12 Image of safety, and security of potential destinations

Respondents were asked to indicate their perceptions of the safety, and security of Thailand, and its competing medical tourism destinations on a seven point Likert-type scale.

4.3.12.1 Image of safety, and security of Thailand

The mean score for this variable was 4.7296 (standard deviation 1.2129), which suggests that respondents perceived Thailand to be neither safe nor unsafe. Although no outliers were detected, the scores for this variable were not normally distributed, as indicated by a z-score of 4.5507, which was greater than the critical value of 3.29 for a sample size larger than 300. This variable was therefore treated with non-parametric statistical methods in subsequent analyses because it failed to satisfy the assumption of normality.

4.3.13 Intention to visit

Intention to visit Thailand or its three competing medical tourism destinations was measured as a dependent variable by asking respondents to indicate (on a seven-point Likert-type scale) the likelihood of their visiting each of the four destinations.

4.3.13.1 Intention to visit Thailand

The mean score for this variable was 5.1246 (standard deviation 1.3543), which suggests that respondents were somewhat likely to visit Thailand for medical reasons. Although no outliers were detected, the scores for this variable were not normally distributed, as indicated by the z-score of 5.8623, which was greater than the critical value of 3.29 for a sample size larger than 300. This variable was therefore treated with non-parametric statistical methods in subsequent analyses because it failed to satisfy the assumption of normality.

4.4 Hypothesis testing

The present study proposed 13 hypotheses to be tested against data collected from the sample. These 13 hypotheses were proposed under three subsidiary research questions as follows.

4.4.1 Subsidiary research question 1.1

The first subsidiary research was:

What motivates people to engage in medical tourism?

In addressing this research question, Section 2.6 proposed four hypotheses for testing:

Hypothesis H1: People who engage in medical tourism tend to possess a high level of internal health.

Hypothesis H2: People who engage in medical tourism think that medical care in their countries of residence.

Hypothesis H3: People engage in medical tourism because they do not want to wait to receive medical treatment in their countries of residence.

Hypothesis H4: People engage in medical tourism because the desired medical treatment is not available in their countries of residence.

In testing these hypotheses it was necessary to identify the relationships among five variables, of which one was a dependent variable, and four were independent variables. These variables were as follows:

independent variables: (i) health locus of control; (ii) attitude towards cost of medical care in home country; (iii) attitudes towards waiting times, and procedures involved with medical care in home country; and (iv) availability of treatment in home country.

dependent variable: motivation to engage in medical tourism.

Each of the independent variables was tested for correlation with the dependent variable. The results are summarised in Table 4.5. The testing of each hypothesis is described in greater detail below.

Table 4.5 Factors that influence level of motivation of individuals to engage in medical tourism

Dependent variable	Independent variables	Test statistic	Result
Motivation to engage in medical tourism	Internal health locus of control	Pearson correlation	Significant positive correlation (Pearson $r = -0.343$; $p = 0.00$)
	Attitudes towards cost of medical care in home country (log transformed)	Pearson correlation	Significant negative correlation (Pearson $r = 0.267$; $p = 0.00$)
	Attitudes towards procedures involved with medical care in home country	Pearson correlation	Significant negative correlation (Pearson $r = -0.267$; $p = 0.00$)
	Availability of treatment in home country	ANOVA	Insignificant effect [$F(2,307) = 0.297$; $p = 0.744$]

Hypothesis H1

The testing of Hypothesis H1 (which had proposed that people who engage in medical tourism tend to possess a high level of internal health locus of control) involved consideration of two variables: (i) internal health locus of control; and (ii) motivation to engage in medical tourism. Because both of these variables were of interval measurement, and their scores were normally distributed, the appropriate test for this hypothesis was Pearson's product-moment correlation. As shown in Table 4.5,

a significant positive relationship was found between the two variables (Pearson $r = 0.343$; $p = 0.00$). It is apparent that a greater health locus of control was associated with a greater motivation to engage in medical tourism. Hypothesis H1 was thus confirmed.

Hypothesis H2

The testing of Hypothesis H2 (which had proposed that people who engage in medical tourism think that medical care in their countries of residence is financially unaffordable) involved consideration of two variables: (i) attitudes towards cost of medical care in home country; and (ii) motivation to engage in medical tourism.

Although both of these variables were of interval measurement, the z-score of the former indicated that scores of respondents attitudes towards the cost of medical care in their home country were not normally distributed. Log transformation was therefore conducted, and the z-score of the log transformed score was satisfactory in terms of normal distribution. Pearson was therefore again chosen as the test statistic.

As shown in Table 4.5, a significant negative correlation was found between the two variables (Pearson $r = -0.267$; $p = 0.00$). It is apparent that negative attitudes towards costs of medical care in the home country (that is, an opinion that the cost of medical care is too high) was associated with a greater motivation to engage in medical tourism. Hypothesis H2 was thus confirmed.

Hypothesis H3

The testing of Hypothesis H3 (which had proposed that people engage in medical tourism because they do not want to wait to receive medical care in their countries of residence) involved consideration of two variables: (i) attitudes towards waiting time, and procedures involved with medical care in home country; and (ii) motivation to engage in medical tourism). Because both of these variables were of interval measurement, and their scores satisfied the assumption of normality, the chosen test statistic was again Pearson.

As shown in Table 4.6, a significant negative correlation was found between the two variables (Pearson $r = -0.203$, $p = 0.00$). It is apparent that more negative attitudes towards waiting times, and procedures involved with medical care in the home country (that is, a perception that people have to negotiate many steps, and wait

for a long time to receive medical treatment) was associated with a greater motivation to engage in medical tourism. Hypothesis H3 was thus confirmed.

Hypothesis H4

The testing of Hypothesis H4 (which had proposed that people engage in medical tourism because the desired medical treatment is not available in their countries of residence) involved consideration of two variables: (i) availability of medical treatment in home country; and (ii) motivation to engage in medical tourism). The former was of nominal measurement, whereas the latter was of interval measurement. One-way analysis of variance (ANOVA) was therefore chosen as the test statistic.

As shown in Tables 4.6 and 4.7, no significant difference was found in the level of motivation to engage in medical tourism between respondents in different situations with regard to the availability of medical treatment in the home country $F(2, 307) = 0.297$; $p = 0.774$ (> 0.05). Hypothesis H4 was therefore rejected.

Table 4.6 ANOVA of availability of desired medical treatment, and motivation to engage in medical tourism

Availability /Motivation	Mean	Standard deviation	Levene's statistic	F statistic
			$F(2,307)=1.657$; $p=0.182$	$F(2,307)=0.297$; $p=0.774$
Available	5.5089	0.8255		
Not available	5.5600	0.8843		
Do not know	5.4167	0.9964		

To explore the combined influence of the independent variables on people's motivation to engage in medical tourism, multiple linear regression was conducted. Table 4.7 shows the multiple correlation coefficients, analysis of variance, and part correlation squared of the three independent variables on the variance of motivation of

respondents to engage in medical tourism. A standard multiple regression was performed between motivation to engage in medical tourism (as the dependent variable), and internal health locus of control, attitudes towards cost of medical care in home country, and attitudes towards waiting times, and procedures involved with medical care in home country (as independent variables). The multiple correlation coefficient ($R = 0.432$) was significantly different from zero, $F(3,301) = 22.990$ ($p = 0.00$) and 17.8% of variation in the dependent variable was explained by the set of independent variables ($R^2 = 0.186$; adjusted $R^2 = 0.178$).

All three independent variables were found to make a significant, and unique contribution to predicting the level of motivation to engage in medical tourism: (i) internal health locus of control: $sri\ 2 = 0.961$; $t = 5.971$, $p < 0.05$; (ii) attitudes towards cost of medical care in home country: $sri\ 2 = -0.432$, $t = -4.008$; $p < 0.05$; and (iii) attitudes towards waiting time, and procedures involved with medical care in home country: $sri2 = -0.012$; $t = -2.105$; $p < 0.05$). The equation of prediction produced by this analysis can be stated as follows: Level of motivation to engage in medical tourism = $(0.313 \cdot \text{Internal health locus of control}) - (0.215 \cdot \text{attitudes towards cost of medical care in home country}) - (0.144 \cdot \text{attitudes towards waiting time, and procedures involved with medical care in home country}) + 3.992$.

Table 4.7 Multiple linear regression of factors influencing motivation to engage in medical tourism

R2	Adjusted R3	F Statistics		Constant
0.186	0.178	F(3,301) = 22.990 (p=0.00)		3.992
Independent variable	Unstandardised B coefficient	Standardised B Coefficient	t = test	Significance Level
Internal health locus of control	0.392	0.313	5.971	0.000
Attitudes towards cost of medical care in home country	-0.486	-0.215	-4.008	0.000
Attitudes towards waiting time and, procedures involved with medical care in home country	-0.080	-0.144	-2.105	0.036

4.4.2 Subsidiary research question 1.2

The second subsidiary research question was:

What is the nature of the information search behaviour of medical tourists when making a destination choice?

In addressing this research question, Section 2.6 proposed four hypotheses for testing:

Hypothesis H5: When choosing a destination, prospective medical tourists place more importance on destination attributes related to quality of care, and potential for savings than attributes about tourism opportunities.

Hypothesis H6: Prospective medical tourists with a low level of familiarity tend to engage in a high level of external search.

Hypothesis H7: Prospective medical tourists with a high level of perceived risk tend to engage in a high level of external search, especially from doctors, and insurance companies.

Hypothesis H8: Induced image produced by relevant medical tourism authorities is important in choosing a destination for medical tourism.

Testing of these hypotheses required consideration of: (i) medical tourism destination attributes; (ii) perceived risks; (iii) familiarity with procedures involved with desired medical treatment; (iv) information search behaviour; and (v) information sources (in terms of their relative importance).

Hypothesis H5

The testing of Hypothesis H5 (which had proposed that, when choosing a destination, prospective medical tourists place more importance on destination attributes related to quality of care, and potential for savings than attributes about tourism opportunities) involved consideration of medical tourism destination attributes. Table 4.8 shows the mean scores, and standard deviations for the attributes.

Table 4.8 Medical tourism destination attributes

Destination attributes	Mean score	Standard deviation
Quality of care	5.6128	0.7715
Saving potential	5.5395	0.9097
Hygiene issues	5.5372	0.7914
Safety, and security issues	5.1390	0.8716
Accessibility	4.9446	1.0862
Tourism opportunities	4.0406	1.1811

Given that hygiene, safety, and security are indirectly related to quality of care, these findings demonstrate that the respondents placed more importance on issues related to quality of care, and saving potential, while being less concerned about accessibility, and tourism opportunities. Hypothesis H5 was thus confirmed.

Hypothesis H6

The testing of Hypothesis H6 (which had proposed that prospective medical tourists with a low level of familiarity tend to engage in a high level of external search) involved consideration of confidence in choosing a medical tourism destination, which served as the dependent variable (as a proxy for information search, because the extent of information search is related to the degree of confidence. The independent variable in the testing of this hypothesis was familiarity, which was measured in terms of: familiarity with Thailand as a medical tourism destination. Tables 4.9, and 4.10 show the results of the analysis of the relationships among these variables.

Table 4.9 Analysis of variance of familiarity with medical procedures, and confidence in choosing a medical tourism destination

Confidence /familiarity	Mean	Standard deviation	Levene's statistic	ANOVA (F statistic)
Confident	5.1111	1.1866	F(2,307)=4.838; p=0.009	F(2,307)=21.277 p=0.000
Not confident	3.8313	1.5223		
Not sure	4.4103	1.3063		

It is apparent from the ANOVA analysis in Table 4.9 that levels of confidence in choosing a medical tourism destination were significantly influenced by familiarity with procedures involved [F (2,307) = 21.277; $p = 0.000$]. People who were not confident in choosing a medical tourism destination had a lower level of familiarity with procedures involved with their desired medical treatment than those who were confident or not sure.

Table 4.10 Kruskal-Wallis, and Mann-Whitney U tests of confidence in choosing a destination, and familiarity with Thailand as a medical destination

Familiarity / confidence	Not sure	Unfamiliar	Familiar
Confident	U = 4440.00; $p=0.000$	U = 1474.00; $p=0.000$	Median = 6.00
Not confident	U = 3192.50; $p=0.000$	Median = 4.00	df = 2
Not sure	Median = 5.00	$\chi^2 = 59.447$	Assymp sig=0.000

Because familiarity with Thailand as a medical tourism destination was a variable that had failed to satisfy the assumption of normality, a Kruskal-Wallis test was conducted between this variable, and confidence in choosing a medical tourism destination. Three groups were found to be significantly different [χ^2 (df = 2; n = 310) = 59.447 ($p = 0.00$)]. Posthoc comparisons were conducted using Mann-Whitney U tests with a Bonferroni adjustment of alpha to $\alpha = 0.017$. The median of familiarity with Thailand as a medical tourism destination held by respondents who were confident in choosing a medical tourism destination was 6.00, which was significantly greater than the level of familiarity with Thailand as a medical tourism destination choice held by both: (i) respondents who were not sure if they are confident in choosing a medical tourism destination (median = 5.00; U = 4440.00; $p < 0.017$); and (ii) those who were not confident in choosing a medical tourism destination (median = 4.00; U = 1474.00; $p < 0.017$).

Moreover, the level of familiarity with Thailand as a medical tourism destination held by those who were not sure if they were confident in choosing a medical tourism destination was also significantly different from the level of familiarity held by those who were not confident in choosing a medical tourism choice too (U = 3192.50; $p < 0.017$). The findings suggest that those with a low level of familiarity with Thailand as a medical tourism destination were less confident in choosing a medical tourism destination, (and thus engaged in an external information search). Hypothesis H6 was thus confirmed.

Hypothesis H7

The testing of Hypothesis H7 (which had proposed that prospective medical tourists with a high level of perceived risk tend to engage in a high level of external search, especially from doctors, and insurance companies) involved consideration of the nine types of perceived risk measured in this study. Each of these risks was therefore analysed in relation to level of confidence in choosing a medical tourism destination. For perceived risks that had normal distribution of scores, ANOVA was conducted (see Table 4.11); for perceived risks that did not have a normal distribution of scores, Kruskal-Wallis and Mann-Whitney U Test were conducted (see Table 4.11).

Table 4.11 ANOVA of perceived risks, and confidence in choosing a medical tourism destination

Perceived risks /confidence in choosing a medical tourism destination	Confident	Not confident	Not sure	ANOVA (F statistic)
Financial risk	Mean=5.4480 SD=1.0433	Mean=5.5051 SD=1.1002	Mean=5.2500 SD=0.9720	F (2,307)=1.752; (p=0.175)
Psychological risk	Mean=3.4588 SD=1.5724	Mean=3.3663 SD=1.3981	Mean=3.7422 SD=1.6801	F (2,307)=1.627; (p=0.198)
Political risk	Mean=3.9633 SD=1.4972	Mean=4.2172 SD=1.3060	Mean=3.9222 SD=1.5547	F (2,307)=0.742; (p=0.477)
Social risk	Mean=3.3633 SD=1.5248	Mean=2.9928 SD=1.3903	Mean=3.2656 SD=1.5164	F (2,307)=1.406; (p=0.246)
Time risk	Mean=4.1844 SD=1.3335	Mean=4.4146 SD=1.2901	Mean=4.4297 SD=1.2402	F (2,307)=1.188; (p=0.306)

Table 4.12 Kruskal-Wallis test of perceived risks, and confidence in choosing a medical tourism destination

Perceived risks /Confidence in choosing a medical tourism destination	Confident	Not confident	Not sure	Kruskall-Wallis test
Functional risk	Median=6	Median=6	Median=6	χ^2 (df=2; n=310) = 4.527 (p=0.104)
Health risk	Median=5	Median=5	Median=5	χ^2 (df=2; n=310) = 5.116 (p=0.770)
Physical risk	Median=5	Median=5	Median=5	χ^2 (df=2; n=310) = 0.129 (p=0.938)
Satisfaction risk	Median=6	Median=6	Median=5	χ^2 (df=2; n=310) = 5.660 (p=0.104)

It is apparent from Tables 4.11, and 4.12 that no significant association was demonstrated between perceived risks, and levels of confidence in choosing a medical tourism destination. Because those who are confident about choosing a medical destination tend not to engage in extensive search behaviour, it would seem that the respondents search behavior was unaffected by any types of perceived risk. The finding suggests that none of the perceived risks has a significant effect on search behaviour.

Table 4.13 shows the relationships between each of the nine types of perceived risk, and the levels of importance of information from insurance companies, and personal doctors. Pearson correlation was used for perceived risks whose scores

were normally distributed, whereas Spearman's rank order correlation was used for perceived risks whose scores fail to satisfy the assumption of normality.

Table 4.13 Correlations between perceived risks, and information from insurance companies, and personal doctors

Types of perceived risk	Test statistic	Correlation/coefficient with information from insurance companies	Correlation/coefficient with information from personal doctors
Functional risk	Spearman's rho	0.171 ($p=0.003$)	0.296 ($p=0.000$)
Financial risk	Pearson r	0.278 ($p=0.000$)	0.287 ($p=0.000$)
Health risk	Spearman's rho	0.136 ($p=0.017$)	0.083 ($p=0.145$)
Physical risk	Spearman's rho	0.081 ($p=0.153$)	0.000 ($p=0.998$)
Satisfaction risk	Spearman's rho	0.194 ($p=0.001$)	0.245 ($p=0.000$)
Psychological risk	Pearson r	0.011 ($p=0.844$)	-0.322 ($p=0.000$)
Political risk	Pearson r	0.090 ($p=0.115$)	0.025 ($p=0.661$)
Social risk	Pearson r	0.000 ($p=0.995$)	-0.239 ($p=0.000$)
Time risk	Pearson r	0.138 ($p=0.015$)	-0.051 ($p=0.368$)

It is apparent that there were significant positive correlations/coefficients between certain risks (functional, financial, health, satisfaction, and time), and importance of information from insurance companies ($p < 0.05$). Positive correlations were also found between certain risks (functional, financial, and satisfaction), and information from personal doctors ($p < 0.05$).

In summary, perceived risks of all types were found to have insignificant effects on the respondents level of confidence in choosing a medical tourism destination (which was used as a proxy for external search in this study). The finding

suggests that respondents tend not to change their levels of external information search as a consequence of perceived risk.

However, positive correlations between certain types of perceived risks, and information from insurance companies, and personal doctors suggest that respondents who perceive higher risks in certain respects tend to rely more on information from these two sources. Hypothesis H7 was therefore partially confirmed.

Hypothesis H8

The testing of Hypothesis H8 (which had proposed that induced image produced by relevant medical tourism authorities is important in choosing a medical tourism destination) required consideration of types of image agents, and intention to visit Thailand as a medical tourism destination. Table 4.14 shows the results of this analysis.

Table 4.14 Mean scores of three image agents, and correlations with visit intention to Thailand

Types of image agent	Mean score	Standard deviation	Correlation with intention to visit Thailand (Spearman's rho)
Induced	4.8655	0.8863	0.208 ($p=0.000$)
Autonomous	5.1428	0.7562	0.159 ($p=0.005$)
Organic	5.5975	0.8197	0.218 ($p=0.000$)

It is apparent from Table 4.14 that respondents considered information received from organic image agents (mean = 5.5975, SD = 0.8197), and autonomous agents (mean = 5.1428, SD = 0.7562) to be quite important in choosing a medical tourism destination, whereas information received from induced image agents (mean = 4.8655, SD = 0.8863) was neither important nor unimportant. However, all three types of image agents were positively, and significantly correlated with intention to visit Thailand.

These findings suggest that, although respondents considered information received from organic, and autonomous image agents to be more important than information from induced image agents, all three types of image agents were important to an intention to visit Thailand for medical reasons. Two specific types of

information from medical tourism authorities are worthy of consideration: (i) brochures from destination authorities; and (ii) advertising campaigns developed by destinations about medical tourism.

Correlations between the information from these two sources, and intention to visit Thailand would signify that respondents considered information from these two sources to be important in choosing a medical tourism destination. Because intention to visit Thailand did not satisfy the assumption of normality, Spearman was chosen as the test statistic. As shown in Table 4.15, brochures from destination authorities correlated significantly with intention to visit Thailand (Spearman's $\rho = 0.144$; $p < 0.05$). Advertising campaigns developed by destinations about medical tourism also correlated significantly with intention to visit Thailand (Spearman's $\rho = 0.162$; $p < 0.05$). It can therefore be argued that respondents who placed more importance on information from these two sources were more likely to visit Thailand for medical reasons.

Table 4.15 Correlations between information from medical tourism authorities, and intention to visit Thailand

Information source	Correlation with intention to visit Thailand (Spearman's ρ)
Brochures from destination authorities	Spearman's $\rho=0.144$; $p=0.011$
Advertising campaigns by destinations	Spearman's $\rho=0.162$; $p=0.004$

Brochures from destination authorities Spearman's $\rho = 0.144$; $p = 0.011$

Advertising campaigns by destinations Spearman's $\rho = 0.162$; $p = 0.004$

In summary, although the mean score for induced image agents (in general) suggested that this source of information is neither important nor unimportant in choosing a medical tourism destination, this source of information correlated significantly with intention to visit Thailand. Moreover, the results indicate that respondents considered information from all three types of image agents (including induced images) to be important in choosing a medical tourism destination. Hypothesis H8 was thus confirmed.

4.4.3 Subsidiary research question 1.3

The third subsidiary research question was:

What are the factors in choosing a medical tourism destination?

In addressing this research question, Section 2.6 proposed four hypotheses for testing:

Hypothesis H9: Quality of care is a non-compensatory rule; that is, prospective medical tourists tend to avoid destinations that are perceived to be inferior in terms of the quality of medical care that they provide.

Hypothesis H10: Potential for cost saving is a compensatory rule; that is, prospective medical tourists are willing to sacrifice certain attributes for a greater potential for cost saving.

Hypothesis H11: The image of a destination with regard to search a information about medical tourism has a positive effect on medical tourists intention to visit.

Hypothesis H12: The image of a destination with regard to hygiene has a positive effect on medical tourists intention to visit.

Hypothesis H13: The image of a destination with regard to safety, and security has a positive effect on medical tourists intention to visit.

Table 4.16 Correlations of destination attributes, and visit intentions

Destination attributes	Intention to visit Thailand
Quality of care	Spearman's $\rho=0.017$; $p=0.771$
Saving potential	Spearman's $\rho=0.140$; $p=0.014$
Safety, and security	Spearman's $\rho=0.058$; $p=0.309$
Hygiene issues	Spearman's $\rho=-0.025$; $p=0.666$
Tourism Opportunities	Spearman's $\rho=0.148$; $p=0.013$
Accessibility	Spearman's $\rho=0.090$; $p=0.112$

In testing these hypotheses, it was necessary to consider destination attributes, and evaluation of alternative medical tourism destinations, as shown in Table 4.16.

Hypothesis H9

The testing of Hypothesis H9 (which had proposed that quality of care is a non compensatory rule; that is, prospective medical tourists tend to avoid destinations that are perceived to be inferior in terms of quality of medical care that they provide) involved consideration of two variables: (i) quality of care (as the independent variable), and (ii) intention to visit Thailand or its three competing medical tourism destinations (as dependent variables). It was apparent from Table 4.8 (see above) that quality of care (mean = 5.6128, SD = 0.7715) was the most important destination attribute for respondents in choosing a medical tourism destination.

However, providing a quality of care greater than this threshold level would not necessarily lead to a greater intention to visit. Hypothesis H9 was thus confirmed.

Hypothesis H10

The testing of Hypothesis H10 (which had proposed that potential for cost saving is a compensatory rule; that is, prospective medical tourists are willing to sacrifice certain attributes for cost saving) involved consideration of two variables: (i) saving potential; and (ii) intention to visit Thailand or its three competing medical tourism destinations.

As previously noted, Table 4.18 showed that a significant positive correlation existed between saving potential, and intention to visit Thailand (Spearman's $\rho = 0.140$, $p < 0.05$). These respondents would appear to be willing to sacrifice certain attributes of their medical vacation in the interests of greater saving potential, while avoiding destinations that are perceived to be expensive. Hypothesis H10 was thus confirmed.

Hypothesis H11

The test of Hypothesis H11 (which had proposed that the image of a destination with regard to search a information about medical tourism has a positive effect on medical tourists intention to visit) involved consideration of three variables: (i) source of information; (ii) image of a information (of Thailand, and its three competing destinations); and (iii) intentions to visit the four destinations. Although all of these variables were of interval measurement, several of them failed to satisfy the

assumption of normality. Spearman's rank order correlation (Spearman's rho) was therefore chosen as the test statistic for all correlations. Table 4.17 shows the correlations between image of safety, and security and intentions to visit.

Table 4.17 Correlations between image of a information about medical tourism

Independent variable	Dependent variable	Correlation
Image of a information of Thailand	Intention to visit Thailand	Spearman's rho=0.372; $p=0.000$

Hypothesis H12

The testing of Hypothesis H12 (which had proposed that the image of a destination with regard to hygiene has a positive effect on medical tourists intention to visit) involved consideration of three variables: (i) hygiene issues; (ii) image of hygiene level of Thailand, and its three competing medical tourism destinations; and (iii) intentions to visit the four destinations.

Table 4.18 Correlations between image of hygiene level, and intention to visit

Independent variable	Dependent variable	Correlation
Image of hygiene level of Thailand	Intention to visit Thailand	Spearman's rho=0.372; $p=0.000$

Table 4.18 shows the correlations between image of hygiene level, and intention to visit. As previously noted, it showed that hygiene issues represented the third-most important attribute of a medical tourism destination (mean = 5.5372; SD = 0.7914). It was apparent that respondents placed significant importance on the hygiene level of a medical tourism destination; indeed, this attribute ranked with quality of care, saving potential, and safety, and security issues as an attribute of

considerable importance. This is also reflected in the significant correlations between image of hygiene level, and intention to visit Thailand confirms Hypothesis H12.

Hypothesis H13

The testing of Hypothesis H13 (which had proposed that the image of a destination with regard to safety, and security has a positive effect on medical tourists intention to visit) involved consideration of three variables: (i) safety, and security issues; (ii) image of safety, and security (of Thailand, and its three competing destinations); and (iii) intentions to visit the four destinations. Although all of these variables were of interval measurement, several of them failed to satisfy the assumption of normality. Spearman's rank order correlation (Spearman's rho) was therefore chosen as the test statistic for all correlations.

Table 4.19 Correlations between image of safety, and security, and intention

Dependent variable	Dependent variables	Test statistic	Correlation
Image of safety, and security of Thailand	Intention to visit Thailand	Spearman's rho	Spearman's rho=0.388; p=0.000

Table 4.19 shows the correlations between image of safety, and security, and intentions to visit. As previously noted, Table 4.7 showed that safety, and security issues were the fourth most important attribute of a medical tourism destination (mean = 5.1390; SD = 0.8716); indeed, this attribute ranked with quality of care, saving potential, and hygiene as significant issues for consideration by respondents. This was confirmed in Table 4.19, which shows that significant positive correlations existed between images of safety, and security, and intentions to visit in the cases of all four destinations. It is thus apparent that image of safety, and security is important for intention to visit. Hypothesis H13 was thus confirmed.

CHAPTER 5

CONCLUSIONS, AND RECOMMENDATIONS

5.1 Conclusions

The thirteen hypotheses proposed in Chapter 2 have been tested, as reported in Chapter 4. Eleven of the hypotheses were confirmed (H1–H3, H5–H6, H8–H13), one was rejected (H4), and another was partially confirmed (H7). As previously noted, Hypotheses H1 to H4 were proposed under subsidiary research question 1.1, H5 to H8 were proposed under subsidiary research question 1.2 and H9 to H13 were proposed under research question 1.3. The findings regarding the testing of these hypotheses are formally stated below.

5.2 The findings of research

5.2.1 Subsidiary research question 1.1

The first subsidiary research question addressed in this study was:

What motivates people to engage in medical tourism?

The effective promotion of any tourism destination requires a thorough understanding of the motivation of prospective tourists. Motivation influences the whole process of choice behaviour, including information search, consideration set, image information, and evaluation of alternative destinations. A variety of factors influence the motivation of people to leave their own country, and travel to foreign destinations to receive medical treatment. These factors include the persons internal health locus of control, and their attitudes towards such issues as cost, waiting times, and the administrative procedures involved with the medical systems in their home countries. In the present study, four hypotheses were proposed, and tested to address the first subsidiary research question. The findings with regard to these four hypotheses are formally stated below.

Hypothesis H1

Hypothesis H1 had proposed that people who engage in medical tourism tend to possess a high level of internal health of control. In testing this hypothesis, the present study demonstrated that a significant relationship existed between the health

locus of control of the respondents, and the level of their motivation to engage in medical tourism (Pearson $r = 0.343$; $p < 0.05$). Hypothesis H1 was thus confirmed.

In accordance with, the present finding suggests that prospective medical tourists with a higher level of internal health locus of control have greater motivation to engage in health-enhancing behaviours, including the adoption of medical tourism.

Hypothesis H2

Hypothesis H2 had proposed that people who engage in medical tourism think that medical care in their countries of residence is financially unaffordable. In testing this hypothesis, the present study demonstrated that a significant relationship existed between the attitudes of the respondents towards the cost of medical care in their home country, and the level of their motivation to engage in medical tourism (Pearson $r = -0.267$; $p < 0.05$). Hypothesis H2 was thus confirmed.

The present finding suggests that prospective medical tourists with more negative attitudes towards the cost of medical care provided in their countries of residence have greater motivation to travel to Thailand for medical tourism.

Hypothesis H3

Hypothesis H3 had proposed that people engage in medical tourism because they do not want to wait to receive medical treatment in their countries of residence. In testing this hypothesis, the present study demonstrated that a significant relationship existed between the attitudes of respondents towards waiting times, and administrative procedures involved with the health-care system in their home country, and the level of their motivation to engage in medical tourism (Pearson $r = -0.203$; $p < 0.05$). Hypothesis H3 was thus confirmed.

The present finding suggests that prospective medical tourists who hold more negative attitudes towards waiting times, and administrative procedures involved with the health-care system in their home country have greater motivation to engage in medical tourism to Thailand.

Hypothesis H4

Hypothesis H4 had proposed that people engage in medical tourism because the desired medical treatment is not available in their countries of residence. In testing this hypothesis, the present study found that the availability of desired medical treatment in the home countries of respondents had an insignificant effect on their

level of motivation to engage in medical tourism [$F(2,307) = 0.297$; $p > 0.05$]. Hypothesis H4 was therefore rejected.

The results thus suggest that the motivation of prospective medical tourists to engage in medical tourism to Thailand is not dependent on the availability or unavailability of desired medical treatment in their home country.

Summary of findings: Subsidiary research question 1.1 (Hypotheses H1–H4)

The findings of the study with regard to subsidiary research question 1.1 showed that three factors (health locus of control, attitudes towards cost in home country, and attitudes towards administrative procedures in home country) uniquely, and significantly contribute to the levels of motivation of prospective medical tourists in accordance with the following equation:

$$(0.313 * \text{internal health locus of control}) - (0.215 * \text{attitudes towards cost in home country}) - (0.144 * \text{attitudes towards procedures in home country}) + 3.992$$

In summary, the present study concludes that three factors increase the motivation of prospective medical tourists to engage in medical tourism to Thailand.

Firstly, individuals with higher levels of internal health locus of control are more likely to engage in health-enhancing behaviours, including medical tourism.

Secondly, individuals are more motivated to seek medical treatment outside their countries of residence if they believe that the cost of medical care in their home country is too high.

Thirdly, the motivation to engage in medical tourism is enhanced if waiting times are perceived as being too long. In contrast, the unavailability of desired medical treatment in the home country does not appear to influence the motivation of people to engage in medical tourism.

5.2.2 Subsidiary research question 1.2

The second subsidiary research question addressed in this study was:

What is the nature of the information search behaviour of medical tourists when making a destination choice?

Medical tourism destinations that wish to provide effective information about the merits of their destination need to understand the nature of the information search behaviour of prospective medical tourists. According to several authors, the external

information search behaviour of tourists is influenced by the individual's level of product knowledge, familiarity with the product, and perceptions of risk.

In addition, heightened perceptions of certain risks have been associated with reliance on certain types of information sources. Because the level of risk associated with the choice of a medical tourism destination is greater than that associated with choosing a general tourism destination, prospective medical tourists are more likely to rely on information from specific sources such as medical tourism professionals, their personal doctors, and medical insurance companies.

In addition, as suggested by the above findings with regard to motivation, medical tourists are more likely to attach more importance to information that is related to medical care, and potential for cost savings than to information about other destination attributes.

In the present study, four hypotheses were proposed, and tested to address the second subsidiary research question. The findings regarding the testing of these hypotheses are formally stated below.

Hypothesis H5

Hypothesis H5 had proposed that, when choosing a destination, prospective medical tourists place more importance on destination attributes related to quality of care, and potential for savings than attributes about tourism opportunities.

In testing this hypothesis, the present study compared the mean scores of six attributes of medical tourism destinations. It was found that the respondents attached substantial importance to quality of care (mean score 0.56128), and saving potential (0.5395). They also considered hygiene issues (5.5372), and safety, and security issues (5.1390), which are indirectly related to quality of medical care, to be quite important. Hypothesis H5 was thus confirmed.

Hypothesis H6

Hypothesis H6 had proposed that prospective medical tourists with a low level of familiarity (with medical procedures, and with Thailand as a medical tourism destination) tend to engage in a high level of external search.

In testing this hypothesis, one-way analysis of variance (ANOVA) detected a significant relationship between the respondents level of confidence in choosing a medical tourism destination, and their level of familiarity with procedures involved

with medical treatment [$F(2,307) = 21.277$ ($p < 0.05$)]. Post hoc comparisons (Turkey HSD) found that there was a significant level of familiarity with medical procedures among three groups of respondents: (i) those who were confident (mean = 5.1111, SD = 1.1866); (ii) those who were not confident (mean = 3.8313, SD = 1.5223); and (iii) those who were not sure whether they were confident (mean = 4.4103, SD = 1.3063). These results show that respondents who were not confident in choosing a medical tourism destination also had the lowest level of familiarity with procedures involved with their medical treatment.

With regard to the level of familiarity with Thailand as a medical tourism destination, a Kruskal Wallis test was conducted to test the relationship between familiarity with Thailand, and level of confidence in choosing a medical tourism destination. Three groups were found to be significantly different [$\chi^2(df = 2, n = 310) = 59.447$ ($p = 0.00$)]. Post hoc comparisons were conducted using Mann-Whitney U Tests with a Bonferroni adjustment of alpha (to 0.017). The median of familiarity with Thailand as a medical tourism destination held by respondents who were confident in choosing a medical tourism destination was 6.00, which was significantly greater than the level of familiarity held by respondents who were not sure whether they are confident in choosing a medical tourism destination (median = 5.00; $U = 4440.00$; $p < 0.017$), and those who were not confident in choosing a medical tourism destination (median = 4.00; $U = 1474.00$; $p < 0.017$). Moreover, the level of familiarity with Thailand as a medical tourism destination held by those who were not sure whether they were confident in choosing a medical tourism destination was also significantly different from the level of familiarity with Thailand as a medical tourism destination choice held by those who were not confident in choosing a medical tourism destination ($U = 3192.50$; $p < 0.017$). The results showed that respondents with a low level of familiarity with Thailand as a medical tourism destination were also less confident in choosing a medical tourism destination, (and thus more likely to engage in external information search). Taken together, these results confirmed Hypothesis H6.

Hypothesis H7

Hypothesis H7 had proposed that prospective medical tourists with a high level of perceived risk tend to engage in a high level of external search, especially

from doctors, and insurance companies.

In testing this hypothesis, no significant effect of any types of perceived risk was found on the level of confidence of prospective medical tourists in choosing a medical tourism destination. This finding was in apparent contradiction to the commonly accepted view that tasks with higher levels of risk, and involvement (such as choosing a medical tourism destination) are usually associated with higher levels of external information search. It is likely that the explanation for the present finding is that information regarding medical care tends to be too complex for most prospective medical tourists to digest.

As a consequence, people therefore tend to rely on information from particular information sources, such as personal doctors, and insurance companies. Evidence for this explanation was found in the present study, which demonstrated that certain risks (functional, financial, health, satisfaction, and time) correlated significantly with the level of importance attached by respondents to information from insurance companies. Significant positive relationships were also found between functional, financial, and satisfaction risks, and the importance attached to information from personal doctors. Taken together, these results provided partial confirmation for Hypothesis H7.

Hypothesis H8

Hypothesis H8 had proposed that induced image produced by relevant medical tourism authorities is important in choosing a medical tourism destination.

In testing this hypothesis, significant correlations were found between three types of destination image agents, and intention to visit Thailand for medical tourism. With regard to induced image agents, two items (brochures from tourism authorities, and advertising campaigns by destinations) were found to correlate positively, and significantly with intention to visit Thailand for medical tourism.

The findings indicate that all three types of image agents, including induced image produced by medical tourism authorities, are important in choosing a medical tourism destination. Hypothesis H8 was thus confirmed.

Summary of findings: Subsidiary research question 1.2 (Hypotheses H5 – H8)

The findings of the study with regard to subsidiary research question 1.2 reveal that prospective medical tourists attach most importance to four destination

attributes: (i) quality of care; (ii) potential for cost savings; (iii) hygiene issues; and (iv) safety, and security issues. Moreover, the study finds that product familiarity both familiarity with medical procedures, and familiarity with a country as a medical tourism destination exerts a strong influence on information search behaviour. Prospective tourists who perceive that they possess a low level of familiarity with procedures, and destinations tend to engage in a higher level of external information search. Although perceived risks (in general) do not appear to exert a strong influence on external search behaviour, there are certain risks that increase reliance on information from insurance companies, and personal doctors.

Finally, when searching for information, prospective medical tourists rely on information from a variety of sources, but they do tend to attach more importance to information from organic, and autonomous agents.

5.2.3 Subsidiary research question 1.3

The third subsidiary research question addressed in this study was: What are the factors influencing tourists's preferences toward medical tourism in Thailand?

This question was addressed by testing four hypotheses regarding certain destination attributes, and so-called decision rules which can be categorised as compensatory decision rules, and non-compensatory rules.

Hypothesis H9

Hypothesis H9 had proposed that quality of care is a non-compensatory rule; that is, prospective tourists tend to avoid destinations that are perceived to be inferior in terms of the quality of medical care that they provide.

In testing this hypothesis, a significant negative relationship ($p < 0.05$) was found between quality of care, and no significant relationship ($p > 0.05$) was found between quality of care, and intentions to visit other proposed destinations. Given that quality of care was considered by respondents to be the most important destination attribute when choosing a medical tourism destination, it is apparent that medical tourists expect medical tourism destinations to provide an acceptable standard of medical care; however, the provision of a higher quality of care beyond this threshold standard does not appear to make a destination even more attractive. These results confirmed Hypothesis H9.

Hypothesis H10

Hypothesis H10 had proposed that potential for cost saving is a compensatory rule; that is, prospective medical tourists are willing to sacrifice certain other attributes for cost saving.

In testing this hypothesis, a significant positive relationship was found between saving potential, and intention to visit Thailand ($\rho = 0.140$; $p < 0.05$). A significant negative relationship was also found between saving potential. These results suggest that price-sensitive medical tourists tend to choose Thailand as the preferred medical destination. Given that potential for saving was ranked by respondents as the second-most important destination attribute, the results show that the respondents were willing to sacrifice certain attributes to benefit from the greater saving potential offered by certain destinations; in other words, saving potential represents a so-called compensatory rule. Hypothesis H10 was thus confirmed.

Hypothesis H11

Hypothesis H11 had proposed that the image of a destination with regard to search a information about medical tourism has a positive effect on medical tourists intention to visit.

In testing this hypothesis, the present study found that the images of Thailand (with respect to search a information) correlated positively, and significantly ($p < 0.05$) with respondents intentions to visit these countries. Hypothesis H11 was thus confirmed.

Hypothesis H12

Hypothesis H12 had proposed that the image of a destination with regard to hygiene has a positive effect on medical tourists's intention to visit.

In testing this hypothesis, the present study found that the images of Thailand (with respect to hygiene) correlated positively, and significantly ($p < 0.05$) with respondents's intention to visit these destinations. This result confirmed Hypothesis H12.

Hypothesis H13

Hypothesis H13 had proposed that the image of a destination with regard to safety, and security has a positive effect on medical tourists intention to visit.

In testing this hypothesis, the present study found that the images of Thailand (with respect to safety, and security) correlated positively, and significantly ($p < 0.05$) with respondents intentions to visit these countries. Hypothesis H13 was thus confirmed.

Summary of findings: Subsidiary research question 1.3 (Hypotheses H9–H13)

The findings of the study with regard to subsidiary research question 1.3 reveal that prospective medical tourists apply certain decision rules to particular destination attributes that are directly or indirectly related to their motivation to travel. These destination attributes are quality of care, and saving potential (which are directly related to the motivation to travel) (Gnoth, 1997, Mansfeld, 1992, Hanlan et al., 2006), and hygiene, and security, and safety (which are indirectly related to the motivation of medical tourists).

In accordance with, the present study has shown that quality of care is assessed by a non-compensatory rule; that is, medical tourists eliminate alternative medical tourism destinations that are unacceptable in terms of quality of care. However, the provision of medical care of a higher quality than the threshold level does not lead to increased intention to visit.

In contrast, potential for saving is assessed by a compensatory rule; that is, medical tourists tend to trade off other attributes for greater saving potential (Mansfeld, 1992). Taking these two findings together, it is apparent that medical tourism destinations should therefore promote an acceptable quality of care, and greater saving potential. The images of destinations with regard to hygiene, and safety, and security also influence intentions to visit for medical reasons.

5.3 Implications for theory

Although this research was conducted to address a research question that is primarily of managerial concern (What are the factors influencing tourist's preferences toward medical tourism in Thailand?), the findings also have theoretical implications. The implications of the study for theory can be considered under three headings: (i) the theory of tourists external information search behaviour; (ii) the theory of tourists reliance on information sources; and (iii) the theory of evaluation of alternative destinations. Each of these is considered in greater detail below.

5.3.1 Tourists external information search behaviour

As previously noted, the choice of a medical tourism destination tends to be high involvement task with a high perceived risk. As a consequence, the literature suggests that medical tourists are likely to engage in extensive information search to minimise the inherent risk prospective medical tourists also tend to solve their complex decision-making problems by setting certain decision rules for assessment of particular attributes. (Crotts, 2000, Mansfeld, 1992, Zaichkowsky, 1985). A significant factor that influences the external search behaviour of tourists is their knowledge of tourism activities, and alternative destinations. Tourists who lack confidence about their knowledge of these matters tend to rely more on external information search, and less on internal information search. Information can thus be understood as a risk minimiser.

Against this theoretical background, the present study has demonstrated that the respondents familiarity with medical procedures, and/or with Thailand as a medical tourism destination had a significant, positive influence on their confidence in choosing a destination, (and thus on their lack of reliance on external information search). (Mansfeld, 1992, Bettman, 1973).

5.3.2 Tourists reliance on information sources

The second theoretical implication derived from the present study concerns reliance on information sources. As previously noted, information sources can be divided into autonomous image agents, organic image agents, and induced image agents. Autonomous image agents, and organic image agents generally have greater credibility than induced image agents, who are often questioned in terms of trustworthiness, and expertise. (Hankinson, 2004, Beerli and Martin, 2004).

Against this theoretical background, the present study has shown that prospective medical tourists tend to rely on information from professionals such as personal doctors, and insurance companies. Nevertheless, although respondents considered information from induced image agents (marketing communication activities) to be neither important nor unimportant compared with information from autonomous image agents, and organic image agents (both of which were considered to be quite important), all information sources were shown to correlate significantly with intention to visit Thailand.

5.3.3 Evaluation of alternative destinations

The third theoretical implication derived from the present study concerns the evaluation of alternative medical tourism destinations. As previously noted, prospective tourists assess the utility of the attributes of alternative destinations on the basis of their consistency with the tourists' motivation to travel. In such evaluations, prospective tourists set decision rules, which can be either: (i) compensatory (rules that allow trade offs among destination attributes, such that tourists are willing to sacrifice a given attribute to benefit from other attributes); or (ii) non-compensatory (rules that do not allow such trade-offs, such that a destination will be rejected if it fails to deliver the expected level of certain attributes) (Mansfeld, 1992).

Against this theoretical background, the present study has shown that prospective medical tourists considered quality of care, saving potential, hygiene issues, and issues related to safety, and security to be quite important in choosing a destination. Quality of care, as the most important destination attribute, was the subject of a non-compensatory decision rule; that is, destinations that were perceived as failing to deliver care of an expected level were rejected.

Saving potential was found to be the second-most important destination attribute when choosing a medical tourism destination. However, this followed a compensatory decision rule. The positive correlation between saving potential, and intention to visit Thailand suggests that medical tourists who place more importance on saving potential are more likely to choose to visit Thailand for medical tourism.

The present study showed that medical tourists tend to choose one destination, (and avoid another) depending on the importance that they attach to saving potential. The present study has also identified other destination attributes that are indirectly related to the motivation of medical tourists including hygiene issues and safety, and security issues. These were respectively the third and fourth-most important destination attributes when respondents were choosing a medical tourism destination. The study found significant correlations between intention to visit, and perceived levels of hygiene in Thailand. The findings demonstrate that prospective medical tourists find higher perceived levels of hygiene in prospective destinations more appealing. With regard to safety, and security, the study found significant correlations between these issues, and intention to visit Thailand. The findings demonstrate that

safer, and more secure destinations are perceived as being more appealing by medical tourists.

5.4 Implications for practitioners

The findings of this study also have several implications for practitioners in promoting Thailand as a preferred medical tourism destination. These implications for practitioners are presented under two headings: (i) the use of information sources for communication; and (ii) leverage points for promotional message.

5.4.1 Use of information sources

Overt marketing communications, which include brochures, and advertising campaigns undertaken by medical tourism authorities, were found to have a positive influence on intention to visit Thailand for medical tourism. The Tourism Authority of Thailand, and the Ministry of Tourism, and Sport should therefore utilise these types of marketing communication activities to promote Thailand as a medical tourism destination. (Tasci and Gartner, 2007). Covert marketing communication activities, which include news, and documentaries, can also be utilised to create awareness, and credibility of the country as a medical tourism destination; indeed, these types of information sources have been shown to enjoy high credibility among consumers.

The study found that information from autonomous image agents correlated significantly with intention to visit Thailand. It is thus apparent that public relations, and publicity about quality of care, and saving potential can certainly help promote Thailand as a medical tourism destination.

The study also found that medical tourists with high perceptions of certain risks (health, functional, financial, and satisfaction) tend to rely more on information from trustworthy social channels, such as insurance companies, and personal doctors. This finding is in accordance with the view that relatively higher levels of trustworthiness, and expertise are antecedents of information credibility. Medical tourism promotion practitioners should therefore target personal doctors, and insurance companies to ensure that they have adequate knowledge, and positive attitudes about Thailand as a medical tourism destination. Familiarisation trips for doctors, insurance companies, and media to visit Thailand could also be arranged. (Belch and Belch, 2001). These trips could include visits to healthcare providers of

different price ranges, familiarisation with the qualifications of Thai medical staff, and enhanced awareness of the sophistication of Thai medical technologies, the attractive price of medical care, the quality of the medical service, the high level of hygiene, the safety, and security of the country as a whole.

The results of the study have also shown that the provision of a quality of care beyond the threshold level does not lead to a higher appeal. Because medical tourists place more importance on saving potential. Practitioners should note that medical tourists are willing to sacrifice other destination attributes for greater saving potential, given an acceptable quality of medical care.

5.4.2 Leverage points for promotional message

The study finds that medical tourism practitioners should concentrate on promoting the fact that Thailand provides a quality of care that is comparable with the acceptable standard in developed countries, while accentuating the saving potential of medical-care services in Thailand. Given that this study has found that medical tourists assess quality of care as a non-compensatory decision rule while assessing saving potential as a compensatory rule, it can be argued that the provision of a quality of medical care greater than the threshold standard is unlikely to increase the appeal of a destination.

Health-care providers should therefore seek a balance between improving the clinical excellence of their operations, and offering greater saving potential to prospective medical tourists.

5.5 Recommendation

Firstly, because each developed country has a different health-care system, separate studies of potential medical tourists from various countries should be conducted to establish research findings relevant to the effective marketing of medical tourism in various source markets.

Secondly, the dependent variable of this study was intention to visit, which was treated as a surrogate for actual choice behaviour. However, because intention might not be translated into actual action, a longitudinal experimental design could be developed in which actual choice behaviour is observed. This would enable researchers to observe situational factors that might cause actual behaviour to deviate from intention.

Thirdly, to gain a more comprehensive understanding of the image of Thailand as a medical tourism destination, further research is required with regard to all six of the destination attributes included in this study (quality of care, saving potential, tourism opportunity, accessibility, image regarding hygiene, and image regarding safety, and security). In addition, the image of Thailand with regard to these factors should be compared against its competing medical tourism destinations.



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APPENDIX A
INFORMATION SHEET, AND SURVEY QUESTIONNAIRE
“FACTORS INFLUENCING TOURIST’S PREFERENCES
TOWARD MEDICAL TOURISM IN THAILAND”

Appendix A Information sheet, and survey questionnaire “Factors influencing tourist’s preferences toward medical tourism in Thailand”

This research forms a part of a Master degree of Business Administration being conducted by Kanokporn Tanomwong, and Dr. Ake Choonhachatrachai, the advisor.

As the medical bills in developed countries are very high and the healthcare system is very expensive resulting in a very long waiting time to receive a desired medical treatment, many people, therefore, seek opportunities for compatible quality of medical treatments at a much lower cost than in other countries. Medical tourism is therefore on the rise. At present, many countries strive to pursue the medical tourism market. However, no study has been conducted to explore factors that influence the destination choice process of prospective medical tourists. As a result, the survey aims to uncover factors that influence the destination choice process of prospective medical tourists with the aim to assist decision making of healthcare providers, and medical tourism destinations.



APPENDIX B
QUESTIONNAIRE

Factors influencing tourist's preferences toward medical tourism in Thailand.

Note : Please mark $\surd$ into ☐ in front of the identical statement to your opinion of fill in the blank.

Part1: General, and related tourism information.

1. What is your gender? ☐ Male ☐ Female
2. How old are you?years old.
3. What is your nationality?
4. What is your status?

☐ Single
 ☐ Married
 ☐ Divorced
5. What is your education?

☐ Primary school
 ☐ Post graduate
 ☐ Diploma/technical school

☐ College or equivalent
 ☐ Secondary/high school

☐ Others (Please specify).....
6. What is your occupation?

☐ Student
 ☐ Housewife
 ☐ Business owner
 ☐ Government officer

☐ Employee
 ☐ Retiree
 ☐ Others (Please specify).....
7. How much income per month?

☐ Less than US\$ 3,000
 ☐ US\$ 3,000-5,000
 ☐ More than US\$ 5,000
8. Have you ever been in Thailand?

☐ Yes,times
 ☐ No
9. What is your main purpose of visiting in Thailand?

☐ Casino/Gambling
 ☐ Business
 ☐ Medical treatment
 ☐ Beauty/Spa

☐ Education ☐ Traveling ☐ Others (Please specify).....

10. Which province you choose to visit to fulfill your main purpose?

(Please specify).....

11. What is your travel?

☐ Personal ☐ With group tour

12. How long would you stay in Thailand?

☐ Less than 1 week ☐ 1-2 weeks

☐ 3-4 weeks ☐ More than 1 months

13. How much did you spend for your whole trip?

☐ Less than US\$ 500 ☐ US\$ 500-1,500

☐ US\$ 1,500-2,500 ☐ More than US\$ 2,500

14. The reason that you choose to use this particular tour operators service.

☐ Save cost/Convenience ☐ Company's reputation

☐ First time to going abroad ☐ Friends suggestion

☐ Like to travelling with big group ☐ Special promotion

☐ Direct experience in the past ☐ Others

15. Sources of information about the service of tour operators.

☐ Self representative ☐ Internet/E-mail ads ☐ Friends suggestion

☐ Television ☐ Guide book ☐ Advertising in traveling

magazine ☐ Others (Please specify).....

Part2: The Service Marketing Mix Factor and behavior to foreign tourist decision choosing services for medical in Thailand.

- Have you ever heard about the medical tourism in Thailand before?

☐Yes

☐No

- Have you ever used the medical tourism services in Thailand?

☐Yes

☐No

1. Product-side effects on decision making.

Service Marketing Mix	Levels of satisfied				
	Highest	High	Middle	Low	None
1. Variety of programs					
2. Quality of service					
3. Company's reputation					
4. Insurance					
5. Others (Please specify).....					

2. Price-side effects on decision making.

Service Marketing Mix	Levels of satisfied				
	Highest	High	Middle	Low	None
1. Lower price than competitors					
2. Credit card receivable					
3. Full package pricing (All inclusive)					
4. Discount/Pricing by number of people					
5. Others (Please specify).....					

3. Place-side effects on decision making.

Service Marketing Mix	Levels of satisfied				
	Highest	High	Middle	Low	None
1. Number of branch offices					
2. Location of offices					
3. Have representative in many countries					
4. Booking via internet					
5. Others (Please specify).....					

4. Promotion-side effects on decision making.

Service Marketing Mix	Levels of satisfied				
	Highest	High	Middle	Low	None
1. Leaflet from TAT (Tourism Authority of Thailand)					
2. Direct mail					
3. Advertising via television, internet					
4. Tourism exhibition trade					
5. Friends suggestion					
6. Discount					
7. Others (Please specify).....					

5. People/Employee-side effects on decision making.

Service Marketing Mix	Levels of satisfied				
	Highest	High	Middle	Low	None
1. Good communication skill					
2. Knowledgeable					
3. Reliable					
4. Equality standard of service					
5. Quick response to clients requirement					
6. Hospitality					
7. Personality					
8. Others (Please specify).....					

6. Physical evidence & Presentation-side effects on decision making.

Service Marketing Mix	Levels of satisfied				
	Highest	High	Middle	Low	None
1. Office building and its look					
2. Interior decoration					
3. Vehicle's condition					
4. Cleanliness of the vehicles					
5. Awards winning company					
6. Others (Please specify).....					

7. Process-side effects on decision making.

Service Marketing Mix	Levels of satisfied				
	Highest	High	Middle	Low	None
1. Convenience					
2. Punctuality					
3. Consistent of working procedure					
4. One stop service					
5. Others (Please specify).....					

Part 3: Please indicate your level of agreement with the following statements on the 7 point scale provided.

Statement	Strongly disagree	Disagree	Tend to disagree	Neither Agree nor disagree	Tend to Agree	Agree	Strongly Agree
1. Whether I have good or bad health, it is my own responsibility?	1	2	3	4	5	6	7
2. My current health condition is a result of the choices I make in life.	1	2	3	4	5	6	7
3. It is no ones fault that I have my current health problem.	1	2	3	4	5	6	7
4. If I choose to live a healthier life, I should get healthier.	1	2	3	4	5	6	7
5. If I have regular medical check-ups, I am less likely to have any health problems.	1	2	3	4	5	6	7
6. Even for a serious illness, if I choose to receive certain treatments, I have to partially pay for such treatments at	1	2	3	4	5	6	7

Part 3: Please indicate your level of agreement with the following statements on the 7 point scale provided. (Cont.)

Statement	Strongly disagree	Disagree	Tend to disagree	Neither Agree nor disagree	Tend to Agree	Agree	Strongly Agree
7. The cost of medical treatments in my home country is very high.	1	2	3	4	5	6	7
8. I have to spend a fortune to receive certain treatments in my home country.	1	2	3	4	5	6	7
9. Until I can receive the treatment, my health condition will get much worse.	1	2	3	4	5	6	7
10. I might get myself into financial difficulty if I have to pay for my desired medical treatment in my home country.							

Please indicate how important each of the following risks are to you when making your decisions about overseas travel for a medical treatment:

Statement	Not at all important	Very unimportant	Unimportant	Neither important nor unimportant	Important	Very important	Extremely important
1. Possibility that travelling abroad for medical treatments will take much longer than I expect.	1	2	3	4	5	6	7
2. Possibility that the medical treatment will not provide a satisfactory outcome.	1	2	3	4	5	6	7
3. Possibility that the overall cost (treatments, and other expenses) will not provide a large savings potential.	1	2	3	4	5	6	7
4. Possibility that overseas for medical treatments does not match myself image.	1	2	3	4	5	6	7
5. Possibility that my health condition will get worse due to travel to a foreign country.	1	2	3	4	5	6	7
6. Possibility of becoming involved in political turmoil during my stay in that country	1	2	3	4	5	6	7
7. Possibility of physical danger or injury due to accidents	1	2	3	4	5	6	7

Please indicate how important each of the following risks are to you when making your decisions about overseas travel for a medical treatment: (Cont.)

Statement	Not at all important	Very unimportant	Unimportant	Neither important nor unimportant	Important	Very important	Extremely important
8. Possibility that the desired medical treatment does not turn out as expected	1	2	3	4	5	6	7
9. Possibility that my choice of destination will affect other people's opinion of me	1	2	3	4	5	6	7
10. Possibility that my choice has many medias to search information about medical tourism.	1	2	3	4	5	6	7

Comment:.....

Thank you very much for agreeing to complete this questionnaire. Kindly name any person whom you think he/she is interested in medical tourism as well as his/her telephone number or e-mail address.

APPENDIX C
ITEM TO TOTAL, AND INTER ITEM
CORRELATIONS OF INTERNAL HEALTH OF CONTROL

Appendix C Item to total, and inter item correlations of Internal Health of control

Statement	Internal health of control	I can have better health by engaging in healthier behavior	Whether I have good or bad health, it is my own	My current health condition is a result of the choices I make	I have a full control of how my health problems which I	My current health condition is the result of my own	I deserve credit if my health gets better, and blame if it	If I choose a healthier life, I should get healthier	I am fully responsible for what happens in my life
1. I have a full control of how my health problems which I currently suffer from	0.793	0.458	0.551	0.639	1	0.497	0.601	0.530	0.514
2. I deserve, credit if my health gets better and blame if it gets worse	0.784	0.333	0.512	0.616	0.601	0.668	1	0.452	0.492
3. My current health condition is a result of the choices I make in life	0.839	0.598	0.569	1	0.639	0.593	0.616	0.558	0.570
4. I can have better health by engaging in healthier behavior	0.682	1	0.694	0.598	0.458	0.346	0.333	0.574	0.518
5. Internal health of control	1	0.682	0.751	0.839	0.793	0.766	0.784	0.730	0.745
6. If I choose a healthier life, I should get healthier	0.730	0.574	0.480	0.558	0.530	0.510	0.452	1	0.457
7. My current health condition is the result of my own unhealthy behavior	0.766	0.346	0.467	0.593	0.497	1	0.668	0.510	0.493

Appendix C Item to total, and inter item correlations of Internal Health of Control (Cont.)

Statement	Internal health of control	I can have better health by engaging in healthier behaviour	Whether I have good or bad health, it is my own responsibility	My current health condition is a result of the choices I make in	I have a full control of how my health problems which I currently	My current health condition is the result of my own unhealthy	I deserve credit if my health gets better, and blame if it gets worse	If I choose a healthier life, I should get healthier	I am fully responsible for what happens in my life
8.. I am fully responsible for what happens in my life	0.745	0.518	0.521	0.570	0.514	0.493	0.492	0.457	1
9. Whether I have good or bad health, it is my own responsibility	0.751	0.694	1	0.569	0.551	0.467	0.512	0.480	0.521

APPENDIX D
INTER-ITEM, AND ITEM TO TOTAL
CORRELATIONS OF HEALTH LOCUS OF CONTROL

Appendix D Inter-item, and item to total correlations of health locus of control

Statement	Chance health locus of control	My imperfect health condition happened to me by chance	If I am to have better health, it is a matter of luck	I am destined to have the health problems which I currently suffer from	It is no one's fault that I have my current health problem
1. It is no one's fault that I have my current health problem	0.551	0.517	0.496	0.350	1
2. I am destined to have the health problems which I currently suffer from	0.754	0.383	0.351	1	0.350
3. Chance health locus of control	1	0.799	0.758	0.754	0.551
4. If I am to have better health, it is a matter of luck	0.758	0.664	1	0.351	0.496
5. My imperfect health condition happened to me by chance	0.799	1	0.664	0.383	0.517

APPENDIXE
INTER-ITEM, AND ITEM TO TOTAL
CORRELATION OF PEOPLE HEALTH LOCUS OF CONTROL

Appendix E Inter-item, and item to total correlations of people health locus of control

Statement	People health locus of control	If I have a regular checkups, I am less likely	Strict following of doctor's advice is the best	Other people play a big role in my health	The type of support I receive from other people	Regarding my health, I should only do what my	Health professionals are responsible for
1.Stric following of doctor's advice is the best way to keep myself healthy	0.818	0.453	1	0.540	0.479	0.596	0.473
2. Health professionals are responsible for my health condition	0.753	0.425	0.473	0.533	0.496	0.539	1
3. If I have a regular checkups, I am less likely to have any health problems	0.768	1	0.687	0.453	0.470	0.478	0.425
4. Regarding my health, I should only do what my doctors tell me to do	0.759	0.478	0.596	0.476	0.420	1	0.539
5. Other people play a big role in my health condition	0.769	0.470	0.540	1	0.490	0.476	0.533
6. People health locus of control	1	0.768	0.818	0.769	0.728	0.759	0.753
7. The type of support I receive from other people determines how healthy I am	0.728	0.470	0.479	0.490	1	0.420	0.495

APPENDIX F
INTER-ITEM, AND ITEM TO ITEM,
AND ITEM TO TOTAL CORRELATIONS
OF ATTITUDES TOWARD COST OF MEDICAL

Appendix F Inter-item, and item to total correlations of attitudes towards cost of medical

Statement	Attitudes towards cost of medical care	The cost of medical care in my home country is very high	I might get myself into financial difficulty if I have to pay for my desired medical	My healthcare plan does not cover all treatments I need	I have to spend a fortune to receive certain treatments in my home country	Even for a resinous illness, if I choose to receive certain
1. Even for a resinous illness, if I choose to receive certain treatments, I have to partially pay for such treatments at home	0.638	0.415	0.404	0.359	0.419	1
2. I have to spend a fortune to receive certain treatments in my home country	0.787	0.481	0.621	0.478	1	0.419
3. Attitudes towards cost of medical care	1	0.745	0.795	0.681	0.787	0.638
4. I might get myself into financial difficulty if I have to pay for my desired medical treatment in my home country	0.795	0.643	1	0.383	0.621	0.404
5. My healthcare plan does not cover all treatments I need	0.681	0.400	0.383	1	0.478	0.359
6. The cost of medical care in my home country is very high	0.745	1	0.643	0.400	0.481	0.415

APPENDIX G
INTER-ITEM, AND ITEM TO TOTAL
CORRELATIONS OF ATTITUDES TOWARDS
PROCEDURE INVOLVED WITH MEDICAL CARE

**Appendix G Inter-item, and item to total correlations of attitudes towards
procedure involved with medical care**

Statement	Attitude towards procedures involved with medical treatments	Even if a treatment is fully covered by health plan, I must wait a long time to	Until I can receive the treatment, my health condition will get much	There is a lot of paper work to be done, and the system functions too slowly in my	The healthcare system in my country requires me to take too many steps in order t
1. There is a lot of paper work to be done, and the system functions too slowly in my home country	0.889	0.621	0.546	1	0.816
2. Attitude towards procedures involved with medical treatments	1	0.834	0.768	0.889	0.866
3. The healthcare system in my country requires me to take too many steps in order to receive the medical treatment I need	0.866	0.592	0.492	0.816	1
4. Even if a treatment is fully covered by health plan, I must wait a long time to receive that treatment in my home country	0.834	1	0.564	0.621	0.592
5. Until I can receive the treatment, my health condition will get much worse	0.768	0.564	1	0.546	0.492

APPENDIX H
INTER-ITEM, AND ITEM TO TOTAL
CORRELATIONS OF INDUCED IMAGE AGENTS

Appendix H Inter-item, and item to total correlations of induced image agents

Statement	Induced Image agents	Brochures from potential destinations national authorities about medical	Brochures of medical care providers in	Advertising campaigns attempted by destinations	Personal selling by staff of travel agencies	Health insurance policy providers	Information from Internet websites
1. Induced Image agents	1	0.800	0.803	0.807	0.733	0.622	0.569
2. Brochures from potential destinations national authorities	0.800	1	0.673	0.648	0.466	0.381	0.310
3. Brochures of medical care providers in potential destinations	0.803	0.673	1	0.563	0.408	0.491	0.373
4. Advertising campaigns attempted by destinations about medical tourism	0.807	0.648	0.563	1	0.661	0.353	0.272
5. Personal selling by staff of travel agencies specializing in medical tourism	0.733	0.466	0.408	0.661	1	0.341	0.251
6. Health insurance policy providers	0.622	0.381	0.491	0.353	0.341	1	0.387
7. Information from Internet websites	0.596	0.310	0.373	0.272	0.251	0.387	1

APPENDIX I
INTER-ITEM, AND ITEM TO TOTAL
CORRELATIONS OF AUTONOMOUS IMAGE AGENTS

Appendix I Inter-item, and item to total correlations of autonomous image agents

Statement	Autonomous Image Agents	News about medical industries of different potential destinations	Reports about medical industries, and medical tourism in potential	Documentary about medical industries in potential destinations	Articles about medical industries, and medical tourism in potential
1. Autonomous Image agents	1	0.801	0.896	0.900	0.821
2. News about medical industries of different potential destinations	0.801	1	0.658	0.661	0.468
3. Reports about medical industries, and medical tourism in potential destinations	0.896	0.658	1	0.759	0.645
4. Documentary about medical industries in potential destinations	0.900	0.661	0.759	1	0.701
5. Articles about medical industries, and medical tourism in potential destinations	0.821	0.468	0.645	0.701	1

APPENDIX J
INTER-ITEM, AND ITEM TO TOTAL
CORRELATIONS OF ORGANIC IMAGE AGENTS

Appendix J Inter-item, and item to total correlations of organic image agents

Statement	Organic image agents	Friends, and Family	Personal doctors	Testimonials from those who have received the medical treatments in potential destinations
1.Organic image agents	1	0.857	0.874	0.797
2. Friends, and Family	0.857	1	0.678	0.482
3. Personal doctors	0.874	0.678	1	0.536
4. Testimonials from those who have received the medical treatments in potential destinations	0.797	0.482	0.536	1

APPENDIX K
INTER-ITEM, AND ITEM TO TOTAL
CORRELATIONS OF QUALITY O CARE

Appendix K Inter-item, and item to total correlations of quality of care

Statement	QUALITY OF CARE	CARE 1	CARE 2	CARE 3	CARE 4	CARE 5	CARE 6	CARE 7	CARE 8	CARE 9	CARE 10
1.quality of care	1	0.632	0.732	0.671	0.703	0.700	0.723	0.678	0.717	0.613	0.711
2. has many international standard hospitals with board certified doctors & surgeons (CARE1)	0.632	1	0.497	0.436	0.371	0.355	0.351	0.365	0.400	0.245	0.420
3. has many international standard hospitals with high treatment success rates (CARE2)	0.732	0.497	1	0.494	0.459	0.447	0.435	0.427	0.427	0.351	0.495
4. has many international standard hospitals specialising in my desired treatments (CARE3)	0.671	0.436	0.494	1	0.530	0.360	0.417	0.329	0.337	0.313	0.387

Appendix K Inter-item, and item to total correlations of quality of care (Cont.)

Statement	QUALITY OF CARE	CARE 1	CARE 2	CARE 3	CARE 4	CARE 5	CARE 6	CARE 7	CARE 8	CARE 9	CARE 10
5. has many hospitals that are equipped with the world's most sophisticated medical equipment (CARE4)	0.703	0.371	0.459	0.530	1	0.450	0.466	0.313	0.432	0.287	0.458
6. has many hospitals that affiliate with reputable medical institutions, and schools (CARE5)	0.700	0.355	0.447	0.360	0.450	1	0.557	0.326	0.506	0.326	0.423
7. has hospitals that provide care with a high ratio of registered nurses per patient (CARE6)	0.723	0.351	0.435	0.417	0.466	0.557	1	0.374	0.448	0.375	0.551

Appendix K Inter-item, and item to total correlations of quality of care (Cont.)

Statement	QUALITY OF CARE	CARE 1	CARE 2	CARE 3	CARE 4	CARE 5	CARE 6	CARE 7	CARE 8	CARE 9	CARE 10
8.has healthcare professionals that are fluent in several languages including my native language (CARE7)	0.678	0.365	0.427	0.329	0.313	0.326	0.374	1	0.402	0.334	0.325

Appendix K Inter-item, and item to total correlations of quality of care (Cont.)

Statement	QUALITY OF CARE	CARE 1	CARE 2	CARE 3	CARE 4	CARE 5	CARE 6	CARE 7	CARE 8	CARE 9	CARE 10
9. has various hospitals that have been accredited internationally from world reputable institutions including JCIO (Joint Commission for Accreditation of Health Care Organisations) (CARE8)	0.717	0.400	0.427	0.337	0.432	0.506	0.448	0.402	1	0.464	0.469

Appendix K Inter-item, and item to total correlations of quality of care (Cont.)

Statement	QUALITY OF CARE	CARE 1	CARE 2	CARE 3	CARE 4	CARE 5	CARE 6	CARE 7	CARE 8	CARE 9	CARE 10
10. has various hospitals that coordinates with healthcare providers in my home country so that I can be assured about quality of the care (CARE9)	0.613	0.245	0.351	0.313	0.287	0.326	0.375	0.334	0.464	1	0.363
11. has various hospitals that guarantee the results of the treatment and are willing to legally abide by relevant laws (CARE10)	0.711	0.420	0.495	0.387	0.458	0.423	0.551	0.325	0.469	0.363	1

APPENDIX L
INTER-ITEM, AND ITEM TO TOTAL
CORRELATIONS OF SAVING POTENTIAL

Appendix L Inter-item, and item to total correlations of saving potential

Statement	Saving potential	..provides the same medical treatments at much lower cost than my	...offers lower overall costs when combining the costs of medical	...has a much lower cost of living in comparison to my home country	...offers lower overall costs when combining the costs of medical
1.saving potential	1	0.814	0.821	0.340	0.608
2. provides the same medical treatments at much lower cost than my home country	0.814	1	0.530	0.204	0.472
3. provides my desired medical treatment at a lower cost compared to other destinations	0.821	0.530	1	0.251	0.514
4. has a much lower cost of living in comparison to my home country	0.340	0.240	0.251	1	0.388
5. offers lower overall costs when combining the costs of medical treatments, and all other travel costs	0.608	0.472	0.514	0.388	1

APPENDIX M
INTER-ITEM, AND ITEM TO TOTAL
CORRELATIONS OF SAFETY, AND SECURITY ISSUES

Appendix M Inter-item, and item to total correlations of safety, and security issues

Statement	Safety, and security	...is safe to travel to by oneself	...has low crime rates	...is safe to walk on the street by oneself	...is politically stable	...has a low incidence of natural disasters	...has good security systems in buildings (e.g. fire evacuation system, surveillance cameras etc.)	...has a safe environment	...has no internal conflicts	...is not target for terrorists	...has a safe transportation
1. safety, and security	1	0.503	0.671	0.696	0.791	0.788	0.751	0.737	0.681	0.756	0.742
2. is safe to travel to by oneself	0.503	1	0.240	0.235	0.383	0.223	0.375	0.438	0.196	0.263	0.279
3. has low crime rates	0.671	0.240	1	0.509	0.483	0.490	0.409	0.370	0.397	0.428	0.439
4. is safe to walk on the street by oneself	0.696	0.235	0.509	1	0.492	0.547	0.392	0.472	0.447	0.422	0.459
5. is politically stable	0.791	0.383	0.483	0.492	1	0.631	0.557	0.513	0.478	0.567	0.489
6. has a low incidence of natural disasters	0.788	0.223	0.490	0.547	0.631	1	0.555	0.474	0.534	0.554	0.556
7. has good security systems in buildings (e.g. fire evacuation system, surveillance cameras etc.)	0.751	0.375	0.409	0.392	0.557	0.555	1	0.644	0.355	0.518	0.555
8. has a safe environment	0.737	0.438	0.370	0.472	0.513	0.474	0.644	1	0.373	0.504	0.570
9. has no internal conflicts	0.681	0.196	0.397	0.447	0.478	0.534	0.355	0.373	1	0.532	0.445

Appendix M Inter-item, and item to total correlations of safety, and security issues (Cont.)

Statement	Safety, and security	...is safe to travel to by oneself	...has low crime rates	...is safe to walk on the street by	...is politically stable	...has a low incidence of	...has good security systems	...has a safe environment	...has no internal conflicts	...is not target for terrorists' attacks	...has a safe transportation
10. is not target for terrorists attacks	0.756	0.263	0.428	0.422	0.567	0.554	0.518	0.504	0.532	1	0.554
11. has a safe transportation system	0.742	0.279	0.439	0.459	0.489	0.556	0.555	0.570	0.445	0.554	1

APPENDIX N
INTER-ITEM, AND ITEM TO TOTAL
CORRELATIONS OF HYGIENIC ISSUES

Appendix N Inter-item, and item to total correlations of hygienic issues

Statement	Hygienic issues	...has a level of hygiene similar to my own country	...has no epidemic diseases	...has hygiene levels in healthcare providers which are compatible	...has hygiene levels in healthcare providers which are compatible
1.hygienic issues	1	0.715	0.672	0.781	0.738
2. has a level of hygiene similar to my own country	0.715	1	0.387	0.415	0.404
3. is safe to buy food, and drinks from general food vendors	0.672	0.387	1	0.439	0.358
4. has no epidemic diseases	0.781	0.415	0.439	1	0.389
5. has hygiene levels in healthcare providers which are compatible with the hygiene level in my country	0.738	0.404	0.358	0.389	1

APPENDIX O
INTER-ITEM, AND ITEM TO TOTAL CORRELATIONS
OF ACCESSIBILITY OF MEDICAL TOURISM DESTINATIONS

Appendix O Inter-item, and item to total correlations of accessibility of medical tourism destinations

Statement	Accessibility	...has direct flights from where I live	...is a convenient proximity to my home country
1.accessibility	1	0.889	0.875
2. has direct flights from where I live	0.889	1	0.557
3. is a convenient proximity to my home country	0.875	0.557	1

For the attention of
Miss. Jutaporn Reungronarsa
Governor of Tourism Authority of Thailand
1600 Petchburi Road Mukkasan Rajthevee
Bangkok 10400 Thailand

Tuesday 20 August 2013

Dear Miss. Jutaporn Reungronarsa

I would like to express a great appreciation toward your kind assistance granted to me with the information acquisition from your organization. As your might have already known that the research topic is about the behavior of medical tourists in choosing medical tourism destination in Thailand which might develop, and help our country to become a tourism capital of Asia as envisioned by government. I would like to asking questionnaire about the medical tourism.

Thank you in anticipation for your kind consideration for the above and look forward to working with you in develop tourism in Thailand.

Yours respectfully,

Kanokporn Tanomwong MBA Student Stamford
International University E-mail: L1_xy@hotmail.com

For the attention of
Executive of Samitivej Hospital

Tuesday 20 August 2013

Dear Executive of Samitivej Hospital

I would like to express a great appreciation toward your kind assistance granted to me with the information acquisition from your organization. As you might have already known that the research topic is about the behavior of medical tourists in choosing medical tourism destination in Thailand which might develop, and help our country to become a tourism capital of Asia as envisioned by government. I would like to ask questionnaire about the medical tourism.

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Yours respectfully,

Kanokporn Tanomwong MBA Student Stamford
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