INVESTIGATING INTERNATIONAL TOURISTS' BEHAVIOURAL INTENTION FOR MEDICAL TOURISM IN MALAYSIA: THE INFLUENCE OF DESTINATION TRUST, THREAT AND COPING APPRAISALS

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NOVEMBER 2023

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By

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A thesis submitted to the Faculty of Business and Finance,
Universiti Tunku Abdul Rahman,
in partial fulfilment of the requirements for the degree of
Doctor of Philosophy
November 2023

ABSTRACT

This study aims to understand international tourists' behavioural intention for medical tourism in Malaysia. A theoretical model from Protection Motivation Theory (PMT), consisting of the components of threat appraisal and coping appraisal, was applied to the study. Destination trust is included as a mediating role to study international tourists' perceptions. A quantitative survey method was used to collect data from 1,001 international tourists at the international airports in Malaysia. Structural Equation Modelling (SEM) was applied using the Partial Least Square (PLS) approach to analyse the structural and measurement models. The results revealed that perceived severity, vulnerability, self-efficacy, and response efficacy positively influence protection motivation. Further, response costs negatively influence protection motivation. The protection motivation construct indicated a positive influence in predicting medical tourism behavioural intention among the tourists. Destination trust is proved to have a mediating effect, demonstrating that protection motivation can indirectly predict medical tourism behavioural intentions. Findings from this study can enhance medical tourism literature by contributing comprehensive research from behavioural disciplines. For practical implications, this empirical research furnished added knowledge and a benchmark for the policymakers in positioning the healthcare industry. Thus, PMT can be used and expanded to improve publicising strategies in medical tourism. Overall, the insights for this study can help medical service providers exploit marketing tactics to draw potential medical tourists heading to Malaysia.

Keywords: Medical Tourism, Behavioural Intention, Destination Trust, Threat and Coping, Protection Motivation Theory, International Tourists.

ACKNOWLEDGEMENT

I express my deepest gratitude to all those who have supported me throughout my doctoral journey and contributed to completing this thesis.

Heartfelt thanks to my mentor, Prof. Dr Choong Chee Keong, for his steadfast guidance, profound wisdom, and unwavering encouragement throughout my research journey. His mentorship has not only been a source of inspiration but also a reliable compass that skilfully navigated me through complex and demanding academic challenges. I am also profoundly thankful to my supervisors for their invaluable support, instrumental in shaping my academic and personal growth.

Special mention goes to my husband, Patrick, for his boundless love and understanding, constant motivation, and strength. I appreciate his unwavering belief in me and his sacrifices for my education. To my children, Alicia and Kevin, I express my gratitude for their patience, understanding, and unwavering emotional support during the challenging and demanding periods of my academic journey.

Acknowledgment is owed to Universiti Tunku Abdul Rahman for their generous financial support, which made this research possible. Their investment in my academic pursuits has been pivotal. I must also acknowledge the significant contribution of my incredible research collaborator, Dr Choong Yuen Onn, whose collaboration and insights have enriched this research.

To my colleagues, peers, and fellow graduate students who shared this academic journey, I appreciate the camaraderie, intellectual exchange, and mutual support we provided each other. Special thanks to the university library staff and administrative personnel for providing the resources and infrastructure necessary for my research.

Lastly, this thesis represents the collective efforts and support of these exceptional individuals and institutions. Their belief in my abilities and their assistance have been invaluable in bringing this work to fruition. I am deeply thankful for their role in my academic journey.

APPROVAL SHEET

This thesis entitled "INVESTIGATING INTERNATIONAL TOURISTS' BEHAVIOURAL INTENTION FOR MEDICAL TOURISM IN MALAYSIA: THE INFLUENCE OF DESTINATION TRUST, THREAT AND COPING APPRAISALS" was prepared by SEOW AI NA and submitted as partial fulfilment of the requirements for Doctor of Philosophy at Universiti Tunku Abdul Rahman.

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DECLARATION

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Seow Ai Na

Date: 10th November 2023

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndromes
ASEAN	Association of Southeast Asian Nations
AVE	Average variance extracted
BCE	Breast Cancer Examination
CA	Coping appraisal
CAGR	Compound Annual Growth Rate
CB-SEM	Covariance-based structural equation modelling
CR	Composite Reliability
ETP	Economic Transformation Program
EV	Expectancy-Value
GCC	Gulf Cooperation Countries
GDP	Gross Domestic Product
GNI	Gross National Income
HBM	Health Belief Model
HIV	Human Immunodeficiency Virus
HTMT	Heterotrait-Monotrait
ISO	International Organisation for Standardisation
JCI	Joint Commission International
KL	Kuala Lumpur
KLCC	Kuala Lumpur City Centre
KLIA	Kuala Lumpur International Airport

LMICs	Lower- and Middle-Income Countries
MATRADE	Malaysian External Trade Development Corporation
MHTC	Malaysia Healthcare Travel Council
MIDA	Malaysian Industrial Development Authority
MOH	Ministry of Health
MRA	Multiple Regression Analysis
MSQH	Malaysian Society for Quality in Health
NC	National Committee
NCPMHT	National Committee for the Promotion of Medical and Health Tourism
NKEAs	National Key Economic Areas
OIC	Organisation of Islamic Conference
PBC	Perceived behavioural control
PDPA	Personal Data Protection Act
PEN	Penang International Airport
PLS	Partial Least Square
PLS–SEM	Partial least square structural equation modelling
PMT	Protection Motivation Theory
PS	Perceived Severity
PTPTN	Perbadanan Tabung Pendidikan Tinggi Nasional
PV	Perceived Vulnerability
RC	Response cost
RE	Response Efficacy
SARS	Severe Acute Respiratory Syndrome
SAS	Statistical Analysis System

SCT	Social Cognitive Theory
SE	Self-Efficacy
SEM	Structural Equation Modelling
SET	Self-Efficacy Theory
SLT	Social Learning Theory
SMEs	Small and Medium Enterprises
TACT	Target, Action, Context and Time
TDAP	Tetanus, Diphtheria and Acellular Pertussis
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
UAE	United Arab Emirate
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNWTO	World Tourism Organisation
US	United State
UTAR	Universiti Tunku Abdul Rahman

CHAPTER ONE

INTRODUCTION

1.0 Introduction

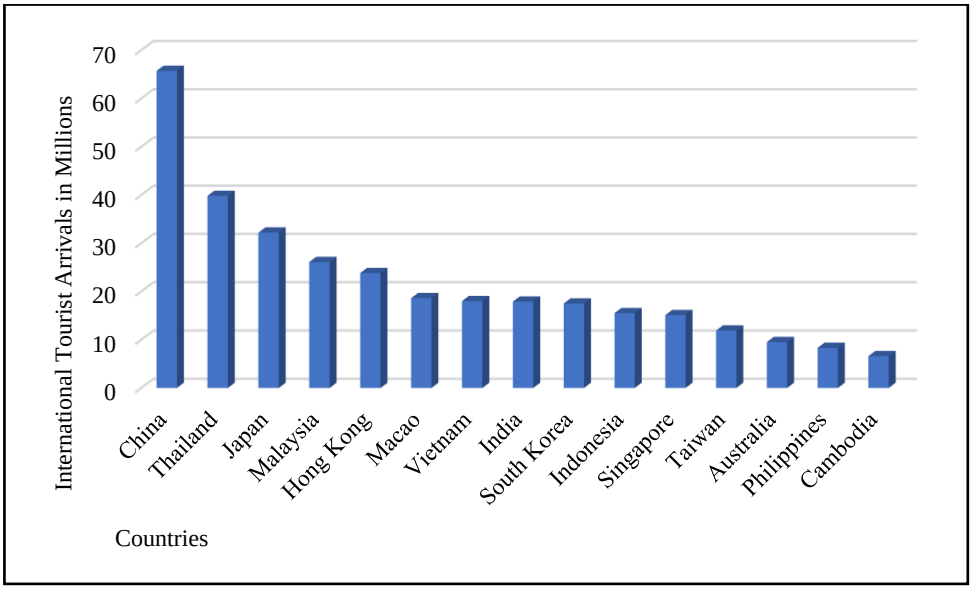
This chapter begins with a discussion related to tourism research background and is followed by an outline of Malaysia's current medical tourism market. This section also presents the problem statements of the study. Subsequently, the scope of the study and research questions of the study, followed by the research objectives of the study, were proposed. The significance of the study, the definition of terms, and the organisation of the study are also deliberated.

1.1 Background of Study

In the Asia Pacific region, the travel industry has continued to develop and has become the world's fastest-growing tourism region (Glaesser et al., 2017; UNWTO, 2019). According to the World Tourism Organisation, in 2019, travel and tourism contributed to about 334 million new tourism jobs. The approximate tourism revenues of RM 12,500 billion accounted for 10.4% of the global gross domestic product (GDP). Apart from China showing spectacular growth in international tourist arrivals, countries like Thailand, Malaysia, Singapore, and Indonesia account for about 70% of arrivals in South-East Asia. Figure 1.1 demonstrates that the number of international tourist arrivals in the Asia Pacific region is nearly 65.7 million. Thus, the growth of South-East Asia is anticipated to remain mainstream (Gupta & Solanky, 2021). Among the

reasons is the rapid economic growth in countries with market openness, travel facilitation, and air connectivity at ease.

Figure 1.1 Number of International Tourist Arrivals in the Asia Pacific Region in 2019



Source: Statista Research Department (2022)

The essential foundations for tourists in selecting a holiday destination are generally discovering new places, natural scenery, shopping, delicious cuisine, fascinating history, local culture, and the affordability of travelling to a destination (Saqib, 2019; Yiamjanya & Wongleedee, 2014). Interestingly, the recent trends' impression indicates significant changes in people's habitual travel behaviour with mobility-styles preferences. For instance, tourists have increasingly become health conscious and customarily look for excursions that permit them to incorporate health elements into their holidays (Ahmed et al., 2020). As a result, people search for health features when itinerant has gained immense popularity and developed a novel travel tendency (De la Hoz-Correa et al., 2018).

Take another look; the inclination of health seekers to travel out of their home country to obtain healthcare service cum vacation from their desirable country of choice has become favourable to many (Ormond, 2013; Pitakdumrongkit & Lim, 2021). Such moves serve as a relief to escape pressure, strive for tranquillity, and simultaneously eye qualified healthcare or medical services for a more meaningful healthcare experience (Camilleri, 2018; Seow et al., 2020a). Given the rise of new patterns of consumption and healthcare service preference, the trend is now reversing. In the past few decades, affluent people from developing countries have enthused forward to developed countries (notably the West and Europe) for medical services. Healthcare seekers travel to attain highly advanced medical services that are not accessible in their home countries. Nonetheless, a turnaround has occurred, where people from industrialised nations travel to developing countries for medical and healthcare (Connell, 2013; Lautier, 2008; Matto & Rathindran, 2006; Singh, 2019). The main market drivers for such tendency are due to cost savings (Abd Manaf et al., 2015; Bashir, 2021; Rodrigues et al., 2017), demand for better quality medical service abroad (Paffhausen et al., 2010; Zolfagharian et al., 2018), rising medical costs in home countries (Pagan & Horsfall, 2020; Sarwar et al., 2012), no visa requirement (Kamassi et al., 2020; Pforr et al., 2020), seeking shorter waiting periods for quicker access to medical service (Connell, 2006; Keckley & Underwood, 2008; Medhekar & Wong, 2020; Yu, & Ko, 2012) among others. Accordingly, these preceding reasons have caused medical tourists to flow into Southeast Asia in the opposite direction of prior medical tourism destinations.

Triumph by the great demand and recognised medical tourism as one of the attractive industries to quest for lucrative profit and economic growth, countries like Singapore, Thailand, and Malaysia have become the famous Southeast Asia medical tourism hub (Sopha et al., 2019; Chandran et al., 2020). These countries are considered ideal places for excellent quality service with reasonable charges (Kandasamy & Rassiah, 2010; Nilashi et al., 2019). It enabled medical tourists to save up to 40 to 60 percent in price compared to developed countries (Collins et al., 2019; Smith-Morris & Manderson, 2010). Table 1.1 shows the cost comparison of selected surgeries in Malaysia, Thailand, and Singapore with developed countries like the US and Costa Rica. The leading causes of price differences are favourable exchange rates, government subsidies in operational costs, low living expenses, and inexpensive overheads.

Table 1.1: Cost comparison of selected surgeries in Malaysia, neighbouring countries and developed countries

Medical Treatment	Malaysia (USD)	Thailand (USD)	Singapore (USD)	US (USD)	Costa Rica (USD)
Heart Bypass	12,100	15,000	17,200	123,000	27,000
Gastric Sleeve	8,400	9,900	11,500	16,500	11,500
Angioplasty	8,000	4,200	13,400	28,200	13,800
Hysterectomy	4,200	3,650	10,400	15,400	6,900
Hip Replacement	8,000	17,000	13,900	40,364	13,600
Hip Resurfacing	12,500	13,500	16,350	28,000	28,000
Knee Replacement	7,700	14,000	16,000	35,000	12,500
Spinal Fusion	6,000	9,500	12,800	110,000	15,700
Dental Implant	1,500	1,720	2,700	2,500	800
Lap Band	8,150	11,500	9,200	14,000	9,450
Gastric Bypass	9,900	16,800	13,700	25,000	12,900
Breast Implants	3,800	3,500	8,400	6,400	3,500
Rhinoplasty	2,200	3,300	2,200	6,500	3,800
Liposuction	2,500	2,500	2,900	5,500	2,800
Tummy Tuck	3,900	5,300	4,650	8,000	5,000
Lasik (both eyes)	3,450	2,310	3,800	4,000	2,400

Source: Medglobal Solution (2020)

In addition to the explanations above, the increased worldwide insurance coverage has led to better collaboration between insurance companies and overseas healthcare institutions, the extreme stress among the working population in quest of granting therapeutic abroad, the ageing population groups are increasing mobile through their own volition, and health consciousness are the main priority to travellers (Chia & Liao, 2021; Majeed & Javed, 2017).

1.1.1 Medical Tourism Industry

Medical tourism refers to organised travel that typically corresponds to national territorial boundaries and is distinct from one's healthcare jurisdiction for medical service intervention (Leng, 2010; Rai, 2019). The term 'health tourism' was first used to explain tourism that specifically endorses health services and facilities from a tourist destination to a deliberate marketing strategy (Goodrich & Goodrich, 1987). It was promoted, including wellness spas, thermal swimming pools, special diets, minor surgeries, and medical check-ups. Subsequently, following widespread usage, the term 'medical tourism' was used to define on-travel for medical and healthcare services. Health tourism focusing on spas and alternative therapies was set separately for wellness services. Today, the term 'medical tourism' is now broadly used, and it no longer necessarily comprises the amusing aspects of tourism. Instead, it comprises well-being and healthcare aspects (Connell, 2013; Hall, 2011; Seow et al., 2020a).

In this study, the term' medical tourism' is generally defined as individuals travelling from their residence to another country for medical or

healthcare services. These include health enhancement, restoration, or maintenance of an individual's mind of well-being to heal the body, mind, and soul. Henceforth, individuals who seek medical service may opt for primary or secondary reasons for medical travel. Usually, many medical tourists travel to receive highly advanced medical procedures, but many also prefer holistic treatments (Connell, 2013). In addition to the conventional medical service, the service deal encompasses cosmetic surgery, sight treatments, spas, comprehensive medical check-up, and many other alternative healthcare services (Whittaker, 2008).

1.1.2 The Rise of the Medical Tourism Market in Malaysia

Medical tourism in Malaysia is recognised as one of the top medical travel destinations in the world (The IMTJ Medical Travel Award winners 2020, 2020). The country is a popular destination for medical travel due to its excellent medical quality service, reasonably priced, efficient staff, high-tech medical equipment, and healthcare facilities that are on par with Western standards (Kandasamy & Rassiah, 2010; Nikbin et al., 2019; Seow et al., 2021a). For instance, one of the well-known hospitals in Malaysia - Prince Court Medical Centre in Kuala Lumpur, offers indoor hydrotherapy pools and luxurious accommodations with personal butlers and full-time nurses (Mohd-Any & Mahdzan, 2017). Malaysia's popular medical services and procedures include eye surgeries, orthopaedics, cosmetics, urology, neurology, rheumatology, endocrinology, obstetrics & gynaecology, oncology, cardiology, dentistry, and comprehensive health screening (Chandran et al., 2018; Lunt et al., 2011; Manaf, 2010).

The Ministry of Health in Malaysia regulates medical tourism to ensure quality medical services are delivered to medical tourists. The Malaysia Healthcare Travel Council (MHTC), a body set up in 2009, mainly coordinates collaborations, builds public-private partnerships and promotes global awareness of Malaysia's world-class medical services. It works hand-in-hand with the local private healthcare institutions. The partnership programme was delivered for its conceited and inspiring array of sophisticated diagnoses, in-patient facilities, and therapeutic purposes. Private medical centres provide patients with well-equipped facilities, safety, and care. It has the highest professional staff and provides a wide choice and state-of-the-art services. More than 35 hospitals in Malaysia participate in medical tourism, and the majority are privately owned institutions in various states of Malaysia (refer to Table 1.2). These hospitals have gained their accreditation which was awarded by the Malaysian medical society for Quality of Health (MSOH) together with the Joint Commission International (JCI) and the International Organisation for Standardisation (ISO) from international bodies.

Table 1.2: Malaysia Hospitals with Joint Commission International (JCI) accreditation status

States	Private Hospitals
Kedah	• Kedah Medical Centre
Kelantan	• KPJ Perdana Specialist Hospital
Pahang	• KPJ Pahang Specialist Hospital
Johor	• KPJ Specialist Hospital (Johor, Pasir Gudang, Bandar Maharani) • Gleneagles Medini • Regency Specialist Hospital
Melaka	• Makhota Medical Centre • Pantai Hospital Ayer Keroh • Oriental Melaka Straits Medical Centre
Negeri Sembilan	• KPJ Seremban Specialist Hospital
Sabah	• Gleneagles Kota Kinabalu • KPJ Sabah Specialist Centre
Penang	• Bagan Specialist Centre • Gleneagles Penang • Loh Guan Lye Specialists Centre • Pantai Hospital Penang • Penang Adventist Hospital
Selangor	• Ara Damansara Medical Centre • Columbia Asia (Puchong) • KPJ Specialist Centre (Klang, Ampang, Damansara) • Sri Kota Specialist Medical Centre • Subang Jaya Medical Centre • Sunway Medical Centre • AVISENA Specialist Hospital • Thomson Hospital Kota Damansara
Wilayah Persekutuan	• Gleneagles Kuala Lumpur • KPJ Tawakkal Specialist Hospital • Park City Medical Centre • Prince Court Medical Centre • Cardiac Vascular Sentral Kuala Lumpur • Institut Jantung Negara

Source: Malaysian Society for Quality in Health (2022)

In 2019, the medical tourism revenue in Malaysia reached RM1,700 million, with a total of 1.22 million international patients (refer to Table 1.3). Penang remained the most preferred medical tourism destination, followed by

Kuala Lumpur, as medical tourists can easily access the hospitals via the nearby international airport (Chee et al., 2019; Ormond & Kaspar, 2019). In addition, multi-agency cooperation between tourism and health authorities is being established, and tax incentives are prearranged through its trade representatives; Malaysia External Trade Development Corporation (MATRADE), Tourism Malaysia, and the state governments from the Malaysian Industrial Development Authority (MIDA).

Table 1.3 International patients and Medical Tourism Receipts/Revenue in Malaysia

Year	Number of International Patients	International Patients Growth Rate (%)	Revenue (RM Million)
2019	1,220,000	1.67	1,700
2018	1,200,000	14.29	1,500
2017	1,050,000	14.01	1,300
2016	921,000	7.22	1,123
2015	859,000	4.20	914
2014	882,000	0.11	777
2013	881,000	21.02	727
2012	728,000	13.22	603
2011	643,000	63.63	527
2010	392,956	16.95	378
2009	336,000	-10.18	288
2008	374,063	9.60	299
2007	341,288	15.03	254
2006	296,687	27.79	204
2005	232,161	33.28	151
2004	174,189	69.20	105
2003	102,946	21.71	59
2002	84,585	12.47	36
2001	75,210	33.99	44

Source: Aziz et al. (2015) and Malaysia Healthcare Travel Council (2022)

Nevertheless, despite the Ministry of Health (MOH) having developed the National Committee (NC) to promote medical tourism in Malaysia, the target set as a medical tourism destination has yet to achieve the expected

significant revenue-generating potential of RM2 billion revenue (Narayanan & Lai, 2021). The recent massive impact of the COVID-19 pandemic has further caused the country's estimated decline in tourism revenue of 75 percent in 2021 (Department of Statistics Malaysia, 2022). MHTC had to reduce its projected revenue by 70%. The leading causes of this decline were the implementation of travel restrictions to curb the spread of the disease. Beginning in spring 2022, the permitting of elective healthcare services has slowly resumed. The demand for medical tourism is expected to gain popularity again as the healthcare market is projected to rebound fully to its previous pre-pandemic growth rate. The Malaysian government is set to take a series of proactive strategies in repositioning and post-pandemic revitalisation plans in the medical tourism sector. The government must incorporate a robust policy and effective marketing strategies, encouraging all major private healthcare service providers to actively participate in the medical tourism industry.

1.2 Problem Statements

In the last decade, Malaysia's neighbouring countries, like Singapore and Thailand, have quickly become top medical tourism destinations (Chandran et al., 2020). The results of their practical strategies enable these neighbouring countries to take advantage of a sizeable trans-Asia presence in elevating business, strengthening healthcare infrastructure, and fastening treatment for medical patients (Ganguli & Ebrahim, 2017). While these neighbouring counties have aggressively vied to get a larger slice of this highly lucrative medical tourism pie, it is also vital for Malaysia to re-strategize its medical tourism market. Thus, it is essential for MHTC to recognise the proactive

business model cum effective marketing strategies further, especially to strengthen its competitive advantage in the medical tourism market (Ormond, 2013; Seow et al., 2016; 2020a; Yusof et al., 2020). On the other hand, if these problems are left unattended, Malaysia may eventually face the danger of being left behind in the race.

The challenges and efforts to alleviate the medical tourism market must be more substantial. It is due to the strategies and interventions designed being inadequate fear elements backed by consumer behaviour theory. Even though there is valuable information regarding various parts of the research puzzle, the theories that have been applied are generally limited and need coping practicalities (Rasoolimanesh et al., 2021; Seow et al., 2017b). While focusing on specific aspects of the phenomenon, for instance, from an economic or business point of view, the current studies needed a comprehensive theoretical framework to support how individuals make decisions when procuring healthcare (Seow et al., 2020a; Zarei et al., 2019) Hence, this stduy fills the research gap on the narratives of medical tourism intention from international tourists' perspective.

The obligation to support the healthcare industry is essential to design the form of evidence in promoting medical services abroad. The crucial beliefs that underpin an individual's intention must be identified, such as whether to perform or not to perform a given behaviour. Theories focused on behaviour can provide solutions in supporting prediction to recognise these beliefs. Suppose the conceptual framework is not well designated from a research

theory. In that case, it does not provide direction to the degree of components that can be presented, recognised and to generate the specific scope of the study. Undeniably, medical services are entangled with risks that can threaten potential medical tourists' concerns. The health and medical-related perceptions may differ among individuals as the potential medical tourists' preference to select a destination for medical tourism may vary. Thus, selecting an appropriate theory to support the study is vital to its appropriateness and ease of application guides to deliver explanatory power.

Tourism coupled with medical (experiential, heterogeneous, or intangible) exposes tourists to tolerance on expectations when facing the actual travelling conditions. Thus, individuals must obtain extensive confidence in medical tourism before making their decisions (Johnston et al., 2012; Seow et al., 2017b). Further, although evidence obtained from the past literature is helpful for the medical tourism operational view, it neither addresses the generic attitudes nor generates a theoretical model from international tourists' perspective (Martin et al., 2011; Seow et al., 2018). As such, it is beneficial for the researcher to gauge information in detail by gathering perceptions from international tourists visiting a country (Malaysia) that provides healthcare services to medical tourists. The attention is given to them (whether they have or without any healthcare services abroad before) because they have acquired the travelling exposure cum experience, and they could become potential medical tourists in Malaysia (Seow et al., 2021a).

Further, factors that influence a person's decision to initiate medical tourism comprise the element of trust. The individual attitude associated with medical tourism includes the perceptions of improving health and promoting a healthy lifestyle with pleasure. Given this, destination policymakers and medical tourism marketers would be interested in guaranteeing tourists' confidence by incorporating trust components in reducing distress and uncertainty to reassure their intentional explanations. Thus, healthcare service providers need to know what constitutes destination trust, specifically their choice of healthcare, hospitals and destination preference. Furthermore, potential medical tourists turn to observation in making the actual decision as the product and service from tourism cannot be accessed while waiting for the acceptance moment. Take, for instance, a heart surgery that can only be completed by a medical tourist getting through with it.

For the preceding reasons, the current research attempts to broaden the scope of medical tourism by concentrating on the international tourists' aspect in filling the research gap, as mentioned. Along with the effort to study tourists' behavioural intentions for medical tourism from a cognitive perspective, the researcher also intends to investigate tourists' decision to consider Malaysia as their medical tourism destination. Thus, this phenomenon necessitates a comprehensive study to examine the influencing factors and the decision-making process of an individual, i.e., a tourist, by including essential foundations with threat and coping appraisal, protection motivation, destination trust, and behavioural intentions. The empirical results from a theoretical

research model can provide valuable insights into understanding international tourists' decision-making process to further develop the medical tourism market.

1.3 Scope of the Study

Medical tourism is one of the prime sectors in measuring the success of business operations in the Malaysian tourism and hospitality industry. The investigation of this study consists of comprehensive cognitive and affective theoretical frameworks, namely, protection motivation theory, in analysing healthcare and tourism-linked behaviours. Protection Motivation Theory (PMT) (Rogers, 1975) is selected for the study as it evaluates the individuals' primary cognitive process.

PMT consists of numerous components (severity, vulnerability, self-efficacy, response efficacy, response cost) from Roger's model (Roger, 1983) to measure a person's behaviour. When an individual is aware of a threatening event (e.g., health symptom linked to a health problem) and the coping response directly influences such behaviour (e.g., having the confidence and ability to perform the recommended behaviour), it triggers a person's willingness to perform a recommended behaviour (e.g., intention to seek for medical service abroad). Protection motivation expects to be the direct antecedent of behavioural intention to guide outcome variables in a controlled and deliberate manner. Behaviour intention is a function of the individual's intention to perform medical tourism behaviour.

PMT emphasises how beliefs and attitudes influence an individual's decisions. Thus, assessing international tourists' threat and coping appraisal allows the researcher to examine their health fear arousal and assess their ability to cope with and avert their symptoms. Consequently, they can adopt the recommended behaviour to protect themselves by obligating medical services and health-related activities abroad (such as in Malaysia). The detailed explanation for the adoption of PMT is further justified in Chapter 2.

The current study also seeks to identify the influence of destination trust as a mediating role to explain further international tourists' behavioural intentions for health-related activity abroad. The researcher addressed the problem statement as mentioned above. International tourists who visited Malaysia are the targeted respondents for the study. Due to the nature of the study, quantitative research evaluates the subjects of interest and clarifies the research design and methodology as elaborated in Chapter 3.

1.4 Research Questions and Objectives of the Study

Based on the scope of the study, the current study aims to study whether international tourists engage in behavioural intentions for medical tourism with destination trust as a mediator. The research questions are as follows:

1. What components of threat appraisal (Perceived Severity and Perceived Vulnerability) influence protection motivation in medical tourism?

2. What components of coping appraisal (Perceived Self Efficacy, Response Efficacy and Response Cost) influence protection motivation in medical tourism?
3. To what extent does protection motivation influence behavioural intention in medical tourism?
4. To what extent does protection motivation influence destination trust in medical tourism?
5. To what extent does destination trust influence behavioural intention in medical tourism?
6. Does destination trust mediate the relationship between protection motivation and behavioural intention?

Specifically, the study is expected to achieve the following research objectives:

1. To examine the influence of threat appraisal components (Perceived Severity and Perceived Vulnerability) on protection motivation in medical tourism.
2. To examine the influence of coping appraisal components (perceived self-efficacy, response efficacy and response cost) on protection motivation in medical tourism.
3. To study the influence of protection motivation on behavioural intention in medical tourism.
4. To study the influence of protection motivation on destination trust in medical tourism.
5. To evaluate the influence of destination trust on behavioural intention in medical tourism.

6. To investigate the mediating effect of destination trust on the relationships between protection motivation and behavioural intention in medical tourism.

1.5 Significance of the Study

The current studies provide various interventions designed to promote medical tourism and focus on altering one or two aspects of the problem, such as increasing medical and tourism knowledge and striving to remove some possible visitation barriers. By utilising a theory that identifies the determinants of intention and behaviour, specific attitudes and beliefs can be identified and targeted for strategic interventions. Knowing which components of PMT best predict the behavioural intention of international tourists for medical tourism would allow healthcare service providers to have better innovative strategies for competitive advantage. In particular, to attract potential international tourists for healthcare travel and engage medical tourism in Malaysia. Accordingly, the study expects to comprehend to the research field of medical tourism below;

i. A theoretical model using a behavioural theory (PMT) to serve as a research model to predict and understand international tourists' behavioural intention to participate in medical tourism.

ii. The findings from threat appraisal components (perceived severity and perceived vulnerability) and coping appraisals (response efficacy, self-efficacy, response cost) relationship can best predict international tourists' protection motivation and their behavioural intention in medical tourism.

iii. The explanation of destination trust, which serves as a mediator between the relationship of protection motivation and behavioural intentions of international tourists in medical tourism.

Moving on, the research outcomes of this study can contribute to the development of medical tourism advancement in terms of theoretical and practical viewpoints below.

1.5.1 Theoretical Contribution

The study applies Protection Motivation Theory to establish a research model in examining behavioural intention for having medical services abroad that apply to medical tourism study. The targeted respondents focused on the international tourists' perception; of the reasons they could be potential medical tourists (which is distinct from general tourists' behaviour). Thus, the study on international tourists could play an essential role in explaining tourists' choice of travel behaviour in healthcare settings. The theoretical contribution of this study will enhance the medical tourism literature from an individual health behaviour perspective as well as the interdisciplinary field of tourism cum healthcare study.

1.5.2 Practical Contribution

The study findings can offer great insight into understanding individuals' decision-making processes. It can explain the underlying factors that could affect the international tourist's cognitive change over their behavioural intention to travel abroad for medical services. The results can assist Malaysian

medical service providers in knowing international tourists' expectations while gaining consciousness of the necessary preparations. By understanding international tourists' decision-making process, the findings can contribute to more marketing strategies in designing medical tourism promotional campaigns in Malaysia. Specifically, it will benefit educators, health communicators and healthcare operators to enhance dissemination efforts, by providing better healthcare awareness to intensify customer expectations. The study strives to provide information to benefit the government towards medical tourism policy implementation in Malaysia.

1.6 Definition of Terms

Medical Tourism (MT) – *refers to organised travel that typically corresponds to national territorial boundaries and is outside one's healthcare jurisdiction for medical service intervention* (Leng, 2010; Rai, 2019).

Perceived severity (PS) – *refers to individuals' fear of the threat's consequence* (Torten et al., 2018).

Perceived Vulnerability (PV) – *refers to the individual's valuation of the likelihood of being exposed to a threat* (Courneya & Hellsten, 2001).

Self-Efficacy (SE) – *refers to individuals' belief in performing a given action based on their abilities* (Ozyilmaz et al., 2018).

Response Efficacy (RE) – *refers to the effectiveness of actions for a recommended response which individuals believe will effectively deter or alleviate health threats* (Jasemzadeh et al., 2018).

Response Cost (RC) – *refers to removing underlines from the issue and is likewise contingent upon the emission of pre-specified and undesirable behaviours* (Kergoat et al., 2017).

Protection Motivation (PM) –*refers to individuals' anticipation to perform specific behaviour where fear-appeals play a vital decision role, and its motivation element forms a recommended behaviour* (Kim et al., 2022).

Behavioural Intention (BI) – *refers to the degree to which individuals have formulated conscious plans to perform or not to perform some specified action* (Coudounaris & Sthapit, 2017).

Destination Trust (DT) – *refers to individuals' interests that depend on the facility of a destination to perform its publicised functions* (Abubakar & Ilkan, 2016).

1.7 Organisation of the Study

This research study comprises five chapters. In Chapter One, the research presents the introduction of the study, and the notion of the study is given by indicating an overview of medical tourism, the research concept, the problem statement, the research questions, the research objectives, the scope of

the study as well as the significance of the study. Chapter Two provides the past studies of medical tourism, its literature gap, the overview of relevant past theoretical foundations, and the proposed hypothesis development. Chapter Three delineates in research methodology the proposed evidence for the study, the respondents, the sources of data, the research instruments used for the measurement, and the statistical treatment of the data. Chapter Four deliberates the findings write-up, hypothesis testing reports and data analyses. Lastly, Chapter Five discusses the results interpretation, implication of the study, and future recommendations of the study.

1.8 Conclusion

This chapter begins with the background of the study, the explanation of medical tourism, and the overview of medical tourism in Malaysia. The problem statements of the study and the research gap are discussed in detail. Accordingly, the study has outlined the research questions and research objectives. The significance of the study has been deliberated by including its theoretical and practical contributions. Lastly, the chapter is concluded by asserting the organisation of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter emphasises the review of existing literature about medical tourism research. It begins with a review of the diverse theoretical models used in past behaviour studies. Protection motivation theory (PMT) applies as a theoretical basis for the study. The chosen theory is explained to support the analysis with a proposed research framework, followed by the research propositions. For hypothesis development, the components of threat appraisal, coping appraisal, and protection motivation are used to study tourists' behavioural intentions in medical tourism. The study also acknowledges the mediating role of destination trust between protection motivation and behavioural intention for medical tourism.

2.2 Past Literature in Medical Tourism

Based on the existing literature, the prevailing academic research on medical tourism has predominantly concentrated on the medical tourism industry's economic, therapeutic, and marketing facets. Researchers from diverse fields bring their disciplines into the study, for instance, supply and demand perspective (Connell, 2006; Pagan & Horsfall, 2020), destinations and medical services (Khan et al., 2016; Smith & Forgione, 2007), analysis and description of the medical tourism industry (Androutsou & Metaxas, 2019), and

motivations and barriers (Gan & Frederik, 2013; Ye et al., 2011). Thus far, researchers know about the effects of threats and coping perspectives in medical tourism, which remain relatively untouched. As a result, this review raises an extensive literature gap in the medical tourism field. Along with a surge from healthcare practitioners and the government authority in exploring medical tourism, there is an overview by the researcher over the publication from the last few years (refer to Appendix 2.1). The common assumption gathered from these reviews is that despite recent publications, the study on medical tourism to examine individuals' decision-making processes is not well projected (Johnston et al., 2012; Nilashi et al., 2019; Seow et al., 2020a). Although the aforementioned has added to the medical tourism literature, these studies are inadequate to capture this burgeoning medical tourism sector from the scope of the behavioural study. Studies searching for potential medical tourists by mapping their behaviour through decision-making processes are lacking (De la Hoz-Correa et al., 2018; Seow et al., 2021a). The risks associated with medical tourism are unique and stem from the specialised nature of services offered in the tourism and medical industries. It is essential to address these specific features and the potential threats they may pose to consumers considering medical tourism. Hence, there is an urgent need for an empirical study drawing upon an established theoretical paradigm for an attitudinal research contribution. In the following, the theoretical background of the study, its application, shortfall, and preference are highlighted.

2.3 Theoretical background

Academic researchers have studied the behaviour of consumers over the past many years in attempting to explain the factors that influence consumers' decision-making theoretically. Howard and Jagdish (1969) proposed a theory of buyer behaviour to explain and capture the consumer's decision-making processes. In this theory, a consumer is exposed to a stimulus (e.g., product or service) which contains characteristics related to significance, symbolism, and social environments. These stimulus characteristics influence buyers' perceptions, and learning about the product or service eventually leads to behavioural outputs. These outputs include attention, comprehension, attitude, intention, and behaviour.

The theory of buyer behaviour by Howard and Jagdish (1969) was a grand theory that could not be easily tested as consumer behaviour needs to be more complex to be meaningfully captured in a single model (Bagozzi, 1992; Simonson et al., 2001). Subsequently, consumer researchers have utilised other persuasion and attitude change theories. These belong to the family of consistency theories and "assume that individuals strive toward consistency among the beliefs, attitudes, and behaviours" (Ajzen & Fishbein, 1980, p. 22). These theories include balance theory (Heider, 1958; Newcomb, 1956), cognitive dissonance theory (Festinger, 1957), social judgement theory (Hovland et al., 1957), cognitive consistency, attitude change and wishful thinking (McGuire, 1960), self-persuasion (Bem, 1965) and congruity theory (Abelson et al., 1968).

The abovementioned theories neither specified which psychological variables influence behaviour nor explained inconsistencies between attitude and observed behaviour. Bagozzi (1992) indicated the need for middle-range theories incorporating micro and macro perspectives. As a result of developing and testing middle-range theories, the multi-attribute model emerged to explain whether intentions mediate the effects on behaviour. For instance, in the study of Albarracin et al. (2001), it was postulated that the expectancy-value theories contain a limited number of psychological variables that can influence behaviour and thus offer a more parsimonious model for explaining behavioural intentions.

2.3.1 Expectancy-value theories

Numerous psychosocial theories were developed to predict and explain individuals' behavioural changes. Thus far, the Expectancy-Value (EV) theories are a broad class of decision-making theories that support rational choice. The notion of these theories is founded on the assumption that an individual's action is stimulated by the interactive consequences and expectations, along with its values and the probabilities of attached outcomes (Darnton, 2008). For health-related research, the term `health behaviour' denotes any behaviour that influences (or is believed to influence physical health outcomes), either by decreasing or increasing its severity or risk (Sutton, 2001). The theories focus on the cognitive variables (as part of behaviour change) and share the hypothesis on attitudes and beliefs (Stroebe, 2011), adding to the expected outcomes from future events (Gebhardt & Maes, 2001). For instance, theories such as social-cognitive theory (SCT), theory of planned behaviour (TPB), health belief model

(HBM), and the protection motivation theory (PMT)" are implemented in health-related behavioural study. These behavioural theories have been expanded on the primary postulation by adding more constructs to expand the model predictability or altering the determining constructs' combination (Armitage & Conner, 2000).

In medical tourism, the study on decision-making (for instance, to seek medical service abroad) relied intensely on the rational choice belief with assumptions underpinning behaviour (Cohen et al., 2014). Thus, for individuals to decide, they will constantly ration on their logical decisions to act prudently. The measurement is based on weighing costs and benefits and selecting the actions in their uppermost self-interest to maximise the net welfare (Meurk, 2014). Under several alternative circumstances, the EV theories assumed that the action(s) that most likely led to positive outcomes are highly preferred. The EV theories that are applied to health behaviour are overviewed below.

2.3.2 Social Cognitive Theory (SCT)

SCT evolved from Social Learning Theory (SLT) in the 1960s, founded by Albert Bandura. The theory posits a multifaceted causal structure regulating human motivation, action, and well-being (Bandura, 1998; Abraham et al., 2000). SCT offers both predictors of adherence and guidelines for its promotion (Bandura, 1997) and is regarded as the most comprehensive theory of behaviour change developed (Redding et al., 2000). The core principle of behaviour change in SCT is reciprocal determinism, where continuous, dynamic

interaction between the individual, the environment and behaviour are considered (Redding et al., 2000).

SCT states that even though risks and benefits are the factors for prerequisite change, it is proposed that additional self-influences are essential for change to occur (Bandura, 2004). For instance, personal efficacy beliefs are one of the influences that play a central role in changes. Thus, individuals' behaviour on health is also affected by their expected outcomes (which can be the negative and positive effects or the material losses and benefits). SCT also proposes that individuals recognise their actions if they perceive to have control over the outcome. Although there are few external barriers, when individuals have confidence in their abilities, they execute their actions (Abraham et al., 2000). SCT is to explain how individuals regulate their behaviour through control and reinforcement that can be maintained over time to achieve their goal-directed behaviour. However, this theory is difficult to operationalise and is often partly used due to its wide-ranging focus (Munro et al., 2007).

2.3.3 Theory of Planned Behaviour (TPB)

The theory of reasoned action (TRA) and its extension, the theory of planned behaviour (TPB), are the two generally renowned behavioural models based on EV theory. The two theoretical models proposed that there is an indirect impact on the action when the constructs are mediated by intentions (Fishbein & Ajzen, 1975). TRA enhances the attitude-behaviour construct by integrating the normative social influences (social norms) to measure intention. Social norms refer to an individual's beliefs in people they are concerned about

expect from the suggestion given to them, which motivates them to comply. Perceived behavioural control (PBC) was incorporated into TPB as the third component by Ajzen (1991). This construct is comparable to self-efficacy by Bandura (1977), where individuals can control the outcomes of their actions. It is believed to influence individuals' behaviour directly as well as indirectly.

TRA and TPB were grounded on the utmost instantaneous and proximal causes of precise behaviour. TRA and TPB studies mainly emphasised the intrapersonal and social aspects of examining individuals' decision-making (Ajzen, 2020; Gholami et al., 2019; Noar, 2004). However, these theories provide a limited understanding of other important social and intrapersonal factors, such as the fear element (Seow et al., 2020a). Besides, there is very little explanation of the causes of specific behaviour to reflect on the standing of situational or contextual variables. TPB has shown more utility in public, but it still needs to be more precise on its inability to consider risk perception (Hamilton et al., 2020; Rezaei et al., 2019; Seow et al., 2017b). Although many researchers have added additional constructs to TPB and more attributes to make it a more integrated model, the rational process is subjective. It barely allows the impacts of emotions and beliefs on behaviour amenably (Davis et al., 2015).

2.3.4 The Health Belief Model (HBM)

A group of social psychologists developed HBM in the 1950s who worked in the field of public health in search of an explanation for health-related precautionary behaviour (Rosenstock, 2000). The model assumed that

behaviour is entirely determined by its anticipated outcomes, drawing from the perspective of EV theory. It hypothesised that the relationship is based on four core constructs, namely:

i. the susceptibility perception (the risk of emerging a problem),
ii. the severity perception (the risk of the problem and its consequences),
iii. the benefits of taking perceived action, and
iv. the barriers to taking perceived action.

HBM postulated that for individuals to take action, it depends on the propositions to trigger it. For instance, symptoms or pains, verbal information from family/professionals or visual materials like brochures and posters to create impulse, which refers to cures to action. Bandura (1977) later added the notion of self-efficacy to enhance the power of prediction from HBM (Rosenstock et al., 1988).

Even though HBM guided the implementation of interventions in health-related studies, nevertheless, it is more descriptive than explanatory, and the model does not state a strategy for changing health-related actions as its constructs are regarded as independent predictors of health behaviour (Armitage & Conner, 2000; Orji et al., 2012). Thus, the constructs are commonly presumed to combine additively to influence the likelihood of performing a behaviour. For instance, for individuals to behave in the desired manner, they must be sure that engaging in such behaviour carries benefits to outweigh its costs (Eisen et al., 1985; Rippetoe & Roger, 1987). Additionally, HBM takes little notice of individuals' attitudes, beliefs, or other individual determinants that dictate

acceptance of particular health behaviours (Stroebe, 2011). Cues to action (events that trigger behaviour) are frequently mentioned in the model, but less empirical work is performed for non-health-related reasons such as social acceptability (Stroebe, 2011; Stroebe & de Wit, 1996). It also assumes that the conditioning factors that may prohibit or promote the recommended action will remain unaffected (Redding et al., 2000).

2.3.5 Protection Motivation Theory (PMT)

Protection motivation theory (PMT) was initially developed to show how individuals respond to health threats aroused by fear communications or `fear appeals.' The term' protection motivation' refers to the motivation for individuals to protect against a health threat. It is usually defined operationally as 'the intention to adopt the recommended action' (Roger, 1975). PMT is the adaptation of the HBM from EV-based theory. An added mediating intervention variable was formed between the attitudinal and behavioural constructs of PMT. Rogers (1975) originally developed PMT to gauge helpful knowledge to understand how individuals can cope with fear appeals and subsequently study their attitude towards it. Today, PMT is extended to embrace a broader range of evidence and convert it into a more general theory focused on persuasive communication that can be applied to any situation relating to threat (Maddux & Rogers, 1983; Rogers, 1983; Seow et al., 2018).

PMT was instigated from two main sources of evidence (Rogers, 1975). The first source is from the environment (for instance, verbal persuasion, observational learning), and the second is from intrapersonal (for instance, the

personality variables, the reaction from prior experience). The theory proposed that individuals tend to protect themselves grounded with the interactions in threat and coping appraisals. The threat appraisal from PMT evaluates maladaptive behaviours (i.e., detrimental behaviours), the outcome of the perceived severity of a threatening event. Along with it, PMT includes the perceived probability of threatening events occurring (perceived vulnerability) by including the possibility of intrinsic or extrinsic maladaptive response rewards. Ultimately, the cognitive appraisal process's ultimate idea is to disclose how it can relate to its coping component (Roger, 1983). The coping appraisal from PMT measures the coping ability to deal with or avert the threat events. It includes the recommended response behaviour (perceived self-efficacy) and the negative consequence of a response (the response costs). (Floyd et al., 2000; Milne et al., 2000; Rogers, 1983).

2.3.6 The preference for using Protection Motivation Theory

Social cognitive models from expectancy-value theories attempt to explain why individuals undertake to protect themselves from actual or anticipated health threats. In contrast, Protection Motivation Theory (PMT) endeavoured instruments to stimulate individuals to avoid undesirable outcomes when they perceived health threats (Weinstein, 1993). PMT proposed that individuals will recognise the potential adverse health outcome related to the threat and develop a desire to protect themselves from this negative outcome. Specifically, individuals will run a risk-benefit analysis where they will weigh the benefits of adapting to a change in their current behaviour against the cost of doing so. Thus, it depends on how individuals perceive its threat and their

desire to avert it. In other words, individuals will either choose not to or choose to protect themselves from actual or anticipated health threats (Rippetoe & Rogers, 1987). However, the critical factors incorporated in each model's risk and non-risk variables differ (Prentice-Dunn & Rogers, 1986). For example, the individuals' perceived worth of taking the precautionary action is vital in PMT but not for TPB.

Among the social cognition models, PMT is incomparable to the relatively large number of experimental tests conducted (Floyd et al., 2000). It used different inclusion criteria and effect size measures to analyse the study. In PMT, behaviour change can be achieved by appealing to threats to individuals. There are three components of fear arousal postulated, namely: (a) the magnitude of harm of a depicted event, (b) the probability of that event's occurrence, and (c) the efficacy of the protective response (Roger, 1975). Together, it incorporates when individuals determine protection motivation intensity, resulting in an activity that stirs a desire to protect oneself from the threat and cope with it by taking recommended action (Stroebe, 2000). Thus, PMT is the only theory within the broader cognitive perspective that explicitly uses the risk-benefits of existing and recommended behaviour to forecast the possibility of change (Gebhardt & Maes, 2001).

Further, the preference for PMT over HBM is how the two theories are organised. HBM is organised as a catalogue of variables contributing to behaviour. In contrast, PMT is organised along with two processes that attempt to match the cognitive processes used in evaluating threats (the threat-appraisal

process) as well as selecting its coping alternatives (the coping appraisal process) (Prentice-Dunn & Rogers, 1986). PMT is the only theory (among the four theories discussed earlier) with self-efficacy as a separate component (Rainear & Christensen, 2022; Weinstein, 1993; Yan et al., 2014). It further separates into a resourceful model in assessing motivational change as its emphasis on self-efficacy is separate from the model. Evidence suggests self-efficacy influences motivational, cognitive, and affective processes (Bandura, 1977; 1992). In addition, Wolf colleagues (1986) state that Roger's theory may be most useful as "a general theory about how various cognitions, though acquired, combine to influence behavioural intentions" (p. 320).

The researcher argued that PMT is an ideal predictive model to assess individuals' appraisal processes (i.e., the beliefs, values, and sense of self-efficacy related to the behaviour being considered) and to predict individuals' intentions. In addition, the model is also valuable for planning interventions that address specific cognitions which need to be altered to facilitate attitude change and consequent behaviour change. For these reasons, this study uses the PMT model as the foundation of the research study, which could expand the present understanding of tourists' health protective behaviours in the medical tourism context.

2.3.7 Prior Research Using Protection Motivation Theory

PMT is extensively used as a research framework to investigate a range of health-related behaviours (Floyd et al., 2000; Milne et al., 2000). The theory is also used in several studies to investigate on risks and protective behaviours

in various perspective, including tobacco use (Maddux & Rogers, 1983; Pechmann et al., 2003; Sabzmakan et al, 2018), alcohol consumption (Amaral et al., 2017; Cismaru et al., 2010; Runge et al., 1993), sunscreen protection (McClendon et. al., 2001; Prentice-Dunn et al., 2009), receiving vaccination (Bish et al., 2011), preventive health behaviours (Bashirian et al., 2020; Helmes, 2002), motivation to follow exercise (Chamroonsawasdi et al., 2021; Gaston & Prapavessis 2014; Milne et al., 2002), physical activity (Morowatisharifabad et al., 2018; Plotnikoff & Trinh, 2010; Wurtele & Maddux, 1987), self-care (Havaei et al., 2021; Fry & Prentice, 2006), environmental hazard reduction (Kothe et al., 2019; Vaughan, 1993), parental protection (Boniel-Nissim et al., 2020; Strobino et al., 1996), security (Hassandoust et al., 2020; Woon et al., 2005), pro-environmental behaviour (Bockarjova & Steg, 2014; Kim et al., 2013), safe computing practices (Anderson & Agarwal, 2010; Atta et al., 2022; Ifinedo, 2012; Lee, 2011), climate change (Wang et al., 2019c), and flood preparedness (Botzen et al., 2019; Bubeck et al., 2013; Kellens et al., 2013).

Additionally, PMT is utilised in healthcare research for purposeful behaviour change when developing and evaluating programs. It includes interventions to promote patient adherence to medical treatment (Munro et al., 2007), healthy lifestyles (Scarpa & Thiene, 2011), substance use prevention (Gong et al., 2009; Runge et al., 1993), HIV protective behaviours (Chen et al., 2010), health screening behaviour (Hakimi et al., 2022), influenza deterrence (Ling et al., 2019; Hotle et al., 2020) and COVID-19 vaccination (Kowalski et al., 2022) among others. The conclusion derived from this literature uncovers

several links between tourism, healthcare and theoretical development that can clarify the conceptual background of this research field (refer to Appendix 2.2).

Several researchers have attempted to apply the protection motivation theory to tourism studies. The studies mainly investigate tourists' risk perception and protective behaviours towards hazardous travel conditions and health threats in travel destinations (Lu & Wei, 2019; Ruan et al., 2020; Verkoeyen & Nepal, 2019; Wang et al., 2019a; 2019b). Interestingly, the study on using protection motivation theory from a medical tourism perspective is regarded as a pioneer by Seow et al., 2021b, where the authors explored international tourists' behavioural intention for medical service abroad. Studies related to medical tourism are distinct from traditional health risk insights since multiple risks are involved. It influences the immediate and perhaps long-term health of individuals. As many of the medical benefits associated with medical tourism are not instantly observable, the potential medical tourists may not be very concerned about their decisions to perform such behaviour. Thus, by applying protection motivation theory to study medical tourism, such areas of research may be able to address the literature gap by indicating how individuals, for instance, international tourists, are set on and willing to accept medical services from abroad and how much effort are they going to exert to perform medical tourism behaviour.

2.4 The Components of Protection Motivation Theory

Rogers (1983) adapted the primary and secondary appraisal process model from Lazarus (1968) and developed the protection motivation theory

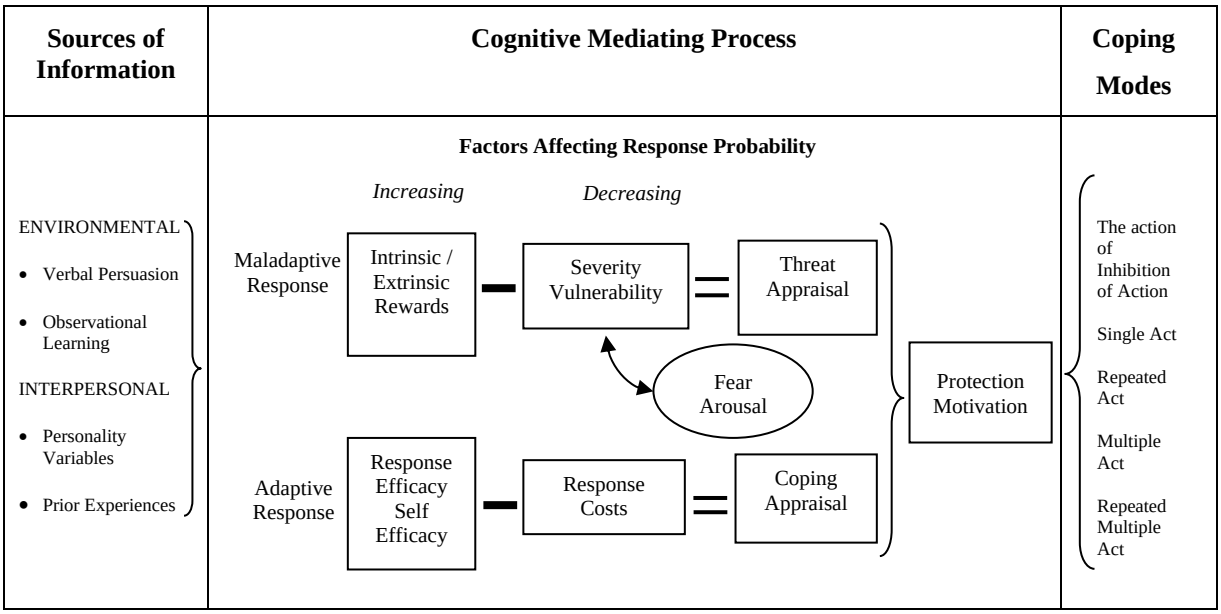
(Tanner et al., 1991). The model "provides a clearer prescription on how to develop messages that can influence adaptive behaviour" (Tanner et al., 1991, p. 37). Practically, the structural model of PMT supports the consideration of health intentions through clear messages, mainly for individuals that face fear-arousing, where fear may not necessarily be a prerequisite to influence behaviour (Scarpa & Thiene, 2011). Roger's initial research was to examine fear communications, attempting to identify the specific components that produced attitude change. Subsequently, he initiates a corresponding cognitive mediating process and hypothesises on each of the components of the fear appeal. Rogers (1975) initially identified these three cognitive mediational processes in the original formulation of PMT by including;

i. the perceived likelihood of individuals' exposure to the event,
ii. the perceived severity of the feared event, and
iii. the perceived efficacy of responses designed to prevent the event's occurrence.

Rogers (1983) eventually revised PMT by suggesting that numerous environmental (including the fear appeals) and intrapersonal sources of information (comprised of personality) can initiate the cognitive processes. The two components of PMT, threat appraisal and coping appraisal, make up the formation of the theory (Courneya & Hellsten, 2001; Floyd et al., 2000; Milne et al., 2002; Plotnikoff et al., 2009). These two appraisals determine an individual’s protection motivation (by taking the initiative in preventive behaviour) to engage in the targeted behaviour. PMT postulates that individuals with a higher perception of threat are more motivated to change, provided the

coping strategy offered effectively reduces the threats (Beck, 1984; Courneya & Hellsten, 2001). Collectively, the responses of threat appraisal and the coping appraisal may result in the intention to perform adaptive responses or may lead to maladaptive responses (not engaging in preventive behaviours). Subsequently, Rogers reviewed his theory again to include the fourth mediational variable, self-efficacy. Self-efficacy advances the belief that one is capable of performing the coping response. In a trial attempt at this model, Maddux and Rogers (1983) found that self-efficacy was the most potent predictor of pro-health intentions. The revised protection motivation theory is best illustrated by the following diagram (Figure 2.1), which describes the individual components (Rogers, 1983).

Figure 2.1 Diagram of Protection Motivation Theory



Source: Rogers (1983)

According to Roger (1983), research based on PMT has included the interrelationship among environmental stimuli, physiological arousal, emotion,

and attitudes. For the antecedents, the first source of information refers to the environmental sources that initiate the cognitive mediating processes, including verbal persuasion (e.g., fear appeals) and observational learning (e.g., seeing what happens to others). Next, the intrapersonal sources include personality variables and previous experience with similar threats. Although environmental stimuli and physiological and emotional arousal are considered influential variables, it is believed that the actual protective responses, or lack of them, are determined by cognitive appraisal.

PMT focuses on the cognitive mediating processes (Rogers, 1983). The sources of information initiate its two appraisal processes. These two parts of the process consist of the appraisal of responses and the appraisal of the variables which increase or decrease the chances of the response. Together, the threat and coping appraisal responses caused the intention to perform adaptive responses (protection motivation).

Considering the coping modes from protection motivation, when the conditions mentioned earlier are met, individuals will be motivated to protect or take care of themselves; whether adaptive or coping, a response occurs. In medical tourism, the response would include behavioural intentions, such as seeking medical service or repeated multiple acts, such as revisiting the country to obtain follow-up medical treatment abroad or considering using the medical service abroad for recuperating purposes. These involve either direct action (e.g., obtaining and using medical services) or the inhibition of action (e.g., abstaining from medical treatment abroad) (Clubb & Hinkle, 2015).

Regardless of how the various components combine, the model postulates that the motivation to protect or take care of oneself is a function of the threat and coping appraisal processes. According to Roger (1983), for an individual to elicit protective motivation and coping behaviour, it is assumed that the individual believes that (i) the threat is severe, (ii) he or she is vulnerable, (iii) the coping response is effective, and (iv) he or she can perform the coping response. The protection motivation to perform a recommended behaviour results from the two appraisal processes of threat and coping. Thus, protection motivation includes any combination for which an effective recommended response can reinforce the individual.

2.4.1 Threat Appraisal in Protection Motivation Theory

Threat appraisal' assesses individuals' seriousness and likelihood of suffering from the threat involved (Floyd et al., 2000). The threats may include social threats, physical harm, health risks, economic costs, and any danger to oneself and others. When faced with a threat, they usually attempt to cope. Threat appraisal assessment measures its adaptive response (Floyd et al., 2000; Rippetoe & Rogers, 1987; Tanner et al., 1991). Such a response refers to the behaviour that individuals are currently engaged in, or they can also adopt. For instance, to pay attention to current health conditions or taking the recommendation to perform health screening or medical check-ups. One of the two factors causing the possibility of the response occurring is how severe the threat is, which causes individuals to avoid the negative consequences of health problems (Rather, 2021; Rippetoe & Rogers, 1987). The other factor refers to the susceptibility to the threat, such as the probability of health problems

occurring in individuals (Prentice-Dunn et al., 1986; Wang et al., 2019a). In medical tourism, threat appraisal indicates an individual's magnitude of health threat (perceived severity) and the susceptibility established in individuals to the communicated threat (perceived vulnerability). The threat appraisal comprises the combination of perceived severity and perceived vulnerability, which influences how individuals process the threat information about their health and how it will protect them from a particular health-related problem (Seow et al., 2021b).

It is contended that international travel does not derive intrinsic pleasure or extrinsic approval for not permitting medical services abroad. As for medical tourism, tourists may not be motivated by intangible rewards such as having fun, feeling assured or fulfilling emotional needs. Moreover, if the motivation for visiting is based on external factors such as positive rewards or avoiding negative consequences, gaining knowledge may not be their top priority. Instead, they would prefer quality healthcare/medical treatment during their visit.

Several studies have excluded rewards from PMT from predicting individuals performing a recommended behaviour (Rainear & Christensen, 2017; Seow et al., 2021b; Wong et al., 2016; Woon et al., 2005). Furthermore, the revision of PMT by Roger (1983) already comprised a component appraising the rewards. PMT has implemented the recommended response as part of the threat appraisal process (Milne et al., 2000). Therefore, the rewards construct will be exempted in the proposed research framework. This will allow

for more comprehensive research on human behaviour within the context of medical tourism (Seow et al., 2021a).

2.4.1.1 Perceived Severity in Threat Appraisal

Perceived severity (PS) refers to individuals' fear of the threat of the consequences (Torten et al., 2018). It indicates how an individual perceives the harmful outcome or the significance of a serious health incident. Perceived severity relates to a predicted affair, which may occur in future or at the current state of its pre-existing problem. In addition, the degree of seriousness of a condition may vary from person to person. It is the subjective opinion of the condition's seriousness and consequences (Tarkang & Zotor, 2015). The emotion of individuals can be influenced by the perception of seriousness provoked by the threat that will perpetrate into the situation (Rosenstock et al., 1994).

The study on perceived severity has also assessed health threat that is not related to health consequences, such as communication and dissemination pandemic response (Raamkumar et al., 2020), usage of mobile-based payment as a social distancing mechanism (Sreelakshmi & Prathap, 2020) or psychological causes of panic buying (Yuen et al., 2020). According to Milne et al. (2000), perceived severity can be actualised in psychosocial and physical severity by applying the Protection Motivation Theory to health-related behaviour. The perceived severity measurement includes the evaluation of medical consequences (disability, death and pain) and the possible social consequences (family life, work conditions and social relations). In essence,

perceived severity in medical tourism studies emerges from individuals' perception of the seriousness of the health threat if one were to deal with it.

2.4.1.2 Perceived Vulnerability in Threat Appraisal

Perceived vulnerability (PV) refers to the individual's assessment of their probability of being exposed to a threat (Courneya & Hellsten, 2001). It reflects on the individual's beliefs about the likelihood of a threat's occurrence or the possibility of developing a problem (Gebrehiwot & van der Veen, 2020; Gerrard & Houlihan, 2007). It elucidated individual perception of uncontrollable measures with uneasiness leading to undesirable consequences (Zarlengo, 2012). PV is also related to the susceptibility of individuals, be it their future unprotected or adverse outcomes from the danger of misfortune. The cognition of this construct is an affective component, which involves fear, feeling anxiety, and apprehension.

In the medical tourism context, the variable of perceived vulnerability from the threat appraisal process encompasses the assessment of the seriousness of the threat by estimating the probability of an adverse health outcome. The fear element is the intervening variable between the perception of vulnerability and the level of threat appraisal (DiClemente et al., 2011). Thus, the fear perception of individuals on the severe health threat will motivate them to engage in health protection behaviour.

2.4.2 Coping Appraisal in Protection Motivation Theory

Coping appraisal (CA) assesses the individuals' effectiveness in their possible responses to the threat (Cathcart & Glendon, 2016). It evaluates individuals' ability to perform the desired response (Bode et al., 2022). In PMT, the measure of evaluating individuals' ability to cope with and avert the threatened danger is assessed. The focus of the coping appraisal dimension is on the adaptive response. The factor that induces an individual to believe in the recommended coping response is its effectiveness in taking such action (Lemay et al., 2020), such as individuals believing that using medical services abroad is more successful in treatment. The other factor would be what causes individuals to believe they can successfully perform with their coping response (Lee et al., 2008), such as individuals believing that making an effort to travel and use better medical services abroad is what they want. Factors that decrease the probability of the adaptive response are the negative consequences of choosing their response (Delfiyan et al., 2021). For instance, the difficulty in having medical services from abroad due to inconvenience, expenses involved, and efforts required.

From the above discussion, coping appraisal comprises the combination of self-efficacy and response efficacy in dealing with health threats and the response costs associated with the suggested behaviour. These constructs, in turn, influence how individuals process their capability to handle the threat and how it will motivate them to engage in a particular recommended health-related behaviour. Recommendations will be adopted once the suggested behaviour is expected to bring the desired outcome.

2.4.2.1 Self Efficacy in Coping Appraisal

Self-efficacy (SE) refers to individuals' belief in performing a given action based on their abilities (Ozyilmaz et al., 2018). The notion is derived from social cognitive theory, which is identified based on previous experience and observation of the performance of the specific behaviour (Bandura, 1986). It includes the encouragement of significant others and physiological responses. SE prospects influence which behaviours individuals will be engaged in and how much effort is expended. Individuals may persist when faced with obstacles and remain self-debilitating or self-encouraging in cognition behaviour (Dennis, 2003). It is a significant determinant of motivation to engage in actual behaviour (Rainear & Christensen, 2022; Riet et al., 2008) and has been demonstrated to be one of the best predictors of protection motivation behaviour (Bandura et al., 2001; Garcia & Mann, 2003; Walker et al., 2006).

Whether an individual will endure the challenges or have self-enhancing or self-defeating thoughts depends on how they respond expressively to travel while seeking medical services. When an individual can perform a requisite behaviour, they will be more likely to accomplish it. When relating self-efficacy to medical tourism study, it prompts as a salient variable to predict whether an individual can travel for medical service abroad. It depends on how much effort an individual will expend on such behaviour. Thus, whether an individual determines his/her ability to perform medical tourism is based on whether he/she has previous travelling knowledge, observed the effective medical services as behaved by others, or accepted encouragement from others to travel and seek medical services overseas.

2.4.2.2 Response Efficacy in coping appraisal

Response efficacy (RE) refers to the potency of actions for a recommended response that individuals believe will effectively deter or alleviate a health threat (Jasemzadeh et al., 2018). It has been presented as a principal component in multiple health beliefs and Bandura models. These models assume that individuals are more likely to engage in specific behaviour if they believe in its effectiveness in solving a problem or achieving a desired outcome (Casey et al., 2009). RE is connected with several concepts within the literature related to health communication. It comprises the belief in encouraging results associated with a behaviour responding to a perceived threat (Roger, 1983). The importance of persuasive cognitive messages is identified as its critical cognitive component. Response efficacy can influence the efficiency of fear-based messages and positive emotion-based messages commonly used in outcome expectancies.

In research related to health studies, response efficacy is applied to describe individuals' acceptance of the effectiveness of the health-benefit approach or prescribed treatment (Zhang et al., 2018). It can also be attentive to added positive outcomes of performing the behaviour, such as the psychological well-being of having precautionary health action will give an individual peace of mind (Wang et al., 2019b). The current study typically emphasises the effectiveness of the behaviour in reducing the health threat. For instance, a regular medical check-up will reduce the chances of having a health challenge. Thus, in this study context, individuals' beliefs about how effective medical

tourism is in resolving their health problems depend on their beliefs about whether medical services abroad are effective or ineffective.

2.4.2.3 Response Cost in Coping Appraisal

Response cost (RC) refers to the removal of a reward or positive consequence in response to the occurrence of pre-specified and undesirable behaviours. (Kergoat et al., 2017). It is considered a barrier to completing the protective behaviour (Floyd et al., 2000). The attributes of response cost included unpleasantness, difficulty, inconvenience, expense, disruption of daily life, complexity, interference with habits, the effort required, social embarrassment, and/or extra time required (Neuwirth et al., 2000). This study's response costs are connected with adaptive coping responses, such as monetary involvement, personal time, and the required efforts. Response cost may diminish the probability of individuals selecting their adaptive response, causing the opportunity costs of accepting the recommended actions to avoid threatening events (Ifinedo, 2012).

2.5 Protection Motivation in Medical Tourism

Protection motivation refers to individuals' intention or anticipation to perform particular behaviour, where fear-appeals play a vital decision role, and its motivation element forms a recommended behaviour (Kim et al., 2022). Health behaviour theories, such as the Protection Motivation Theory (PMT), suggest that people change their behaviour to prevent health problems due to perceived threats. The coping appraisal motivates to determine behaviour embedded in intention. (McClendon & Prentice-Dunn, 2001). Together with

threat appraisal and coping appraisal, protection motivation formulates the effects of individuals (tourists) on their attitude and behavioural change when comes to health perceptions (Maddux & Rogers, 1983; Rogers, 1975). For protection motivation in medical tourism context, tourists' decisions to avoid risks and take protective actions are based on their level of protection motivation. In other words, protection motivation is viewed as the cause of action in which an individual (such as a tourist) intends to engage in a particular behaviour (such as an intention for medical tourism) before it turns into actual action (such as actual travel for medical or healthcare services abroad).

2.6 Destination Trust in Medical Tourism

Trust relies on individuals' cognition based on certain factors such as similarities, relatedness, and closeness (Cairney & Wellstead, 2021). The transfer of trust happens when perceived uncertainty is related to the source of confidence displaced (Leung et al., 2022). From a theoretical perspective, trust is associated between the two parties, where one party has perceived certainty (as an exchange partner), and the other party has integrity and reliability (Bhattacharya et al., 1998). 'Destination Trust' is formed due to consistency between what has been promised to deliver and the guaranteed fulfilment of such promises in that particular destination (Hart, 1988). It can also be referred to transfer between the parties who provide services from a destination (Casielles et al., 2005; Iranmanesh et al., 2018). From the perspective of international tourists, Destination trust is considered a notable factor in the tourism and hospitality industry. Gaining confidence from tourists in a particular destination is critical for decision-making measures (Iranmanesh et

al., 2018). The form of ‘destination trust’ in the hospitality industry is shaped by the collective opinions, perceptions, and attitudes of diverse interest groups, including individual or collective parties and the public from a destination (Artigas et al., 2017; Chatzigeorgiou & Christou, 2016).

In the current study, limited studies focus on healthcare services as recipients of destination trust. To the researcher's knowledge, the study on international tourists' viewpoint on medical tourism is relatively scarce. As such, it is significant to consider tourists' travel experience with their opinion on travel destinations related to healthcare services, which could strengthen the link between tourists' trust and medical tourism (Abubakar & Ilkan, 2016). Trust can be related to tourists' satisfaction, which forms loyalty to a destination (Artigas et al., 2017). Destination trust is an essential psychological factor in the tourism and hospitality industry. It can be measured through multidimensional concepts (Chen & Dhillon, 2003; Flavián et al., 2006). From a medical tourism perspective, destination trust includes the attributes of benevolence, reputation, and competence (Choi et al., 2016; Marinao et al., 2012). Under such consideration, destination trust can be transferred to the sense of international tourists' perception. It influences a tourist's choice of decision in medical tourism of the possibility of risk reduction and ease of insecurity (Artigas et al., 2017; Loureiro & Kastenholz, 2011). Hence, destination trust in the medical tourism context includes the elements of credibility - the willingness to deliver promised medical service and attend to patients in case of adverse effects, reputation – the ability to provide consistent

and improved medical service and competence – the ability to meet and satisfy tourists' expectations (Abubakar & Ilkan, 2016).

2.7 Behavioural Intentions in Medical Tourism

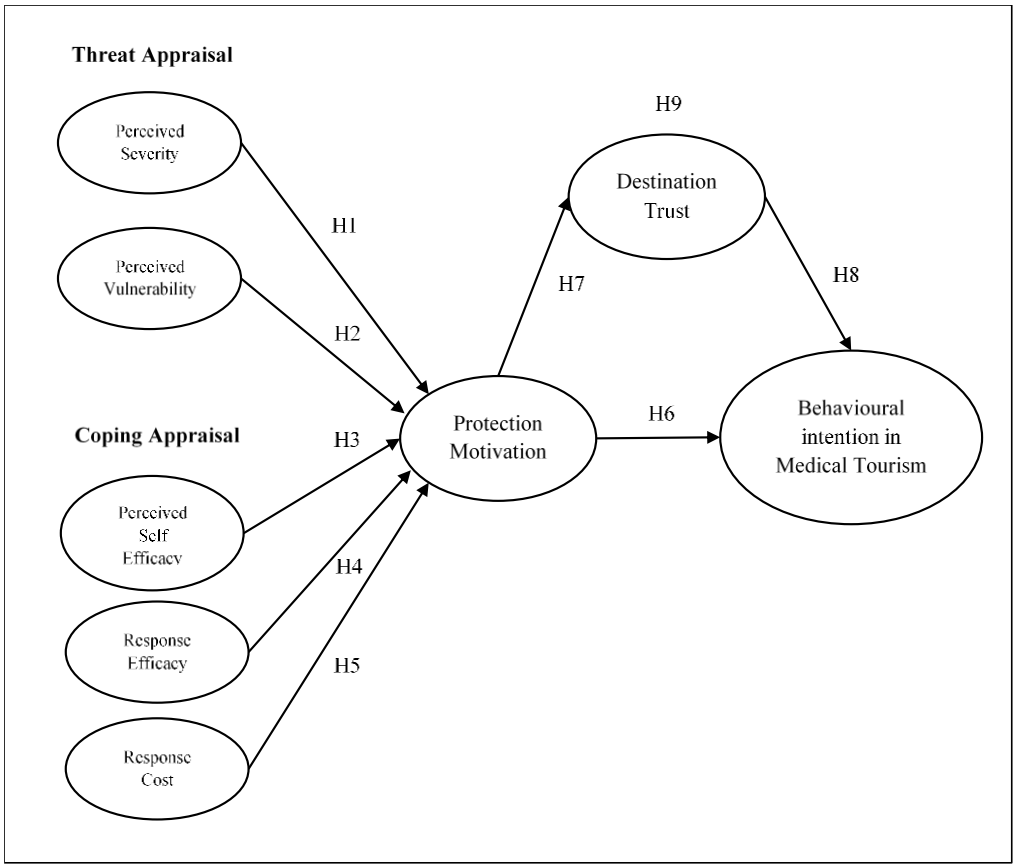
Behaviour theories can predict behavioural change and help identify the determinants of intention to perform a specific behaviour (Lin et al., 2020). Behavioural intention is the degree to which a person has formulated prearranged plans to perform or not to perform some specified action (Coudounaris & Sthapit, 2017). Past studies addressing individuals with constructive intentions to participate in travelling have successfully translated such intentions into action (Eid et al., 2021; Papadimitriou et al., 2015). Behavioural intention signifies a person's motivation to perform the seeming target behaviour (Rebar et al., 2019). When there are no environmental or other constraints, the execution of individuals' behaviour is possible where their need for assistance or the required abilities to perform the seeming behaviour are accessible. In medical tourism, it is necessary to understand the determinants of a given behaviour when developing adequate information to change a person's behaviour (Rubinelli & Diviani, 2020). Thus, it is believed that if an individual has a solid intention to perform the intended behaviour, such as medical tourism, then the actual behaviour will most likely occur (Seow et al., 2021a; Wilding et al., 2019).

2.8 The Proposed Research Framework

By adapting the model from protection motivation theory, a research framework was developed to study international tourists' behavioural intention

for medical tourism (refer to figure 2.1). The framework comprises two main components, threat appraisal and coping appraisal. It is to provide insights into the decision-making process of international tourists who have visited Malaysia for medical tourism. Hypothesis development (H1 to H9) was formulated to examine the relationship between perceived severity, perceived vulnerability, self-efficacy, response efficacy, response cost, and protection motivation. Simultaneously, destination trust is acknowledged as a mediator, and behavioural intention in medical tourism is the dependent variable.

Figure 2.2 Proposed Research Framework



2.9 Hypothesis Development

Hypothesis testing is an important activity of evidence-based research. As previously discussed, a limited study uses theoretical models applied to medical tourism study. Thus, a good exertion of the hypothesis is essential to provide findings to the research questions discussed in chapter one. The researcher has taken into various aspects of consideration the hypothesis. It is general enough to accommodate numerous potential medical tourists (international tourists), ranging from individuals seeking relatively simple procedures (e.g., wellness service, medical check-ups, dental treatment, and Lasik surgery) and to individuals in need of more complex procedures (e.g., knee surgery, heart surgery, and fertility treatment). The importance ranking of these factors within each dimension of PMT may be affected by the need for medical services. Accordingly, this study demonstrates a link between the evaluations of the protection motivation, from threat appraisal and coping appraisal perspective to the perceived behaviour intention for medical tourism. Further, the role of destination trust serves as the mediator to explain the association between protection motivation and medical tourism behavioural intention. This research provides a better understanding of how international tourists' behavioural decisions are associated with the targeted behaviour grounded with medical tourism acceptance in mind.

2.9.1 Perceived Severity and Protection Motivation

Past studies have shown that perceived severity is associated with measures of health-related behaviour (Chavarría et al., 2021; Li et al., 2020; Kan & Zhang, 2018; Rad et al., 2021; Yıldırım et al., 2021). Chamberlain et al.

(2015) stated that the perception of severity for an individual's safety was strongly associated with protection motivation for vaccination. In the study of Esteves-Jaramillo et al. (2009), the perceived severity of influenza is highly associated with the acceptance of newly developed vaccination. Similarly, it was found that the severity of food safety is relatively associated with reading the labels for food safety and buying food with food safety labels (Liao et al., 2020). Herath and Rao (2009) clarified that perceived severity only influences protection motivation when it exceeds a certain threshold; however, additional components can influence protection motivation when it exceeds a certain threshold.

In this study, perceived severity refers to the tourists' fear of the consequences of a health problem. Their doubts about deadly encounters from health measures were the degree of the risk they may have to endure if the health threat had crystallised (Ferrer et al., 2018; Ch'ng & Glendon, 2014). The severity of the health threat that occurred to the tourists can be taken more commonly. When the health problems' consequences correspond to the tourists, a higher perceived severity will likely arouse their health threat (Seow et al., 2021b). For tourists who encounter health problems, the quality of medical services in their home country may have affected their choices. They will recognise the importance of medical problems that would cause severe threats to their quality of life. In return, they would seriously consider receiving medical services that are available outside their home country in order to improve their health conditions, and the following hypothesis is proposed:

H1: Perceived severity positively influences protection motivation in medical tourism.

2.9.2 Perceived Vulnerability and Protection Motivation

Past studies found that individuals who sensed themselves as vulnerable to health threats had a higher intention to take preventive actions. For instance, individuals who feel vulnerable to cancer are likely to undergo cancer screening (Al-Rasheed, 2020; Moeini et al., 2019); individuals that assumed that they could have a COVID-19 virus in their life would undertake vaccination (Rad et al., 2021). Ghaffari et al. (2020) examined farmers' perception of skin cancer factors and concluded that those perceived high-risk categories were most likely to take precautionary actions using sunscreen. Further, smokers who felt vulnerability to the health effects associated with smoking tended to have higher intentions to quit smoking (Arnett, 2000). Wang et al. (2019a) supported a positive relationship between risk perceptions and individuals' attitudes and intentions toward adopting preventive behaviours. It was found that the higher the perceived risk, the more likely a person will partake in a recommended behaviour. For instance, compared to individuals who think of a low risk of developing health issues, individuals who think that risk is high are likelier to take action (Sabzmakan et al., 2018).

When introducing perceived vulnerability in the context of medical tourism, it is believed that tourists who sense vulnerability to health risks are keener to take preventive actions. While tourists perceive their health risks as non-severe, it is not likely to motivate them to adopt precautionary measures

against their health threat (Seow et al., 2021a). When tourists may be in jeopardy of getting health threats, it could convince them to take up medical services from other countries if such a move adds value to their medical procedure. Further, tourists may also be concerned about the local medical facilities in their home country, which may only comply with their medical expectations if they face health problems (Seow et al., 2021b). As such, they may consider using alternative medical services from other countries if necessary. Thus, a higher level of tourists' perceived vulnerability would exhibit a greater engagement in medical services abroad with the following hypothesis is proposed:

H2: Perceived vulnerability positively influences protection motivation in medical tourism.

2.9.3 Self-Efficacy and Protection Motivation

In the study of Bandura (1994), as the perceived self-efficacy increases, the more successful individuals are in reducing health-damaging habits and adopting and integrating health-promoting habits into their lifestyle. Self-efficacy significantly influences protection motivation to adopt recommended coping behaviour (Maddux & Rogers, 1983; Ruan et al., 2020). Pinidiyapathirage et al. (2018) revealed that self-efficacy contributed to the significant predictors of behavioural intention in physical activity. According to Rajani et al. (2021), the high self-efficacy of individuals will exhibit the highest overall reduction in smoking, while those with low self-efficacy will exhibit the lowest. On the contrary, individuals who have little difficulty minimising cigarette smoking will have a greater intention to eliminate cigarette smoking

(Sadeghi et al., 2019). Those with less self-efficacy will not likely face unfamiliar situations or entirely avoid the circumstances (Zheng et al., 2021). In response to the increasing number of individuals that tested positive for sexually transmitted infections, it was concluded that self-efficacy was a significant predictor for infection prevention (Edison et al., 2022; Thomas et al., 2020). Further, it was stated by Morowatisharifabad et al. (2018) stated that self-efficacy is an influential factor in predicting the intention to perform health activity. Ezati Rad et al. (2021) found that greater self-efficacy in adherence to hygienic beliefs led to more efficient protective behaviour for COVID-19 prevention.

In the context of medical tourism study, it is presumed that tourists with high self-efficacy will have more confidence and ability to protect themselves positively than those in a low self-efficacy condition. The researcher believes that tourists who pay attention to health are confident they can uphold their health standards from their current health situations. They would foster action to protect themselves from unnecessary health risks. When tourists recognise that they have adequate resources (such as money, time, and effort), they may consider receiving medical services from another country. Likewise, if they think they can use medical services from another country, if necessary, they would be more likely to pursue such coping measures overseas. With the travel opportunities, they would get to know about alternative medical services from other countries, and thus, the following hypothesis is proposed:

H3: Self-efficacy positively influences protection motivation in medical tourism.

2.9.4 Response Efficacy and Protection Motivation

In the study of Maddux and Rogers (1983), response efficacy plays an adequate role in influencing intentions to adopt a preventive behaviour when the expectations of danger are high. Similarly, Pang et al. (2021) stated that a stronger belief in organic food to maintain a healthy, adequate diet would display a solid intention to purchase. Response efficacy is also highly associated with predicting vitamin consumption behaviour among factory workers (Nabizadeh et al., 2018). The study by Ling et al. (2019) found that response efficacy is the strongest predictor of seasonal vaccination in influenza prevention. For mothers who are confident with their response, their efficacy in maintaining healthy diets indicates an excellent intention to educate their daughters in cancer prevention (Yun et al., 2009).

From the discussion above, a similar relationship is expected to be presented in the medical tourism context, whereby response efficacy influences protection motivation. If tourists perceive health risk prevention as necessary, they will be more likely to seek healthcare services. For instance, while gaining familiarity with the places of travel, tourists can search for healthcare services at the travel destination to work out their health problems. At the same time, tourists could make an inclination to take medical services from abroad to improve their health conditions (Seow, 2020a). Hence, tourists who believe engaging in healthcare or medical service abroad can be effective in maintaining their healthy lifestyle would intend to take such action, and the hypothesis is proposed as follows:

H4: Response efficacy positively influences protection motivation in medical tourism.

2.9.5 Response Cost and Protection Motivation

PMT posits that the likelihood of performing the adaptive coping response will decrease as the response cost increases. In the study of protective behaviour against COVID-19 by Al-Rasheed (2020), it was found that the response cost of the residents in Kuwait was negatively associated with protecting themselves against the disease. Sadeghi et al. (2019) found that smoking is positively associated with the perceived cost of not smoking in social isolation. Further, an increase in response cost will decrease the likelihood of adaptive behaviour (Chen et al., 2020; Floyd et al., 2000; Norman et al., 2003; Seow et al., 2021c). For instance, the lower the response cost, the higher the protection behaviour among the individuals choosing to reduce skin cancer risk (McClendon & Prentice-Dunn, 2001). Babazadeh et al. (2017) confirmed that rural farmers in Iran will be more likely to adopt the suggested coping response if they perceive that sun-protective behaviour is crucial and the cost is low. Rosenstock et al. (2020) found that response cost predicted condom use intention among American Indian adolescents. Likewise, women will undergo breast cancer examinations if the response cost and gain are low (Bashirian et al., 2021). Huang et al. (2021) have shown that the negative consequences of response cost, such as status loss and reputation concern, will increase the likelihood of vaccination to prevent human papillomavirus.

The discussion above highlighted response cost in determining the intention to take adaptive coping responses. Predictably, such a relationship can envisage a tourist's protection motivation. The cost of recommended responses on tourists' behaviour regarding health protection offers the perceived ability to conduct motivational responses. Protection motivation behaviour against health threats requires devotion in tourists' time, money, and effort. Suppose tourists find that the response cost of having medical service from overseas is costly; they will be less likely to undertake the necessary medical services abroad and not consider the demand for proper healthcare to protect themselves. Hence, the following hypothesis is proposed:

H5: Response costs negatively influence protection motivation in medical tourism.

2.9.6 Protection Motivation and Behavioural Intention

Studies on consumer attitudes have found that the most essential factor in choosing a service is the decision made before the intention to act. (Beerli-Palacio et al., 2017; Cham et al., 2022). The association between protection motivation and behavioural intention must consist of purchasing urge, value sensitivity, and committing actions (Alexandris et al., 2002; Zheng et al., 2020). Individuals would take the initiative to avert the threat or danger by adopting the appropriate attitude and behaviour (Kothe et al., 2019; Pang et al., 2021). Maddux and Rogers (1983) suggest that the additive rule may apply up to a point, but other interactions may also affect the behaviour intention. For instance, the interpersonal influence and reliable sources of materials, such as medical tourism information, can be ranked as the most significant evidence

when an individual makes an important decision (Crooks et al., 2010; Meng et al., 2021). In the hospitality and tourism industry, intangible assets are tough to measure before any engagement. This is where behavioural intention comes in, as it can encourage people to decide and adjust their behaviour to fit the situation. (Hyder et al., 2019; Litvin et al., 2008; Chen, 2016; Wang et al., 2019a).

In medical tourism, PMT has pursued motivating tourists who want to decide to have medical services abroad as recommended. The protection motivation construct is guided towards the effects of persuasion. To ensure that persuasive medical messages are communicated intensely, protection motivation from PMT is to focus on the cognitive processes that influence tourists' behavioural change (Johnston et al., 2015), such as considering medical services from another country as a choice for travel opportunities. While the information on medical tourism will guide tourists in deciding whether to travel to another country for medical services, it may also trigger them to take up healthcare services from other countries if needed (Seow et al., 2021a). When tourists realise that medical services from other countries may provide a better substitute, they may consider visiting that particular country, such as Malaysia, for medical tourism. Thus, the following hypothesis is proposed:

H6: Protection Motivation positively influences behavioural intention in medical tourism.

2.9.7 Protection Motivation and Destination Trust

This study examines individuals' attitudes towards their health and their motivation to take protective measures. In the realm of business and marketing, a supplier's reputation can greatly impact a consumer's level of trust (Pop et al., 2021). When a service provider commits to delivering on their promises, it increases the level of trust consumers have in them, which is related to protection motivation for healthcare action. In addition, individuals who seek health protection are more likely to trust healthcare management when they have a positive impression of their capabilities (Wagner et al., 2011). When seeking healthcare information, customers are careful to read reliable reviews and comments to ensure they are making informed decisions (Berhanu & Raj, 2020).

In medical tourism, it consists nature of travel discovery cum the availability of medical facilities. As assured in their commitment, healthcare marketers must go all out to deliver their medical services. The hospitals involved with medical tourism must strive to win international tourists' trust if the transparency and integrity of the medical services are as promised (Abubakar & Ilkan, 2016; Manhas & Tukamushaba, 2015). Protection motivation in healthcare influences the psychological well-being of tourists for medical services, which could support the development of a sense of destination trust. On the contrary, if the motives of the healthcare providers are perceived to take medical activities for a self-centred goal (such as cultivating status and recollecting clientele, among others) rather than satisfying the tourists' interests, then tourists may perceive the country of destination is undependable and

reduce their trust. Thus, it is believed that the stronger the tourists believe in the assurance of medical tourism in a specific destination, the more likely they are to visit the place if their trust in the destination enthuses it, and the following hypothesis is proposed:

H7: Protection Motivation positively influences destination trust in medical tourism.

2.9.8 Destination Trust and Behavioural Intention

Destination trust effectively minimises the perception of uncertainty and threat (Abubakar & Ilkan, 2016). The inseparability and intangibility of the appearances of service are necessary conditions to reassure procurement, and it could influence the degree of trust in the products or the suppliers of the services (Jiang & Hong, 2021; Loureiro & González, 2008; Manhas & Tukamushaba 2015). Tourists are expected to look into a place that they can trust. In the case of healthcare services, places such as private clinics, hospitals, or the destination country that tourists are confident with would be their target settings (Han & Hyun, 2015). From the social exchange theory viewpoint, when an activity is driven by the desire that benefits the overall conditions, individuals tend to believe that such an intention of action can fulfil their interests as a reciprocal exchange (Fan et al., 2021). Thus, tourists presumably visit a destination they deem trustworthy and reliable, where they will make the most of the expected quality of arrangement and accessibility of the visited places (Berhanu & Raj, 2020). The eventual goal of destination marketing is to create an extreme bond

between the customer and the target place, and the main ingredient of this bond is destination trust (Jiang & Hong, 2021).

Based on the arguments above, the current study proposed that international tourists may be willing to visit a trusted destination for medical services. Destination trust expresses not only the reliable place with its past but, above all, the point of fulfilling the potential made in history. From the perspective of tourism and hospitality, tourists have good trust in the destination, which can mean that the place has a good reputation. Hence, destination trust may influence international tourists' willingness for medical tourism, and given the extant literature, the following hypothesis is proposed:

H8: Destination trust positively influences behavioural intentions in medical tourism.

2.10 The Mediating Role of Destination Trust

Destination trust can be considered an essential construct when dealing with individuals' decisions for the tour journey (Abubakar & Ilkan, 2016). It is one of the essential factors in decision-making for medical tourism associated with medical services abroad (Abubakar & Ilkan, 2016). Studies from past literature demonstrated that trust was considered a prerequisite for making preservation to bind the association among the firms and their clients in the services sectors (Kantsperger & Kunz, 2010; Reichheld & Schefter, 2000). The product's nature of tourism consists of intangible services highly dependent on management reputation and trust (Calvaresi et al., 2019). Past studies find that

trust determines its practicality and does impact the outcomes and the relationship processes (Le & Lei, 2018; Shin, 2021; Tarabieh, 2021).

Based on hypothesis development H7 and H8, as discussed above, the researcher grounds to believe that perceptions of individuals related to medical tourism can be further explained by their trust in medical services abroad. The confident aspects of the options available for medical service abroad could clarify the encouraging aspect of intention to commit if the trust element is available. According to trust transfer theory, an individual's trust can be transferred from a known source (Lee et al., 2014), for instance, the destination the tourists have visited. As trust transfer involves a cognitive process, initial trust in the country of visit can be established when a tourist generates trust in another related entity. The entity can be a person, group, or organisation the tourist trusts. Thus, hospitals that implement healthcare practices as promised could attract tourists for healthcare services and gain tourists' confidence in engaging the medical services from the hospital that can be trusted (Iranmanesh et al., 2018). A decent travel destination would give rise to a good impression from the tourists and thus allow them to give a constructive review of possible intentions for medical tourism. Thus, destination trusts that emphasising the medical services associated with medical tourism will explain the relationship between protection motivation and behaviour intention for medical tourism, and the hypothesis is proposed below:

H9: Destination trust will mediate the relationship between protection motivation and behaviour intentions in medical tourism.

2.11 Summary of Literature Review

This chapter discussed past studies and established the importance of social psychological variables in health-related behaviour, particularly in medical tourism. A research framework is proposed, and the hypothesis development has been presented comprehensively. PMT application derived from threat appraisal, coping appraisal, and destination trust as mediator is fully elaborated. It is to provide insights into behavioural decisions in medical tourism study.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The term research methodology is the specific procedures used to obtain the results of a given research objective raised in chapter one and the hypothesis development proposed in chapter two. The current study examines international tourists' behavioural intention to seek medical services in Malaysia. Destination trust has cooperated with threat appraisals and coping appraisals from the protection motivation theory. This chapter starts with the research design for the research methods where a quantitative study was conducted. Subsequently, the proposed methods and procedures for gathering information and data analysis to carry out the study are presented.

3.1 Research Paradigm

From a scientific research studies perspective, it is usually governed by a paradigm to give a broad view of the research. This study is a positivist paradigm drawn on scientific research that uses research objectives, surveys and quantitative data to gain insights (Park et al., 2020). The study is closely linked to fact-based examination, and a structural model is developed using statistical tools to test the proposed hypothesis. The research phenomena are to explain the strengths of the relationships between the constructs with statistical evidence.

The positivist research paradigm assumes a single objective and reality independent of the researcher's perceptions of a phenomenon. (Weber, R. (2004). Thus, the positivist research paradigm entails a systematic approach that necessitates the formulation of relevant hypotheses (Jackson, 2007). Accordingly, a quantitative research method is employed, using statistical techniques commonly used in positivist research to uncover impartial and objective knowledge (Yilmaz, 2013).

3.2 Research Design

Research design outlined the research method used to identify the variables in the research problem mentioned in Chapter One and design the research; the required data can be collected, analysed, and arrived at possible solutions (Zikmund et al., 2013). Several theories were discussed in chapter two, and the protection motivation theory was adopted to apply in the research. Applied research was engaged to achieve the research objectives by adopting deductive reasoning. In this study, primary data was collected to generate the results from a sample of the population by using quantitative research methods (Creswell, 2013). Quantitative research represents phenomena by measuring sample size and conducting the research objectives with research questions as an empirical investigation (Gunderson, 2000; Zikmund et al., 2013). This method is recommended for understanding opinions and behaviour. The study uses measurable data to conclude facts and reveal various research patterns for the problem statements discussed in Chapter One (Bell et al., 2019). The data were collected using self-administered questionnaires. Eventually, the numerical data were analysed to test the specific hypothesis (Hair et al., 2015).

Descriptive and causal research designs were employed in this study to obtain a good understanding of the studied phenomena. A descriptive method was used to explain the overview of a group of qualified respondents by collecting data with survey questionnaires. Causal research was chosen as the primary emphasis to determine the cause-effect relationship between the variables. Due to the questionnaire being designed for one point, a cross-sectional survey was used to collect responses from targeted respondents.

3.3 Data Collection Methods

The primary data collection method was applied in this study by using survey questionnaires to gather the original information (Hox & Boeiji, 2005). In order to avoid a low response rate from surveys through email and avoid the tendency of getting non-qualify respondents, the survey was conducted through the direct distribution of questionnaires to the sample population using face-to-face methods collected from first-hand sources. The questionnaire consisted of several filter questions to identify the correct respondent quickly. The sample location is discussed in section 3.4.3.

3.4 Sampling Design

Sampling refers to the chosen number of people taken from a large population. It allows the researcher to gather relevant data about whom these people represented for the study apart from concluding the population (Jankowicz, 2005).

3.4.1 Target Population

A group of elements is identified to indicate the detailed group of the population in which the researcher is interested in collecting data for researching and analysing (Hair et al., 2006). Given that the primary objective of the present study was to predict the behavioural intention of prospective international tourists in receiving medical services abroad, the criterion for inclusion in the target population is the international tourists willing to participate in the survey.

3.4.2 Sampling Frame

The sampling frame specifies the list of units representing the population covered. International tourists are usually mobile in the areas of their visiting locations. The outline of the Personal Data Protection Act (PDPA) 2010 is to safeguard the integrity of tourists' data following the law. It is unlikely to obtain the complete list of international tourist details in Malaysia. The actual population of international tourists at the time of data collection is unidentified, which grants the use of convenience sampling methods for this study.

3.4.3 Sampling Location

The sampling location is the actual place where the sample was obtained. The survey was conducted in international tourist access areas located in Malaysia, namely Selangor and Penang states (refer to Figure 3.1).

Figure 3.1 Map of Sample Location

These locations were selected for several reasons. Firstly, Kuala Lumpur, the federal territory of Malaysia enclaved within the state of Selangor and Penang state, are the two centres of excellence to attract the majority of medical tourists for medical treatment (Penang Institute, 2021). Secondly, in terms of revenue generated from healthcare, these places generated around 70% of total foreign medical revenues in Malaysia (Penang Institute, 2021). Thirdly, these locations are the top sites with the most appropriate and listed well-equipped hospitals utilising more than 35 medical tourism providers in Malaysia (Malaysia Healthcare Travel Council, 2020). Additionally, the hospitals in these locations participating in medical tourism have attracted more than 800,000 international patients (Malaysia Healthcare Travel Council, 2020) annually, with its in-house travel agency arranging all accommodations, travel documents, and logistics for medical tourists (Malaysia Healthcare Travel Council, 2020).

The survey areas were conducted at the International Airport entry or exit points in Kuala Lumpur and Penang. It is a manageable proximity within the locations where the researcher can approach international tourists that are in Malaysia. The data collection procedure is further discussed in section 3.8. Penang International Airport is the main airport for the northern region of Peninsular Malaysia. Concerning passenger movement, it is the third busiest airport in Malaysia after KLIA 1 and KLIA 2 International Airport. In 2019, 8.3 million visitors were using Penang International Airport, which had increased to nearly 7% passengers from 2018 (Malaysia Airport Holding Berhad, 2019). The main international airport in Malaysia is Kuala Lumpur International Airport (KLIA), a major airport in Southeast Asia's major aviation hubs. KLIA handled 62,336,469 passengers, with a record 3.9% growth in 2019 (Malaysia Airports, 2019). It ranked as the ninth busiest international airport in Asia. Regarding international passenger traffic, it is the 21st busiest airport in the world (The Port Authority of New York and New Jersey, 2019).

3.4.4 Sampling Elements

The unit of analysis in a population consists of a unit of analysis clustered for measurement (Hitzig, 2004). In this research, international tourists who had travelled to Malaysia were selected as the sampling element. The term 'tourist' is retrieved from the World Tourism Organisation and defined as 'people who travel and stay in places for leisure, business, and other purposes, where it is outside their usual environment for not more than one consecutive year' (Mill & Morisson, 1985). Consequently, the criteria to be included in the sample were adult tourists who

i. travelling out of their home country,

ii. have stayed for at least 24 hours but less than 12 months in Malaysia, and

iii. currently are not under employment from Malaysia.

International tourists who entered Malaysia were approached for data collection purposes. They were enquired about their health symptoms and their awareness of health problems. The study measures the international tourists' perception of medical tourism by investigating their health threat perception, coping with medical travel, destination trust, and predicting their future behavioural intention to have medical services in Malaysia.

3.4.5 Size of the sample

The three key considerations in determining the sample size are; the degree of the population's diversity, its degree of accuracy, and the number of variables to be studied. Though no specific standards are mentioned about the guidelines between the size of the sample and the complexity of the path model tested, there are guidelines for a more accurate target (Kline, 2005). Based on the statistics released by the Malaysian Immigration Department, the tourist arrivals and receipts to Malaysia in the past 22 years are shown in Table 3.1. Nonetheless, a declining shift was detected due to the outbreak of the COVID-19 pandemic in 2020 and 2021—the restrictions placed towards the entry of international tourists during the movement control order period. Thus, the statistics for these two years were excluded as it does not indicate the calculation

that directly influences research findings and generates tourism performance in Malaysia.

Table 3.1 Tourist Arrivals and Receipts to Malaysia (1998-2019)

YEAR	ARRIVALS	RECEIPTS (RM)
2019	26.10 Million	86.1 Billion
2018	25.83 Million	84.1 Billion
2017	25.95 Million	82.1 Billion
2016	26.76 Million	82.1 Billion
2015	25.72 Million	69.1 Billion
2014	27.44 Million	72.0 Billion
2013	25.72 Million	65.4 Billion
2012	25.03 Million	60.6 Billion
2011	24.71 Million	58.3 Billion
2010	24.58 Million	56.5 Billion
2009	23.65 Million	53.4 Billion
2008	22.05 Million	49.6 Billion
2007	20.97 Million	53.4 Billion
2006	17.55 Million	36.3 Billion
2005	16.43 Million	32.0 Billion
2004	15.70 Million	29.7 Billion
2003	10.58 Million	21.3 Billion
2002	13.29 Million	25.8 Billion
2001	12.78 Million	24.2 Billion
2000	10.22 Million	17.3 Billion
1999	7.9 Million	12.3 Billion
1998	5.5 Million	8.6 Billion

Source: Tourism Malaysia (2022); Kosnan et al. (2012)

As a rule of thumb, the estimated parameters must be at least five times the number of parameters, or the sample size is considered significant with a minimum of 50 respondents. The sample size justification could also be based on the model complexity and the characteristics of the primary measurement model. When the number of factors is more extensive than six, and multiple low communalities are present, sample size requirements may exceed 500 (Hair et al., 2006). As the targeted population size for the study is large, the expected number of sample sizes was determined by the suggestion of Krejcie and

Morgan (1970), and the most diminutive actual sample size used in this study is at least 384.

3.4.6 Sampling Technique

The sampling technique is the process of identifying the subset of the sample entities that are used to investigate the whole population. This study used a quantitative approach to analyse the data with measurement tests for descriptive and causal research designs. Convenience sampling was used to collect survey responses. Judgemental sampling was added to reduce bias in this non-probability technique. These methods are deemed appropriate as the researcher formed the sample elements that are informative for the enclosure in the sample. Several screening questions were asked to enhance the validity of the data, whether respondents are tourists (country of origin) and the duration of stay (at least more than a day and less than a year), and whether they have experienced any symptoms related to their health conditions. These are part of the screening questions before the participant participates in the survey. This study only includes the responses of international tourists who have visited Malaysia for business, leisure, or other purposes to eliminate biases in the respondents' behaviour. This study did not include expatriates or foreign workers who have resided in Malaysia. Such an approach will enable the results of this study to predict more precisely the international tourists' perceived threat, coping appraisal, destination trust, and behavioural intention and to avoid any misperceptions.

3.5 Research Instrument

The current study uses a survey questionnaire as the primary research instrument. The questions in the questionnaire were structured into scale-response with closed-ended questions to ease the respondents in answering the questions. The respondents were requested to choose the best answers that represented their agreement.

3.5.1 Questionnaire Design

This study's primary data collection instrument was a comprehensive survey questionnaire. The instrument was developed from the review of the related literature related to protection motivation theory, medical tourism, and behavioural study on the decision-making process. The questionnaire was constructed in English, as the adapted measurement items were originally English. After completing the questionnaire in English version, the questionnaire was later translated into Bahasa and Chinese through Brislin's back-to-back translation technique (Brislin, 1970). Initially, the English version of the questionnaire was translated to the language of Bahasa Malaysia and the Chinese version. After that, both the Bahasa and Chinese versions of the survey questionnaire were translated back to English without referring to the English version. It is an attempt to check any discrepancies between different language versions of the questionnaire.

The survey questionnaire consisted of three sections. The first section of the questionnaire was used to collect data concerning the health symptoms of international tourists. They were asked about their last visit to obtain healthcare

in their home country, whether they had taken any health or medical insurance coverage, and whether they had received any medical or healthcare service in another country. The questionnaire contents in the second section were designed to gather information about the threat and coping appraisal, destination trust, and medical tourism behavioural intention. Under this section, the respondents were asked to rate their agreement associated with perceived severity and perceived vulnerability from the threat appraisal. Subsequently, they indicate self-efficacy, response efficacy, and response cost from the component of coping appraisal. The attributes regarding destination trust and the behavioural intention of having medical tourism in Malaysia were also verified. The third section of the questionnaire was used to collect statistics associated with the general perceptions of international tourists. Such as:

i. Their primary source of information that they would have consulted before deciding to embark on a medical trip
ii. The choice of medical services as well as the wellness program they would prefer in Malaysia
iii. Their preferred length of stay for a medical trip followed by the respondent's profile as presented

The Likert scale was deployed to measure the constructs where the respondents were asked about the extent of their agreement with the series of statements about the indicator and its attributes. It allows the respondents to indicate their degrees of opinion ranging from the scales provided instead of getting 'yes' or 'no' answers (McLeod, 2008). A 7-point Likert-type scale was

used, with end-anchors labelled ‘7’ – “strongly disagree” and ‘1’ – “strongly agree” in individual items (DeVellis, 2003; Gay & Airasian, 2000). Odd-numbered scales have been pursued to allow for the ‘no opinion at all’ rating (e.g., neutral). The mid-point of ‘4’ is appropriate because the study area is for usability evaluations (Losby & Wetmore, 2012). Accordingly, the seven answer categories provide more variations for the individual to interpret the scale.

In the final section of the survey questionnaire, respondents' demographic profiles were requested. Understanding the respondents’ characteristics from collected samples allows a more straightforward interpretation of the data. The information is gathered for descriptive analysis of the respondent’s country of origin, gender, age, marital status, religion, nationality, and purpose of visitation, among others.

3.5.2 Construct Measurement

The details and sources of measurement items are shown in Table 3.2. All the adapted items of measurement were adopted from past studies. According to Nielson (2014), adopting past measurements without assessing the construct’s validity related to a similar research field is highly perilous. Thus, each item is carefully selected and matched with the respective constructs and the theoretical model supported.

Table 3.2 The detail and sources of measurement items

Construct	Variable Role	Items Number	Source
Behavioural Intention	Dependent Variable	6	Lee et al. (2012); Seow et al. (2021b)
Destination Trust	Independent Variable and Mediator Variable	5	Abubakar & Ilkan (2016)
Protection Motivation	Independent Variable	5	Ch'ng & Glendon (2014), Roger (1983)
Perceived Severity	Independent Variable	5	Grindley et al. (2008); Horng et al. (2014); Roger (1983); Seow et al., (2021b)
Perceived Vulnerability	Independent Variable	5	Grindley et al. (2008); Horng et al. (2014); Roger (1983); Seow et al., (2021b)
Response Efficacy	Independent Variable	5	Grindley et al. (2008); Horng et al. (2014), Roger (1983); Seow et al., (2021a)
Self-Efficacy	Independent Variable	5	Grindley et al. (2008); Roger (1983); Seow et al., (2021b)
Response Cost	Independent Variable	5	Ch'ng & Glendon (2014); Roger (1983); Seow et al., (2021b)

3.6 Pre-test and Ethical Clearance

The rationale of having a pre-test is to ensure that the measurement instruments from the questionnaire are free from grammatical errors, understandable, and comfortable for items' relevancy. At the initial stage, a set of questionnaires to conduct a pre-test was created. The conversant professors in medical tourism research were approached and commented on the relevancy of adopted measurement items, layout, and questionnaire design. The instructions in the questionnaire, clarity of questions, and appropriateness of term usage were advised. Numerous important feedbacks were acknowledged

to be added, deleted, and modified, such as inappropriateness of word usage, ambiguity instruction given, and refining the statements in the medical tourism context. The instructions' clarity and appropriateness were quantified to ensure that the measurement items could convey the same meaning to each respondent.

A set of questionnaires and an application for ethical clearance to involve human subjects in research was submitted to the Institute of Postgraduate Studies and Research, UTAR, for approval. This study was guided by the ethical principles of research with human participants set out by Universiti Tunku Abdul Rahman. Ethical support for the research project was employed to obtain respondents' permission to participate in the survey (refer to Appendix 4.7). As the subject of this study is international tourists, it is essential to safeguard the parties involved from any undesirable ethical issues associated with the investigation, such as evading any jeopardies related to the research procedures during the data collection process. The personal details of the respondents are to remain anonymous to protect their identity as to the enforcement of the Personal Data Protection Act 2010 (PDPA). The final version of the revised questionnaire together with the personal data protection statement is attached in Appendix 3.1.

3.6.1 Face Validity

Face validity is also assessed by conducting a pre-test. The conversant professors in medical tourism research and several experienced international medical tourists were approached and invited to access the measurement items of the study. The professional medical experts from the hospital were asked to

deliver their views on the relevancy of the questions and the measurement items regarding the specific construct and appropriateness of term usage in the medical tourism context. Further, several academic research experts or professors were approached for their comprehensibility of each construct's items and sequences of questions. The objective is to ensure the suitability of items used to measure the variable in Malaysia's medical tourism context (Johnson, 2013).

3.7 Pilot Test

After the pre-test and before the primary survey, the questionnaire was confirmed by conducting a pilot test to scrutinize the instrument's validity and reliability. The format of the scales was shown by conveniently selecting the participants who are international tourists located in Malaysia. The test also extends to each scale's wording of items, its appropriateness, and the instrument length. The participants were well-versed in the purpose of the research before seeking their permission for the survey. The aims and objectives of the pilot test, together with details about the data collection process, were explained to the participants. The participants were allowed to withdraw from the study without questions being asked. All data collected was anonymised by replacing the participants' names with ascending code numbers in the order of the data received. In the study of Issac and Michael (1995), the highly preferred sample size for a pilot study is 10 to 30 respondents to investigate the feasibility of the research. In the study of Hill (1998), it was recommended that around 10 to 30 participants are reasonable for pilot trials. Accordingly, 30 data sets were collected from international tourists at international airports to run this study's

reliability and validity tests. It is to ensure that an accurate and precise parameter for the representative of the population is sufficiently large.

3.7.1 Pilot Test's Construct Validity

Construct validity consists of convergent and discriminant validity. 'Convergent validity' is recognised by assessing factor loadings, average variance extracted (AVE), and composite reliability (Hair et al., 2017). According to the rule of thumb, the minimum threshold value for factor loading is 0.708. In terms of AVE, each construct should have a value of at least 0.500 to warrant that the convergent validity of the construct is not disputed and that its variance is mainly due to the construct rather than measurement error. Based on pilot study analyses, items' factor loading was more significant than the minimum cut-off of 0.708, and AVE for all constructs was more than 0.5 threshold values. Further, Cronbach's alpha then composite reliability score of each construct exceeded the minimum recommended value of 0.708 (refer to Appendix 3.2). Thus, this indicates that the convergent validity of the measurement model was adequately achieved.

'Discriminant validity' evaluates whether the items used to measure one construct are dissimilar to those used to measure other constructs. The square root of the AVE score of each construct must be larger than the correlations with other constructs (Chin, 2010). From Table 3.3, the correlation scores between the items of two different constructs were lower than the square root of the AVE scores. It is connoted that the construct's indicator loadings were higher than other constructs' loadings. Further, Table 3.4 shows that none of the

HTMT ratios exceeded the threshold of HTMT0.85 (Henseler et al., 2015). Based on the above analysis, the discriminant validity was well-ascertained.

Table 3.3. Discriminant Validity Results

No.	Construct	1	2	3	4	5	6	7	8
1	Perceived Severity	0.788							
2	Perceived Vulnerability	0.594	0.773						
3	Self-Efficacy	0.412	0.369	0.739					
4	Response Efficacy	0.393	0.354	0.672	0.809				
5	Response Cost	0.439	0.446	0.180	0.251	0.734			
6	Protection Motivation	0.406	0.400	0.541	0.583	0.259	0.759		
7	Destination Trust	0.379	0.409	0.422	0.367	0.291	0.474	0.799	
8	Behavioural Intention	0.344	0.370	0.370	0.348	0.217	0.451	0.750	0.830

Table 3.4. Heterotrait-Monotrait (HTMT) Results

No.	Construct	1	2	3	4	5	6	7	8
1	Perceived Severity								
2	Perceived Vulnerability	0.716							
3	Self-Efficacy	0.480	0.448						
4	Response Efficacy	0.438	0.415	0.803					
5	Response Cost	0.514	0.488	0.171	0.262				
6	Protection Motivation	0.466	0.468	0.660	0.691	0.249			
7	Destination Trust	0.440	0.473	0.504	0.425	0.295	0.558		
8	Behavioural Intention	0.380	0.426	0.427	0.390	0.219	0.515	0.845	

3.8 Data Collection Procedure

The success of this study largely depends on the respondent's engagement through their willingness and collaboration in the survey. The data collection period was done from the beginning of September 2019 to the end of January 2020. The reason is that the year-end holiday season is usually one of the peak seasons for tourists to stay and visit Malaysia, with an expected response rate of 80% (Nguwi, 2023). Due to the service nature of tourism involvement, gathering systematic feedback from international tourists before they leave the country would ideally be uplifting. A total of 1,500 copies of questionnaires (face-to-face survey instrument) was disseminated to

international tourists to ensure information is captured while it is still fresh (recentness) in their mind.

To begin with, the researcher had encountered difficulty in surveying the airports initially as the security needed to be tight. After several attempts and an application to obtain a permission letter was submitted to the security management, the researcher was granted permission to conduct the fieldwork near the airport departure hall. The respondents were approached while waiting for their flight. After confirming that respondents are international tourists via the screening questions provided in the questionnaire, they were invited to take part in the survey. The study objectives and purpose of the survey were explained to attain the respondents' agreement for voluntary participation. The definition of medical tourism was specified in the survey questionnaire and well explained to ensure the respective participants knew the subject matter. It reduces the likelihood of responding in a socially desirable manner, and a greater tendency for respondents' honesty in responding to survey questionnaires is compulsory (Podsakoff et al., 2003). Simultaneously, guaranteed anonymity and confidentiality were assured to the respondents. The respondents were permitted to ask questions or raise any query about the study. The researcher assisted in clarifying any ambiguity in filling out the survey form if requested.

3.9 Data Analysis

Data collected are well arranged, classified, and sorted according to the study objectives. Several statistical methods were implemented to analyse and evaluate the data gathered across fieldwork.

3.9.1 Descriptive Statistics

Like most tourism research, the study includes potential international tourists' essential socio-demographic variables, for example, age, gender, education level, and annual household income. The purpose of these socio-demographic variables was included in the study to provide the various characteristics of the large sample. These findings are also helpful for medical tourism providers and organisers as a way to better understand the potential medical tourist's demographic profile. The sample characteristics and past travelling records were described using their frequency count and percentages.

3.9.2 Statistical Techniques

In the previous decade, there was a considerable debate received from various scholars about the adoption decision of analysis between covariance-based structural equation modeling (CB-SEM) and partial least square structural equation modeling (PLS–SEM) (Afthanorhan, 2013; Monecke & Leisch, 2012; Ringle et al., 2005; Wong, 2013). The PLS–SEM was adopted to conduct an extensive analysis. The PLS–SEM is a second-generation technique initially developed and implemented by Wold (1982, 1985) and Lohmöller (1989). Earlier, the PLS-SEM was applied to the area of strategic management. Several scholars have recently applied PLS-SEM to marketing and accounting areas of

research (Henseler et al., 2009; Hair et al., 2012; Lee et al., 2011). The PLS–SEM can run both confirmatory and exploratory factor analyses, which fulfil the requirement of the present research objective (Chin, 1998; Lowry & Gaskin, 2014). Further, it can examine a research model with more constructs (Hair et al., 2014; Ringle et al., 2012) and handle a research framework comprising a more significant number of indicators (Hair et al., 2012; Lowry & Gaskin, 2014). Most importantly, the analysis is concerned with testing a theoretical framework proposed in this study, particularly from a prediction perspective (Hair et al., 2019). This study's research objectives are to understand better the increasing complexity of the research framework where theoretical extensions of established theories, such as PMT, are being adopted.

3.10 Methodology Summary

This chapter addressed the types of methodology employed in the study. A deductive reasoning approach, quantitative study, cross-sectional study, causal with descriptive study, and applied research were presented. The development of the questionnaire and scale measurement were discussed. The target population for the sample is international tourists who are visiting Malaysia. The sources used to develop the research instrument were adopted from past literature. All the measurement items were tested vigorously to ensure their validity and reliability. A pre-test, pilot test, and actual field study were conducted. A total of 1001 samples were gathered. The data analysis of the study is shown in Chapter Four.

CHAPTER 4

DATA ANALYSIS

4.0 Introduction

This chapter is divided into three sub-sections: descriptive analysis, preliminary analysis, and model analysis. The analysis begins with reporting the response rate and then proceeds to descriptive analysis. The descriptive analysis further illustrates the health status and the respondent's revelation related to their healthcare. Further, the characteristics of the respondents and their opinions toward medical tourism are also presented in detail. Various preliminary tests were conducted, such as normality tests, common method tests, validity tests, and reliability tests. The model analysis is also tested by assessing the coefficient of determination, t statistics, significant value, effect size, and the predictive relevance of endogenous construct.

4.1 Response Rate

The survey period of this study was conducted for approximately twelve weeks. A total of one thousand five hundred sets of questionnaires were disseminated to international tourists (the targeted respondents). However, only 1,322 sets of questionnaires were received. Out of 1322 questionnaires, 321 incomplete questionnaires were discarded from the data set. Only 1001 questionnaires were considered usable, which yielded 66.73 percent of the response rate (refer to Table 4.1). The response rate was considered significant (large) and sufficient for data analysis, as Sekaran and Bougie (2010)

emphasised that the generally acceptable response rate for most social science research is 30%. Further, the response rate from past empirical studies ranged from 30% to 70% (Iranmanesh et al., 2018; Musa et al., 2012; Rahman, 2019; Wang, 2012). Thus, this study's response rate is acceptable in medical tourism studies.

Table 4.1: Data Collection Statistics

Total number of Respondents' Agreed to Participate in Survey[A]	1500
Total number of Questionnaires Returned[B]	1322
Total number of Usable Questionnaires[C]	1001
Response Rate (C/A)	66.73%

4.2 Descriptive Analysis

Before evaluating the measurement model and the structural model, the study's statistic below represents the respondents' health conditions, and sample characteristics are shown in Tables 4.2 and 4.3 below.

4.2.1 Status of the Respondents

Based on Table 4.2, most of the respondents stated that they had faced at least more than one health symptom, such as pain, nausea, breathlessness, weight loss, fatigue, stiff joints, sore eyes, headaches, upset stomach, sleep difficulties, dizziness, or loss of strength for the past six months. It shows that international tourists would have the possibility of having some health problems at any time. Unsurprisingly, the survey on health symptoms has prompted them to be conscientious about their health. 475 (48%) respondents received healthcare treatment in their home country in the past six months. The remaining respondents (n=526, 52%) had received healthcare treatment in the

past year or more. Most respondents (n=693, 69%) purchased medical insurance covering the medical treatment in their home country only, whereas 137 (14%) respondents subscribed to medical insurance covering the medical treatment in their destination travel country. A handful of them (n=171, 17%) did not subscribe to any medical insurance coverage for medical treatment. Lastly, 187 (19%) respondents have travelled internationally before to obtain various types of wellness or medical or healthcare services.

Table 4.2. Status of Respondents

	Full Sample (N = 1001)	
Status	**Frequency**	**Percentage**
Health symptoms		
Pain	333	33%
Nausea	246	25%
Breathlessness	244	24%
Weight Loss	245	24%
Fatigue	311	31%
Stiff Joints	177	18%
Sore Eyes	266	27%
Headaches	321	32%
Upset Stomach	265	26%
Sleep Difficulties	292	29%
Dizziness	228	23%
Loss of Strength	150	15%
Others	61	6%
When was your last visit to obtain healthcare in your home country?		
In the past 3 months	229	23%
In the past 6 months	246	25%
In the past years	210	21%
More than 1 year ago	316	32%
Do you have any type of health or medical insurance coverage for medical treatment?		
Yes, in my home country	693	69%
Yes, in the destination travel country	137	14%

Table 4.2 (Continued)

No medical insurance coverage	171	17%
Have you ever travelled internationally to obtain any type of wellness/medical/healthcare services?		
Yes	187	19%
No	814	81%

4.2.2 Characteristics of Respondents

The respondents are international tourists who have visited Malaysia for more than a day and less than a year of staying in the country. Their characteristics are tabulated in Table 4.3 below. It shows that slightly more than half of the respondents were female (n=573, 57%), whereas 428 (43%) were male. Most respondents fell within the age group of 26-35 years old (n=371, 37%). It was accompanied by an age range of 36-45 years old (n=243, 24%), age range 18-25 years old (n=175, 17%), age range 46-55 years old (n=110, 11%), age range 56-65 (n=78, 8%) and lastly the eldest age range, 65 years old and above (n=24, 2%). Most of the respondents were married (n=481, 48%), and those with single status (n=360, 36%) also participated in the survey. To further understand tourist's cultural beliefs and behaviours, religion was included with characteristics composed of 330 (33%) Christians, 147 (15%) Buddhists, 244 (24%) Muslims, 45 (4%) Hindus, 41 (4%) Jews, whereas 38 (4%) of them were folk religion, 143 (14%) respondents without any religion and 13 (1%) respondents with other religion.

Most respondents (n=825, 82%) had visited Malaysia before, and 176 (18%) had their first visit to Malaysia. There are 243 respondents (24%) who travelled alone to Malaysia, while the remaining respondents (n=758, 76%) travelled with their partner: spouse, family, colleague, friend, tour group, and

others. In terms of average annual household income, there were 139 (14%) respondents with less than USD 10,000 average annual household income, 257 (26%) respondents oriented within the average annual household income range of USD 10,000 to USD 19,999, 241 (24%) respondents with the average annual household income range from USD 20,000 to USD 29,999, 152 (15%) respondents earn an average annual household income range from USD 30,000 to USD 39,999, 89 (9%) respondents with an average annual household income range from USD 40,000 to USD 49,999, 76 (8%) respondents fall within the earning range from USD 50,000 to USD 59,999, 35 (3%) respondents with an average annual household income range from USD 60,000 to USD 99,999 and the remaining respondents (n=12, 1%) earn more than USD 100,000 per year. The primary purpose of the respondents' visit was mainly on pleasure or vacation (n=651, 65%), while the rest of the respondents were with the purpose of business or work trip (n=136, 14%), medical treatment (n=14, 1%), visit friends and relatives (n=154, 15%), attend convention or exhibition (n=29, 3%), and other purposes (n=16, 2%). The top three groups of respondents were from Asia (n=695, 69%), North America (n=127, 13%), and Europe (n=95, 9%). Only a handful of respondents were from Oceania (n=40, 4%), South America (n=25, 2%), and Africa (n=19, 2%).

Table 4.3. Demographic Profile of Respondent

	Full Sample (N = 1001)	
Characteristics	**Frequency**	**Percentage**
Gender		
Male	428	43%
Female	573	57%

Table 4.3 (Continued)

Age		
18 - 25 Years Old	175	18%
26 - 35 Years Old	371	37%
36 - 45 Years Old	243	24%
46 - 55 Years Old	110	11%
56 - 65 Years Old	78	8%
Above 65 Years Old	24	2%
Marital Status		
Single	360	36%
Married	481	48%
Cohabiting	86	9%
Divorced/Widowed/Separated	74	7%
Religions		
Christian	330	33%
Buddhist	147	15%
Muslim	244	24%
Hinduism	45	5%
Jews	41	4%
Folk Religion	38	4%
Unaffiliated	143	14%
Others	13	1%
Previously Visit Malaysia		
Never	176	18%
1 - 2 times	409	41%
3 - 4 times	267	26%
5 - 6 times	65	6%
7 - 10 times	37	4%
More than 10 times	47	5%
Travelling Partner		
Alone	243	24%
Spouse/Family	355	36%
Friend	200	20%
Colleague	81	8%
Tour Package	114	11%
Other	8	1%

Table 4.3 (Continued)

Average Annual Household Income		
Less than 10,000 USD	139	14%
10,000 - 19,999 USD	257	26%
20,000 - 29,999 USD	241	24%
30,000 - 39,999 USD	152	15%
40,000 - 49,999 USD	89	9%
50,000 - 59,999 USD	76	8%
60,000 - 99,999 USD	35	3%
More than 100,000 USD	12	1%
Primary Purpose of the Visit		
Pleasure/Vacation	651	65%
Business/Work trip	136	14%
Medical Treatment	14	1%
Visit Friends and Relatives	154	15%
Convention/Exhibition	29	3%
Others	16	2%
Region		
Africa	19	2%
Asia	695	69%
Europe	95	10%
North America	127	13%
Oceania	40	4%
South America	25	2%

4.2.3 Information About Respondents' Intention towards Medical Tourism in Malaysia

Table 4.4 indicates the additional information about the respondents. Firstly, they will refer to the primary source of information before deciding to embark on a medical trip. The top three most frequent sources that respondents will refer are; (i) through the advice of their domestic doctor or physician (n=669, 67%), (ii) website of a recognised hospital or medical facility with a reputation (n=429, 43%) and (iii) through word-of-mouth from friend or family (n=415, 41%). Respondents have revealed that should they decide to travel to Malaysia for medical tourism, they will opt for sight treatment (n=455, 45%),

orthopaedics (n=445, 44%), cardiovascular or heart surgery (n=397, 40%), dental surgery (n=370, 37%) and comprehensive medical check-up (n=320, 32%). Additionally, respondents stated that if they travel to Malaysia for well-being programs, they seek comprehensive diagnostic services (n=625, 62%). Further, they also demand aesthetic, diet programs (n=406, 41%), stress release, detox programs (n=424, 42%), skin care services (n=430, 43%), Spa, massage, or thalassic therapy (n=424, 42%), meditation, yoga, spiritual or holistic programs (n=348, 35%) as well as sports, rehabilitation, or psychological therapy (n=343, 34%). Their preferred length of stay for medical tourism in Malaysia is at least 4 to 5 days (n=332, 33%) or 6 to 15 days (n=303, 30%).

Table 4.4. Additional Information of Respondent

	Full Sample (N = 1001)	
Characteristics	**Frequency**	**Percentage**
What will be the possible primary source of information you would have consulted before deciding to embark on a medical trip?		
Advice from your domestic doctor/physician	669	67%
Word-of-mouth from friends or family	415	41%
Medical tourism intermediary's website	355	35%
Website of a recognised hospital/medical facility with a reputation	429	43%
Online medical communities	324	32%
Medical tourism blog	283	28%
Refer to the testimonies of other medical tourists	287	29%
News courses (televisions, magazines, etc.)	239	24%
Others	8	1%

Table 4.4 (Continued)

If you are travelling to Malaysia for medical treatment, which type of medical services will you seek out the most?		
Sight treatment	455	45%
Dental surgery/treatment/restorative	370	37%
Orthopaedics	445	44%
Cardiovascular/heart surgery	397	40%
Cosmetic/plastic/reconstructive surgery	237	24%
Weight Loss/LAP-BAND/gastric bypass	259	26%
Reproductive care	191	19%
Sexual reassignment surgery	100	10%
Comprehensive medical check-up	320	32%
Alternative care	221	22%
Others	13	1%
If you are travelling to Malaysia for well-being programs, which type of services you will prefer?		
Comprehensive diagnostic services	625	62%
Aesthetic, and diet programs	406	41%
Stress release, and detox programs	424	42%
Skincare services	430	43%
Spa/massage/thalassic therapy	424	42%
Meditation/Yoga/Spiritual/Holistic programs	348	35%
Sports/Rehabilitation/psychological therapy	343	34%
What will be your preferred length of stay in Malaysia for medical tourism purposes?		
1-3 days	114	11%
4-5 days	332	33%
6-15 days	303	30%
16-30 days	152	15%
More than a month	100	10%

4.2.4 Construct's Mean and Standard Deviation

The next, table 4.5, is a basic analysis of each latent construct's mean score and standard deviation. It can be concluded that respondents exhibit above scale midpoint of 3.5000 for all items and constructs. The perceived vulnerability has the highest mean score of 5.1642 and a standard deviation of 0.98612. This is followed by respond efficacy (Mean=5.1642, SD=0.98612),

respond cost (Mean=4.9674, SD=1.00472), perceived self-efficacy (Mean=4.9648, SD=0.94249), perceived severity (Mean=4.9379, SD=1.17382), protection motivation (Mean=4.9374, SD=1.01423), destination trust (Mean=4.8354, SD=1.00614) and behavioural intention (Mean=4.7599, SD=1.09482). Notably, most international tourists would indicate their intention to visit Malaysia for medical services.

All variable mean scores are more significant than 4.00 on a seven-point Likert scale. It elucidated that respondents generally agreed that severity resulted from medical problems such as financial security, inconveniences, the threat to the quality of life, and others. Further, they also agreed that vulnerability is related to medical problems. For instance, they believe that there is a possibility to have a risk of getting infected by the disease. Respondents could consider overseas medical services to offer the best healthcare options in case of serious medical problems. In addition to this, respondents are keen to look for better medical services and overseas treatment provided that they have sufficient resources. Conversely, respondents know that seeking medical treatment in another country may be costly, time-consuming, stressful, and inconvenient. Most respondents would be keen to take precautionary healthcare measures by participating in medical tourism, provided they trust that Malaysia could be an ideal medical tourism destination. Above all, most respondents perceived a higher intention toward medical tourism in Malaysia as the mean score is above the midpoint of 4.0.

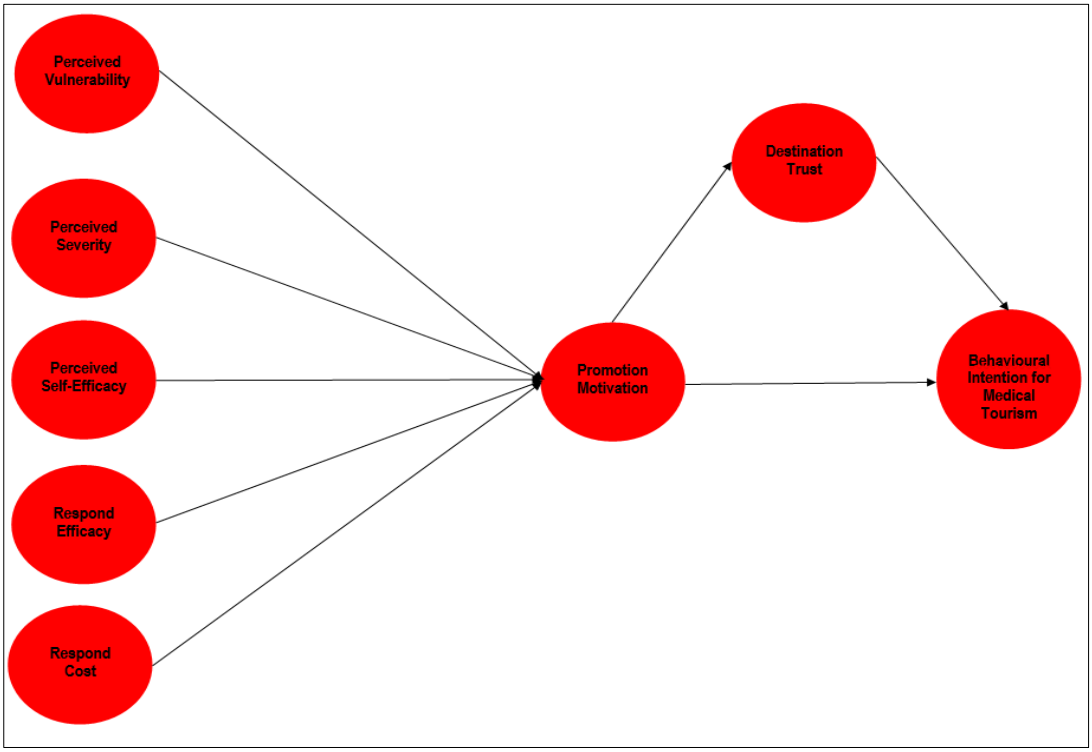
Table 4.5: Latent Construct's Mean and Standard Deviation

Construct	Mean	Median	Standard Deviation
Behavioural Intention	4.7599	5.0000	1.09482
Destination Tourism	4.8354	5.0000	1.00614
Protection Motivation	4.9374	5.2000	1.01423
Perceived Severity	4.9379	5.2000	1.17382
Perceived Vulnerability	5.1642	5.4000	0.98612
Perceived Self-Efficacy	4.9648	5.2000	0.94249
Respond Efficacy	5.1251	5.4000	0.90564
Respond Cost	4.9674	5.0000	1.00472

4.3 Model Specifications

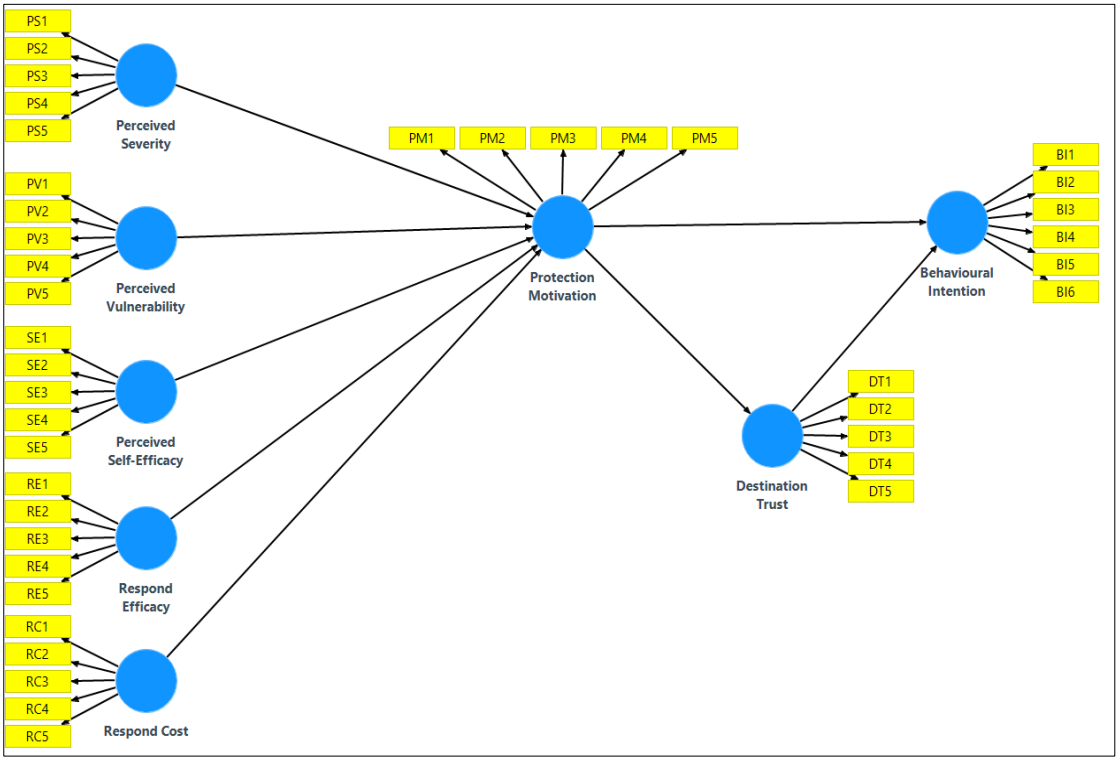
Inner and outer models were developed based on a proposed conceptual framework. The inner model was created where each red circle presents a single construct: behavioural intention for medical tourism, destination trust, protection motivation, perceived vulnerability, perceived severity, perceived self-efficacy, response efficacy, and response cost. All these red circles were interconnected after that. For instance, perceived vulnerability, perceived severity, perceived self-efficacy, response efficacy, and response cost are connected to protection motivation. Subsequently, protection motivation is linked to destination trust and behavioural intention for medical tourism. Lastly, destination trust is connected to behavioural intention for medical tourism (see Figure 4.1).

Figure 4.1: Inner Model for the Study



After the inner model is formed, an outer model is developed. In this study, all constructs are with reflective measurement whereby the indicators for each construct are adequately reflected in its content. Figure 4.2 shows that each construct consisted of five indicators drawn in a yellow rectangular box, except for behavioural intention for the medical tourism construct, which consisted of six indicators.

Figure 4.2: Outer Model for the Study



4.4 Common Method Variance

A common method bias was assessed to ensure no "single factor or one general factor accounting for the majority of covariance among measures" (Podsakoff et al., 2003, p. 889). Due to the nature of the current study, which adopted a self-report survey method for primary data collection, the predictor and criterion variables are usually from the same respondents, or the data used are from the same sources. Hence, Harman's single-factor test was adopted to examine the existing common method variance of the data (Bagozzi et al., 1991).

4.4.1 Harman's Single Factor Test

The exploratory factor analysis was conducted using SPSS version 24 software to run Harman's single factor test. All items' principal component

factor analysis was included (Podsakoff & Organ, 1986). Based on the un-rotated factor analysis (Appendix 4.1), the first factor accounted for 38.05% of the variance. It is less than Harman's Single Test threshold of 50% (Podsakoff et al., 2003). Succinctly, no single factor accounted for more than 50% of the variances explained in the endogenous construct of the study. The extracted sums of square loadings for the remaining factors also range from 7.89% to 2.59%. Therefore, it can be determined that no common method bias exists in the data set collected.

4.5 Assessment of Measurement Model

4.5.1 Assess the Data Set Normality

A normality test ensures that the data is normally distributed (Hair et al., 2011). Two basic normality tests were used to confirm the normality of the data: kurtosis and skewness. The rule of thumb for skewness is to ensure the value must be within the +1 to -1 range, while for kurtosis, the value should be within the +3 to -3 range (Hair et al., 2011). Table 4.6 indicates that each construct's kurtosis and skewness values fall within the acceptable range (Hair et al., 2011). Apart from this, the normality test is also conducted for each construct indicator whereby the value of kurtosis and skewness fall within the recommended range (refer to Appendix 4.2). Thus, it is confirmed that the data is normally distributed.

Table 4.6: Normality Analysis

No.	Construct	Skewness	Kurtosis
1	BI	-0.596	-0.111
2	DT	-0.519	-0.069
3	PM	-0.607	-0.139
4	PS	-0.310	-1.106
5	PV	-0.675	-0.296
6	SE	-0.511	-0.342
7	RE	-0.774	0.467
8	RC	-0.472	-0.314

Note. BI=Behavioural Intention; DT=Destination Loyalty; PM=Protection Motivation; PS=Perceived severity; PV=Perceived vulnerability, RE=Respond Efficacy; SE=Perceived Self-Efficacy; RC=Respond Cost

4.5.2 Assess the Construct Reliability

Having testified on convergent and discriminant validity, it is also essential to conduct reliability analysis to ensure data consistency as proposed by Hulland (1999) and Bagozzi and Yi (1988), where the composite reliability and Cronbach alpha for each indicator of the respective construct should be at least 0.700. Table 4.7 depicts the value of indicator reliability and composite reliability for each construct. It is shown that both the indicator and composite reliability for each construct has exceeded the most negligible threshold value of 0.700. Hence, the measurement model is reliable with good internal consistency reliability.

Table 4.7: Reliability Analysis of Measurement Model

Constructs	Composite Reliability	Cronbach Alpha
Behavioural Intention	0.952	0.940
Destination Trust	0.926	0.900
Protection Motivation	0.913	0.880
Perceived Severity	0.912	0.880
Perceived Vulnerability	0.897	0.855
Perceived Self-Efficacy	0.901	0.863
Respond Efficacy	0.921	0.893
Respond Cost	0.914	0.884

4.5.3 Assessment of the Construct Validity

Essentially, the construct validity is tested by assessing convergent and discriminant validity. Several criteria must be tested for convergent validity, such as each item's factor loadings, average variance extracted (AVE), and composite reliability of each latent construct (Gholami et al., 2013; Hair et al., 2017). The tests declared are used to confirm that the items of each construct are adequately loaded on the correct construct that is supposed to be measured (Hair et al., 2010; Hair et al., 2014). Regarding discriminant validity, it ensures that each construct is distinct from other constructs and can differentiate from other constructs (Cheung & Lee, 2010; Kumar et al., 2013). It can be assessed by cross-loading, the Fornell and Larcker criterion, and the Heterotrait-Monotrait ratio of correlations (HTMT criterion). In short, convergent validity measures correlations among items in the same dimension, whereas discriminant validity measures the correlations across dimensions.

4.5.3.1 Convergent Validity

Table 4.8 and Figure 4.3 shows that all indicator loadings are more significant than the threshold value of 0.708 specified by Hair et al. (2014). However, only one item loadings fall between 0.50 and 0.70: one from perceived vulnerability (PV5). Since the average variance extracted (AVE) for each construct has surpassed the threshold value of 0.50, item loadings that fall between 0.50 and 0.70 can be retained, as suggested by Hair et al. (2010), Chin (2010) and Kock (2011). The indicators' loadings for each construct ranged from 0.853 to 0.907 (behavioural intention), 0.816 to 0.861 (destination trust), 0.800 to 0.840 (protection motivation), 0.787 to 0.845 (perceived severity), 0.508 to 0.894 (perceived vulnerability), 0.781 to 0.829 (perceived self-efficacy), 0.787 to 0.863 (respond efficacy) and 0.749 to 0.865 (respond cost).

The AVE value for each construct is larger than the minimum threshold value of 0.50 recommended by Hair et al. (2014), which ranged from 0.642 (Perceived Vulnerability) to 0.768 (Behavioural Intention). Each construct can "explain more than half of the variance of its indicators" (Hair et al., 2014, p. 112).

For the composite reliability, the value for the constructs ranged from 0.897 (perceived vulnerability) to 0.952 (behavioural intention). The Cronbach alpha value ranged from 0855 (perceived vulnerability) to 0.940 (behavioural intention). The composite reliability and Cronbach alpha value for the constructs of the study have exceeded the recommended threshold value of 0.700. All the tests were assessed and achieved based on the criterion tested

above. Hence, the measurement model possessed sufficient convergent validity. The actual output generated for convergent validity and reliability can be referred to in Appendix 4.3.

Table 4.8: **Convergent Validity of Measurement Model**

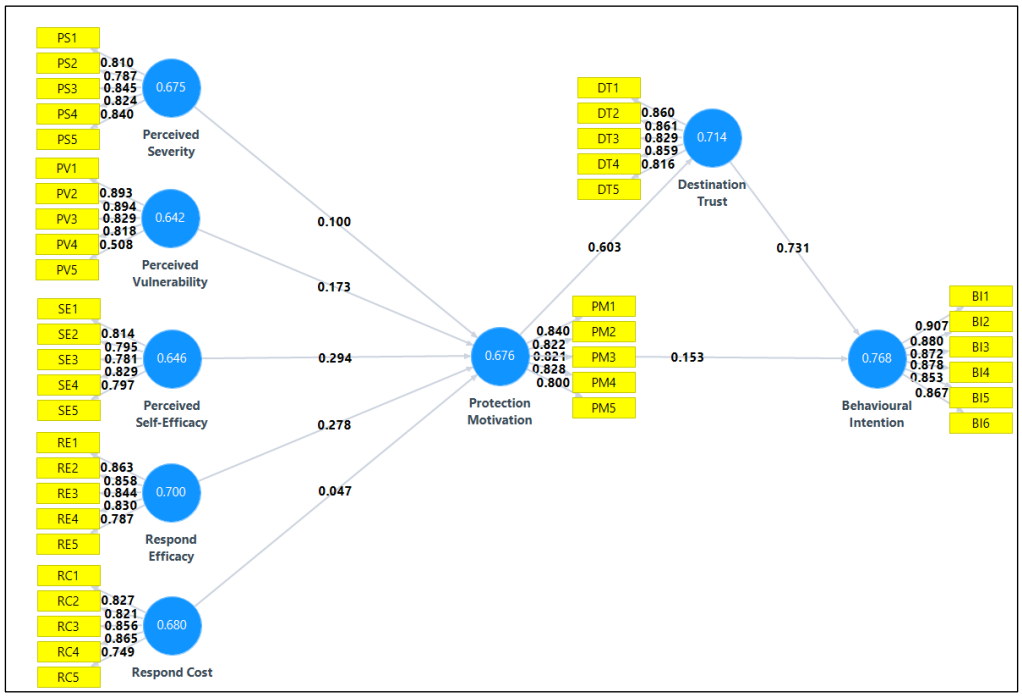
Constructs	Items	Full Sample (n = 1001)			
		Loadings	AVE	CR	CA
Behavioural Intention	BI1	0.907	0.768	0.952	0.940
	BI2	0.880			
	BI3	0.872			
	BI4	0.878			
	BI5	0.853			
	BI6	0.867			
Destination Trust	DT1	0.860	0.714	0.926	0.900
	DT2	0.861			
	DT3	0.829			
	DT4	0.859			
	DT5	0.816			
Protection Motivation	PM1	0.840	0.676	0.913	0.880
	PM2	0.822			
	PM3	0.821			
	PM4	0.828			
	PM5	0.800			
Perceived Severity	PS1	0.810	0.675	0.912	0.880
	PS2	0.787			
	PS3	0.845			
	PS4	0.824			
	PS5	0.840			

Table 4.8 (Continued)

Perceived Vulnerability	PV1	0.893	0.642	0.897	0.855
	PV2	0.894			
	PV3	0.829			
	PV4	0.818			
	PV5	0.508			
Perceived Self-Efficacy	PSE1	0.814	0.646	0.901	0.863
	PSE2	0.795			
	PSE3	0.781			
	PSE4	0.829			
	PSE5	0.797			
Respond Efficacy	RE1	0.863	0.700	0.921	0.893
	RE2	0.858			
	RE3	0.844			
	RE4	0.830			
	RE5	0.787			
Respond Cost	RC1	0.827	0.680	0.914	0.884
	RC2	0.821			
	RC3	0.856			
	RC4	0.865			
	RC5	0.749			

Note: AVE = Average Variance Extracted, CR = Composite Reliability, CA = Cronbach Alpha

Figure 4.3: Measurement Model Result



4.5.3.2 Discriminant Validity

The discriminant validity can be examined using cross-loadings, the Fornell and Larker criterion and the Heterotrait-Monotrait (HTMT) ratio of correlations method. Based on Hair et al. (2014), the item loadings of each construct must be greater than other cross-loadings with other constructs. The item loadings of each measured construct were greater than other cross-loadings with other constructs by at least 0.10, which was suggested by Hair et al. (2014) (refer to Appendix 4.4).

The subsequent discriminant validity test is the Fornell and Larcker criterion, which compares the square root of average variances extracted (AVE) with the correlations between other constructs (Fornell & Larcker, 1981). The rule of thumb for the Fornell and Larcker criterion is that the square root of the AVE of each construct must be higher than all constructs' correlations (within the same row and column). It is revealed in Table 4.9 that the square root of the AVE of each construct is greater than the rest of the correlation values in the particular column and row (refer to Appendix 4.5 for the actual output of the discriminant Validity result). Therefore, it can be concluded that each construct shared more variance with its indicators than any other construct.

Table 4.9: Fornell and Larcker Criterion Validity

No.	Construct	1	2	3	4	5	6	7	8
1	Behavioural Intention	**0.876**							
2	Destination Trust	0.823	**0.845**						
3	Protection Motivation	0.594	0.603	**0.822**					
4	Perceived Severity	0.473	0.513	0.522	**0.821**				
5	Perceived Vulnerability	0.504	0.554	0.588	0.672	**0.801**			
6	Perceived Self Efficacy	0.520	0.566	0.658	0.504	0.560	**0.804**		
7	Respond Efficacy	0.479	0.525	0.565	0.512	0.572	0.744	**0.837**	
8	Respond Cost	0.330	0.383	0.252	0.327	0.321	0.216	0.191	**0.825**

Note: The bolded figures represent the average variance extracted (AVE) square root the rest represent the correlations.

Henseler and his colleague argued that the criterion of Fornell and Larcker (1981) is inadequate and reliable to measure the discriminant validity (Henseler et al., 2015). Hence, the Heterotrait-Monotrait (HTMT) ratio of correlations is proposed to test the discriminant validity of the measurement model (Henseler et al., 2015). HTMT can test the correlations of indicators across the constructs instead of testing correlations of indicators by measuring the same construct.

The threshold value for HTMT is 0.85, as Kline (2011) recommended or less than 0.90 suggested by Gold et al. (2001). Table 4.10 posits that the HTMT value for each construct does not exceed the threshold value of 0.90 (HTMT0.90) determined by Gold et al. (2001), ranging from the lowest value of 0.233 to the highest value of 0.895. Thus, the discriminant validity of the measurement model is well ascertained (refer to Appendix 4.5 for the actual output of the discriminant validity result).

Table 4.10: Heterotrait-Monotrait (HTMT)

No.	Construct	1	2	3	4	5	6	7	8
1	Behavioural Intention								
2	Destination Trust	0.895							
3	Protection Motivation	0.648	0.672						
4	Perceived Severity	0.517	0.574	0.585					
5	Perceived Vulnerability	0.542	0.607	0.665	0.765				
6	Perceived Self Efficacy	0.576	0.642	0.752	0.572	0.642			
7	Respond Efficacy	0.521	0.584	0.739	0.570	0.642	0.847		
8	Respond Cost	0.359	0.422	0.269	0.370	0.321	0.233	0.204	

Note: $HTMT_{0.90}$ is adopted

4.6 Step 3: Assessment of Structural Model

4.6.1 Multi-Collinearity Analysis

The multi-collinearity is also confirmed by generating the collinearity values for each latent construct. The threshold value of 3.3 is adopted, which Kock and Lynn (2012) recommended. For the value of collinearity with more than 3.3, it is to be claimed that multi-collinearity exists among the latent variables. Table 4.11 reveals that variance inflation factors for each construct scored below the threshold of 3.3, ranging from 1.189 for response cost to 2.253 for perceived self-efficacy. Therefore, there is no redundancy of latent constructs, and each latent construct is differentiable.

Table 4.11: Collinearity for Exogenous Constructs

Constructs	VIF
Behavioural Intention	N/A
Destination Trust	1.593
Protection Motivation	1.593
Perceived Severity	1.408
Perceived Vulnerability	1.408
Perceived Self-Efficacy	2.253
Respond Efficacy	2.193
Respond Cost	1.189

Note: N/A = Not Applicable

4.6.2 Assessment of Structural Model

The structural model was tested by assessing and generating the R-square (R2), f-square (f2), and Q-square (Q2) as well as t-values. A bootstrapping procedure with 5000 resamples was conducted to generate the t-statistics for significance testing of the inner and outer model, R2, f2 and Q2, suggested by Hair et al. (2011). The variance explained or R-squared of each endogenous construct and the significance of each path estimate were measured to assess the goodness of the structural model. One tail test was applied as the proposed hypotheses were in directional form. It also tests how well the data collected supports the hypothesised path and structural model. Likewise, the f-squared is exercised to confirm the effect size of each direct relationship, while the Q-squared is to observe the predictive relevance of each endogenous construct (Chin, 1998).

4.6.3 Assessment of Predictive Power – R^2

Table 4.12 shows that the coefficient of determination value for protection motivation, destination trust and behavioural intention in medical tourism are 0.540, 0.363 and 0.693, respectively. It means that perceived severity, vulnerability, self-efficacy, response efficacy, and response cost can explain 54.0% of the variance in protection motivation. In contrast, protection motivation alone can explain 36.3% of the variance in destination trust. Likewise, destination trust and protection motivation can explain 69.3% of the variance in behavioural intention for medical tourism. Based on Cohen's (1988) guideline, the coefficient of determination value for these three endogenous constructs is considered substantial and exceeds the substantial level of 0.26. The R-squared values of the existing structural model are considered adequate since the minimum value of the R-squared value of the endogenous construct is more than 0.10 (Falk and Miller, 1992).

Table 4.12: R-squared Value

Hypotheses	Predictors	Endogenous Construct	Predictive Power (R^2)
Hypothesis 1	Perceived Severity	Protection Motivation	0.540
Hypothesis 2	Perceived Vulnerability		
Hypothesis 3	Perceived Self-Efficacy		
Hypothesis 4	Respond Efficacy		
Hypothesis 5	Respond Cost		
Hypothesis 6	Protection Motivation	Behavioural Intention for Medical Tourism	0.693
Hypothesis 8	Destination Trust		
Hypothesis 7	Protection Motivation	Destination Trust	0.363

4.6.4 Assessment of Significance of Hypotheses

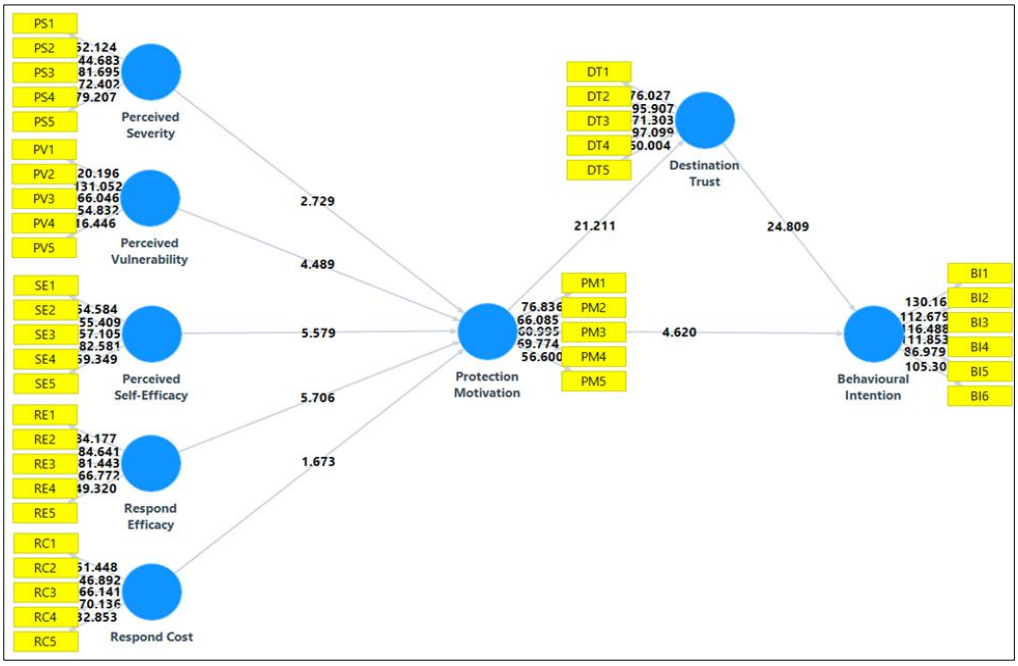
The detailed results for hypothesis testing and path analysis are demonstrated in Table 4.13 and Figure 4.4, such as the beta (β), standard error, t-statistics, p-value, and hypothesis outcome (refer to Appendix 4.6). The statistics results posit that perceived severity ($\beta = .100$, $t = 2.729$, $p < 0.05$), perceived vulnerability ($\beta = .173$, $t = 4.489$, $p < 0.001$), perceived self-efficacy ($\beta = .294$, $t = 5.579$, $p < 0.001$), respond efficacy ($\beta = .278$, $t = 5.706$, $p < 0.001$) and respond cost ($\beta = .047$, $t = 1.673$, $p < 0.05$) are significantly related to protection motivation. Thus, the data supported H1, H2, H3, H4 and H5, respectively. It is also found that the protection motivation ($\beta = .153$, $t = 4.620$, $p < 0.001$) and destination trust ($\beta = .731$, $t = 24.809$, $p < 0.001$) significantly and positively influence behavioural intention. Therefore, H6 and H8 are supported by data. Similarly, the result clearly stated that protection motivation ($\beta = .603$, $t = 21.211$, $p < 0.001$) significantly and positively influences destination trust. It is concluded that the data support H7. For mediation analysis, the analysis reveals that destination trust ($\beta = .440$, $t = 17.689$, $p < 0.001$) is adequate to mediate the relationship between promotion motivation and behavioural intention. Therefore, the data support hypothesis H9.

Table 4.13: Summary of the Structural Model

H	Path	Beta	Standard Error	*t*-Statistics	*p*-Value	Outcome
H1	PS → PM	0.100	0.037	2.729	0.003	Supported
H2	PV → PM	0.173	0.039	4.489	0.000	Supported
H3	PSE → PM	0.294	0.053	5.579	0.000	Supported
H4	RE → PM	0.278	0.049	5.706	0.000	Supported
H5	RC → PM	0.047	0.028	1.673	0.047	Supported
H6	PM → BI	0.153	0.033	4.620	0.000	Supported
H7	PM → DT	0.603	0.028	21.211	0.000	Supported
H8	DT → BI	0.731	0.029	24.809	0.000	Supported
H9	PM → DT → BI	0.440	0.025	17.689	0.000	Supported

Note. BI=Behavioural Intention; DT=Destination Loyalty; PM=Protection Motivation; PS=Perceived severity; PV=Perceived vulnerability, RE=Respond Efficacy; SE=Perceived Self-Efficacy; RC=Respond Cost, one tail test is used to test the hypotheses

Figure 4.4: Structural Model Results



To further test the mediation hypothesis, Preacher and Hayes's mediation method was pursued (Preacher & Hayes, 2008). At first, the direct effect of protection motivation on behavioural intention was examined, with the absence of the mediator variable (destination trust). In the subsequent stage, the

mediator (destination trust) was added to the direct path model. Table 4.14 indicated that both the direct path (β = .460, t = 9.801, p < 0.001) and indirect path (β = .328, t = 9.044, p < 0.001) are statistically significant. The magnitude of the mediator can be determined by calculating the variance account for (VAF) (indirect effect/total effect). Thus, the VAF value for the mediating effect is 0.721, where 72.1% of the direct effect can be explained through the mediator: destination trust. Thereby, the mediating effect should be considered partial mediation as it is between the range of partial mediation (20% to 80%) (Preacher & Hayes, 2008).

Table 4.14. Variance Account for Mediation Path Analysis

Hypothesis		Direct Effect	Indirect Effect	Total Effect	Indirect Effect / Total Effect
Hypothesis 9: Protection Motivation->Destination Trust -> Behavioural Intention	*β*	0.460	0.328	0.455	0.721
	t	9.801	9.044	9.576	N/A
	p	<0.001	<0.001	<0.001	N/A

Note. *β*=path coefficient, *t*=t-statistics, *p*=significance value

4.6.5 Assessment of Effect Sizes – f^2

Apart from reporting significant value, the effect size of significance on each path is also examined. It can provide information on the magnitude of effect size instead of just looking at the p-value on the test's significance statistically (Sullivan & Feinn, 2012). The Cohen (1988) guideline for effect size is adopted with the indication of 0.35 (large), 0.15 (medium) and 0.02 (small). Based on table 4.15 outlines that the effect size for the path relationship between perceived severity and protection motivation (Hypothesis 1), perceived vulnerability and protection motivation (Hypothesis 2), as well as protection motivation and behavioural intention (Hypothesis 6) are considered small,

which fall within the range of small effect size: 0.02 and 0.149. Whereas the path relationship between perceived self-efficacy and protection motivation (Hypothesis 3), response efficacy and protection motivation (Hypothesis 4) and response cost and protection motivation (Hypothesis 5) fall within medium effect size ranging from 0.15 to 0.349. Lastly, the remaining two path relationships, Hypothesis 7 (protection motivation and destination trust) and Hypothesis 8 (destination trust and behavioural intention), have large effect sizes that have exceeded the minimum cut-off value of a large effect size of 0.35.

Table 4.15: Effect Size for Each Hypothesis

Hypotheses	Path			Effect Size (f^2)
Hypothesis 1	PS	→	PM	0.025
Hypothesis 2	PV	→	PM	0.032
Hypothesis 3	PSE	→	PM	0.160
Hypothesis 4	RE	→	PM	0.110
Hypothesis 5	RC	→	PM	0.103
Hypothesis 6	PM	→	BI	0.038
Hypothesis 7	PM	→	DT	0.536
Hypothesis 8	DT	→	BI	1.009

Note. BI=Behavioural Intention; DT=Destination Loyalty; PM=Protection Motivation; PS=Perceived severity; PV=Perceived vulnerability, RE=Respond Efficacy; SE=Perceived Self-Efficacy; RC=Respond Cost

4.6.6 Assessment of Predictive Relevance – Q^2

The blindfolding process is carried out to evaluate the predictive relevance of the proposed model. The guideline from Hair et al. (2014) is employed to check the relative measure of each endogenous construct's predictive relevance shown in the proposed model – 0.35 indicates (large), 0.15 (medium) and 0.02 (small). Further, it is notable that the endogenous construct possessed adequate predictive relevance provided the Q2 value is greater than zero value (Fornell & Cha, 1994). The Q2 value "represents how well-observed

values are reconstructed by the model and its parameter estimates" (Chin, 1998). The omission distance of seven was used to estimate the parameters with the remaining data points (Henseler et al., 2009; Tenenhaus et al., 2005; Chin, 1998). Table 4.16 reveals that the predictive relevance of exogenous constructs (perceived severity, perceived vulnerability, perceived self-efficacy, response efficacy and response cost) on its endogenous construct, protection motivation, as well as protection motivation on destination trust, are considered medium (0.306 and 0.241 respectively) which fall within the medium range of 0.15 and 0.349. The predictive relevance of protection motivation and destination trust on behavioural intention has surpassed the large cut-off value of 0.35.

Table 4.16: Predictive Relevance Result

Hypotheses	Predictors	Endogenous Construct	Predictive Relevance (Q^2)
Hypothesis 1	Perceived Severity	Protection Motivation	0.306
Hypothesis 2	Perceived Vulnerability		
Hypothesis 3	Perceived Self-Efficacy		
Hypothesis 4	Respond Efficacy		
Hypothesis 5	Respond Cost		
Hypothesis 6	Protection Motivation	Behavioural Intention for Medical Tourism	0.483
Hypothesis 8	Destination Trust		
Hypothesis 7	Protection Motivation	Destination Trust	0.241

4.7 Chapter Summary

In summary, the three procedures of the PLS algorithm, bootstrapping and blindfolding techniques, were well conducted. Further, the measurement model and structural model were evaluated adequately. The empirical results showed that all proposed path relationships were supported. Apart from this, the mediation hypothesis was also well confirmed by the data. The coefficient of determination and predictive power of endogenous construct: behavioural intention was also indicated as an acceptable score. Consequently, the proposed model is valid and confirmed.

CHAPTER 5

DISCUSSIONS, IMPLICATIONS AND CONCLUSIONS

5.1 Introduction

This final chapter discusses the findings derived in the previous chapter and presents the implications and conclusions from the doctoral research of this study. This chapter begins with an overview of the research. It is followed by a discussion of this research's theoretical, managerial and social implications. The limitations of this research and the recommendations for future research are suggested. This chapter ends with a conclusion.

5.2 An Overview of the Doctoral Research

The study of the medical tourism research model is proposed and developed using the protection motivation theory (Seow et al., 2021a; Wang et al., 2019a). The research model was developed based on various empirical aspects from past studies. Chapter One states that five research objectives led to five research questions. Accordingly, nine research hypotheses were developed following the research model projected in Chapter Two. The target respondents are international tourists who have visited Malaysia. A convenient sampling technique was adopted to select participants. A total of 1001 samples were obtained. The sample data were analysed using SPSS software and SmartPLS software to perform partial least squares structural equation modelling (PLS-SEM) analysis.

The findings showed that all the proposed hypotheses are supported. The parameters estimate statistics results indicate that the exogenous variables perceived severity, perceived vulnerability, self-efficacy, and response efficacy are positively significant to protection motivation. In contrast, response cost is negatively significant to protection motivation. For the mediation analysis, it is stipulated that destination trust significantly mediates the relationship between protection motivation and behaviour intention in medical tourism. The empirical findings of this study have validated the goodness of the proposed research model, drawing from the context of medical tourism. A summary of the research overview is shown in Table 5.1.

Table 5.1 Research Questions and Objectives, Hypothesis and Findings

Research Question	Research Objective	Hypothesis Development	Finding
1. What components of threat appraisal (Perceived Severity and perceived Vulnerability) influence protection motivation in medical tourism?	1. To examine the influence of threat appraisal components (Perceived Severity and perceived Vulnerability) on protection motivation in medical tourism.	H1: Perceived severity positively influences protection motivation in medical tourism. H2: Perceived vulnerability positively influences protection motivation in medical tourism.	H1 is supported H2 is supported
2. What components of coping appraisal (Perceived Self-efficacy, Response Efficacy and response Cost) influence protection motivation in medical tourism?	2. To examine the influence of coping appraisal components (perceived self-efficacy, response efficacy, and response cost) on protection motivation in medical tourism.	H3: Self-efficacy positively influences protection motivation in medical tourism. H4: Response efficacy positively influences protection motivation in medical tourism.	H3 is supported H4 is supported

		H5: Response costs are negatively significant to protection motivation in medical tourism.	H5 is supported
3. To what extent does protection motivation influence behavioural intention in medical tourism?	3. To study the influence of protection motivation on behavioural intention in medical tourism.	H6: Protection Motivation positively influences behavioural intentions in medical tourism.	H6 is supported
4. To what extent does protection motivation influence destination trust in medical tourism?	4. To study the influence of protection motivation on destination trust in medical tourism.	H7: Protection Motivation positively influences destination trust in medical tourism.	H7 is supported
5. To what extent does destination trust influence behavioural intention in medical tourism?	5. To evaluate the influence of destination trust on behavioural intention in medical tourism	H8: Destination trust is positively influenced behavioural intention in medical tourism	H8 is supported
6. Does destination trust mediate the relationship between protection motivation and behavioural intention?	6. To investigate the mediating effect of destination trust on the relationships between protection motivation and behavioural intention in medical tourism.	H9: Destination Trust will mediate the relationship between protection motivation and behaviour intentions in medical tourism.	H9 is supported

5.3 Overview of the Findings

This study has applied the main components of the Protection Motivation Theory to explain international tourists' behavioural intention to visit Malaysia for medical tourism. To extend the research framework further, destination trust was added as a mediator, and behavioural intention acts as an endogenous variable. The findings confirmed the importance of the critical

variables in the Protection Motivation Theory. All nine hypotheses were supported. PMT is confirmed to prove its ability to predict how individuals, specifically international tourists, react to healthcare concerning medical services abroad and their decision-making on medical tourism behavioural intention. It is believed that health indications among international tourists may have influenced their perception regarding threats and coping with healthcare abroad. Their intention to seek healthcare abroad can activate their health-related mindset and encourage them to take action towards medical tourism. The statistical analysis yielded several prominent findings emphasised in this report below.

5.3.1 The Influence of Threat appraisal on protection motivation in medical tourism

The findings indicated that perceived severity and perceived vulnerability positively influence protection motivation. The study aligns with Ferrer et al.'s (2018) and Ch'ng and Glendon's (2014) arguments. It was found that tourists tend to perceive that their healthcare problems could lead to negative consequences; thus, it could be assumed that they recognise that taking precautionary behaviours and seeking healthcare services are necessary. Findings indicate that it is due to health threats that could greatly concern their quality of life and financial security, causing inconveniences to the immediate family and changing their confidence in their health. Similarly, for the perceived vulnerability construct, it was found that tourists may worry that the quality of medical services provided in their home country is not good enough. Although their health conditions may increase the likelihood of health threats, they may

perceive the risks of health problems as less severe due to experiencing only mild health symptoms. It is also revealed that perceived vulnerability produced a higher effect size than perceived severity on protection motivation, thus arguing that tourists are more concerned about the vulnerability of health threats.

If tourists have pre-existing health conditions, they may worry about accessing medical services in their home country, which could motivate them to seek medical tourism.

5.3.2 The Influence of Coping appraisal on protection motivation in medical tourism

The study indicated that self-efficacy and response efficacy positively influence protection motivation, while response cost negatively influences protection motivation. Past studies such as Rajani et al. (2021), Verkijika (2018) and Ghaffari et al. (2020) discovered similar results. According to Arnett (2000), Sabzmakan et al. (2018) and Wang et al. (2019a), individuals who perceived that they were in high-risk categories were most likely to take precautionary and protective actions. Tourists who believe in acting based on their abilities and knowledge would avoid their health problems by engaging in medical services abroad. Thus, if there is an alternative and better medical service abroad, they declare willingness to embrace protective behaviour by participating in medical tourism. Tourists with sufficient resources, such as money, time, and effort, would be more motivated and consider having medical services abroad (Seow et al., 2021b). Likewise, studies by Bandura (1994), Maddux and Roger (1983), Pinidiyapathirage et al. (2018) and Ruan (2020)

found that self-efficacy provides a great significant influence on protection motivation. Findings reviewed that the effect size of self-efficacy on protection motivation is larger than response efficacy and response cost. The study portrays that tourists' protective measures to reduce their health problems are their primary concern (Seow et al., 2021a). It is interesting to note that the cost and expenses of medical services abroad do not deter individuals from seeking medical attention. The study indicated that tourists with adequate resources to purchase affordable healthcare services would likely exhibit protection motivation behaviour in medical tourism.

Remarkably, self-efficacy, response efficacy and response cost from coping appraisal are better predictors than perceived severity and perceived vulnerability from threat appraisal (Geng et al., 2020). The constructs from coping appraisal have a stronger influence on the outcome constructs (protection motivation) as related to the constructs from threat appraisal. The results were consistent with the meta-analysis of past studies (Floyd et al., 2000; Milne et al., 2000). While self-efficacy and response efficacy increase the possibility of protection motivation behaviour, response costs decrease the likelihood of taking adequate reactions to prevent health threats. The relationship is considered linear and additive (Al-Rasheed, 2020; Sadeghi et al., 2019). Thus, decreasing response costs will lead to more positive behaviour in protection motivation (Chen et al., 2020; Floyd et al., 2000; Norman et al., 2003). As previously discussed, the negative implications (i.e., expenses, time and effort) associated with implementing a protection motivation behaviour are found to have large effect sizes. As such, international tourists who encompass

protection motivation behaviour in medical tourism highly depend on their efficacy level and their adequacy of resources.

5.3.3 The influence of protection motivation on destination trust in medical tourism

The results have revealed that international tourists' protection motivation positively influences destination trust in medical tourism. It elucidated that tourists who intend to engage in medical services abroad are prompt to have greater destination trust in medical tourism (Abubakar & Ikan, 2016; Manhas & Tukamushaba, 2015). For instance, if tourists are certain that a country like Malaysia can offer high-quality medical services, they would have a great sense of trust and enhanced confidence in Malaysian accredited hospitals. The study also indicated that international tourists are willing to travel for medical tourism. Those considering alternative medical services offered in other countries tend to be more proactive in medical tourism participation. They are willing to search for relevant information about medical services provided by other countries that offer medical tourism and make extra efforts to understand the destination country's medical system. As Stanaland et al. (2011) indicated, corporate reputation is one of the key components to sustaining consumer trust in the long run. Therefore, Malaysia's medical system and healthcare services must be well-known and have a proven track record. Consequently, such world-class medical services would reinforce destination trust among international tourists for having medical services abroad.

5.3.4 The influence of protection motivation and destination trust on behavioural intention in medical tourism

Results of the study disclosed that protection motivation and destination trust positively influence behavioural intention in medical tourism. The results were consistent with past studies: Berhanu and Raj (2020), Zheng et al. (2020) and Alexandris et al. (2002). As indicated by Seow et al. (2021a), an individual with a sense of protection motivation would stimulate to look for better medical treatment overseas. Pang et al. (2021) further added that if individuals perceived a health threat or danger, it would motivate him/her to travel for medical service abroad. Similarly, tourists who trust the medical services offered abroad would travel abroad for medical treatment or healthcare services. As Jiang and Hong (2021) argued, the main ingredient of gaining tourists' destination trust is to develop a strong bond between the customer and the brand. To develop tourists' trust, the healthcare providers should provide a medical service environment focused on the friendliness of the healthcare professionals, high-quality medical facilities and equipment, comfortable accommodations and remedial treatment.

5.3.5 The mediating effect of destination trust on the relationship between protection motivation and behavioural intention in medical tourism

The destination trust construct significantly mediated the relationship between protection motivation and behavioural intention in medical tourism among international tourists. Thus, it can be explained that destination trust is essential to a tourist's medical journey decision (Abubakar & Ikan, 2016). The study's findings indicated that international tourists with high trust in their travel destination would be more likely to take medical services from other countries.

(Seow et al., 2016; 2017b; 2018; 2020a; 2021a). However, they prioritised their intention to visit hospitals with honest, sincere medical staff who can solve their medical problem. Past studies have also indicated that trust is crucial in connecting the customers' perception and behavioural intention (Kantsperger & Kunz, 2010; Reichheld & Schefter, 2000). Thus, if tourists are confident that Malaysian hospitals could make efforts to satisfy them and provide compensation should there be any problems with medical services raised, they are more willing to commit to medical tourism. They are also concerned about whether the medical facilities in Malaysia can provide reliable quality medical services. The study shed light on the well-recognised medical accreditation status of the hospital as part of tourists' consideration for medical tourism (Iranmanesh et al., 2018).

Based on the above discussion, the PMT model provides an excellent empirical study to indicate the prospect of using threat and coping appraisal in understanding tourists' protection motivation behaviour. Disseminating medical tourism information to international tourists about the availability of medical services abroad can be a practical approach for tourists to consider Malaysia an alternative place for medical and healthcare services. The health threat creates fear appeals for tourists because they are driven by fear of losing their health. Whereas the coping responses facilitate insights into whether international tourists to ponder the medical services in Malaysia. By using a well-planned health-threat communication approach, potential tourists can be motivated to consider medical tourism in Malaysia and feel more confident in their decision.

5.4 Implications

From the overview of the findings, the presentation of implications is discussed in the following section. The implications aim to highlight the possible outcome from the research findings and provide essential insights to respective stakeholders. The study used PLS–SEM to estimate the complex cause-effect relationships from the proposed research model adopted from PMT. The study's findings detected the mediation effects in a relatively new context – the medical tourism perspective. It implied that PLS-SEM methodology accommodates the interplay between underpin theory and valuable data. Several significant implications are highlighted below. This research supports previous studies suggesting that cognitive factors, particularly the frame of mind and beliefs, may significantly influence international tourists' behavioural intention for medical tourism.

5.4.1 Theoretical Implications

The study's results support medical tourism with evidence-based interventions. The PMT model is a useful framework for examining the medical tourism behaviours of individuals (Seow et al., 2021a). It is essential to support future scholars in understanding how to apply the fundamental principles, theories, research findings, and methods from the perspective of social and behavioural science. PMT considers risk perceptions (severity and vulnerability) and how this leads an individual to form protection motivation. The study considers individuals' beliefs about the effectiveness of the protective measures available and any associated costs individuals may face. These beliefs, in turn, determine to the extent that enables individuals to implement

those measures. A thorough understanding based on theory applied in health behaviour from the social sciences perspective is crucial. In this study, protection motivation theory allows researchers to understand the behaviour of individuals by pairing certain antecedent stimuli in medical tourism. Such as the effectiveness of an adaptive response to alleviate the threats (response efficacy) and the negative implications of enacting the responses (response cost) are empirical in the study. The outcome from the decision-making process of international tourists has revealed their consideration and indicates their ability to perform the adaptive response (self-efficacy) successfully. For tourists' self-efficacy and response efficacy to increase (the probability of an adaptive response - medical tourism intention), they need to outweigh perceived costs or barriers (e.g., money, time and effort) that inhibit them from performing the adaptive behaviour - participate in medical tourism.

The output of this research indicates a sign of a field rich in theoretical development; it makes the research progressively significant to accumulate the findings into a coherent body of knowledge. The interactions among the predictor variables and main effects were supported. These interactions explained the additional plan of action which could be exploited by the tourists when confronted with perceived threats and dealing with coping behaviour (Maddux & Rogers, 1983; Rippetoe, 1987; Seow et al., 2020a).

5.4.2 Practical Implications

PMT advocates that one should consider risk perceptions when attempting to predict individuals who have taken precautions against threats (Ferrer et al., 2018; Wang et al., 2019b). The risk perceptions or beliefs about an individual's vulnerability to adverse health outcomes are strongly associated with health behaviour (Rogers, 1975; Seow et al., 2017a). In the medical tourism context, tourists' decision-making is action-based. Thus, tourists seeking medical services abroad heavily rely on the belief that their rational choice assumptions underpin their behaviour. They will continuously make prudent and logical decisions by considering the risks and benefits before taking any measures and selecting the preference in their highest self-interest to maximise their net welfare (Seow et al., 2021b).

The results have pointed to the importance of predicting the international tourists' behaviour towards medical services available abroad in a way that can interrelate with their future medical practitioners who are involved in medical tourism practices. It implied that the success of policymakers and the healthcare industry in medical tourism depends on its accuracy in identifying and defining the medical service demand and the expectations of potential medical tourists. The PMT model guided the interpretation of the study findings concerning international tourists' threat perception of medical services in their home country, which created alarm about seeking alternative medical services abroad. Healthcare providers can better understand tourists' perceptions by identifying the reasons behind their perceived vulnerability. Additionally, the tourism industry could utilise the findings to implement targeted strategies to

meet the medical needs of international tourists. The study provides insights into possible factors that international tourists consider when assessing the availability of medical care from overseas. For instance, informative knowledge about the quality of medical services abroad, up-to-date medical treatment, and ensuring value for money in healthcare services abroad would further arouse their medical tourism intention.

The study also emphasises international tourists' perception of medical tourism coping, where it instigates their protection from health problems and subsequently motivates them to receive medical services abroad. The researcher suggests that the Malaysian government should aggressively promote medical tourism by working hand in hand with tour agents to bundle healthcare services on top of tour activities. In spite of everything, the ultimate goal of potential medical tourists is to have a better quality of life, prevent disease and death, and strive to achieve well-being. International tourists will be more likely to adopt the recommended coping response if they believe that medical tourism is effective in reducing their health threats and that they are capable of performing the recommended behaviour.

Medical tourism consists of a market with distinct features from healthcare to vacation. Tourists who have experienced a vacation in Malaysia before should have a better exposure and impression of Malaysian hospitality and its diverse cultures. The favourable infrastructures, accommodation costs, travelling expenses, entertainment facilities, shopping, and amusement could generate destination trust. Similarly, the accreditation awarded by reputable

hospitals should gain tourists' confidence in the healthcare professionals in Malaysia. The quality of the medical services abroad and the hospital's state-of-the-art equipment are helpful information to support medical tourism, where tourists can trust the medical staff's ability to solve their medical problems. Tourists build confidence in medical tourism by reciprocating with greater trust in Malaysian hospitals and their medical services abroad. Further, destination marketers participating in medical tourism promotional activities should provide a more detailed description of medical tourism destinations. For instance, travel blogs or word-of-mouth related to testimonials in medical tourism can heavily influence the image and reputation of a medical tourism destination. Through the discovery of this study, an assessment of destination brands in medical tourism and tourist behaviour provides an effective strategy to attract potential medical tourists. It provides directions to gain a competitive advantage in Medical tourism.

5.4.3 Social Implications

The establishment of a medical tourism industry can bring about a significant impact on countries like Malaysia. It can boost a country's global reputation as a destination for first-class medical care. Creating a welcoming environment that attracts medical tourists, investors, and businesses. In addition to healthcare, the tourism and hospitality sectors see a surge in growth as medical tourists require accommodations, transportation, and recreational activities. Stronger political bonds resulting from cross-border exchange are feasible, for instance, an integrated medical service between the Malaysian healthcare sector and the Indonesian private health laboratory industry

(Bernama, 2022). Indeed, the growth of the medical tourism industry is more than just creating employment. There will be a better standard of living, improved infrastructure, more excellent transportation facilities, and better drafting of healthcare policy for the nation.

5.5 Limitations of the study and recommendations for future research

While this study has provided valuable insights into medical tourism, it is crucial to acknowledge limitations that may impact generalisability and scope. The study utilised survey questionnaires and an intervention approach to deliver its findings. Thus, the implications of the results were broad due to the nature of the research. According to Chang and Lee, 2009, communications that include vivid presentations are more effective than written influences in generating arousal. The study was restrained to arousing the participants, where producing a distinct or clear impression on the senses was limited, may have caused the discussion slightly restricted. Another limitation was that the data collected was self-reported. This means that participants were asked to provide their demographic information and report their health symptoms, which could be influenced by social desirability bias. Although measures were taken to ensure privacy and confidentiality during the survey, there is still a possibility that the respondents may not have reported their symptoms accurately due to recall and social desirability issues. Cross-sectional studies have a common limitation due to the inability to determine the cause-and-effect relationship over time for causal inference (Wang & Cheng, 2020). Scholars could have better predicted cause-and-effect relationships by conducting a future study that monitors the same subjects over an extended period.

External environmental factors reflect and generalise medical tourism's view among international tourists. For instance, since the data was collected before the impact of the COVID-19 pandemic on the tourism industry, in the future, the post-pandemic situation may have jeopardised international tourists' decision-making to take part in medical tourism. The scholars may consider including public health, which the government should regulate to protect tourist safety and prevent COVID-19 or other similar diseases. It is to reassure the international tourists' self-protective behaviour against health risks. Investigating how international tourists could take safety precautions while travelling abroad would extensively provide new insights to researchers, practitioners, healthcare centre management, and relevant ministries.

The data collected for this study was before the COVID-19 outbreak. It may not reflect the current situation, and the pandemic may significantly impact the decision-making of tourists who wish to benefit from medical tourism services. Scholars should take into account the element of public health regulations, which can safeguard the safety of tourists and prevent the spread of communicable diseases such as COVID-19. Such future findings can be helpful for researchers, healthcare centre management, practitioners, and relevant government agencies to take necessary precautions while designing strategies to promote medical tourism.

The current study has a specific scope, as indicated in Chapter One. Despite its limitations, the study has made significant contributions. Future research should aim to replicate this study and incorporate some of the critical

changes in practice. A more intensive arousal method can be used to conduct a more comprehensive study. For example, participants can be asked to watch medical tourism documentaries, which depict medical services abroad in a way that could be highly appealing to potential international medical tourists who are currently facing medical problems or health-related chronic illnesses. These include tapping into appropriate health cum tourism activity together with the recommendation of medical services abroad. Interventions of this nature would increase international tourists' self-efficacy concerning health activity from medical tourism and motivation for well-being and a healthy lifestyle.

This study endeavours to develop interventions to trigger international tourists for medical tourism action. Although the use of the PMT model in the study had shown some significant effects, it provides valuable directions for scholars to develop a more robust theoretical intervention in future research. The study can be enhanced by applying more health-related behavioural models. Further refinement of assessment instruments is essential in addition to the PMT model when applied to medical tourism settings and how the components of these models could encourage future behavioural change. From a narrow perspective, the target population's research can gather the most influential variables. The experimental manipulation of constructs from the studies of PMT would provide much more substantial evidence of causal effects, and more appropriate intervention strategies can be designed in a more specific manner.

This study has contributed to the emerging use of an appropriate framework from a reputable theoretical model (PMT) where threat and coping interventions have been used to encourage international tourists to engage in medical tourism. Although the PMT model used in the study indicated only some significant effects, it provides valuable insights for scholars to develop more robust empirical evidence for future research. The study can be improved by utilising similar health-related behavioural models. Additionally, it is essential to refine assessment instruments in addition to the PMT model when applied to medical tourism settings and identify how the components of these models can promote future behavioural change in the target respondents. From a narrow perspective, the research has gathered the most influential variables of the target population. The experimental manipulation of constructs from the PMT studies would provide much more substantial evidence of causal effects, and more appropriate intervention strategies can be designed in a more specific manner.

5.6 Conclusion

The study used the Protection Motivation Theory as a theoretical foundation, which has not been extensively applied to medical tourism in previous research. The PMT model was chosen over the other cognitive models of health behaviour as it is able to measure international tourists' behavioural intention for medical tourism. The research framework was established based on the research objectives derived from the problem statement. A quantitative survey was conducted to study the behaviour of international tourists. Tourists were asked to share their opinions on health risks and their ability to cope with

health problems. The survey was analysed through a threat appraisal and coping appraisal process. The study predicts how tourists respond to health issues and whether they are prepared to deal with the availability of medical services in a foreign country like Malaysia. Destination trust was applied as a mediator in explaining international tourists' indirect behaviour between protection motivation and behavioural intention in medical tourism. The findings have supported the hypothesis postulated in chapter two.

The scope of the study emphasises the model from PMT, and it offers knowledge of studies on medical services abroad. This empirical study guides healthcare providers and scholars concerning the threat of health problems message and how it could become more salient to the public in participating in medical tourism. When an individual is faced with a health threat, the fear appeal will be incurred. This could initiate a coping appraisal. It is derived from (i) the severity of the health threat, (ii) the probability of the health threat occurring if no adaptive behaviour is performed (Such as (i) availability of a coping response (solution), and the individual's ability to carry out the coping behaviour. It allows a more vital designation drawn upon theoretical concepts, greater standardisation of measures, greater concentration on the models, and future empirical evidence in medical tourism. This research study is prominent enough to persuade future scholars to explore tourism cum healthcare services study. As healthcare service providers continue to explore methods of curbing the ever-growing need for outstanding medical services, the researcher hoped that the insights provided in this study would shape the tourist's beliefs and maintain a positive impression in the Malaysian medical tourism industry.

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APPENDICES

Appendix 2.1

Review of medical tourism studies

Author's/ Year	Research Title / Constructs	Findings/Discussion	Researcher's Comments
Buzinde and Yarnal (2012)	Therapeutic landscapes and postcolonial theory: A theoretical approach to medical tourism	• Postcolonial theory critiques the economic, moral, and cultural tensions emerging from the intersection between corporations that provide cheaper and more attractive medical services. • The nations on the periphery are struggling to offer high medical standards that may not be accessible to their local populations.	• The growing popularity of medical tourism and the ubiquity of neoliberal values on health care, thus widening the economic gap, allows for future investigations for a similar study.
Chaulagain, Pizam, and Wang (2021)	An integrated behavioural model for medical tourism: An American perspective	• Attitude, perceived behavioural control, and subjective norm positively influenced individuals' intention to engage in medical tourism. • A significant moderating effect of perceived severity was found on the relationships between perceived benefits and attitude, perceived barriers and attitude, and attitude and behavioural intention.	• More research is required to investigate the impact of other factors on behavioural intention. • Data from other countries can offer valuable information in comparing social differences in medical tourists' behavioural intentions.
Dang, Nguyen, Wang, Day, and Dang (2020)	Grey system theory in the study of the medical tourism industry and its economic impact	• Tourism sources and healthcare medical infrastructures are crucial in promoting the healthcare travel industry, while cost advantage and marketing effectiveness were less considered. • Performance analyses indicated that Thailand has a good performance and stands in the top ranking, followed by Malaysia, India, Singapore, South Korea, and Taiwan, respectively.	• The research needs to expand by considering a global market scope and study at the travel destination.
Dash (2020)	Exploring visit intention to India for medical tourism using an extended theory of	• Perceived financial risk, physical risk, psychological risk, and facilitating conditions available in a country are significantly linked to the attitude of a medical tourist. • Facilitating conditions available in a country are	• A similar study should include other countries to gather a relatively larger sample size

	planned behaviour	significantly related to the perceived behavioural control of a medical tourist. • Attitude, subjective norm, and perceived behavioural control are significantly related to the visit intention of medical tourists to India • Perceived time and performance risks are insignificantly associated with the visit intention.	
Jun and Oh (2015)	Framing risks and benefits of medical tourism: a content analysis of medical tourism coverage in Korean American community newspapers	• Korean American community newspapers rarely engage in risk communication and lack sufficient information about potential medical tourism risks while emphasizing various benefits. • Korean ethnic media, as the primary source of health communication for Korean Americans, should provide more reliable health and medical information for the population's appropriate health management.	• The study is limited to Korean ethnic media's representation of medical tourism, its perception and willingness to medical tourism, and health outcomes can be explored further.
Lee, Wright, O'Connor, and Wombacher (2014)	Framing medical tourism: an analysis of persuasive appeals, risks and benefits, and new media features of medical tourism broker websites	• The websites highly emphasised benefits while downplaying the risks. • The websites failed to report any procedural, post-operative, or legal concerns associated with them. • The websites relied on heavy use of new media features to enhance the appeal of the offered medical services.	• Further exploration of individual motives in using medical tourism services is necessary.
Mason and Wright (2011)	Framing medical tourism: an examination of appeal, risk, convalescence, accreditation, and interactivity in medical tourism websites	• Medical tourism Web sites essentially promote the benefits of medical procedures while downplaying the risks, and relatively little information regarding the credibility of these services appears. • The presentation of benefits/risks, credibility, and Web site interactivity differed by region and type of facility.	• Risks and benefits were framed to bring concerns about medical tourism. The information does help individuals to make informed decisions
Nilashi et al. (2019)	Factors influencing medical tourism adoption in	• Human and technological factors were the most important factors for medical tourism adoption in Malaysia.	• Further investigation on medical tourism from tourists'

	Malaysia: A DEMATEL-Fuzzy TOPSIS approach		perspectives is crucial.
Olya and Nia (2021)	The medical tourism index and behavioural responses of medical travellers: a mixed-method study	• Three dimensions of MTI, excluding cost, are necessary to achieve satisfaction and desired behavioural intention. • Medical complications and legal conditions in the origin country influence medical travellers' behaviours. • The model testing results support fundamental tenets of complexity theory and extend the knowledge of how to regulate conditions to discharge a dis/satisfied and dis/loyal patient.	• To include antecedents (e.g., type of treatment, risks perceived by medical travellers) to the configurational model. Suggest a more extensive data set in predicting the behaviours of medical travellers.
Ramamonjiarivelo Martin, and Martin (2015)	The determinants of medical tourism intentions: Applying the theory of planned behaviour	• Findings suggested that the MEDTOUR scale (developed and introduced in a prior study) is robust and works reasonably well with a national sample.	• MEDTOUR appears worthy of further research consideration by health marketing scholars.
Reddy, York and Brannon (2010)	Travel for treatment: students' perspective on medical tourism	• Students do not have positive intentions for mere willingness to seek more information about travelling to a developing country to receive medical treatment. • An educational intervention is necessary to help promote travel for medical treatment. • The intervention may include educating people on the availability of quality health care, highly trained competent doctors, and the ability to vacation and see another country.	• The study indicates a lack of research on beliefs and attitudes in medical tourism, specifically for older adult populations.
Seow, Choong, Moorthy and Chan (2017b)	Intention to visit Malaysia for medical tourism using the antecedents of the Theory of Planned Behaviour: A predictive model	• Perceived benefits and perceived costs are significantly related to attitude; Resource availability is related to perceived behavioural control. • However, the perceived behavioural control is found to be insignificant to intention. • Attitude and subjective norms are also significantly	• To increase the number of respondents and data collection durations to gain a more general understanding of tourists' behaviour changes across time.

		related to the intention for medical tourism in Malaysia.	
Suess, Baloglu, and Busser (2018)	Perceived Impacts of medical tourism development on Community wellbeing	• Residents perceive improvement in community well-being from medical tourism. • Improved community well-being impacts residents' tax-paying behaviour.	• To develop detailed frameworks for critically analysing the development of medical tourism. The impact on the tourists' quality of life, health care, and tourism industries needs further investigation.
Tham (2018)	Sand, surgery and stakeholders: A multi-stakeholder involvement model of domestic medical tourism for Australia's Sunshine Coast	• Findings suggest that while domestic medical tourism promises much, stakeholder management is critical to its conception in emerging destinations.	• To explore the feasibility of medical tourism development from other tourism destinations.
Um and Kim (2018)	Application of fairness theory to medical tourists' dissatisfaction and complaint behaviours: The moderating role of patient participation in medical tourism	• Fairness is the most substantial variable affecting dissatisfaction, followed by interpersonal, procedural, and informational fairness, and dissatisfaction triggers specific behaviours (e.g., switching, negative word of mouth, and complaining) and differs by levels of participation. • A medical hosting country and its hospitals should provide a fair service to reduce dissatisfaction and conceive a way of managing complaint behaviours.	• To identify and test more factors mediating or moderating service fairness, dissatisfaction, and response behaviours.
Mathijsen (2019)	Home, sweet home? Understanding diasporic medical tourism behaviour. Exploratory research of Polish immigrants in Belgium	• Promoting diasporic medical travel requires working via ethnic and kinship networks. • Internet, word-of-mouth, and the strength of national brand shape diasporic attitudes and choices. • Using prospect theory, this study finds medical tourism considerations driven by domestic medical costs, patient privacy concerns, medical	• More research is required to explain decision-making in diasporic medical tourism besides the theory of Planned Behaviour (TPB)/ Reasoned Action (TRA)

		restrictions, and foreign destination desirability. • Tourist attractions, service quality assurance, and domestic medical costs influence the latter.	
Zolfaghari, Rajamma, Naderi, and Torkzadeh (2018)	Determinants of medical tourism destination selection process	• This study finds medical tourism considerations driven by domestic medical costs, patient privacy concerns, medical restrictions, and foreign destination desirability. • Tourist attractions, service quality assurance, and domestic medical costs influence the latter.	• To use behavioural theoretical lenses to address decision-making's emotional or subjective aspects. • To verify the generalizability of the findings by utilizing more representative samples across the country.

Appendix 2.2

Review of Protection Motivation Theory Studies

Author's /Year	Research Title / Constructs	Findings/Discussion	Researcher's Comments
Babcicky and Seebauer (2019)	Unpacking Protection Motivation Theory: evidence for a separate protective and non-protective route in private flood mitigation behaviour	• Risk perception is not found to be part of the protective route, nor are non-protective responses confirmed to undermine protection motivation. • Risk communication measures should specifically target the protective route and avoid (accidentally) providing incentives that fall within the non-protective route.	• The study uses cross-sectional to establish how the two routes interrelate over time. More experimental research is required to address potential feedback effects and the role of decision stages.
Camerini, Diviani, Fadda, and Schulz (2019)	Using protection motivation theory to predict intention to adhere to official MMR vaccination recommendations in Switzerland	• Perceived efficacy of the MMR vaccine is the strongest direct predictor of intentions. • Pro-social attitudes favouring herd immunity also, directly and indirectly, predict intentions.	• The role of PMT in predicting intention is essential as the decision-making process can contribute to different socio-cultural contexts in future studies.
Kowalski and Black (2021)	Protection motivation and the COVID-19 virus	• Perceived severity and outcome efficaciousness correlate positively with frequency. • Anticipatory regret mediated the relationship between PMT and protective health behaviour frequency. • Public health announcements about the severity of the virus and the efficacy of the health behaviours in decreasing the virus's spread are more successful than those that heighten people's vulnerability to the disease.	The value of the PMT in predicting health behaviours are crucial for future health studies.
Ling, Kothe, and Mullan (2019)	Predicting intention to receive a	• Response efficacy is the strongest predictor of intention to vaccinate.	• Future studies should manipulate PMT

	seasonal influenza vaccination using Protection Motivation Theory	• Response costs do not predict intention to receive an influenza vaccination. • Studies should consider maladaptive response rewards involved with not vaccinating.	constructs to examine the changes that are causally related to intention, and such changes can successfully bring about its subsequent uptake.
Moeini et al. (2019)	Skin cancer preventive behaviours in Iranian farmers: applying protection motivation theory	• Self-efficacy to adopt prevention behaviour and perceived protection motivation increased the mean score of the "protective" behaviour. • Working conditions among farmers place them at significant risk, and skin cancer prevention is essential. • Intervention and prevention programs should fully identify the determinants of skin cancer prevention in farmers.	• Future studies can apply protection motivation theory in predicting health-related behaviours.
Rather (2021)	Demystifying the effects of perceived risk and fear on customer engagement, co-creation and revisit intention during COVID-19: A protection motivation theory approach	• Social media positively affects CBE, subsequently impacting co-creation and revisit intention. • Social media indirectly affects co-creation and revisit intention, as mediated via CBE. • Fear and perceived risk moderate the link between social media, CBE, and co-creation/revisit intention.	• More research is required to generalisable the results after the pandemic.
Roozbahani, Kaviani, and Khorsandi (2020)	Path analysis of skin cancer preventive behaviour among rural women based on protection motivation theory	• Concerning skin cancer preventive behaviours, 27.8% of women wore sun-blocking clothing when working under the sun, 21.7% used sunscreen cream, 5.7% wore a cap, and 4.8% used gloves and sunglasses. • Protection motivation theory and per capita	• Future studies can employ PMT and its constructs to predict behavioural intention and protection motivation actual behaviours.

		income explained 51% of motivation variance and 25% of skin cancer preventive behaviours. • The response efficacy construct was the strongest predictor of protection motivation. Per-capita income and motivation were the strongest predictors of these behaviours.	
Ruan, Kang, and Song (2020)	Applying protection motivation theory to understand international tourists' behavioural intentions under the threat of air pollution: A case of Beijing, China	• Severity, vulnerability, response efficacy, and self-efficacy significantly and positively influenced protective behavioural intention, whereas perceived government support exerted a significant negative effect. • Among significant and positive variables, the influence of the severity of threat appraisal was the largest.	• PMT has rarely been incorporated into tourism research, and more research is needed to assess tourists' behaviour.
Sabzmakan, Ghasemi, Asghari Jafarabadi, Kamalikhah, and Chaleshgar Kordasiabi, (2018)	Factors associated with tobacco use among Iranian adolescents: an application of protection motivation theory	• Perceived vulnerability, fear, self-efficacy, perceived intrinsic reward, threat appraisal, and coping appraisal had a direct effect and are significant with intention. • Perceived vulnerability, fear, self-efficacy, perceived intrinsic reward, threat appraisal, and coping appraisal affected tobacco use indirectly through intention and were significantly associated with behaviour. • Also, the intention had a direct effect and is significant with tobacco use.	• Future studies can apply PMT to predict individuals' behaviour.
Seow, Choong, Chonng and Moorthy (2021b)	Health tourism: behavioural intention and protection	• Tourists' high-risk perception must be complemented by a coping ability to produce a motivational response.	• A more comprehensive assessment is needed to generate

	motivation theory	• The adaptive behaviours of international tourists are focussed more on perceived efficacy than the perception of threats related to behavioural intentions towards health tourism.	considerable effectiveness in decision-making studies derived from the theoretical model is possible.
Wang, Liu-Lastres, Ritchie, and Mills (2019a)	Travellers' self-protection against health risks: An application of the full Protection Motivation Theory	• Both threat and coping appraisals can enhance travellers' protection motivations. • Highlight the mediating role played by protection motivation on actual behaviours • Maladaptive perception is negatively associated with the coping appraisal.	• Future studies can use PMT to enrich the body of literature and explore different topics related to individual behaviour.
Youn, Lee, and Ha-Brookshire (2021)	Fashion consumers' channel switching behaviour during the COVID-19: Protection motivation theory in the extended planned behaviour framework	• Perceived severity and altruistic fear of COVID-19 and response efficacy and self-efficacy of channel switching increased beliefs components (i.e., attitude, perceived behaviour control, subjective norm) and intentions to switch shopping channels to online. • The age (young vs. old) moderated the effects of response efficacy and self-efficacy on perceived behaviour control, perceived severity on the subjective norm, perceived behaviour control on channel switching intentions, and intention on actual switching behaviour.	• Different motivational factors can extend the PMT model to increase its validity in future studies.

Appendix 3.1

SURVEY QUESTIONNAIRE

Dear Sir/Mdm,

Warmest greetings from Universiti Tunku Abdul Rahman (UTAR)
I am currently conducting a study on medical tourism in Malaysia.
Medical tourism is defined as the act of travelling abroad [across international borders] to obtain wellness, healthcare and/or medical treatments.

Are you currently travelling out of your home country?
Yes ( ) No ( )

Is your current stay in Malaysia more than 24 hours but not exceeding 12 months?
Yes ( ) No ( )

Are you currently under employment in Malaysia?
Yes ( ) No ( )

Voluntary Nature of the Study
Your participation in this research is entirely voluntary. Even if you decide to participate, you may change your mind and stop at any time. All information collected will be treated strictly confidential and solely for the purpose of this study only. It will take approximately 20 minutes to fill up the questionnaire.

I have been informed of the purpose of the study and I give my consent to participate in this survey.
Yes ( ) No ( )

Yours sincerely,

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Personal Data Protection Statement

Please be informed that by Personal Data Protection Act 2010 (PDPA) which came into force on 15 November 2013, Universiti Tunku Abdul Rahman (UTAR) is hereby bound to take notice and require consent about collection, recording, storage, usage, and retention of personal information.

Notice:

1. The purposes for which your personal data may be used are inclusive but not limited to: -
    - For assessment of any application to UTAR
    - For processing any benefits and services
    - For communication purposes
    - For advertorial and news
    - For general administration and record purposes
    - For enhancing the value of education
    - For educational and related purposes consequential to UTAR
    - For our corporate governance
    - For consideration as a guarantor for UTAR staff/students applying for his/her scholarship/ study loan

2. Your personal data may be transferred and/or disclosed to a third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for the purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

3. Any personal information retained by UTAR shall be destroyed and/or deleted by our retention policy applicable to us in the event such information is no longer required.

4. UTAR is committed to ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

1. By submitting this form, you hereby authorise and consent to us processing (including disclosing) your personal data and any updates of your information, for the purposes and/or for any other purposes related to the purpose.

2. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfil our obligations to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

3. You may access and update your personal data by writing to us at seowan@utar.edu.my.

Section A: Health Symptom

Listed below are several symptoms that you may or may not have experienced in the past 6 months. Please indicate by ticking “Yes” or No", whether you have experienced any of these symptoms.

Health Symptom	I have experienced this symptom	
Pain	☐ Yes	☐ No
Nausea	☐ Yes	☐ No
Breathlessness	☐ Yes	☐ No
Weight Loss	☐ Yes	☐ No
Fatigue	☐ Yes	☐ No
Stiff Joints	☐ Yes	☐ No
Sore Eyes	☐ Yes	☐ No
Headaches	☐ Yes	☐ No
Upset Stomach	☐ Yes	☐ No
Sleep Difficulties	☐ Yes	☐ No
Dizziness	☐ Yes	☐ No
Loss of Strength	☐ Yes	☐ No
Others please specify: _____		

Please place a tick “√” for each of the following:

a. When was your last visit to obtain healthcare in your home country?

- ☐ In the past 3 months
- ☐ In the past 6 months
- ☐ In the past year
- ☐ More than 1 year ago

b. Do you have any type of health or medical insurance coverage on medical treatment?

- ☐ Yes, in my home country (full or partial coverage)
- ☐ Yes, in the destination travel country (full or partial coverage)
- ☐ No medical insurance coverage

c. Have you ever travelled internationally to obtain any type of wellness / medical / healthcare service?

- ☐ Yes
- ☐ No

Section B: Your perception of health and medical issues.

Each item below represents a commonly held opinion. There is no right or wrong answer. Select the indicator which **BEST** suits your agreement using the scale below. Please indicate your opinion of each statement with a tick (√) in the appropriate box.

Very Strongly Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Very Strongly Agree
1	2	3	4	5	6	7

Part 1: Medical problems (like sickness and diseases) may have various impacts on health. In general, how do you agree with the severity resulting from the medical problem listed below?

No	Code	Items	Very Strongly Disagree ◄---► Very Strongly Agree						
1.	PS1	If I were to have a medical problem(s), it would be a very serious threat to my quality of life.	1	2	3	4	5	6	7
2.	PS2	If I were to have a medical problem(s), it would bring concerns to my financial security.	1	2	3	4	5	6	7
3.	PS3	If I were to have a medical problem(s), it would cause inconveniences to those who are close to me.	1	2	3	4	5	6	7
4.	PS4	If I were to have a medical problem(s), my perception of my health would change.	1	2	3	4	5	6	7
5.	PS5	To me, the consequences of having a medical problem(s) would be very bad.	1	2	3	4	5	6	7

Part 2: In general, how do you agree with the vulnerability related to the medical problems listed below?

No	Code	Items	Very Strongly Disagree ◄						Very Strongly Agree ►
6.	PV1	There is a possibility that I may be at risk of getting infected by disease(s).	1	2	3	4	5	6	7
7.	PV2	There is a possibility that I may be exposed to a medical problem(s).	1	2	3	4	5	6	7
8.	PV3	There is a possibility that I can be at health risk if I fail to pay attention to my health.	1	2	3	4	5	6	7
9.	PV4	There is a possibility that I worry about the medical services provided is not good enough.	1	2	3	4	5	6	7
10.	PV5	There is a possibility that my current physical health conditions increase the likelihood of health threats.	1	2	3	4	5	6	7

Part 3: How do you agree with the following medical services alternatives?

No	Code	Items	Very Strongly Disagree ◄						Very Strongly Agree ►
11.	RE1	Receiving medical services in another country can contribute to my overall health.	1	2	3	4	5	6	7
12.	RE2	Using medical services in another country can solve my health problems.	1	2	3	4	5	6	7
13.	RE3	Seeking medical services in another country can reduce the risk of encountering serious medical problems.	1	2	3	4	5	6	7
14.	RE4	Looking for alternative medical services available from another country can provide better treatment.	1	2	3	4	5	6	7
15.	RE5	Taking the tendency of having medical services from another country can improve my well-being.	1	2	3	4	5	6	7

Part 4: How do you agree with the following, given that medical services alternatives are realistic?

No	Code	Items	Very Strongly Disagree ◄						Very Strongly Agree ►
16.	SE1	I think I can make use of medical services from another country if necessary.	1	2	3	4	5	6	7
17.	SE2	I think I will look for various medical services in another country if there are choices available.	1	2	3	4	5	6	7
18.	SE3	I think I should have sufficient resources to go for medical services in another country.	1	2	3	4	5	6	7
19.	SE4	I think having another preference for medical services from another country is completely up to my control.	1	2	3	4	5	6	7
20.	SE5	I think I will not hesitate to seek an opportunity to combine medical services with a vacation in another country.	1	2	3	4	5	6	7

Part 5: How do you agree with the following concerns to seek medical services out of your home country?

No	Code	Items	Very Strongly Disagree ◄						Very Strongly Agree ►
21.	RC1	I think it is not convenient for me to go to another country for medical services. (e.g., distance)	1	2	3	4	5	6	7
22.	RC2	I think it is expensive to go to another country for medical services.	1	2	3	4	5	6	7
23.	RC3	I think it is time-consuming to go to another country for medical services.	1	2	3	4	5	6	7
24.	RC4	I think it requires too much effort/arrangement to go to another country for medical services.	1	2	3	4	5	6	7
25.	RC5	I think having medical services in another country may cause anxiety/stress.	1	2	3	4	5	6	7

Part 6: To what extent you are willing to take precautionary behaviours by participating in medical tourism?

No	Code	Items	Very Strongly Disagree ◄						Very Strongly Agree ►
26.	PM1	I will possibly take up healthcare services from another country if needed.	1	2	3	4	5	6	7
27.	PM2	I will consider using alternative medical services from another country as travel opportunities.	1	2	3	4	5	6	7
28.	PM3	I am willing to travel to another country for recuperation. (e.g., health recovery, medical healing)	1	2	3	4	5	6	7
29.	PM4	The more I know about alternative medical services from another country, the more I will consider them.	1	2	3	4	5	6	7
30.	PM5	I am certain that medical services from another country will add valuable experience to my well-being.	1	2	3	4	5	6	7

Part 7: To what extent do you agree that Malaysia can be a trusted medical tourism destination?

No	Code	Items	Very Strongly Disagree ◄						Very Strongly Agree ►
31.	DT1	Malaysia hospitals are honest and sincere in addressing my concerns.	1	2	3	4	5	6	7
32.	DT2	I can rely on Malaysian hospitals to solve my medical problems.	1	2	3	4	5	6	7
33.	DT3	I have confidence in hospitals with recognised medical accreditation in Malaysia.	1	2	3	4	5	6	7
34.	DT4	Malaysia hospitals will take efforts to make me satisfied.	1	2	3	4	5	6	7
35.	DT5	Malaysia hospitals will compensate me in some ways if problems with medical services arise.	1	2	3	4	5	6	7

Section C: What would be your behavioural intention on medical tourism in Malaysia?

No	Code	Items	Very Strongly Disagree ◄						Very Strongly Agree ►
36.	BI1	I will make an effort to travel to Malaysia for medical services in the future.	1	2	3	4	5	6	7
37.	BI2	I will probably be interested to take up medical services in Malaysia.	1	2	3	4	5	6	7
38.	BI3	I will plan to visit Malaysia for medical services purposes.	1	2	3	4	5	6	7
39.	BI4	I believe that I can recommend healthcare services in Malaysia to others.	1	2	3	4	5	6	7
40.	BI5	I will recommend to others the opportunity to combine medical services cum a retreat in Malaysia.	1	2	3	4	5	6	7
41.	BI6	I will visit Malaysia rather than other medical destinations for medical services.	1	2	3	4	5	6	7

Please select the most appropriate response/answer to the following items.

Q1 What will be the possible primary source of information you would have consulted before deciding to embark on a medical trip? (Choose the top 3 options)

- □ Advice from your domestic doctor/physician
- □ Word-of-mouth from friends or family
- □ Medical tourism intermediary's website
- □ Website of the recognised hospital/ medical facility with reputation
- □ On-line medical communities
- □ Medical tourism blog
- □ Reading the testimonies of other patients who had surgery abroad
- □ News sources (television, magazine, etc.)
- □ Other ……..

Q2 If you are travelling to Malaysia for medical treatment, which type of medical services will you seek out the most? (Choose the top 3 options)

- □ Sight treatment/Lasik
- □ Dental surgery/treatment/restorative
- □ Orthopaedics (joint, spine, sports medicine, etc.)

- □ Cardiovascular/heart surgery (angioplasty, CABG, transplant), etc.
- □ Cosmetic/plastic/reconstructive surgery
- □ Weight loss/LAP-BAND/gastric bypass
- □ Reproductive care.
- □ Sexual reassignment surgery
- □ Comprehensive medical check-up
- □ Alternative care (acupuncture, chiropractic, etc.)
- □ Other ……..

Q3 If you are travelling to Malaysia for well-being programs, which type of services you will prefer? (Choose the top 3 options)

- □ Comprehensive diagnostic services (healthcare check-ups)
- □ Aesthetic, and diet programs
- □ Stress release, and detox programs
- □ Skin care services
- □ Spa/massage/thalasso therapy
- □ Meditation/Yoga/ Spiritual/Holistic programs
- □ Sports/Rehabilitation (lifestyle-related)/psychological therapy

Q4 What will be your preferred length of stay in Malaysia for medical tourism purposes?

- □ 1 - 3 days
- □ 3 - 5 days
- □ 5 - 15 days
- □ 15 - 30 days
- □ More than a month

Section D: Respondent Profile

1. What is your country of origin? _____

2. What is your gender?

□ Male □ Female

3. What is your age group?

□ 18 – 25 □ 46 – 55
□ 26 – 35 □ 56 – 65
□ 36 – 45 □ Above 65

4. What is your marital status?

□ Single □ Cohabiting
□ Married □ Divorced/ Widowed/ Separated

5. What is your religion?

- ☐ Christians
- ☐ Buddhists
- ☐ Muslims
- ☐ Hindus
- ☐ Jews
- ☐ Folk Religions
- ☐ Unaffiliated
- ☐ Others (please specify) _____

6. How many times have you visited Malaysia previously?

- ☐ Never
- ☐ 1 - 2
- ☐ 3 - 4
- ☐ 5 - 6
- ☐ 7 - 10
- ☐ More than 10

7. Who are you travelling with?

- ☐ Alone
- ☐ Spouse/Family
- ☐ Friend(s)
- ☐ Colleague(s)
- ☐ Tour package
- ☐ Others (please specify) _____

8. What is your average annual household income (before taxes) in USD?

- ☐ Less than US$10,000
- ☐ US$10,000 - US$19,999
- ☐ US$20,000 - US$29,999
- ☐ US$30,000 - US$39,999
- ☐ US$40,000 - US$49,999
- ☐ US$50,000 - US$59,999
- ☐ US$60,000 - US$99,999
- ☐ More than US$99,999

9. What is your primary purpose for this visit to Malaysia? (select only one)

- ☐ Pleasure/Vacation
- ☐ Business/Work
- ☐ Medical Treatment
- ☐ Visit friends and relatives
- ☐ Convention/Exhibition
- ☐ Other (please specify) _____

10. Do you have any suggestions regarding medical tourism in Malaysia?

_____

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

Tuan-Tuan dan Puan-Puan,

Salam sejahtera dari Universiti Tunku Abdul Rahman (UTAR)

Saya sedang menjalankan satu penyelidikan mengenai pelancongan perubatan di Malaysia.

Pelancongan perubatan didefinisikan sebagai tindakan melancong ke luar negara untuk mendapatkan pelbagai jenis rawatan kesihatan dan perubatan.

Adakah anda sedang melancong di luar negara sekarang?

Ya ( ) Bukan ( )

Adakah penempatan anda di Malaysia kali ini melebihi 24 jam tetapi tidak melebihi 12 bulan?

Ya ( ) Bukan ( )

Adakah anda sedang bekerja di Malaysia sekarang?

Ya ( ) Bukan ( )

Penyertaan Secera Sukarela Sebagai Responden
Penyertaan anda adalah secara sukarela. Segala informasi yang diberikan adalah sulit dan tidak akan digunakan untuk tujuan komersial. Sila luangkan lebih kurang 20 minit untuk mengisi borang soal selidik ini.

Saya maklum objektif penyelidikan ini dan bersetuju memberi maklumat yang dikehendaki di dalam borang soal selidik ini.

Ya ( ) Bukan ( )

Yang benar,

Pn Seow Ai Na (Pelajar PhD)
Universiti Tunku Abdul Rahman (UTAR) 拉曼大學 **(**Perak Campus)
Jalan Universiti, Bandar Barat,
31900 Kampar,
Perak Darul Ridzuan,.
TEL:+(605)4688888 Ext 4627

Penyataan Perlindungan Data Peribadi

Anda dimaklumkan bahawa selaras dengan Akta Perlindungan Data Peribadi 2010 (PDPA) yang berkuatkuasa pada 15 November 2013, Universiti Tunku Abdul Rahman (UTAR) adalah dengan ini terikat untuk membuat notis dan memerlukan persetujuan perhubungan dengan pergumpulan, rakaman, penyimpanan, penggunaan dan penyimpanan maklumat peribadi.

Notis:

5. Maklumat peribadi anda boleh digunakan adalah termasuk tetapi tidak terhad kepada:
    - Bagi penilaian sebarang permohonan untuk UTAR
    - Bagi memproses sebarang faedah dan perkhidmatan
    - Bagi tujuan komunikasi
    - Bagi iklan dan berita
    - Bagi tujuan pentadbiran am dan tujuan rekod
    - Bagi meningkatkan nilai pendidikan
    - Bagi tujuan pendidikan dan berkaitan dengan UTAR
    - Bagi tujuan tadbir urus korporat kami
    - Sebagai pertimbangan sebagai penjamin untuk kakitangan / pelajar yang memohon / biasiswa beliau / pinjaman pengajian

6. Maklumat peribadi anda mungkin akan dipindahkan dan / atau didedahkan kepada pihak ketiga dan / atau rakan kerjasama UTAR termasuk tetapi tidak terhad kepada ejen penyumberan luar masing-masing dan dilantik untuk tujuan memenuhi tanggungjawab kami kepada anda berkenaan dengan tujuan-tujuan dan semua maksud lain yang berkaitan dengan tujuan-tujuan dan juga dalam penyediaan perkhidmatan bersepadu, penyelenggaraan dan penyimpanan rekod. Maklumat anda mungkin akan dikongsi apabila dikehendaki oleh undang-undang dan apabila pendedahan adalah diperlukan untuk mematuhi undang-undang.

7. Sebarang maklumat peribadi yang disimpan oleh UTAR akan dimusnahkan dan / atau dihapuskan mengikuti dasar pengekalan kami berkenaan dengan kita sekiranya maklumat tersebut tidak lagi diperlukan.

8. UTAR komited untuk memastikan kerahsiaan, perlindungan, keselamatan dan ketepatan maklumat peribadi anda yang ada pada kami dan ia telah menjadi dasar yang ketat dijalankan untuk memastikan bahawa maklumat peribadi anda adalah tepat, lengkap, tidak mengelirukan dan terkini. UTAR juga akan memastikan bahawa data peribadi anda tidak boleh digunakan untuk tujuan politik dan komersial.

Persetujuan:

4. Dengan penghantaran borang ini, anda dengan ini memberi kuasa dan membenarkan kami memproses (termasuk pendedahan) maklumat peribadi anda dan sebarang kemas kini maklumat anda, untuk tujuan-tujuan dan / atau tujuan lain yang berkaitan.

5. Jika anda tidak bersetuju atau kemudiannya menarik balik persetujuan anda terhadap pemprosesan dan pendedahan maklumat peribadi anda, UTAR tidak akan dapat memenuhi tanggungjawab kami atau menghubungi anda atau membantu anda berkenaan dengan tujuan dan / atau maksud lain yang berhubungan untuk tujuan tersebut.
6. Anda boleh mengakses dan mengemas kini maklumat peribadi anda dengan emel kepada kami pada seowan@utar.edu.my.

Seksyen A: Rekod Kesihatan Anda

Jadual di bawah ini merujuk kepada senarai tanda-tanda yang pernah anda alami dalam tempoh 6 bulan yang lepas. Sila tandakan (√) pada kotak yang disediakan.

Tanda	Saya pernah berasa simpton ini.	
Sering Sakit	□ Ya	□ Tidak
Berasa Loya	□ Ya	□ Tidak
Sesak Nafas	□ Ya	□ Tidak
Kegurangan Berat Badan	□ Ya	□ Tidak
Keletihan	□ Ya	□ Tidak
Sendi Kaku	□ Ya	□ Tidak
Sakit Mata	□ Ya	□ Tidak
Sakit Kepala	□ Ya	□ Tidak
Sakit Perut	□ Ya	□ Tidak
Kesukaran Tidur	□ Ya	□ Tidak
Pening Kepala	□ Ya	□ Tidak
Kekurangan Tenaga	□ Ya	□ Tidak
Lain-lain, sila nyatakan: _____		

Sila tandakan (√) pada ruang yang berkenaan:

a. Bilakah anda mendapat rawatan perubatan terakhir di dalam negara anda?

- ☐ Dalam 3 bulan yang lepas
- ☐ Dalam 6 bulan yang lepas
- ☐ Dalam 1 tahun yang lepas
- ☐ Melebihi 1 tahun yang lepas

b. Adakah anda mempunyai perlindungan insurans kesihatan atau perubatan yang mengenai rawatan perubatan?

- ☐ Ya, di negara saya (liputan penuh atau separa)
- ☐ Ya, di mana-mana destinasi yang saya pergi (liputan penuh atau separa)
- ☐ Tidak ada perlindungan insurans

c. Pernahkah anda pergi ke luar negara untuk mendapat perkhidmatan kesihatan atau perubatan?

- ☐ Ya
- ☐ Tidak

Seksyen B: Pendapat anda terhadap Isu Kesihatan dan Isu Perubatan.

Sila nyatakan pendapat anda untuk item berikut berdasarkan skala di bawah. Setiap item mewakili pendapat umum. Sila tandakan (√) pada ruang yang berkenaan.

Sangat Tidak Bersetuju	Tidak Bersetuju	Kurang Bersetuju	Tiada Pandangan	Lebih Kurang Bersetuju	Bersetuju	Sangat Bersetuju
1	2	3	4	5	6	7

Bahagian 1: Masalah perubatan (sebagai penyakit) mungkin akan membawa pelbagai kesan terhadap kesihatan. Adakah anda bersetuju dengan masalah-masalah perubatan yang disenaraikan seperti berikut?

No	Kod	Perkara (Sangat Tidak Bersetuju ◄----------► Sangat Bersetuju)							
Jika saya dapat masalah perubatan, …									
1.	PS1	…ia akan membawa ancaman yang serius terhadap kualiti kehidupan saya.	1	2	3	4	5	6	7
2.	PS2	…ia akan membawa kerisauan terhadap kedudukan kewangan saya.	1	2	3	4	5	6	7
3.	PS3	…ia akan membawa kesulitan terhadap orang-orang yang rapat dengan saya.	1	2	3	4	5	6	7
4.	PS4	…saya akan mengubah persepsi saya terhadap kesihatan.	1	2	3	4	5	6	7
5.	PS5	Pada pendapat saya, masalah perubatan akan membawa akibat-akibat yang sangat buruk.	1	2	3	4	5	6	7

Bahagian 2: Pada umumnya, adakah kemungkinan anda bersetuju dengan masalah mengenai perubatan yang disenaraikan seperti berikut?

No	Kod	Perkara (Sangat Tidak Bersetuju ◄----------► Sangat Bersetuju)							
Secara kebarangkalian, …									
6.	PV1	…saya mungkin akan dijangkiti penyakit.	1	2	3	4	5	6	7
7.	PV2	…saya mungkin akan dedah kepada masalah perubatan.	1	2	3	4	5	6	7

8.	PV3	…saya mungkin akan terdapat risiko kesihatan akibat tidak memberi perhatian terhadap kesihatan.	1	2	3	4	5	6	7
9.	PV4	…saya mungkin akan bimbang dengan perkhidmatan perubatan yang disediakan adalah tidak cukup baik.	1	2	3	4	5	6	7
10.	PV5	…keadaan fizikal saya sekarang mungkin akan menimbulkan ancaman terhadap kesihatan saya.	1	2	3	4	5	6	7

Bahagian 3: Adakah anda bersetuju dengan perkhidmatan perubatan alternatif berikut?

No	Kod	Perkara	Sangat Tidak Bersetuju ◄----------► Sangat Bersetuju						
11.	RE1	Saya boleh menerima perkhidmatan perubatan di luar negara bagi memastikan kesihatan saya.	1	2	3	4	5	6	7
12.	RE2	Saya boleh menerima perkhidmatan perubatan di luar negara untuk menangangi masalah kesihatan saya.	1	2	3	4	5	6	7
13.	RE3	Saya boleh menerima perkhidmatan perubatan di luar negara untuk mengurangkan tahap risiko dalam masalah perubatan.	1	2	3	4	5	6	7
14.	RE4	Saya boleh memilih perkhidmatan perubatan lain yang tersedia ada di luar negara.	1	2	3	4	5	6	7
15.	RE5	Saya boleh membuat tinjauan mengenai perkhidmatan perubatan di luar negara untuk permulihan.	1	2	3	4	5	6	7

Bahagian 4: Jika terdapat perkhidmatan perubatan alternatif yang realistik, apakah tindak laku anda?

No	Kod	Perkara	Sangat Tidak Bersetuju ◄---► Sangat Bersetuju						
16.	SE1	Jika perlu, saya rasa saya boleh menerima perkhidmatan perubatan di luar negara.	1	2	3	4	5	6	7
17.	SE2	Jika terdapat pilihan yang tersedia, saya rasa saya akan mencari pelbagai perkhidmatan perubatan di luar negara.	1	2	3	4	5	6	7
18.	SE3	Saya rasa saya mempunyai sumber-sumber yang mencukupi untuk menerima perkhidmatan perubatan di luar negara.	1	2	3	4	5	6	7
19.	SE4	Saya berasa saya mempunyai kuasa kawalan yang penuh untuk memilih perkhidmatan perubatan di luar negara.	1	2	3	4	5	6	7
20.	SE5	Saya tidak akan teragak-agak untuk mencari peluang terhadap pelancongan perkhidmatan perubatan di luar negara.	1	2	3	4	5	6	7

Bahagian 5: Jika anda menerima perkhidmatan perubatan di luar negara, apakah pendapat anda dengan kebimbangan yang disebut berikut?

No	Kod	Perkara	Sangat Tidak Bersetuju ◄---► Sangat Bersetuju						
Saya berasa bahawa penerimaan perkhidmatan perubatan di luar negara...									
21	RC1	...akan membawa kesulitan kepada saya. (contohnya, jarak jauh)	1	2	3	4	5	6	7
22.	RC2	..amat mahal.	1	2	3	4	5	6	7
23.	RC3	...memerlukan jangka masa yang panjang.	1	2	3	4	5	6	7
24.	RC4	...memerlukan banyak penyediaan.	1	2	3	4	5	6	7
25.	RC5	...mungkin akan menimbulkan tekanan yang tinggi.	1	2	3	4	5	6	7

Bahagian 6: Sejauh manakah anda sanggup menyertai dalam pelancongan perubatan?

No	Kod	Perkara	Sangat Tidak Bersetuju ◄----------► Sangat Bersetuju						
26.	PM1	Jika perlu, saya berkemungkinan akan menerima perkhidmatan perubatan di luar negara.	1	2	3	4	5	6	7
27.	PM2	Jika perlu, saya akan mempertimbangkan peluang-peluang yang ada untuk menerima perkhidmatan perubatan di luar negara.	1	2	3	4	5	6	7
28.	PM3	Jika perlu, saya bersiap sedia untuk pergi ke luar negara untuk mendapat pemulihanan kesihatan.	1	2	3	4	5	6	7
29.	PM4	Jika terdapat banyak maklumat perubatan yang diperolehi, perluang saya untuk membuat pelancongan perubatan adalah semakin tinggi.	1	2	3	4	5	6	7
30.	PM5	Jika saya yakin bahawa perkhidmatan perubatan di luar negara akan menambah pengalaman yang berharga kepada saya.	1	2	3	4	5	6	7

Bahagian 7: Sejauh manakah anda bersetuju bahawa <u>Malaysia</u> boleh menjadi destinasi pelancongan perubatan yang terkenal?

No	Kod	Perkara	Sangat Tidak Bersetuju ◄----------► Sangat Bersetuju						
31.	DT1	Hospital Malaysia jujur dan ikhlas dalam menangani masalah kesihatan saya.	1	2	3	4	5	6	7
32.	DT2	Saya boleh bergantung kepada hospital Malaysia untuk menyelesaikan masalah perubatan saya.	1	2	3	4	5	6	7
33.	DT3	Saya mempunyai keyakinan terhadap hospital yang diakreditasi oleh pihak berkuasa di Malaysia.	1	2	3	4	5	6	7

34.	DT4	Hospital Malaysia akan berusaha untuk memenui permintaan perubatan saya.	1	2	3	4	5	6	7
35.	DT5	Hospital-hospital Malaysia akan memberi pampasan yang berpatutan sekiranya lawatan perkhidmatan perubatan saya tertimbul di luar jangkaan.	1	2	3	4	5	6	7

Seksyen C: Apakah niat jangkaan anda terhadap pelancongan perubatan di Malaysia?

No	Kod	Perkara (Sangat Tidak Bersetuju ◄----------► Sangat Bersetuju)							
36.	BI1	Saya akan berusaha untuk mendapat perkhidmatan perubatan di Malaysia pada masa depan.	1	2	3	4	5	6	7
37.	BI2	Saya mungkin akan berminat untuk menerima perkhidmatan perubatan di Malaysia.	1	2	3	4	5	6	7
38.	BI3	Saya akan membuat rancangan untuk melawat Malaysia sebagai destinasi perkhidmatan perubatan.	1	2	3	4	5	6	7
39.	BI4	Saya mungkin akan mengesyorkan kepada orang lain atas perkhidmatan penjagaan kesihatan di Malaysia.	1	2	3	4	5	6	7
40.	BI5	Saya mungkin akan mengesyorkan peluang pelancongan perubatan di Malaysia.	1	2	3	4	5	6	7
41.	BI6	Saya akan melawat Malaysia untuk perkhidmatan perubatan berbanding dengan destinasi yang lain.	1	2	3	4	5	6	7

Sila tunjukkan pendapat anda dengan meandakan (√) pada kotak yang disediakan.

Q1 Apakah sumber utama maklumat yang mungkin anda merujuki sebelum membuat keputusan untuk memulakan rawatan perubatan? (Sila tandakan 3 pilihan utama)

- □ Nasihat doktor / pakar-pakar perubatan anda
- □ Cadangan daripada rakan atau ahli keluarga
- □ Laman web pengantara pelancongan perubatan

- Laman web hospital /kemudahan perubatan yang diiktiraf dan diakreditasi
- Komuniti perubatan maya (online)
- Blog pelancongan perubatan
- Testimoni pesakit lain yang menjalani pembedahan di luar negara
- Sumber berita (televisyen, majalah, dan lain-lain)
- Lain-lain ……..

Q2 Sekiranya anda menerima rawatan perubatan di Malaysia, apakah jenis perkhidmatan perubatan yang terpilih? (Sila tandakan 3 pilihan utama)

- Rawatan mata/ lasik
- Pembedahan / rawatan / pemulihan gigi
- Ortopedik (sendi, spina, perubatan sukan dan lain-lain)
- Kardiovaskular/ pembedahan jantung (angioplasty, CABG, pemindahan) dan lain-lain
- Kosmestic/ pembedahan rekonstruktif
- Penyegaraan berat badan, LAP-BAND, masalah gastrik
- Penjagaan reproduktif
- Pembedahan seksual
- Pemeriksaan kesihatan secara menyeluruh
- Rawatan alternatif (akupunktur, kiropratik, dan lain-lain)
- Lain-lain ……..

Q3 Pilih perkhidmatan yang disukai daripada program penjagaan kesihatan dan kesejahteraan di Malaysia. (Sila tandakan 3 pilihan utama)

- Pemeriksaan diagnostik
- Program diet
- Periksaan tekanan, program detoks
- Perkhidmatan penjagaan kulit
- Spa/ Urut/ Terapi thalasso
- Program Meditasi/ Yoga/ Rohani / Holistik
- Terapi psikologi/ Senam

Q4 Apakah jangka masa anda tinggal di Malaysia untuk tujuan pelancongan perubatan?

- 1 – 3 hari
- 3 - 5 hari
- 5 - 15 hari
- 15 - 30 hari
- Melebihi 1 bulan

Seksyen D: Profil Responden

1. Dimanakah negara asal anda? _____

2. Apakah jantina anda?

□ Lelaki □ Perempuan

3. Apakah kumpulan umur anda?

□ 18 – 25 tahun
□ 26 – 35 tahun
□ 36 – 45 tahun
□ 46 – 55 tahun
□ 56 – 65 tahun
□ melebihi 65 tahun

4. Apakah status perkahwinan anda?

□ Bujang
□ Berkahwin
□ Bersekongkol
□ Bercerai / Duda / Terpisah

5. Apakah agama anda?

□ Islam
□ Kristian
□ Buddha
□ Hindu
□ Jews
□ Agama Folk
□ Tidak bersekutu
□ Lain-lain (sila nyatakan) _____

6. Sebelum ini berapa kalikah anda pernah melawat Malaysia?

□ Tidak pernah
□ 1 - 2
□ 3 - 4
□ 5 - 6
□ 7 - 10
□ Melebihi 10

7. Anda berlancong bersama siapa?

□ Sendiri
□ Pasangan / Keluarga
□ Kawan
□ Rakan sekerja
□ Pakej pelancongan
□ Lain-lain (sila nyatakan) _____

8. Berapakah purata pendapatan tahunan isi rumah anda (sebelum cukai dalam wang US)?

□ Kurang daripada US$10,000 □ US$40,000 - US$49,999

□ US$10,000 - US$19,999
□ US$20,000 - US$29,999
□ US$30,000 - US$39,999
□ US$50,000 - US$59,999
□ US$60,000 - US$99,999
□ Melebihi US$99,999

9. Apakah tujuan lawatan anda di Malaysia? (hanya pilih satu)

□ Percutian
□ Perniagaan / Kerja rasmi
□ Rawatan perubatan
□ Melawat rakan dan saudara mara
□ Konvensyen / Pameran
□ Lain-lain (sila nyatakan) _____

10. Adakah anda mempunyai sebarang ulasan mengenai pelancongan perubatan di Malaysia?

_____

Terima kasih.

Penyertaan anda adalah amat dihargai.

调 查 问 卷

亲爱的先生 / 女士，

我目前正在马来西西亚进行一项关于医学旅游的研究。

医学旅游是指在国外旅行时【跨越国际边界】，同时获得保健和 / 或医疗服务。

您目前正在国外（您祖国以外的国家）旅行吗?

是(　　)　　否(　　)

您目前在马来西亚的停留时间是否超过 24 小时，但不超过 12 个月?

是(　　)　　否(　　)

您目前在马来西亚工作吗?

是(　　)　　否(　　)

研究的自愿性质 您参与这项研究完全是自愿的。所有收集到的信息将被严格保密，并仅为本研究的目的。 填写问卷大约需要 20 分钟。

我已被告知这项研究的目的，我同意参与这项调查。

是(　　)　　否(　　)

诚挚致意，

萧爱娜女士（博士研究生）

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个人数据保护声明

根据 2013 年 11 月 15 日所生效的 2010 年个人数据保护法（PDPA）， 拉曼大学(UTAR)特此发出通知，并要求您的同意去收集，记录，存储，使用和保留 您的个人信息。

注意:

9. 您的个人资料的使用目的包括，但不限于：-
    - 用于拉曼大学的任何申请
    - 用于获取任何福利和服务
    - 用于通信目的
    - 用于广告和新闻
    - 用于一般管理和记录目的
    - 用于提高教育价值
    - 用于与拉曼大学教育相关的任何事物
    - 用于公司治理的目的
    - 用于作为拉曼大学员工或者学生申请奖学金或者学生贷款的担保人

10. 您的个人数据可能会被转让/或者披露给第三方或与拉曼大学联合伙伴，但仅限于研究目的。当法律要求必须披露您的数据时，为了遵从法律，您的个人数据可能会被共享及公开。

11. 如果您的个人数据不再被需要，您的个人信息将会被销毁或删除。

12. 在此，拉曼大学会确保您所提供给我们的个人信息的机密性，保护性，安全性和准确性，以确保您的个人信息准确及完整。此外，拉曼大学 将担保您的个人数据不会被用于政治和商业目的。

同意:

7. 通过提交此表格，您在此授权并同意我们处理（包括披露）您的个人数据和您的信息，用于我们的研究及与研究相关的事项。

8. 如果您不同意或随后想撤销您所提供的个人数据，UTAR 将无法履行 UTAR 的责任或就您的目的或其他目的与您联系或为您提供帮助。

9. 若您想更新您的个人数据，您可电邮致 seowan@utar.edu.my。

A 部分：关于您的健康状况

下面列出的是一些在过去 6 个月的时间里，您可能会或可能不会经历的症状。请用“是”或 “否” 来表示您是否有遇到任何相似的症状。

症状	我曾有过这种症状	
疼痛	□ 是	□ 否
恶心	□ 是	□ 否
呼吸困难	□ 是	□ 否
消瘦	□ 是	□ 否
疲乏 / 疲倦	□ 是	□ 否
关节僵硬	□ 是	□ 否
眼睛肿痛	□ 是	□ 否
头痛	□ 是	□ 否
胃痛 / 胃不舒服	□ 是	□ 否
失眠 / 睡眠困难	□ 是	□ 否
头晕	□ 是	□ 否
全身无力	□ 是	□ 否
其他 （请注明）_____		

请为下列每一项问题勾选适合您的答案：

a. 你最近什么时候在自己的国家获得医疗保健的相关服务?

- □ 在过去的 3 个月里
- □ 在过去的 6 个月里
- □ 在过去的 1 年里
- □ 1 年多以前

b. 您是否有针对任何类型的医疗保健而投保的医疗保险？

- □ 是, 在我的祖国 (全部或部分投保)
- □ 是, 在旅游的国家 (全部或部分投保)
- □ 没有医疗保险

c. 你是否曾在国外旅行时，获得任何医疗保健的相关服务?

□ 是
□ 否

B 部分: 您对健康和医疗问题的看法。

下面的每一项都代表了一个常用的选项。没有正确或错误的答案。使用下面的量表里选择 适合您的看法。请在适当的方框内勾选(√) 以表示您对每一题的看法。

强烈反对	非常不同意	不同意	中立	同意	非常同意	强烈同意
1	2	3	4	5	6	7

第 1 部分:医疗问题(如生病或其他疾病)可具有各种影响。一般来说，您如何 认同以下列出的医疗问题可能带来的后果?

No	编码	项目	强烈反对						强烈同意
1.	PS1	如果我的身体健康有问题，那将会严重威胁我的生活质量。	1	2	3	4	5	6	7
2.	PS2	如果我的身体健康有问题， 这将引起我对财务状况的担忧。	1	2	3	4	5	6	7
3.	PS3	如果我的身体健康有问题，这将会对我身边的亲人造成困扰。	1	2	3	4	5	6	7
4.	PS4	如果我的身体健康有问题，我将改变我的健康观念。	1	2	3	4	5	6	7
5.	PS5	如果我的身体健康有问题，那么将是非常糟糕的情况。	1	2	3	4	5	6	7

第 2 部分：您是否认同以下所面对各种医疗相关的问题?

No	编码	项目	强烈反对						强烈同意
6.	PV1	我有可能会面对被疾病感染的风险。	1	2	3	4	5	6	7
7.	PV2	我有可能会身处在疾病感染的风险里。	1	2	3	4	5	6	7
8.	PV3	如果我不关心自己的健康状况，我有可能会患上疾病的风险。	1	2	3	4	5	6	7
9.	PV4	我有可能会面对医疗所提供的服务不够好 / 不足的问题。	1	2	3	4	5	6	7
10.	PV5	我目前的身体状况有可能会对我的身体健康增加负担。	1	2	3	4	5	6	7

第 3 部分:您如何认同以下医疗服务的替代方案?

No	编码	项目	强烈反对						强烈同意
11.	RE1	我可以去国外做医疗检查，以确保我的健康状况。	1	2	3	4	5	6	7
12.	RE2	我可以在国外进行医疗服务以解决健康问题。	1	2	3	4	5	6	7
13.	RE3	我可以在国外寻求医疗服务，以减少医疗风险。	1	2	3	4	5	6	7
14.	RE4	我可以寻找国外所提供的医疗服务，以得到更好的治疗。	1	2	3	4	5	6	7
15.	RE5	我可以获得国外医疗信息，以改善我的健康状况。	1	2	3	4	5	6	7

第 4 部分：您如何回应以下医疗方案？

No	编码	项目	强烈反对						强烈同意
16.	SE1	如果有必要的话，我可以接受其他国家的医疗服务。	1	2	3	4	5	6	7
17.	SE2	如果有选择的话，我想我会在国外寻找更好的医疗服务。	1	2	3	4	5	6	7
18.	SE3	我想我应该有足够的财力在国外接受医疗服务。	1	2	3	4	5	6	7
19.	SE4	我觉得我有绝对的控制权选择在国外的医疗服务。	1	2	3	4	5	6	7
20.	SE5	如果有机会，我想我会毫不犹豫在国外寻求医疗旅游服务。	1	2	3	4	5	6	7

第 5 部分：您如何认同以下有关寻求国外医疗服务的问题?

No	编码	项目	强烈反对						强烈同意
21.	RC1	我认为去国外接受医疗服务是很不方便(例如距离因素)。	1	2	3	4	5	6	7
22.	RC2	我认为去国外接受医疗服务很昂贵。	1	2	3	4	5	6	7
23.	RC3	我认为去国外接受医疗服务是很费时的。	1	2	3	4	5	6	7
24.	RC4	我认为去国外做医疗服务需要付出太多的努力和精神去安排。	1	2	3	4	5	6	7
25.	RC5	我认为在国外接受医疗服务可能会引起一定的压力。	1	2	3	4	5	6	7

第 6 部分：根据下面的陈述，您愿意在何种程度上通过参与医疗旅游来采取预防措施？

No	编码	项目	强烈反对						强烈同意
26.	PM1	如果有需要，我可能会从国外接受医疗服务。	1	2	3	4	5	6	7
27.	PM2	我会考虑在国外选择医疗旅游。	1	2	3	4	5	6	7
28.	PM3	我宁可在到国外进行疗养(如健康复苏、医疗康复)。	1	2	3	4	5	6	7

29.	PM4	我对国外的医疗服务了解得越多，就越会考虑出国治疗。	1	2	3	4	5	6	7
30.	PM5	我确信在国外接受治疗时，我将获得良好的经验。	1	2	3	4	5	6	7

第 7 部分：您认同马来西亚可以成为值得信赖的医疗旅游目的地吗?

No	编码	项目	强烈反对						强烈同意
31.	DT1	马来西亚的医院将会诚恳和全心全意地处理我的医疗担忧。	1	2	3	4	5	6	7
32.	DT2	我可以依靠马来西亚的医院来解决我的医疗问题。	1	2	3	4	5	6	7
33.	DT3	我对马来西亚获得医疗认可和认证的医院有信心。	1	2	3	4	5	6	7
34.	DT4	马来西亚的医院会不遗余力的满足足我的医疗需求。	1	2	3	4	5	6	7
35.	DT5	如果医疗进展出现问题，马来西亚医院会给我各种补偿。	1	2	3	4	5	6	7

C 部分：您在马来西亚的医疗旅游行为意图是什什么?

No	编码	项目	强烈反对						强烈同意
36.	BI1	在将来，我会到访马来西亚以寻求医疗服务。	1	2	3	4	5	6	7
37.	BI2	我可能有兴趣在马来西亚接受医疗服务。	1	2	3	4	5	6	7
38.	BI3	我将来会计划到马来西亚寻求医疗服务。	1	2	3	4	5	6	7
39.	BI4	我相信我可以向其他人推荐马来西亚的医疗保健服务。	1	2	3	4	5	6	7
40.	BI5	我将推荐其他人到马来西亚进行医疗旅游活动。	1	2	3	4	5	6	7
41.	BI6	我将优先选择前往马来西亚，而不是其他国家进行医疗服务。	1	2	3	4	5	6	7

请在下列项目选择最适当的答案：

1. 在决定开始医疗旅行之前，您可能会咨询哪些主要的信息来源?(选择 3 项)

- □ 您的家庭医生 / 医生的建议
- □ 来自朋友或家人的口碑
- □ 医疗旅游中介的网站
- □ 被认可的医院 / 享有名誉的医疗机构的网站
- □ 在线/网上医疗社区
- □ 医学旅游博客
- □ 阅读其他在国外接受手术 / 医疗的案例
- □ 新闻来源(电视、杂志等)
- □ 其他_____

2. 如果你要去马来西亚就医，你最关注哪种医疗服务？(选择 3 项)

- □ 视力治疗 / 激光矫正
- □ 牙科手术 / 治疗 / 恢复性手术
- □ 骨科(关节、脊柱、运动医学等)
- □ 心血管 / 心脏手术(血管成形术、冠状动脉搭桥术、心脏移植等)
- □ 整容 / 整形外科 / 重建手术
- □ 减重管理 / 胃箍 / 胃绕道手术
- □ 生育保健
- □ 变性手术
- □ 全面体检
- □ 替代疗法(针灸、脊椎按摩療法等)
- □ 其他_____

3. 由马来西亚提供的医疗保健和福利项目里,请选择您喜欢的福利。(选择 3 项)

- □ 全面的医疗检查诊断服务 / 综合诊断服务(健康检查)
- □ 美容 / 饮食食管理计划
- □ 压力释放 / 排毒护理
- □ 皮肤护理服务
- □ 水疗中心 / 按摩 / 海水浴疗法
- □ 禅修 / 瑜伽 / 心灵疗法 / 综合方案
- □ 强身健体的活动 / 康复（与生活方式有关的） / 心理治疗

4. 您认为您会为了医疗旅游选择在马来西亚停留多少天？

- □ 1 - 3天
- □ 3 - 5天
- □ 5 - 15天
- □ 15 - 30天
- □ 超过 1 个月

D 部分：受访者个人资料料

1. 您的国籍是 _____

2. 您的性别

□ 男 □ 女

3. 您的年龄

□ 18 - 25岁
□ 26 - 35岁
□ 36 - 45岁
□ 46 - 55岁
□ 56 - 65岁
□ 65 岁及以上

4. 您的婚姻状态

□ 单身
□ 已婚
□ 同居
□ 离婚 / 丧偶 / 分居

5. 您的宗教信仰

□ 基督教
□ 穆斯林林
□ 佛教徒
□ 印度教徒
□ 犹太教
□ 民民间宗教
□ 无无神论者
□ 其他 （请注明）
_____

6. 您之前到访过马来西亚多少次?

□ 从来没有
□ 1 - 2次
□ 3 - 4次
□ 5 - 6次
□ 7 - 10次
□ 超过 10 次

7. 您这次和谁一起结伴旅游？

□ 独自出游
□ 伴侣 / 家人人
□ 朋友
□ 同事
□ 参加旅行团
□ 其他 （请注明）
_____

8. 您平均家庭年收入(缴税前)， 以美元(USD)为准

□ 少于$10,000
□ $10,000 - $19,999
□ $20,000 - $29,999
□ $30,000 - $39,999
□ $40,000 - $49,999
□ $50,000 - $59,999
□ $60,000 - $99,999
□ 超过 $99,999

9. 您此次访问马马来西西亚的主要目目的(请只选择一个)

□ 休闲度假
□ 公务出差
□ 医疗保健
□ 探亲访友

□ 参加会议 / 展览

□ 其他 （请注明_____

10. 您对马来西亚的医疗旅游有何建议?

_____

非常感谢您的参与

Appendix 3.2

Convergent Validity Result for Pilot Study

Constructs	Items	Loadings	AVE	CR	CA
Perceived Severity	PS1	0.723	0.620	0.890	0.847
	PS2	0.691			
	PS3	0.822			
	PS4	0.829			
	PS5	0.859			
Perceived Vulnerability	PV1	0.801	0.598	0.880	0.831
	PV2	0.844			
	PV3	0.797			
	PV4	0.796			
	PV5	0.606			
Self-Efficacy	SE1	0.719	0.546	0.857	0.793
	SE2	0.749			
	SE3	0.676			
	SE4	0.787			
	SE5	0.760			
Response Efficacy	RE1	0.820	0.655	0.905	0.868
	RE2	0.828			
	RE3	0.819			
	RE4	0.839			
	RE5	0.737			
Response Cost	RC1	0.601	0.538	0.850	0.811
	RC2	0.724			
	RC3	0.863			
	RC4	0.841			
	RC5	0.595			
Protection Motivation	PM1	0.748	0.575	0.871	0.816
	PM2	0.757			
	PM3	0.757			
	PM4	0.799			
	PM5	0.731			
Destination Trust	DT1	0.796	0.638	0.898	0.858
	DT2	0.816			
	DT3	0.786			
	DT4	0.817			
	DT5	0.779			
Behavioural Intention	BI1	0.857	0.689	0.930	0.910
	BI2	0.828			
	BI3	0.834			
	BI4	0.838			
	BI5	0.789			
	BI6	0.832			

Note: AVE = Average Variance Extracted; CR = Composite Reliability; CA = Cronbach's Alpha

Appendix 4.1

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	15.600	38.049	38.049	15.600	38.049	38.049
2	3.237	7.896	45.945	3.237	7.896	45.945
3	2.770	6.757	52.702	2.770	6.757	52.702
4	1.938	4.726	57.428	1.938	4.726	57.428
5	1.627	3.968	61.395	1.627	3.968	61.395
6	1.353	3.300	64.695	1.353	3.300	64.695
7	1.064	2.594	67.289	1.064	2.594	67.289
8	.964	2.352	69.641			
9	.854	2.082	71.723			
10	.764	1.863	73.586			
11	.740	1.805	75.392			
12	.733	1.788	77.179			
13	.662	1.614	78.794			
14	.588	1.434	80.228			
15	.516	1.259	81.487			
16	.479	1.168	82.655			
17	.455	1.110	83.765			
18	.445	1.085	84.850			
19	.415	1.011	85.861			
20	.381	.929	86.790			
21	.367	.895	87.685			
22	.355	.865	88.550			
23	.352	.858	89.409			
24	.342	.834	90.243			
25	.336	.819	91.062			
26	.326	.795	91.857			
27	.305	.743	92.600			
28	.287	.700	93.300			
29	.275	.671	93.970			
30	.268	.653	94.623			
31	.256	.625	95.248			
32	.247	.603	95.851			
33	.237	.579	96.430			
34	.228	.556	96.986			
35	.208	.506	97.493			
36	.202	.492	97.985			
37	.191	.465	98.450			
38	.178	.433	98.883			
39	.173	.422	99.306			
40	.168	.409	99.715			
41	.117	.285	100.000			

Extraction Method: Principal Component Analysis.

Appendix 4.2
Normality Analysis Result for Each Items

	Skewness	Kurtosis
	Statistic	Statistic
PS1	-.727	-.161
PS2	-.630	-.967
PS3	-.440	-1.205
PS4	-.746	.144
PS5	-.778	.323
PV1	-.724	.103
PV2	-.693	-.006
PV3	-.724	.062
PV4	-.788	.285
PV5	-.124	-.698
RE1	-.668	.452
RE2	-.659	.463
RE3	-.689	.380
RE4	-.691	.403
RE5	-.580	.089
SE1	-.579	.504
SE2	-.460	.184
SE3	-.385	-.318
SE4	-.602	-.088
SE5	-.806	.513
RC1	-.529	-.200
RC2	-.707	.091
RC3	-.459	-.335
RC4	-.455	-.593
RC5	-.402	-.391
PM1	-.559	.007
PM2	-.607	.040
PM3	-.474	-.356
PM4	-.605	.079
PM5	-.722	.276
DT1	-.534	.295
DT2	-.368	-.107
DT3	-.432	-.046
DT4	-.393	-.205
DT5	-.459	-.161
BI1	-.524	.266
BI2	-.529	.215
BI3	-.452	-.142
BI4	-.421	-.102
BI5	-.458	-.057
BI6	-.540	-.087
Valid N (listwise)		

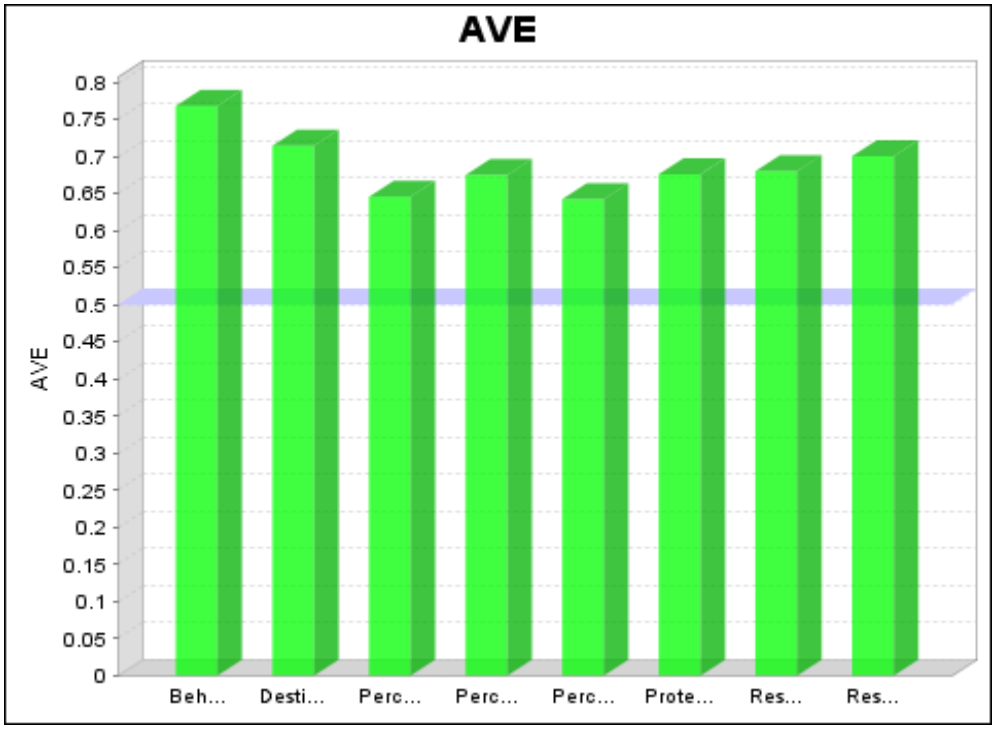
Note. BI=Behavioural Intention; DT=Destination Loyalty; PM=Protection Motivation; PS=Perceived severity; PV=Perceived vulnerability, RE=Respond Efficacy; SE=Perceived Self-Efficacy; RC=Respond Cost

Appendix 4.3:
Original Output for Convergent Validity and Reliability
Outer Loading

	BI	DT	SE	PS	PV	PM	RC	RE
BI1	0.907							
BI2	0.880							
BI3	0.872							
BI4	0.878							
BI5	0.853							
BI6	0.867							
DT1		0.860						
DT2		0.861						
DT3		0.829						
DT4		0.859						
DT5		0.816						
PM1						0.840		
PM2						0.822		
PM3						0.821		
PM4						0.828		
PM5						0.800		
PS1				0.810				
PS2				0.787				
PS3				0.845				
PS4				0.824				
PS5				0.840				
PV1					0.893			
PV2					0.894			
PV3					0.829			
PV4					0.818			
PV5					0.508			
RC1							0.827	
RC2							0.821	
RC3							0.856	
RC4							0.865	
RC5							0.749	
RE1								0.863
RE2								0.858
RE3								0.844
RE4								0.830
RE5								0.787
SE1			0.814					
SE2			0.795					
SE3			0.781					
SE4			0.829					
SE5			0.797					

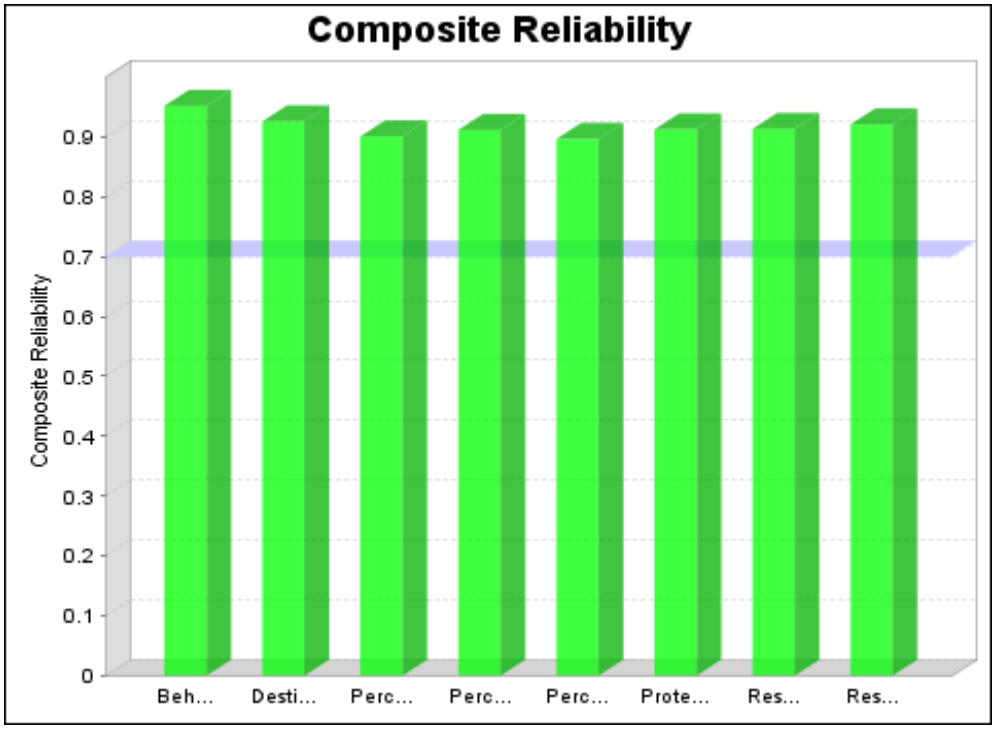
Note. BI=Behavioural Intention; DT=Destination Loyalty; PM=Protection Motivation; PS=Perceived severity; PV=Perceived vulnerability, RE=Respond Efficacy; SE=Perceived Self-Efficacy; RC=Respond Cost

Average Variance Extracted (AVE)



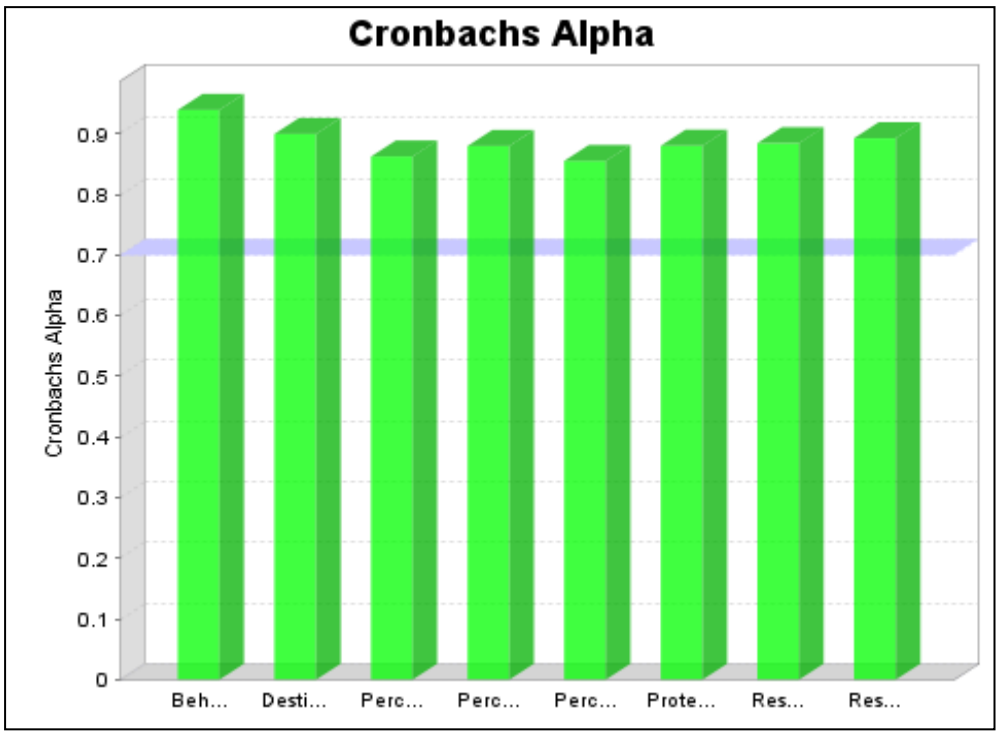
	AVE
Behavioural Intention	0.768
Destination Trust	0.714
Perceived Self-Efficacy	0.646
Perceived Severity	0.675
Perceived Vulnerability	0.642
Protection Motivation	0.676
Respond Cost	0.680
Respond Efficacy	0.700

Composite Reliability (CR)



	Composite Reliability
Behavioural Intention	0.952
Destination Trust	0.926
Perceived Self-Efficacy	0.901
Perceived Severity	0.912
Perceived Vulnerability	0.897
Protection Motivation	0.913
Respond Cost	0.914
Respond Efficacy	0.921

Cronbach Alpha (CA)



	Cronbachs Alpha
Behavioural Intention	0.940
Destination Trust	0.900
Perceived Self-Efficacy	0.863
Perceived Severity	0.880
Perceived Vulnerability	0.855
Protection Motivation	0.880
Respond Cost	0.884
Respond Efficacy	0.893

Appendix 4.4

Cross Loadings

	BI	DT	PC	SE	PS	PV	PMT	RE
BI1	**0.884**	0.747	0.379	0.489	0.349	0.474	0.532	0.461
BI2	**0.858**	0.748	0.376	0.451	0.367	0.497	0.533	0.435
BI3	**0.842**	0.710	0.394	0.490	0.377	0.488	0.525	0.443
BI4	**0.874**	0.704	0.372	0.434	0.334	0.443	0.497	0.383
BI5	**0.854**	0.710	0.339	0.417	0.320	0.416	0.496	0.350
BI6	**0.860**	0.710	0.411	0.468	0.346	0.417	0.524	0.394
DT1	0.682	**0.849**	0.416	0.520	0.339	0.466	0.474	0.426
DT2	0.713	**0.850**	0.380	0.467	0.305	0.474	0.505	0.415
DT3	0.701	**0.827**	0.383	0.436	0.352	0.413	0.479	0.408
DT4	0.710	**0.856**	0.424	0.457	0.338	0.436	0.528	0.387
DT5	0.720	**0.830**	0.378	0.530	0.386	0.515	0.577	0.460
PM1	0.544	0.541	0.335	0.540	0.376	0.448	**0.830**	0.498
PM2	0.470	0.483	0.285	0.545	0.362	0.436	**0.815**	0.480
PM3	0.536	0.535	0.314	0.503	0.369	0.484	**0.823**	0.488
PM4	0.437	0.458	0.321	0.490	0.352	0.479	**0.830**	0.495
PM5	0.467	0.476	0.334	0.516	0.400	0.467	**0.798**	0.526
PS1	0.154	0.164	0.245	0.102	**0.650**	0.125	0.141	0.099
PS2	0.112	0.096	0.246	0.052	**0.612**	0.053	0.126	0.040
PS3	0.197	0.180	0.262	0.114	**0.666**	0.105	0.202	0.121
PS4	0.381	0.409	0.350	0.475	**0.788**	0.599	0.459	0.465
PS5	0.406	0.398	0.341	0.433	**0.814**	0.596	0.448	0.423
PV1	0.469	0.482	0.371	0.477	0.448	**0.853**	0.490	0.455
PV2	0.442	0.468	0.383	0.495	0.441	**0.865**	0.487	0.480
PV3	0.408	0.458	0.394	0.486	0.540	**0.812**	0.464	0.469
PV4	0.486	0.488	0.424	0.487	0.430	**0.812**	0.509	0.459
PV5	0.276	0.243	0.156	0.356	0.242	**0.617**	0.258	0.317
RC1	0.374	0.389	**0.830**	0.407	0.274	0.376	0.322	0.333
RC2	0.329	0.354	**0.832**	0.285	0.304	0.356	0.268	0.283
RC3	0.364	0.404	**0.816**	0.372	0.383	0.413	0.394	0.328
RC4	0.326	0.350	**0.683**	0.171	0.365	0.276	0.267	0.203
RC5	0.252	0.263	**0.582**	0.105	0.280	0.207	0.163	0.109
RE1	0.403	0.415	0.272	0.593	0.277	0.456	0.477	**0.826**
RE2	0.375	0.363	0.283	0.555	0.336	0.425	0.471	**0.845**
RE3	0.393	0.419	0.282	0.589	0.332	0.474	0.493	**0.821**
RE4	0.349	0.395	0.270	0.617	0.340	0.411	0.504	**0.815**
RE5	0.427	0.437	0.334	0.638	0.385	0.488	0.530	**0.774**
SE1	0.443	0.478	0.338	**0.808**	0.385	0.501	0.506	0.598
SE2	0.429	0.475	0.322	**0.797**	0.385	0.478	0.496	0.597
SE3	0.425	0.439	0.220	**0.769**	0.258	0.451	0.464	0.535
SE4	0.382	0.433	0.317	**0.821**	0.298	0.446	0.503	0.604
SE5	0.442	0.457	0.330	**0.788**	0.336	0.440	0.553	0.585

Note. BI=Behavioural Intention; DT=Destination Loyalty; PM=Protection Motivation; PS=Perceived severity; PV=Perceived vulnerability, RE=Respond Efficacy; SE=Perceived Self-Efficacy; RC=Respond Cost

Appendix 4.5

Original Output for Fornell and Larcker Criterion Result

	BI	DT	SE	PS	PV	PM	RC	RE
Behavioural Intention	0.876							
Destination Trust	0.823	0.845						
Perceived Self-Efficacy	0.520	0.566	0.804					
Perceived Severity	0.473	0.513	0.504	0.821				
Perceived Vulnerability	0.504	0.554	0.560	0.672	0.801			
Protection Motivation	0.594	0.603	0.658	0.522	0.579	0.822		
Respond Cost	0.330	0.383	0.216	0.327	0.321	0.252	0.825	
Respond Efficacy	0.479	0.525	0.744	0.512	0.572	0.656	0.191	0.837

Heterotrait-Monotrait (HTMT) Criterion Result

	BI	DT	SE	PS	PV	PM	RC	RE
Behavioural Intention								
Destination Trust	0.895							
Perceived Self-Efficacy	0.576	0.642						
Perceived Severity	0.517	0.574	0.572					
Perceived Vulnerability	0.542	0.607	0.642	0.765				
Protection Motivation	0.648	0.672	0.752	0.585	0.639			
Respond Cost	0.359	0.422	0.233	0.370	0.321	0.269		
Respond Efficacy	0.521	0.584	0.847	0.570	0.642	0.739	0.204	

Note. BI=Behavioural Intention; DT=Destination Loyalty; PM=Protection Motivation; PS=Perceived severity; PV=Perceived vulnerability, RE=Respond Efficacy; SE=Perceived Self-Efficacy; RC=Respond Cost

Appendix 4.6

Original Output from Bootstrapping Direct Effects

	Original Sample (O)	Sample Mean (M)	Standard Error (STERR)	T Statistics (|O/STERR|)	P Values
Destination Trust -> Behavioural Intention	0.731	0.731	0.029	24.809	0.000
Perceived Self-Efficacy -> Protection Motivation	0.294	0.296	0.053	5.579	0.000
Perceived Severity -> Protection Motivation	0.100	0.100	0.037	2.729	0.003
Perceived Vulnerability -> Protection Motivation	0.173	0.174	0.039	4.489	0.000
Protection Motivation -> Behavioural Intention	0.153	0.153	0.033	4.620	0.000
Protection Motivation -> Destination Trust	0.603	0.603	0.028	21.211	0.000
Respond Cost -> Protection Motivation	0.047	0.049	0.028	1.673	0.047
Respond Efficacy -> Protection Motivation	0.278	0.276	0.049	5.706	0.000

Original Output from Bootstrapping Indirect Effects

	Original Sample (O)	Sample Mean (M)	Standard Error (STERR)	T Statistics (|O/STERR|)	P Values
Destination Trust -> Behavioural Intention					
Perceived Self-Efficacy -> Behavioural Intention	0.175	0.176	0.033	5.349	0.000
Perceived Self-Efficacy -> Destination Trust	0.177	0.178	0.033	5.405	0.000
Perceived Self-Efficacy -> Protection Motivation					
Perceived Severity -> Behavioural Intention	0.060	0.059	0.022	2.703	0.003
Perceived Severity -> Destination Trust	0.060	0.060	0.023	2.676	0.004
Perceived Severity -> Protection Motivation					
Perceived Vulnerability -> Behavioural Intention	0.103	0.103	0.024	4.299	0.000
Perceived Vulnerability -> Destination Trust	0.104	0.105	0.024	4.260	0.000
Perceived Vulnerability -> Protection Motivation					
Protection Motivation -> Behavioural Intention	0.440	0.441	0.025	17.689	0.000
Protection Motivation -> Destination Trust					
Respond Cost -> Behavioural Intention	0.028	0.029	0.017	1.670	0.048
Respond Cost -> Destination Trust	0.028	0.030	0.017	1.650	0.050
Respond Cost -> Protection Motivation					
Respond Efficacy -> Behavioural Intention	0.165	0.164	0.029	5.667	0.000
Respond Efficacy -> Destination Trust	0.167	0.166	0.029	5.745	0.000
Respond Efficacy -> Protection Motivation					

Note. BI=Behavioural Intention; DT=Destination Loyalty; PM=Protection Motivation; PS=Perceived severity; PV=Perceived vulnerability, RE=Respond Efficacy; SE=Perceived Self-Efficacy; RC=Respond Cost

Appendix 4.7

Ethical Clearance Letter

UNIVERSITI TUNKU ABDUL RAHMAN
Wholly Owned by UTAR Education Foundation (Company No. 578227-M)

Re: U/SERC/106/2019

11 July 2019

Dr Chen I-Chi
Department of Marketing
Faculty of Business and Finance
Universiti Tunku Abdul Rahman
Jalan Universiti, Bandar Baru Barat
31900 Kampar, Perak

Dear Dr Chen,

Ethical Approval For Research Project/Protocol

We refer to your application for ethical approval for your research project (PhD student's project) and are pleased to inform you that your application has been approved under expedited review.

The details of your research project are as follows:

Research Title	Investigating International Tourists' Behavioural Intention for Medical Tourism in Malaysia: The Influence of Destination Trust, Threat and Coping Appraisals
Investigator(s)	Dr Chen I-Chi Prof Dr Choong Chee Keong Ms Seow Ai Na (UTAR Postgraduate Student)
Research Area	Social Sciences
Research Location	Klang Valley; Penang; Melaka
No of Participants	384 participants
Research Costs	Self-funded
Approval Validity	11 July 2019 - 10 July 2020

The conduct of this research is subject to the following:

(1) The participants' informed consent be obtained prior to the commencement of the research,

(2) Confidentiality of participants' personal data must be maintained; and

(3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

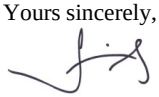
Kampar Campus : Jalan Universiti, Bandar Barat, 31900 Kampar, Perak Darul Ridzuan, Malaysia
Tel: (605) 468 8888 **Fax**: (605) 466 1313
Sungai Long Campus : Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor Darul Ehsan, Malaysia
Tel: (603) 9086 0288 **Fax**: (603) 9019 8868
Website: www.utar.edu.my

Should you collect personal data of participants in your study, please have the participants sign the attached Personal Data Protection Statement for your records.

The University wishes you all the best in your research.

Thank you.

Yours sincerely,



Professor Ts Dr Faidz bin Abd Rahman
Chairman
UTAR Scientific and Ethical Review Committee

c.c Dean, Faculty of Business and Finance
Director, Institute of Postgraduate Studies and Research

PUBLICATIONS

Seow, A. N., Choong, Y. O., & Chan, L. M. (2016). Travel intentions among foreign tourists for medical treatment in Malaysia: An empirical study. *Procedia-Social and Behavioral Sciences*, *224*, 546-553. https://doi.org/10.1016/j.sbspro.2016.05.434

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Seow, A. N., Choong, C. K., Chen, I. C., & Choong, Y. O. (2021). Can protection motivation theory explain the perception of international tourists on medical tourism? *Journal of Hospitality and Tourism Insights, 5*(2), 394-412. https://doi.org/10.1108/JHTI-10-2020-0189

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