



Green Attitudes and Behaviours of Western Guests at Green Hotels in Phuket, Thailand

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ชื่อวิทยานิพนธ์	ทัศนคติและพฤติกรรมสีเขียวของนักท่องเที่ยวชาวตะวันตกที่มีต่อโรงแรมสีเขียวในจังหวัดภูเก็ต
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บทคัดย่อ

การวิจัยในครั้งนี้มีวัตถุประสงค์เพื่อตรวจสอบความสัมพันธ์เกี่ยวกับทัศนคติสีเขียวและพฤติกรรมสีเขียวของนักท่องเที่ยวชาวตะวันตกที่มีต่อโรงแรมสีเขียวในจังหวัดภูเก็ต ซึ่งได้รับอิทธิพลจากคุณสมบัติส่วนบุคคลของนักท่องเที่ยวของโรงแรมซึ่งได้แก่ เพศ การศึกษา และรายได้ แนวโน้มการรับรู้สภาพแวดล้อมทั่วโลกมีอิทธิพลต่อพฤติกรรมการเดินทางของนักท่องเที่ยว โรงแรมหลายแห่งได้ใช้การรับรองการปฏิบัติที่เป็นมิตรกับสิ่งแวดล้อมเพื่อลดผลกระทบต่อสิ่งแวดล้อมและเพื่อเพิ่มมูลค่าการแข่งขันสำหรับนักท่องเที่ยวที่มีพฤติกรรมที่เป็นมิตรกับสิ่งแวดล้อม พบหลักฐานในวรรณกรรมที่สนับสนุนความจริงที่ว่านักท่องเที่ยวที่เข้าพักที่โรงแรมสีเขียวโดยทั่วไปมีทัศนคติที่เป็นมิตรกับสิ่งแวดล้อมและปฏิบัติตามกิจกรรมที่เป็นมิตรกับสิ่งแวดล้อม อย่างไรก็ตามยังไม่ชัดเจนว่าทัศนคติที่เป็นมิตรต่อสิ่งแวดล้อมของพวกเขาส่งผลต่อการตัดสินใจของลูกค้าโรงแรมหรือความตั้งใจที่จะเข้าพักที่โรงแรมสีเขียวโดยเฉพาะกับกลุ่มลูกค้าตะวันตกในประเทศไทย

ดังนั้นการศึกษานี้ผลลัพธ์ได้มาจากแบบสอบถามลูกค้าโรงแรมสีเขียวชาวตะวันตกจำนวน 400 ราย จากโรงแรม 36 โรงแรมในจังหวัดภูเก็ตที่ได้รับการรับรองจากมูลนิธิใบไม้เขียว การสำรวจพบว่าอายุและเพศไม่ส่งผลต่อทัศนคติและพฤติกรรมสีเขียวของลูกค้า แต่ได้รับผลกระทบจากการศึกษา นอกจากนี้ยังพบว่าสภาพแวดล้อมทั่วโลกทัศนคติของโรงแรมสีเขียว พฤติกรรมการมีส่วนร่วมสีเขียวและความตั้งใจที่จะเข้าพักมีความสัมพันธ์กัน สิ่งนี้ชี้ให้เห็นว่าในการออกแบบกลยุทธ์ทางการตลาดเพื่อดึงดูดลูกค้าชาวตะวันตกที่ตั้งใจจะเข้าพักที่โรงแรมสีเขียว โรงแรมควรคำนึงถึงทัศนคติและพฤติกรรมที่เป็นมิตรต่อสิ่งแวดล้อมของลูกค้าซึ่งได้รับผลกระทบจากการศึกษาของแต่ละบุคคล

คำสำคัญ: ทัศนคติสีเขียว, ทัศนคติต่อโรงแรมสีเขียว, คุณลักษณะสีเขียว, พฤติกรรมสีเขียว

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Abstract

This study aims to examine the relationship of green attitudes and behaviours of Western Guests at green hotels in Phuket, Thailand which were influenced by the hotel guests' personal demographics including their gender, education, and income. Global environmental awareness trends have an influence on tourists' travelling behaviours. Many hotels have achieved green practice certification to reduce their negative impact on the environment and to enhance their competitive value for tourists with eco-friendly behaviour. Evidence was found in the literature that supported the fact that tourists who stay at green hotels, generally have environmentally friendly attitudes and practise eco-friendly activities. However, it was unclear if their green attitudes affected the hotel guests' decisions or intentions to stay at green hotels specifically with the group of Western visitors in Thailand.

Therefore, this study aimed to investigate the connection between green attitudes and behaviours leading to the guests' intentions to stay at green hotels. The results have been drawn based on a questionnaire of 400 Western tourists from 36 Green Leaf certified hotels in Phuket, Thailand. It found that age and gender had not affected the guests' green attitudes and behaviours, but had been affected by their education. It also found that the global environment, green hotel attitude, green participation behaviour, and intention to stay were individually related. This indicated that, in designing marketing strategies to attract Western tourists intent on staying at green hotels, the hotels should pay attention to the guests' green attitudes and behaviours which were impacted by education.

Keywords: green attitude, green hotel, green attributes, green behaviour

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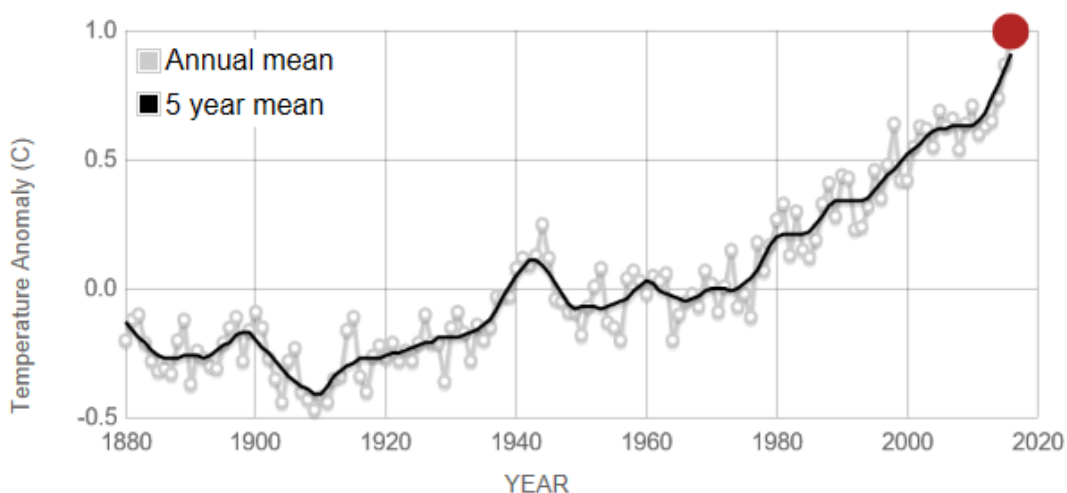
CHAPTER 1

INTRODUCTION

1.1 Statement of the problem

At this time, environmental issues such as the global warming crisis have become a significant problem affecting all human and world economies. Global warming is increasing global surface temperatures commonly known as the greenhouse effect. Naturally, the earth has its own system for the sun's energy to bypass the earth's atmosphere in order to warm the earth's surface and retain some heat on earth to sustain life. However, the excess heat from the sun is not able to be reflected back to space as much as it used to be, due to the heat being trapped by massive amounts of greenhouse gases in the atmosphere. (Department of Environment and Energy, Australian Government, 2017). As a result, world temperatures have been continuously rising steadily in recent years.

Figure 1.1 Global Land / Ocean Temperature Index

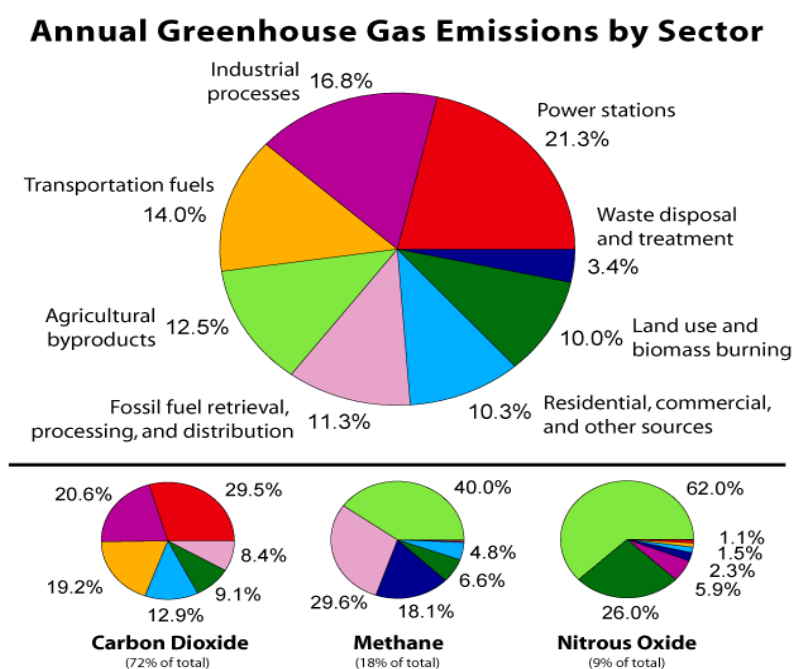


Source: NASA's Goddard Institute for Space Studies (GISS) (2016).

This graph illustrates the change in global surface temperatures from 1880 to 2016. From 1980, the temperatures rose dramatically and continued increasing until 2016. Consequently, the year 2016 had become the warmest on record for the past 136 years. (Source: NASA/GISS).

Greenhouse gases are significantly composed of Carbon Dioxide, Methane, and Nitrous Oxide which are caused as a direct result of human activity.

Figure 1.2 Annual Greenhouse Gas Emissions by Sector



Source: Global Warming Facts (2000)

This chart shows greenhouse gases produced by human activities in the year 2000. The majority of greenhouse gases are made up of power stations (21.3%) followed by industrial processes (16.8%), and finally transportation fuels (14%). The major producer of Carbon Dioxide is power stations (29.5%) while Methane and Nitrous Oxide are predominantly produced by the agricultural sector.

As can be seen in Figure 1.2, the critically harmful greenhouse gases are caused mainly from power stations which generate the most Carbon Dioxide. Carbon Dioxide is notably caused by burning fossil fuels for generating electricity as well as petrol for vehicles. (Global Warming Facts, 2000). NASA's Jet Propulsion Laboratory (2017) revealed that Carbon Dioxide levels had increased drastically to 405.92ppm in January 2017, being the highest Carbon Dioxide levels ever recorded in history at that time. Progress, technology and an increase in world population since the 1950s has resulted in much higher electricity consumption significantly adding to the ever-increasing Carbon Dioxide levels. According to a report issued from the

Energy Policy and Planning Office (EPPO), Ministry of Energy Thailand (2016), the industrial sector is the highest consumer of electricity followed by the business and household sectors.

Hotels, which fall under the business sector, currently have the second-highest electricity usage after department stores, but their consumption is consistently increasing. Over and above their prominent contribution to increased Carbon Dioxide levels, the hotel business sector is also responsible for generating extremely high amounts of solid waste. (Bohdanowicz, 2005).

A study by Bohdanowicz (2005) mentions that more than one kilogram of waste per guest per day is generated from hotel visitors. And that only 30 percent of that waste can be reused or recycled. (Graci and Kuehnel, 2016). This relates directly to the data accumulated in 2013, which found that of 26.8 million tons of solid waste in Thailand, only 7.2 million tons were managed in a correct recycling process that was further reduced to only 5.1 million tons of actual recyclable materials. The remaining balance of 19.6 million tons of incorrectly disposed waste became an aggravated contributor to the never-ending increase of toxic Carbon Dioxide levels. (Silapasuwan, 2014).

Similarly, the hotel sector is also responsible for extremely high water consumption levels. Another study identifies that people on holiday will, generally, use more water, especially when staying in hotels. In addition, the hotels themselves use a lot of water to ensure visitor satisfaction, as well as in their operational activities such as swimming pools, gardens, laundry and other cleaning requirements. (Gossling et al, 2012). This information is supported by a report from Earth Check Research Institute (2013) which revealed that water consumption in hotels per guest per night is even higher than in the agricultural sector.

Global warming is harmfully affecting human beings by damaging our environment, climate, health, etc. A study by The Union of Concerned Scientists (UCSUSA) (2017) emphasizes the major consequences of global warming accordingly:

- 1) Increased risk of coastal flooding from rising sea levels due to melting ice in both the north and south pole.

- 2) Rising temperatures are causing harsher and prolonged droughts which affect the growth of trees and crops which, in turn, creates a shortage of food supplies.

3) Seasons are changing, either starting earlier or later and becoming shorter or longer, which are resulting in either more droughts or more flooding.

4) A noticeable increase in the severity and power of inclement weather such as storms and tornadoes, as a direct result of climate change.

5) Intensive heat waves are occurring more frequently, resulting in more people suffering from heat strokes, heat exhaustion and dehydration.

6) Increasing temperatures are having a major impact on the land as well as in the oceans. Coral reefs are also being destroyed, which is decreasing the oxygen supply that is so essential for human survival.

7) Electricity consumption is growing rapidly as a result of extreme hot and cold weather conditions. Freshwater consumption is also reaching crisis levels due to rising heat and an increase in drought-affected regions. (UCSUSA, 2017).

The destructive impact of increased human consumption of natural resources such as energy and water, as well as a lack of effective waste disposal methods (responsible for the dangerously high greenhouse gases and increased global warming), more and more people all around the world, are becoming far more concerned about protecting the environment, which is so critical to ensure the survival and wellbeing of humankind.

The hotel industry, worldwide, is also becoming more aware of the damage they are causing to the environment, and many are now striving to adjust or renovate their businesses to become more environmentally friendly. To be considered a “Green Establishment”, hotels and businesses need to implement good business practices such as energy-saving measures, effective waste management including reducing, reusing and recycling procedures, and the use of more organic products. These, in turn, help the business to reduce costs, enhance their company image, as well as become active participants in the effort to save our planet. The study of Ying-Chang Chen and Yu-Ta Chen (2012) confirmed that existing green hotels have reduced operating costs, increased intangible assets, and have developed credible brand reputations. In view of increasing public concerns about environmental conservation, green hotels were also found to have a much higher appeal to tourists and prospective guests, as well as a greater advantage in current market competitive trends.

In this regard, several hotels in Thailand have participated in environmental initiatives such as ISO 14001, Green Globe, and the Green Leaf Foundation. Green Leaf is a Thai organisation which co-operates in conjunction with the United Nations Environment Program (UNEP), the Tourism Authority of Thailand (TAT), the Electricity Generating Authority of Thailand (EGAT), the Metropolitan Waterworks Authority (MWA), the Thai Hotels Association (THA), and the Association for Development of Environmental Quality (ADEQ), (TAT, 2010).

Currently, the Green Leaf Foundation's membership consists of 219 Thai hotels who have been awarded green certification. These hotels divided by region are Southern (88), Central (62), Eastern (28), Western (19), Northern (12) and North-Eastern (10). This excludes green hotels currently undergoing Green Leaf assessment for certification. (Green Leaf Foundation, 2017). This is a clear indication of Thailand and its hotel and tourism industry's intent to become active, participating, conserving contributors dedicated to reducing global warming, decreasing emissions, and taking responsible and sustainable action to preserve our natural resources by joining the green movement to protect our environment.

1.2 Research Questions

Although hotels are progressing on green concerns in terms of guests, is the environmental crisis important enough to motivate visitors to stay at green hotels with a willingness to co-operate with the hotel's green mission? Many studies are concentrated on tourists' attitudes toward the behaviour of decision-making, or staying intentions, or a readiness to pay for green attributes in green hotels.

For example, the studies of Han and Kim (2010), Tilikidou and Delistavrou (2014), Han, Hsu, and Lee (2009) are focused on decision-making and intentions to stay at green hotels. Whereas, the study of Litaa, Suryaa, Ma'rufb and Syahrula (2013) were more centralised on the willingness of guests to pay more for green hotel attributes. Some studies have paid attention to green participation among hotel guests with green hotel attributes such as Verma, and Chandra (2016).

Only a few studies have even considered the relationship of guest attitude and behaviour, such as the study of Mongkol and Vannavanit (2015) whose main focus was domestic

tourism. There was little or no information regarding international tourists' attitude and behaviour in terms of green participation available at the time of this study.

As a result, this research set out to develop a questionnaire that would further investigate the relationship between guests' green attitudes and behaviours and also examine how differences in their personal demographics affected their decisions. The purpose of our research was to gain a better understanding of green hotel guests' attitudes towards both, the global environment and green hotels, as well their individual behaviour regarding green participation and their intention to continue staying in green hotels.

According to the studies, the research questions could be developed as follows:

1.2.1. How do green hotel guests' green attitudes and behaviours differ across personal demography?

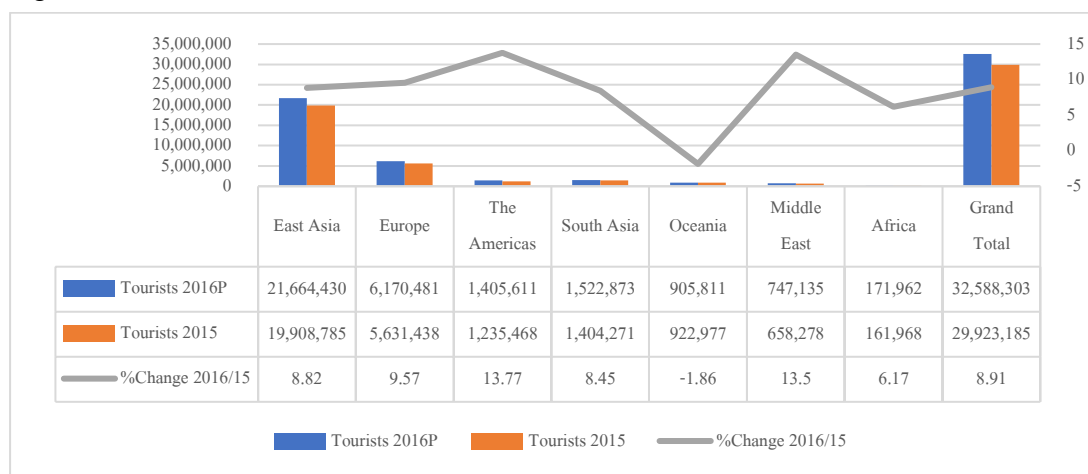
1.2.2. Are green hotel's guests' global environment and green hotel attitudes related?

1.2.3. Is the green hotel guest's participation behaviour and intention to stay in green hotels related?

1.2.4. Are green hotel guests' attitudes and behaviours related?

The tourists that were selected for the research were international visitors, specifically Westerners. As can be seen from the report on international tourist arrivals of people who visited Thailand in 2016, East Asia was the highest with 21,664,430 people. This was followed by Europeans (6,170,481), South Asians (1,522,873), and the Americas (1,405,611), (Department of Tourism, 2017). Although the number of East Asians was the highest, in terms of the growth rate from the previous year's record (2015), the number of American tourists had increased by 13.77%. Similarly, the Middle East had increased by 13.50%, and Europeans by 9.57%. Accordingly, the improvement of the accumulated growth rate of Western visitors (Americans and Europeans) is much higher and, therefore, focusing on attracting more Western visitors will be far more significant for Thailand tourism.

Figure 1.3 International Tourist Arrivals to Thailand in 2016



Source: Department of Tourism, Thailand (2017)

The southern part of Thailand seems to be attracting more international visitors in recent years. In 2012, the south had 12,357,474 international visitors but, by 2015, this number had increased to a massive 23,098,813 people. Bangkok has always been the number one destination for foreigners visiting Thailand, but since 2014, the number of visitors in Bangkok has dropped to about 18,142,499 people. It had a brief spike of 20,869,916 visitors in 2015 but has still been consistently lower with tourists preferring to travel more in the southern regions nowadays.

Figure 1.4 Trends of International Visitors Arrival to Thailand from 2011-2015 (By region)



Source: TAT Intelligence Center (2017)

Phuket is most definitely the major attraction in the south that foreign tourists choose to visit. The number of tourists who visit Phuket is more than double when compared to other provinces such as Krabi, Phang Nga, or Surat Thani. This is a clear indicator that Phuket now plays an important role in international tourism in Thailand.

Figure 1.5 Trends of International Visitors Arrival to Thailand from 2009-2015 (By province)



Source: National Statistic Office of Thailand (2017)

This research attempted to ascertain the connections between hotel guests' gender, attitude toward global environment, green hotel attitude, green participation behaviour, and intentions to stay, in order to assist green hotels and other hotels (who may decide to implement green concepts in future) to better understand what factors will play an important role in increasing prospective future visitors' intentions to stay in their establishments. These results should also enlighten and benefit the Hotel and Tourism industry when creating new marketing strategies and designing communicative campaigns to successfully attract their desired target market, while also reducing the intensity of competitiveness.

1.3 Research Objective:

- 1) To analyse the relationship between demographics and green attitudes and behaviours of the green Western guests.
- 2) To analyse the relationship between global environmental attitudes and green hotel attitudes of Western guests.
- 3) To analyse the relationship between green participation behaviours and intentions to stay in green hotels by Western guests.
- 4) To analyse the relationship between green attitudes and green behaviours of Western guests.

1.4 Definition:

Green Hotel is “environmentally-friendly properties whose managers are eager to institute programs that save water, save energy and reduce solid waste—while saving money—to help protect our one and only earth” (Green Hotel Association, 2016).

Green Attributes are the hotel’s environmentally-friendly practices for customers to represent the hotel’s eco-friendly quality and characteristic that help to conserve the natural environment.

Green Attitude is environmentally friendly attitudes which are used in the evaluation of natural environment and determinants influencing its quality (McIntyre and Milfont, 2016).

Green Behavior is “the individual behaviour has a substantial impact on the environment such as climate change, pollution, biodiversity loss and natural resource depletion” (European Commission, 2012).

CHAPTER 2

LITERATURE REVIEW

2.1 Green Hotel Concept

Green Hotel is the concept of having environmentally friendly management teams who help to protect the planet and bring back a good clean environment for the locale, (Green Hotel Association, 2016). The Tourism Authority of Thailand advises that the green hotels contain 10 basic practices including recycling of used consumer items; eliminating junk mail; minimising paper wastage; recycling of electronic equipment; educating themselves on standard green principles - such as ‘turning it off’ when not in use, repairing rather than replacing, digitising documentation, and creating green interiors; as well as networking with other green-minded companies, and promoting freecycling. The green concept is a long-term strategy to help protect our environment from destructive human behaviour. It also helps to reduce operating costs in the industry (TAT, 2010).

2.1.1 Green Leaf Foundation

Many hotels in Thailand have already achieved green certification, while others are currently in the process of implementing green practices based on the green concept into their organizations, the success of which will also lead them to become approved as certified green hotels. As can be seen from the Directory of Green Hotels provided by the Green Leaf Foundation Thailand, the number of hotels applying for membership and/or certification approval has been steadily increasing every year, (Green Leaf Foundation, 2016). This confirms that more and more hotels in Thailand are focusing their attention on worldwide environmental concerns and are making concerted efforts to improve their operating procedures to minimise further damage to the environment.

In addition to accepting social responsibility for their operations, hotels are also becoming aware that there are other advantages to becoming part of the green movement. One research indicates that the greening of hotel operations also benefits the individual business by reducing their operating costs, increasing their competitive advantage, improving employee loyalty, enhancing guest reservations as well as observing regulatory compliance and reduced risk management. (Graci & Dodds, 2008)

The Green Leaf Foundation (GLF) was officially established on the 17th March 1998, at the same time that members of the Board of Environmental Promotion of Tourism Activities (BEPTA) announced their vision for integrating global environmental initiatives into the hotel and tourism industry (Green Leaf Foundation, 2016).

The organisations currently working in conjunction to develop this integration are 1) the Tourism Authority of Thailand (TAT), 2) the Thai Hotels Association (THA), 3) the United Nations Environment Program UNEP, 4) the Demand Side Management Project of the Office of Electricity Generating Authority of Thailand, (EGAT) 5) the Association for the Development of Environmental Quality (ADEQ), and 6) the Metropolitan Water Works Authority (MWA), (Green Leaf Foundation, 2016).

The objectives of the Green Leaf Foundation include:

- 1) Distribution of knowledge and information, providing education and research to entrepreneurs, understanding how to work efficiently with the environment.
- 2) Encouraging business operators in Thai tourism to develop standards, improve efficiency, and implement environmentally friendly operations.
- 3) Developing and incorporating Environmental Management Standards to improve operational efficiency in the activities of all tourism associated businesses and their subcontractors.

The Green Leaf program was introduced specifically to advise and assist hotels to improve their efficiency in saving energy, water, and other natural resources. It focuses on facilitating the efficient use of energy and natural resources under the theme “Save Money, Save the Environment.” The certification program was developed to provide a guided direction of the best environmental practices for all hotels and to support the efforts of those who are already contributing to protecting the environment via efficient management of energy, water and natural resources. It was designed to help lower operational costs and, thereby, allow guests to benefit from these cost-savings as well. The program also encourages participatory activities by guests in the effort of saving energy and natural resources.

The process of evaluating a hotel’s environmental standards involves 11 factors concerning rules, regulations, and/or legislation regarding environmental restrictions as follows.

Section 1: Policy and Standards of Environmental Practice

Section 2: Waste Management

Section 3: Efficiently Use of Energy and Water

Section 4: Purchasing

Section 5: In-door Air quality

Section 6: Air Pollution

Section 7: Noise Pollution

Section 8: Quality of Water

Section 9: Storage and Management of fuel, gas, and toxic waste

Section 10: Impact on Eco-system

Section 11: Cooperation with Community and Local Organizations

Scores are calculated from the questionnaires and the results of audits which are then compared to the Standards Ranking developed from 20 reference hotels. Green leaf hotels will be identifiable by their acquired 1 to 5 rating.

The Green Leaf Foundation has successfully developed Environmental Standards and Management procedures which are implemented throughout the hotel's various departments. This shows the hotel's compliance with the required environmental practices and developmental responsibilities. The Green Leaf Foundation's standards, being practised by the 219 hotels who received Green Leaf Certification in 2016, are now encouraging other hotels to also implement and upgrade their own environmental standards, which ultimately leads to their improved sustainability and efficiency.

2.1.2 Green Hotel in Thailand

The location of the 219 Green Leaf certified hotels throughout Thailand, divided by region is Southern (88), Central (62), Eastern (28), Western (19), Northern (12) and North-Eastern (10). The Southern region, which currently has the highest number of Green Leaf certified hotels, has clearly taken the lead in terms of adapting its operations in order to actively protect the environment. Of their 88 hotels, 36 of them are located in Phuket Province which, on its own, is higher than most of the other regions, (Green Leaf Foundation, 2016). It is interesting to note that the current trend of visitors' preferences to holiday in the South of Thailand coincides

with the successful implementation of a wide choice of environmentally friendly hotels in Phuket Province.

2.2 Personal Demography and Green Attitudes and Behaviours

To conceive and differentiate hotel guests' green attitudes and behaviours, personal demographic characteristics are decidedly significant, (Han et al, 2011). There are many studies available that mention personal demographics such as gender, age, income and education affecting the guest's attitudes and behaviours.

Based on the social-role theory studied on male and female attitudes and behaviours, it showed that there are definite differences between males and females in the role of society. The study led to evolutionary psychology that identified the patterns of interest and behaviours being extremely varied between males and females, (Archer, 1996; Buss, 1996; Saad and Gill, 2000). When making decisions, responsibility and compliance tend to be found more in females, while dependence and aggression are found more in males (Saad and Gill, 2000). Further to the decision-making process, the study of Han and Ryu (2006) indicated that social roles differ greatly between genders with specific reference to upscale restaurant settings. In terms of environmental attitudes and behaviours, females seem to be far more concerned and are willing to purchase environmentally friendly products much more than males do. It was found that females appear to be much more focused on human relations and other people's welfare than their male counterparts. (Eagly, 1987; Laroche et al., 2001).

Age is another important component of environmental attitudes and behaviours. The study of Roberts (1996) supported that differences in eco-friendly environmental concern was distinctly obvious when comparing groups of older and younger guests. His study concluded that older guests had far more environmental awareness and were much more likely to make eco-friendly decisions in regard to purchases, than younger members of society. In addition, the findings of Han et al. (2011) suggest that older female guests, in particular, display more eco-friendly behaviours and their optimistic attitudes about green hotels, in turn, lead to a natural acceptance to pay more for the environmentally-friendly amenities.

In terms of education and income, there are vast amounts of literature confirming the influence that education and income have in respect to eco-friendly attitudes and behaviours especially with decision-making and eco-friendly purchasing. Guests who have a higher

education have more knowledge and experience to develop their purchasing behaviours from the expectation of products or services which is similar to guests who have a higher income, (Keaveney and Parthasaraty, 2001). Roberts (1996) also agreed that guests who have higher education degrees and higher incomes tend to be more aware of the environment and therefore lean more towards eco-friendly activities such as the purchasing of green products.

As a result, the above literature is identified as being of significant relevance for assessing the demography of guests' attitudes and behaviours and which, therefore, leads to the development of the first hypothesis as follows:

***Hypothesis 1:** There is a significant difference between the demographics of green hotels' guests and their green attitudes and behaviours.*

2.3 Guests' Green Attitudes

In terms of guests' attitude on green implementation, this paper will divide the observations into two sections, namely Definition of Attitude and Attitudes Structure Theory.

2.3.1 Definition of Attitude

Attitude is the representation of human emotion to show feelings such as like or dislike, love or hate, agreement or disagreement, etc., which is used in the evaluation of people's positive or negative responses (Eagly & Chaiken, 1998). There are a large number of opinions recorded by psychologists regarding the definition of an attitude. However, from more than 100 interpretations from various psychologists, Citeman (2010) has gleaned an accurate attitude definition separated into 4 major distinctions.

The first is that attitude is used to present people's feelings on something they find to be negative or positive, antagonistic or confrontational. This definition views attitudes as feelings or an evaluated reaction to objects.

The second meaning is a complicated idea that combines a willingness to respond to the objects. A concept of this meaning states that the attitude, in terms of learned predispositions, will respond to an object or class of objects in a consistently favourable or favourable way.

In the third meaning, the attitude is separated into three components that are about the process of emotional perception to create motivation in personal individual

perspectives. The components include a knowledge component, an emotional component, and a behavioural component. These components explain people's characteristics being impacted by attitudes which are related to emotion and cognition, which then become a behaviour.

The last meaning shows the consumers' perceptions of the object or product from the different beliefs of each object attribution. Guests may see many benefits from the product and if guests believe in all benefits, they will create a strong positive attitude on the product. In some cases, other guests may also believe in all product benefits in all attributes as the first guest believes, but it does not mean that they will also receive the same strong positive attitude as the first guests did. They may evaluate the product in other aspects of all attributes and get less or more positive attitudes. (Citeman, 2010)

From the definitions above, the characteristics of attitude can be concluded accordingly: 1) Attitude is something that can be learned. 2) Attitude itself can create stability. 3) Attitude is a self-evaluation to show things that are good-bad or liked-disliked. 4) Attitude allows a person to be ready to respond to their attitude purpose. 5) Attitude can define the relationship between person and person, person and object, and person and situation. (Keavchaoum, 2006).

2.3.2 The Structure of Attitudes

Attitude structure, originally, has been divided into 3 components, which are mentioned in Attitude Definition above. Rosenberg and Hovland (1960) have analysed these three components that include:

- 1) **Cognitive Component:** This component is related to a person's knowledge, belief, opinion toward the attitude object.
- 2) **Affective Component:** This component reflects the feelings or emotions of an individual person such as likes-dislikes, or agreement-disagreement on the attitude object.
- 3) **Behavioral Component:** This component is about the tendency or readiness of an individual person to act or react based on the influence of the attitude. (McLeod, 2009)

The studies of Kretch, Crutchfield and Pallachey (1962), Triandis (1971) and Hogg and Vaughan (2005) revealed the concept of three-component attitude had been agreed by many psychologists (Huskinson and Haddock, 2006).

Some psychologists support 2 components of Attitude Structure, which consists of a Cognitive component and an Affective component. Behaviour can be the cause of attitude or the effect of the attitude. Psychologists who support these two components include Katz (1950), Rosenberg and Hovland (1960), Giner-Sorolla (2001) (Auwanno,1985). Giner-Sorolla (2001) states that the affective component creates a more accessible attitude than the cognitive component. However, the original data can be unpinned from the attitudes which make attitudes that are based on affective components inaccessible (Huskinson and Haddock, 2006).

There are psychologists who believe that the only component that contributes to attitude is the effect or feeling for an object. The psychologists who support this model include Bem (1970), and Fishbein and Ajzen (1975) (Auwanno,1985).

2.3.3 Global Environment and Green Hotel Attitudes

Eco-friendly attitudes are related to individual belief, knowledge, or opinion assessment toward the value of environmental protection. Environmental attitudes have an effect on consumers' purchasing decisions (Mohd Noor et al., 2014).

Stefanica and Butnaru (2015) who studied tourists' environmental perceptions justified that environmental beliefs and tourists' feelings were related. The environment must be conserved and improved to prevent it from having a negative impact on tourism. Environmental issues that tourists' are concerned about include global warming, pollution, waste, limited natural resources or biodiversity annihilation. They suggested that it was not only the environmental organization, tourist department, or government that should be concerned about the issues that affect overall tourism, but the entire society should take responsibility and play a part in preventing the negative impacts of environmental depletion. Moreover, the ecological organizations as well as the hotel and tourism business sectors should contribute to a system of ecological management (Stefanica and Butnaru, 2015).

Hence, the above literature leads to the development of the second hypothesis as follows:

Hypothesis 2: There is a significant relationship between the attitude toward global environment and the green hotel attitude of green hotel guests.

2.4 Relationship of Green Attitudes and Green Behaviour

2.4.1 The Effect of Attitude to Behaviour

The relationship between attitude and behaviour can be ascertained by the Hierarchy of Effects model which was established in 1961 by Lavidge and Steiner. It is used for marketing communication terms including six steps to formulate the attitude on a product to enhance a guests' buying behaviour (Solomon, 1995). The six steps include:

1) Awareness (Cognitive): Awareness happens when the guests see product advertising. There is no guarantee that guests will be aware of specific product information, as there is much advertising from different channels and different competitors.

2) Knowledge (Cognitive): Product information is easily available nowadays with many channels (such as the internet, tv adverts, direct marketing) providing consumers with detailed product knowledge.

3) Liking (Affect): This relates directly to the emotion of a proposed customer's feeling to like or dislike the product advertised.

4) Preference (Affect): This relates to making the product appealing and attractive to result in the guest preferring your product above all others available.

5) Conviction (Behaviour): This step is essential to ensure that your product or activity is in accordance with the proposed visitors' convictions and beliefs.

6) Purchase (Behaviour): Once the above processes have been met, the customers will make decisions and act on purchasing or participating in accordance with the product they feel suits them best. This process is represented as behaviour.

With reference to the attitude and behaviour theory, the result of each component will be evaluated with the hierarchy of effects theory. Hierarchy of Effects illustrates the relation of Cognition, Affect and Behaviour components. If the cognition and effect are greater than behaviour, it shows the high involvement of guests to buy products. Guests who are conducted at this level will tend to choose the product that solves their problems. The step will begin with the guests' belief in the product according to their knowledge. Then the guests will analyse the belief and knowledge to form their feelings on the product. After that, both processes will accumulate to the behaviour of buying the product or participation in the mission. Product information on guests is limited to this state. People must usually try a product first before developing a

confirmed feeling for a product. This level can lead to brand loyalty for consumers. Since behaviour becomes greater than cognition and affect, the process of attitude is formed by behaviour. That can mean guests have no information or very limited information about the product. Therefore, they must try it first before it can transform to be knowledge or feelings (Mansfield, 2014). Lavidge and Steiner's Hierarchy of Effects model (1961) can be integrated with the study of Koshkaki and Solhi (2016) which investigated the role of negative emotion in the decision-making process, to enable further exploration on the relation of attitude and behaviour.

2.4.2 The Connection of Attitudes and Behaviours

There is some conflict of opinion in the correlation between attitude and behaviour. According to many theories, attitudes should logically describe behaviour. However, there are some studies that provide a different idea. The study of LaPiere (1934), cited in Dockery & Bedeian (1989) (p.9) shows that the attitudes (Cognitive and Affective Components) do not always influence behaviour. LaPiere did research on service discrimination towards Chinese people. He conducted his study while on a journey through the Western United States, visiting 67 hotels and 184 restaurants with a Chinese couple. The results determined that they were only refused service at one establishment, while all the other establishments had treated them politely. Six months later, he wrote to each of the hotels and restaurants they had visited during his research, politely requesting information from each establishment about their policies with regard to Chinese guests. The unexpected response was that 92% of 128 establishments did not welcome Chinese guests. This result presented an exceptional difference in the behaviour portrayed by the establishments. When given a choice their preference is not to accept Chinese custom, but in the event of unexpected arrivals, their behaviour appears to remain polite and acceptable.

Despite the fact that the Chinese couple had generally received polite welcomes upon arrival in the Western United States, the negative response received about intended visits by Chinese people concludes, therefore, that the attitude may not always match the behaviour. On the other hand, Kutner, Wilkins and Yarrow (1952) indicated that LaPiere's study is inconclusive based on the fact that the staff who attended the Chinese couple in all probability would not be the same people who had responded to the written enquiry. In addition, it was inferred that the

negative attitudes of the individual responders at that time, cannot be applied as a true representation of all hospitality hosts' attitudes within the Western United States (Lord, Lepper, & Mackie, 1984). Furthermore, the fact that the Chinese couple had received polite reception on arrival, in no way confirms that it was a true or accurate representation of the service providers feeling or attitude regarding their presence, at that time. (Fazio and Roskos-Ewoldsen, 1986).

Another research that examines differences between attitude and behaviour was carried out by Corey (1937), cited in Aarstad, J. (2013). He studied the cheating attitude against the real cheating behaviour among students. A true-false exam was designed and implemented, with the students being advised that they would score themselves. The students were unaware that their exams had already been scored by teachers, while the students were taking a break. The study intended to use the differences between the scores awarded by the students and the teachers as a confirmed indicator that cheating took place. The results determined the lack of relationship between attitude and behaviour. It was expected that the students with a high attitude (i.e. weak students) would naturally cheat to raise their scores. However, regardless of the attitude, the results reflected that, when presented with the opportunity, all the students had displayed cheating behaviour.

On the contrary, these findings do not imply that there is never a connection between attitude and behaviour at all. Some researchers support the traditional concept of this relationship. For example, Kelley and Mirer (1974) conducted research based on a pre-election attitude and actual voting behaviour. The data was collated from respondents who were on the four-president election voting roll from 1952 to 1964. The results found that 85% of the respondents' pre-election attitude provided an accurate prediction of their voting behaviour. This confirmed that there was no difference between their actual voting behaviour and their pre-election attitude (Kelley and Mirer, 1974). This was again reflected in the study of Seligman et al. (1979) who carried out a survey on household attitude and energy consumption behaviour after the Save Energy campaign was released during the energy crisis. They found a distinct parallel between the households' personal attitude for their well-being and comfort and their behavioural consumption of air-conditioning. Further indicating definite similarities between attitude and behaviour.

2.4.3 Green Attitudes and Green Behaviours

In terms of the green concept aspect, many studies seem to agree with the connection between attitude and behaviour. For example, there is a study on customer' beliefs and their attention to choosing green hotels conducted on a Greek market by Tilikidou and Delistavrou (2014). The result found that guests who have a powerful belief in the green concept and environment scoop preferred to choose to stay in green hotels. However, the green hotels with matching data on guests' budget and location are difficult to find (Tilikidou and Delistavrou, 2014). This is supported by the study of Han et al. (2011). They found that the beliefs on the green concept will impact on eco-friendly behaviour for the group of older age female guests. The guests preferred to choose green hotels, would recommend to others, and even pay more for the green amenities (Han et al., 2011).

The study of Han and Yoon (2015) is focused on guests' intention when choosing green hotels by using the Model of Goal-directed Behaviour (MGB). It is found that the intention of selecting green hotels is related to eco-friendly behaviour (Han and Yoon, 2015). Mongkol and Vannavanit (2015) researched a group of tourists in Thailand relating to the topic of Guest's attitude impacting on their intention to stay and facilities usage in green hotels. Mongkol and Vannavanit also agree on the relationship of attitude and behaviour that the tourists who have a strong focus on social responsibility and environmental issues, will select to stay at the green hotels and accept some inconveniences that may occur during a stay at green hotels. Even the study of Noor et al. (2014), also confirmed that tourists who have a high attitude on the impact of environmental crisis will prefer the hotel that can implement a high degree of green practices as well.

However, the relation between eco-friendly attitudes and green behaviours sometimes are affected by other factors. Gronau and Brohlburg (2011) designed a study on Cyprus travellers toward their green perception and behaviour. The result came out that the travellers who contain green perception, likely selected staying at green hotels, but the green concept is not the major influence on how they choose the hotel. The priority factor is the price, and if the guests need to pay more for the green attribute, the quality of overall service must be better (Gronau and Brohlburg, 2001). It was similar to Afrouz (2012) investigation. Afrouz (2012) found that inconveniences experienced during a stay provide an important impact on

future intention to stay at green hotels. No matter how serious the environmental crisis, it will not affect the intention to select a green hotel, because, in the long run, people definitely seem to be more concerned about their comfort rather than the environmental problems (Mongkol and Vannavanit, 2015).

For marketing purposes, it is shown that the lack of knowledge is related to fear emotion, which is much affected by buying decisions. With the results, it could be concluded that marketing practitioners should be concerned with marketing communications based on emotion to motivate the buying decision (Koshkaki and Solhi, 2016). Therefore, the hierarchy of effect model can be adapted to investigate the attitude on the global environment and green hotels, whether it affects guests' behaviour toward intention to stay and practising behaviours.

According to the literature reviews discussed regarding the green attitudes and green behaviours above, the following hypotheses were formulated:

***Hypothesis 3:** There is a significant relationship between attitude toward global environment and green participation behaviour of green hotel guests.*

***Hypothesis 4:** There is a significant relationship between attitude toward global environment and intention to stay at a green hotel of green hotel guests.*

***Hypothesis 5:** There is a significant relationship between green hotel attitude and green participation behaviours of green hotel guests.*

***Hypothesis 6:** There is a significant relationship between green hotel attitude and intention to stay at a green hotel of green hotel guests.*

2.5 Guests' Green Behaviour

2.5.1 Definition of Behaviour

There are various definitions of behaviour from different sources. The first meaning defined by the Aeimsupasit (1998) mentioned that human behaviour is the ability during a human being's life (prenatal, infancy, childhood, adolescence, and adulthood) including mental, physical, emotional, and social activities. The behaviours are ruled by culture, society, values, morals, ethics, and genetics.

Human behaviour in Boyd's opinion (2017) is that it is used to indicate a person's actions and conduct. Behaviour can be determined by observing it directly or indirectly.

Direct observations get studied in response to a work environment. Indirect observations are used to gain awareness of decision-making processes and attitudes (Khanka, 2009)

In terms of science, Gregory (2015) believes that the endocrine and nervous systems affect human behaviours. The more complex the nervous system is, the more capable it is to accept new challenges and transform to acceptable behaviours.

In conclusion, Alberto and Troutman (2003) explain that “Behaviour is every action by a person who can be seen or heard. Behaviour must be defined in a way that is both observable and measurable so that everyone working with the child has a good understanding of what the behaviour should look and sound like”

2.5.2 Behaviour Model

To understand human behaviour, Fogg (2009) developed the behaviour model. The model suggests that there are three elements comprising Motivation, Ability, and Trigger that all must be met for behaviour to occur. The model highlights three elements, of which each element also has subcomponents. The model includes three Core Motivators (Motivation), six Simplicity Factors (Ability), and three Triggers.

The first element is “Motivation”. The Core Motivators are involved with Sensation, Anticipation, and Belonging. Each of these is split into 2 opposite sides. Sensations are defined by pleasure and pain, which are a powerful motivation core. People tend to react to the current happening on what it will cost them. Anticipation is defined by hope and fear. Hope is the expectation of good things that may happen. Fear is the expectation of bad things. Belonging is defined by acceptance and rejection. This influences social behaviour, and whether society will accept or reject our behaviour.

The second element is “Simplicity” (Ability). It required 6 factors to optimize the ability of behaviour consisting of time, money, physical effort, brain cycles, social deviance, and non-routine. For example, if there is no time to act, some things will be difficult. Or money makes behaviour that has cost required to be simpler to happen. Some behaviour needs physical effort to support the behaviour such as travelling to another country, if it has to walk, the behaviour will not be simple to happen, but it takes transportation it will make the behaviour easier because it does not require much physical effort. Brain cycles are the factors that tell the behaviour that requires thinking hard, it will not be affected by the behaviour. Or if behaviour

needs to be socially deviant, it makes the behaviour not simple to happen. As well as with routine behaviour, people are familiar with the routine activities and tend to overdo it again and again. However, when the behaviour is not routine, then people will not feel that it is simple. All 6 factors are linked like a chain, if one of the factors is failing, it will affect other factors as well.

The third element is “Triggers”. A trigger is something that leads the behaviour to be activated. Triggers result from a relation between motivation and ability factors, which are defined with sparks, facilitators, and signals. A spark is for motivating behaviour. A facilitator is used to make the behaviour easier. A signal is for directing or reminding to activate the behaviour. The spark refers to people who have the high ability but less or no motivation in an activity. To make an activity to be happening, the motivation plan must be added to this kind of person. The facilitator explains that people who have high motivation but a low ability need a facilitator to support an activity. The signal refers to people who have both motivation and ability, therefore the behaviour will be performed easily. The signal doesn’t require motivating people or providing a facilitator, it just requires a reminder to make the behaviour occur. (Fogg, 2009)

In terms of behaviour, the focused aspects are about intentions to stay at green hotels and a willingness to participate in green missions during a stay at green hotels.

2.5.3 Guests’ Green Participation

In respect of tourists who had stayed in the green hotels, there were various opinions formed while being accommodated at the green hotel and participating in its green attributes. This part is to show the behaviours of green hotels’ guests and how they practised on green hotel facilities.

According to the case study of Verma and Chandra (2016) researched on hotel guests who stay in 4 and 5-star hotels in Uttar Pradesh, India, it reveals that there is a prime interest of guests for staying in green hotels. The hotels where are implemented green practice such as using eco-friendly light bulbs and recycle bins in the guest rooms and the hotel area is preferred by the hotels’ guests. However, not all the green practices can satisfy the guests such as refillable shampoo dispenser and towel reuse program, it results in the guests feeling that it does not look hygienic (Verma and Chandra, 2016).

In contrast, the study from Bruns-Smith et al., (2015) researched 120,000 guests of 100 hotels in the United States mentions that 88 percent of the hotel guests were willing to take

part in a towel and linen reuse program as well as a water-saving program. This means guests were pleased with the green program and showed a willingness to follow the program. However, the hotel's service and facilities including food and beverage quality had been stronger factors to make guests more satisfied than the green implementation (Bruns-Smith et al., 2015).

Although guests were concerned about the environmental impact and were willing to attend the eco-friendly practices, the convenience during a stay at the hotel is of major importance. The study of Mongkol and Vannavanit (2015) agrees that guests paid attention to the green mission and realized the significance of environmental responsibility. Even though they were likely to support the green hotel concept, they still showed concerns in terms of meeting their comfort requirements (Mongkol and Vannavanit, 2015).

As can be seen that there is some conflict between the studies. Those are supported by the research of Kim et al. (2016) which was conducted from green hotel guests in Korea. It showed that there was some complexity in guest satisfaction toward green hotel attributes. The green practices were not completely related to guest satisfaction unlike the service and product quality throughout the hotel's star rating (Kim et al., 2016).

The guests' perception from several nationalities, concludes that as long as the price, luxury and comfort have not been removed from the guest experience in order to implement the green concept, guests are willing to participate in the hotel green practice (Kovalijova and Chawla, 2013).

2.5.4 Guests' Intention to Stay

There are several types of research which studied guests' decision making in hotel selection. The results of many hotel research studies are mostly concerned with factors such as the room price, hotel amenities and services, hotel location, or hotel reputation.

For example, a study from Gunasekaran and Anandkumar (2012) who investigated tourists in Puducherry, India, mentioned four important factors. The four factors included 'homely atmosphere', 'value for money', 'local touch' and 'guest-host relationship'. Baruca and Civre (2012) also state that the factors that influence consumer decision-making in hotel choice consist of 'hotel product', 'received information', 'and personal preferences'. The study was conducted from international tourists in Portoroz, Slovenia. Similarly, the study from Choorichom (2011) who collected information at Lanta Yai Island, Krabi, Thailand reported the

result that there are five major factors which influenced the tourists. The five factors include 'Safety and Security', 'Value', 'Staff Service Quality', 'Location' and 'Room & Facilities Quality'.

Referring to the above research, there is some similarity in the findings that shows the guests' concern about the product which relates to the service and facilities. The products have to offer good value for money. Although, it has nothing to do with environmental concern; it is too early to conclude that the guests are not aware of this.

However, when we focus the research on guests who did stay in green hotels, the results seem to have a different outcome. Various researches found out that guests who have an eco-friendly attitude intend to select to stay at green hotels.

For example, Mohd Noor et al. (2014) investigated tourists who visited Malaysia and stated that tourists who have an environmental attitude will be attracted to green hotels. The strong green practices of hotels are likely to be more chosen by the tourists. As well as the study of Lita et al. (2013) who identified that guests are pleased to pay more for green hotels and restaurants. Also, the green concept is an important factor contributing to a hotel's reputation to receive returning guests.

On the other hand, some research found some differences in the group of guests who stay in green hotels. Even though the guests intend to stay at a green hotel, it will be on the condition that the hotel must be at a convenient location and price (Tilikidou and Delistavrou, 2014). Price has still been an influencing factor more than environmental reasons on the views of tourists to select hotels (Kovalijova and Chawla, 2013). And the inconveniences that can be incurred by staying in a green hotel is one of the significant factors that will prevent guests from selecting the hotels (Afrouz, 2012).

Nationalities seem to be another one of the components affecting hotel selection. There is evidence that identifies that people from China are less affected by environmentally responsive behaviour, unlike people from Taiwan. The price seems to be more important to the Chinese. (Chen, 2014).

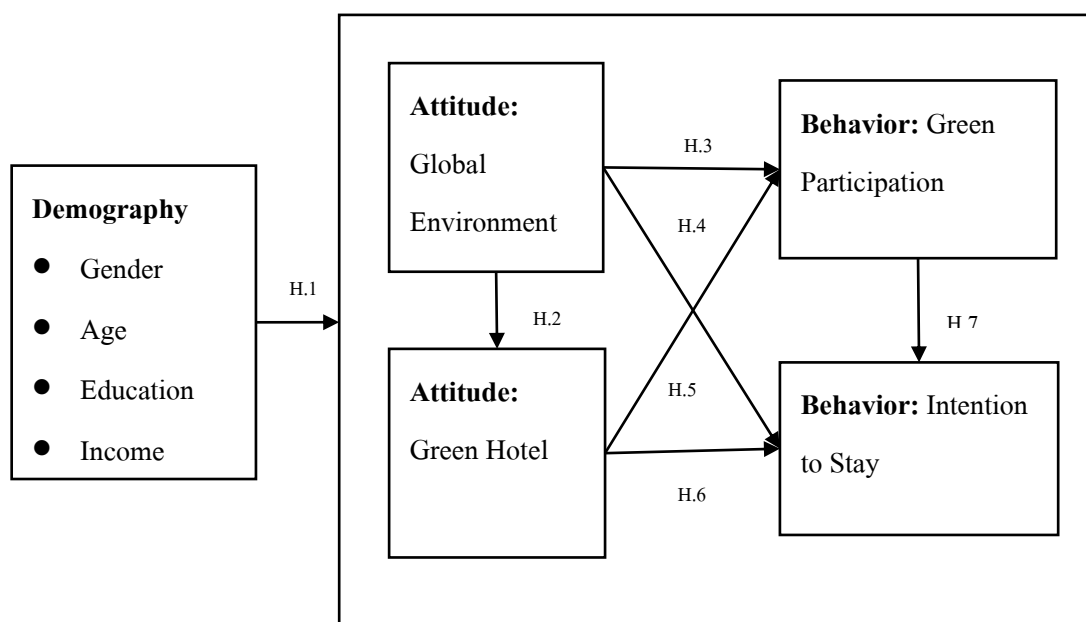
In this research, the two components model will be selected as the origin of behaviour. The attitude of guests who stayed at the green hotel may come from the knowledge of the importance of a green mission or may happen from a feeling that a green hotel will be good

for them, before leading to the behaviour of intention to practice a green mission. Based on the literature review discussed above, the hypothesis was formulated as:

Hypothesis 7: *There is a significant relationship between green participation behaviour and intention to stay at a green hotel of hotel guests.*

2.6 Conceptual Framework

Figure 2.1 Conceptual Framework: Overview Research Model



2.7 Hypotheses

Based on the conceptual framework and objectives of this study, the hypotheses have been developed accordingly.

H1. There is a significant difference between the demographics of green hotels' guests and their green attitudes and behaviours.

H1.1 There is a significant difference between genders of green hotel guests and attitude toward global environment.

H1.2 There is a significant difference between genders of green hotel guests and green hotel attitude.

H1.3 There is a significant difference between the genders of green hotel guests and green participation behaviour.

H1.4 There is a significant difference between genders of green hotel guests and the intention to stay at a green hotel.

H1.5 There is a significant difference between the ages of green hotel guests and attitude toward global environment.

H1.6 There is a significant difference between the ages of green hotel guests and green hotel attitude.

H1.7 There is a significant difference between the ages of green hotel guests and green participation behaviour.

H1.8 There is a significant difference between the ages of green hotel guests and the intention to stay at a green hotel.

H1.9 There is a significant difference between education of green hotel guests and attitude toward global environment.

H1.10 There is a significant difference between the education of green hotel guests and green hotel attitude.

H1.11 There is a significant difference between education of green hotel guests and green participation.

H1.12 There is a significant difference between the education of the green hotels guests and intention to stay at green hotels.

H1.13 There is a significant difference between incomes of green hotel guests and attitude toward global environment.

H1.14 There is a significant difference between the incomes of green hotel guests and green hotel attitude.

H1.15 There is a significant difference between the incomes of green hotel guests and green participation behaviour.

H1.16 There is a significant difference between the incomes of green hotel guests and the intention to stay at a green hotel.

H2. There is a significant relationship between the attitude toward global environment and the green hotel attitude of green hotel guests.

H3. There is a significant relationship between attitude toward global environment and green participation behaviour of green hotel guests.

H4. There is a significant relationship between attitude toward global environment and intention to stay at a green hotel of green hotel guests.

H5. There is a significant relationship between green hotel attitude and green participation behaviours of green hotel guests.

H6. There is a significant relationship between green hotel attitude and intention to stay at a green hotel of green hotel guests.

H7. There is a significant relationship between green participation behaviour and intention to stay at a green hotel of hotel guests.

CHAPTER 3

METHODOLOGY

The study was according to attitudes and behaviours in green hotels. The design of this study was quantitative research, which was developed from the research objective. The topic in this chapter was designed as follows:

3.1 Population, Sampling Group and Sampling Method

The population used for this research were tourists who had experienced accommodation in green hotels in Phuket, Thailand. The list of green hotels in Thailand was gathered from the Green Leaf Foundation Thailand and the Tourism Authority of Thailand. 36 hotels in Phuket, Thailand participated in Green Leaf Foundation in 2016 (Green Leaf Foundation, 2016).

The population used for calculating the sampling number was the total number of Western tourists including Europe, East Europe and The Americas in Phuket which is 1,097,357 peoples in the year 2016 (TAT Intelligence Center, 2017)

The sampling was selected by way of a two-step process. The first step was Convenience Sampling. In this step, Western tourists and the 36 Green Leaf certified hotels in Phuket were chosen. The second step was Purposive Sampling for tourists near the green hotels' locations in Phuket who were Westerners and had experiences staying in 36 hotels in Phuket that are certified by Green Leaf Foundation.

Sampling numbers were calculated using the Yamane (1970) formula over 95% confidence level, as can be seen below.

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{1,097,357}{1 + 1,097,357 (0.05^2)}$$

$$n = 399.9996$$

$N = 1,097,357$
 $e = 0.05$ (95% confident level)

Therefore, the total number of required sampling was 400 people.

3.2 Research Instruments

This study was composed of primary data and secondary data.

3.2.1 Primary Data

The primary data was taken directly from the research progress. The questionnaire was designed to collect quantitative data through distribution to tourists who had stayed in Green Leaf certified hotels in Phuket. The questionnaire was divided into 3 sections which included personal profiles, general information as well as attitude and behaviour data.

Section A: The questionnaire was designed as a nominal scale concerned with personal profiles such as nationality, age, gender, education, employment status, marital status and income. Questions had both open-ended and close-ended formats by checklist.

Section B: General information, also designed as a nominal scale, included their experiences of visiting Thailand, their reasons for their choice of hotels, and the name of any hotels in which they had been accommodated. Once again, questions had both open-ended and close-ended formats by checklist.

Section C: The Attitude and Behaviour data questionnaire was an interval scale on the attitudes and behaviours of Phuket green hotel guests. The question elements were applied from the studies of Hsu et al. (2011), Rahman & Reynolds (2016), Tilikidou and Delistavrou (2014), and Vermar and Chandra (2016). This section was divided into four parts with a total of 26 questions as follows:

Part 1: Attitudes on global environmental conservation (6 questions)

Part 2: Attitudes toward green hotels (6 questions)

Part 3: Intentions to stay in green hotels (7 questions)

Part 4: Participation in green activities (7 questions)

To measure the level of respondents' opinions in Parts 1-3, the questions were delivered in a close-ended format using the Likert Theory rating-scale (Likert, 1967), with a five-level option format as follows:

Interval Scale	Level of Opinion
5	Strongly agree
4	Agree
3	Neutral
2	Disagree
1	Strongly disagree

In Part 4, Participation in green hotel activities, the scale level was adapted to make it more relevant to the action of participation, as follows:

Interval Scale	Level of Participation
5	Always
4	Often
3	Sometimes
2	Seldom
1	Never

The collated data was examined and developed by using a questionnaire as the research instrument. The process for development was as follows:

3.2.3.1 Research and study on the relevant researches which were connected to research topics related to information on tourism trends and statistics, tourists' attitudes and behaviours, and green hotels.

3.2.3.2 Develop research objectives, variables and conceptual framework, then create questionnaires according to the research objectives and variables.

3.2.3.3 Discuss the questionnaire in detail, with an advisor, to check its accuracy, validity, and clarity according to the research's objectives. If necessary, to then improve the questionnaire based on the advisor's suggestions.

3.2.3.4 Pretest the questionnaire using the Cronbach Alpha Coefficient test, to prove its relevance and efficiency, on a pilot group of 30 people not included in the sampling group. The Cronbach Alpha Coefficient number must be more than 0.7 to determine the questionnaire's reliability.

3.2.3.5 Improve the questionnaire, if required, and release it for data collection.

Table 3.1 Variables and reliability of scales

Variables	Items	Sources	Cronbach's Alpha
<i>Attitude toward global environment</i>	(6)		0.875
I am very worried about environmental issues because my country has limited resources.	1	“In our country, we have enough electricity, water, and trees that we do not have to worry about conservation” (Han et al., 2011).	
The earth is a closed system so I worry that the environment will not return to normal after it is destroyed.	1	“The earth is a closed system where everything eventually returns to normal, so I see no need to worry about its present state” (Han et al., 2011).	
I am willing to give up things that I like doing if they harm the natural environment.	1	“I am willing to give things up that I like doing if they harm the natural environment” (Rahman & Reynolds, 2016).	
I am willing to take on responsibilities that will help conserve the natural environment.	1	“I am willing to take on responsibilities that will help conserve the natural environment” (Rahman & Reynolds, 2016).	
Even when it is inconvenient for me, I am willing to do what I think is best for the environment.	1	“Even when it is inconvenient to me, I am willing to do what I think is best for the environment” (Rahman & Reynolds, 2016).	
I am willing to go out of my way to do what is best for the environment.	1	“I am willing to go out of my way to do what is best for the environment” (Rahman & Reynolds, 2016).	

Table 3.1 Continued

Variables	Items	Sources	Cronbach's Alpha
<i>Green hotel attitude</i>	(6)		0.826
I believe that staying at a green hotel can protect the global environment.	1	“Staying at a green hotel makes me believe that I protect our environment” (Tilikidou & Delistavrou, 2014).	
I believe that staying at a green hotel makes me more socially responsible.	1	“Staying at a green hotel makes me more socially responsible” (Tilikidou & Delistavrou, 2014).	
I believe that staying at a green hotel offers the experience of a healthy, environmentally friendly guestroom.	1	“Staying at a green hotel offers experience of a healthy, environmentally friendly guestroom” (Tilikidou & Delistavrou, 2014).	
I believe that the price for staying at a green hotel is reasonable.	1	“Staying at a green hotel is expensive” (Tilikidou & Delistavrou, 2014).	
I believe that it is convenient to stay at a green hotel.	1	A green hotel provides inconvenient stay (Monkol & Vannavanit, 2015)	
I believe that finding a green hotel while travelling is not difficult.	1	“Finding a green hotel when travelling takes time and effort” (Tilikidou & Delistavrou, 2014).	

Table 3.1 Continued

Variables	Items	Sources	Cronbach's Alpha
<i>Green participation behaviour</i>	(7)		0.825
Towel reuse program.	1	Towel Re-use programs and Bed sheet reuse programs in the guest room were strongly agreed by participants (Vermar & Chandra, 2016).	
Bed sheet reuse program.	1		
Separating garbage for recycling	1	Separating garbage for recycling (Millar & Baloglu, 2008)	
Using water carefully when brushing your teeth, shaving or washing your hands and face.		Water and energy were powering to the future concerns for the attendees by using these steps to conservation	
Setting an air-conditioner at an appropriate temperature to save energy.	1	(1) using water carefully, (2) setting an air-conditioner at an appropriate temperature, (3) turning off	
Turning off electronic devices such as television, stereo, computer, fans when you are not using them.	1	electronic devices, (4) turning off unnecessary light (Rahman et al., 2012).	
Turning off unnecessary light in the room to save energy when you are not using it.	1		

Table 3.1 Continued

Variables	Items	Sources	Cronbach's Alpha
<i>Intention to stay at a green hotel</i>	(7)		0.856
I am willing to visit a green hotel.	1	“I am willing to stay at a green hotel” (Han et al., 2011).	
I plan to stay at a green hotel when travelling.	1	“I will make an effort to stay at a green hotel when traveling” (Han et al., 2011).	
I will book a green hotel to stay at my next time travelling.	1	Booking a green hotel to stay at, next time travelling (Tilikidou & Delistavrou, 2014).	
I am willing to pay more for a green hotel.	1	“I will spend extra in order to stay at an environmentally friendly hotel (Han et al., 2011).	
I am willing to sacrifice quality by staying at a green hotel.	1	“I am willing to sacrifice quality by staying at a green hotel” (Rahman and Reynolds, 2016).	
I am willing to sacrifice convenience by staying at a green hotel.	1	The willingness to sacrifice convenience by staying at a green hotel affected their green hotel behavioral intentions. (Rahman and Reynolds, 2016).	
I am willing to sacrifice luxury by staying at a green hotel.	1	Customers are willing to sacrifice luxury by staying at a green hotel (Rahman and Reynolds, 2016).	

3.3 Collecting Data

The researcher distributed over 400 questionnaires to Green Leaf certified hotels in Phuket. Using the convenience sampling technique, the researcher classified the sampling should be done randomly amongst the current Westerners staying in the hotels at that time. The distribution process was executed as follows

1) The researcher contacted Human Resource Managers at the 36 Green Leaf hotels. Eight of the 36 hotels agreed to the research and 60 copies of the questionnaires were provided. The 8 hotels are located in Patong, Kata, Karon, Kamala, and Maikao areas. Two of the hotels placed the questionnaires in their hotel lobby and were introduced to guests at the discretion of hotel employees. The other 6 hotels designated student interns to approach guests face-to-face, either in the lobby or restaurant, and request their participation in the research. The researcher arranged to collect completed questionnaires every 2 weeks.

2) Research data collection took place at the hotels from November 2017 until March 2018. The face-to-face survey requests returned 268 questionnaires of which 252 qualified. The questionnaires simply placed in the hotel lobby returned a mere 52 of which only 34 qualified. Therefore, a total of 286 correctly completed questionnaires from 8 of 36 green hotels were verified and qualified as suitable data for inclusion into our research.

3) Due to this number being so much lower than our anticipated expectation, measures were implemented in an attempt to increase data for our research. The questionnaires were amended to include a section verifying tourists hotel accommodations. The research team then set out to interview Westerners in popular public tourist areas such as Patong beach, Maikao Turtle Village, Bangtao beach, as well as in Phuket old town. Once it had been established that the Westerners approached, were in fact staying in green hotels, their assistance was requested in completing the questionnaire.

4) This additional questionnaire distribution in public areas took place during March and April of 2018. Fifty copies were allocated per area with a data collection schedule planned based on two weeks per location, divided up as follows: Weeks 1-2 Bangtao Beach, Weeks 3-4 Maikao Turtle Village, Weeks 5-6 Phuket old town and finally Weeks 7-8 in Patong Beach. Of the 150 questionnaires implemented during our second research survey, 114 questionnaires qualified for inclusion into our research.

5) In summary, a total of 680 questionnaires were distributed to collect data to aid our research. A total of 470 completed surveys were received by the researchers, with 70 copies being disqualified as a result of incomplete or incorrect information provided, leaving a total of 400 qualified questionnaires to analyse for the research

3.4 Data Analysis

The 400 qualified questionnaires were rechecked and verified, the numbers computed and the data recorded for the statistical analysis. The SPSS program was then used for the data to be recorded and the statistical results evaluated. Descriptive statistics explained the frequency, percentage, mean, and SD value of the collected data. Inference statistics estimated population size calculated by Simple Regression Analysis, and Multiple Regression Analysis to determine the relationship between variances. The statistics for analysis in each section is as follows:

3.4.1 Section A and Section B: The questionnaire was used as the descriptive statistic for analysis data in which the statistics consisted of frequency and percentage.

3.4.2 Section C: The questionnaire was used as descriptive statistics for analysing data in which the statistics consisted of Mean and Standard Deviation (S.D.). The data was analysed based on the Interval level.

$$\begin{aligned} \text{The interval level} &= \frac{(Max - Min)}{n} \\ &= \frac{(5 - 1)}{5} \\ &= 0.80 \end{aligned}$$

As per the results, the mean scores are:

<i>Mean Scores</i>	<i>Level of Opinion/ Level of Action</i>
4.21 – 5.00	Strongly Agree / Always
3.41 – 4.20	Agree / Often
2.61 – 3.40	Neutral / Sometime
1.81 – 2.60	Disagree / Seldom
1.00 – 1.80	Strongly disagree / Never

3.4.3 Hypothesis research analysis: Inferential statistics analysis was implemented accordingly:

3.4.3.1 T-test was used to compare the means of two groups such as male and female to determine whether two groups affected a variable different from one another at the significant level 0.05.

3.4.3.2 One-way ANOVA was used to analyse the difference between the means of more than two groups, whether those groups affected a variable different from others at the significant level 0.05. Gabriel's Post Hoc test (Gabriel's Pairwise Comparisons Test) was performed to compare pairs of different mean values at the significant level 0.05.

3.4.3.3 Simple Regression Analysis was used in inferring the relationship between one dependent variable and one independent variable, while Multiple Regression Analysis was used in determining the relationship between a dependent variable and more than one independent variable.

CHAPTER 4

RESULTS

This study aimed to investigate the green attitude and behaviour of Western guests in Phuket Province and analyse their relationship. The researcher compiled questionnaires for the sampling of 400 people. Once their correctness had been verified, the data was recorded in the SPSS program, and the results analysed. The analysed results included results of personal demographics, results of global environmental attitudes of respondents, results of green hotel attitudes of respondents, results of green participation by respondents, results of respondents intentions to stay at green hotels, and hypotheses.

4.1 Results of The Personal Demography

Table 4.1 Frequency and percentage of personal demography

Personal Profile	Frequency (n=400)	Percentage (%)
1. Gender		
Male	193	48.3%
Female	207	51.8%
2. Age		
20-30 yrs.	172	43.0%
31-40 yrs.	108	27.0%
41-50 yrs.	69	17.3%
> 51 yrs.	51	12.8%
3. Marital Status		
Single	171	42.8%
Married	172	43.0%
Separated	11	2.8%
Divorced	26	6.5%
Other	20	5.0%

Table 4.1 Continued

Personal Profile	Frequency (n=400)	Percentage (%)
4. Education Level		
Master's degree/ Graduate or higher	128	32.0%
Undergraduate/ Bachelor's degree	159	39.8%
Diploma	53	13.3%
High school	51	12.8%
Other	9	2.3%
5. Income (per month)		
< 3,000 USD/~ 2,540 EUR	101	25.3%
3,001–6,000 USD/~ 2,541–5,080 EUR	95	23.8%
6,001–9,000 USD/~ 5,081–7,630 EUR	58	14.5%
9,001–12,000 USD/~ 7,631–10,170 EUR	33	8.3%
12,00 –15,000 USD/~ 10,171–12,720 EUR	30	7.5%
15,001–18,000 USD/~ 12,721–15,260 EUR	16	4.0%
18,001–21,000 USD/~ 15,261–17,800 EUR	18	4.5%
> 21,000 USD/~ 17,800 EUR	49	12.3%
6. Traveling to Thailand Experience		
yes	215	53.8%
no	185	46.3%

Table 4.1 presents the personal demography of the respondents. There was no significant difference in the number of respondents between female and male (Female: 207 or 51.8%, Male 193 or 48.3%). The age majority of respondents is 20-30 years old (172 or 43.0%) with married status equally at 172 or 43.0%. Most of the respondents had received a bachelor's degree (159 or 39.8%) with an average income lower than 3,000 USD or 2,540 EUR (101 or 25.3%). More than half of the respondents had visited Thailand before.

Table 4.2 Maximum, minimum, and mean of general information of respondents

General Information	Min.	Max.	Mean	S.D.
1. Times to Visit Aboard in 3 Years	0	30.00	6.23	6.23
2. Times to Visit Thailand	0	20.00	1.33	2.32

Table 4.2 shows the number of times they had been abroad in the past 3 years and number of times they had visited Thailand. The results reflected an enormous gap between the minimum and maximum numbers of travelling abroad (S.D. 6.23) and visiting Thailand (S.D. 2.32). The average of going overseas was 6.23 times, whereas going to Thailand was 1.33 times.

4.2 Results of Attitude Toward Global Environment of Respondents

Table 4.3 Maximum, minimum, mean and standard deviation of the global environmental attitudes of respondent

The attitudes toward global environment	Max.	Min.	Mean	S.D.	Level of Opinion
1. I am willing to take on responsibilities that will help conserve the natural environment.	1.00	5.00	3.89	0.92	Agree
2. I am willing to give up things that I like doing if they harm the natural environment.	1.00	5.00	3.77	0.93	Agree
3. I am willing to go out of my way to do what is best for the environment.	1.00	5.00	3.62	0.84	Agree
4. The earth is a closed system so I worry that the environment will not returns to normal after it is destroyed.	1.00	5.00	3.61	1.12	Agree
5. Even when it is inconvenient for me, I am willing to do what I think is best for the environment.	1.00	5.00	3.58	0.91	Agree
6. I am very worried about environmental issues because my country has limited resources.	1.00	5.00	3.09	1.05	Neutral

Table 4.3 illustrates the results of respondents' attitudes on the global environment. Overall, the respondents agreed that the global environment is important and that they were willing to take on responsibilities to help conserve the natural environment with the highest mean at 3.89 (S.D. 0.92), they were also receptive to giving up things they liked doing if they contributed to the destruction of the natural environment at mean 3.77 (S.D. 0.93), while their concerns on environmental issues as a result of limited resources in their own countries returned a surprising neutral with mean 3.09 (S.D. 1.05).

4.3 Results of Green Hotel Attitudes of Respondents

Table 4.4 Maximum, minimum, mean and standard deviation of the green hotel attitudes of respondents.

The Green Hotel Attitudes	Max.	Min.	Mean	S.D.	Level of Opinion
1. I believe that staying at a green hotel makes me more socially responsible	1.00	5.00	3.71	0.87	Agree
2. I believe that staying at a green hotel offers the experience of a healthy, environmentally friendly guestroom.	1.00	5.00	3.69	0.84	Agree
3. I believe that staying at a green hotel can protect the global environment.	1.00	5.00	3.65	0.89	Agree
4. I believe that the price for staying at a green hotel is reasonable.	1.00	5.00	3.61	0.83	Agree
5. I believe that it is convenient to stay at a green hotel.	1.00	5.00	3.52	0.85	Agree
6. I believe that finding a green hotel while travelling is not difficult.	1.00	5.00	3.17	0.99	Neutral

Table 4.4 shows the results of respondents' attitudes about green hotels. Most of the respondents agreed on their beliefs that a green hotel is good for the global environment. They believed that staying at a green hotel was more socially responsible (3.71, S.D. 0.87) and that staying at a green hotel offered the experience of a healthy, environmentally friendly guest room

(3.69, S.D. 0.84). On the other hand, the ease of finding green hotels while travelling returned a neutral level (3.17, S.D. 0.99).

4.4 Results of The Green Participation Behaviour of Respondents

Table 4.5 Maximum, minimum, mean and standard deviation of green participation practices by respondents

The Green Participation Practices	Max.	Min.	Mean	S.D.	Level of Opinion
1. Turning off unnecessary light in the room to save energy when you are not using it.	1.00	5.00	4.08	0.89	Often
2. Turning off electronic devices such as television, stereo, computer, fans when you are not using them.	1.00	5.00	3.99	0.90	Often
3. Separating garbage for recycling	1.00	5.00	3.84	1.03	Often
4. Using water carefully when brushing your teeth, shaving or washing your hands and face.	1.00	5.00	3.74	0.94	Often
5. Setting an air-conditioner at an appropriate temperature to save energy.	1.00	5.00	3.68	1.03	Often
6. Towel reuse program.	1.00	5.00	3.53	1.03	Often
7. Bed sheet reuse program.	1.00	5.00	3.45	1.08	Often

Table 4.5 reflects the results of the respondents' commitment to green hotel participation. The results showed that they would be very likely to participate in green hotel missions. Turning off lights in the room when not in use, often (4.08, S.D. 0.89). Turning off electronic devices such as a television, stereo, computer, fans when not in use, often. (3.99, S.D. 1.90), and separating their own garbage for recycling purposes, often (3.84, S.D. 1.03). The Reuse of bed sheets received the least positive response (3.45, S.D. 1.08).

4.5 Results of the Intention to Stay at A Green Hotel of Respondents

Table 4.6 Maximum, minimum, mean and standard deviation of the respondents' intentions to stay

The Intention to Stay	Max.	Min.	Mean	S.D.	Level of Opinion
1. I am willing to visit a green hotel.	1.00	5.00	3.84	0.90	Agree
2. I am willing to sacrifice luxury by staying at a green hotel.	1.00	5.00	3.56	1.01	Agree
3. I plan to stay at a green hotel when travelling.	1.00	5.00	3.42	0.95	Agree
4. I am willing to sacrifice convenience by staying at a green hotel.	1.00	5.00	3.37	0.95	Neutral
5. I will book a green hotel to stay at my next time travelling.	1.00	5.00	3.36	0.93	Neutral
6. I am willing to sacrifice quality by staying at a green hotel.	1.00	5.00	3.34	1.01	Neutral
7. I am willing to pay more for a green hotel.	1.00	5.00	3.27	0.95	Neutral

Table 4.6 presents the results of respondents' behaviours regarding intentions to stay at green hotels. They agreed to visit a green hotel (3.84, S.D. 0.90), they were prepared to sacrifice luxury by staying at a green hotel (3.56, S.D. 1.01), and they planned to stay at a green hotel on future travels (3.42, S.D. 0.95).

4.6 Hypothesis Testing

H1. There is a significant difference between the demographics of green hotels' guests and their green attitudes and behaviours.

H1.1 There is a significant difference between genders of green hotel guests and attitude toward global environment.

H1.2 There is a significant difference between genders of green hotel guests and green hotel attitude.

H1.3 There is a significant difference between the genders of green hotel guests and green participation behaviour.

H1.4 There is a significant difference between genders of green hotel guests and the intention to stay at a green hotel.

Table 4.7 The Independent Sample T-Test comparison of the hotel's guests genders and green attitudes and behaviours

Genders	N	Mean	S.D.	t-test	p-value
Attitude toward global environment					
Male	193	3.60	0.70	0.33	0.504
Female	207	3.58	0.70		
Green hotel Attitude					
Male	193	3.51	0.60	-1.51	0.058
Female	207	3.60	0.67		
Green participation behaviour					
Male	193	3.81	0.66	0.188	*0.048
Female	207	3.80	0.65		
Intention to stay					
Male	193	3.03	0.57	0.580	0.573
Female	207	3.00	0.65		

*p<0.05, **p<0.01

Table 4.7 shows the difference between the hotel's guests' genders and their green attitudes and behaviours. To test the hypotheses for 1.1 to 1.4, an independent sample T-test was conducted to compare attitude toward global environment, green hotel attitudes, green participation behaviour and intention to stay at a green hotel between males and females. The results present no differences in scores of attitude toward global environment for male (3.60, S.D. 0.70) and female (3.58, S.D. 0.70), ($t = 0.33$, $p = 0.504$); green hotel attitude for male (3.51, S.D. 0.60) and female (3.60, S.D. 0.67), ($t = -1.51$, $p = 0.058$); intention to stay at a green hotel for male (3.03, S.D. 0.57) and female (3.00, S.D. 0.65), ($t = 0.580$, $p = 0.573$). These results suggest that gender does not have an effect on green attitudes and behaviours. However, the results present differences in scores of green participation behaviour for male (3.81, S.D. 0.66) and female (3.80, S.D. 0.65), ($t = 0.188$, $p = 0.048$).

H1.5 There is a significant difference between the ages of green hotel guests and attitude toward global environment.

H1.6 There is a significant difference between the ages of green hotel guests and green hotel attitude.

H1.7 There is a significant difference between the ages of green hotel guests and green participation behaviour.

H1.8 There is a significant difference between the ages of green hotel guests and the intention to stay at a green hotel.

Table 4.8 The One-Way ANOVA comparison of hotel guests' ages and green attitudes and behaviours

Variables	Mean				F	P	Post hoc (Gabriel)
	20-30 yrs. (A)	31-40 yrs. (B)	41-50 yrs. (C)	> 51 yrs. (D)			
Attitude toward global environment	3.55	3.55	3.66	3.73	1.16	.32	-

Table 4.8 Continued

Variables	Mean				<i>F</i>	<i>P</i>	Post hoc (Gabriel)
	20-30 yrs. (A)	31-40 yrs. (B)	41-50 yrs. (C)	> 51 yrs. (D)			
Green hotel attitude	3.59	3.52	3.62	3.44	1.02	.38	-
Green participation behaviour	3.81	3.75	3.88	3.85	0.67	.57	-
Intention to stay	3.02	3.04	3.07	2.87	1.21	.30	-

* $p < 0.05$, ** $p < 0.01$

The differences in the hotel guests' ages and green attitudes and behaviours were uncovered by the use of a one-way analysis of variance (ANOVA) to answer the hypotheses 1.5 to 1.8, shown in Table 4.8. An examination of the ANOVA results on the aspect of green attitudes and behaviours suggests that there were no statistically significant differences in each variable of the hotel guests' ages. These variables include attitude toward global environment ($F = 1.16$, $p = 0.32$), green hotel attitude ($F = 1.02$, $p = 0.38$), green participation behaviour ($F = 0.67$, $p = 0.57$), and intention to stay a green hotel ($F = 1.21$, $p = 0.30$).

To test whether there were any significant differences between age and green attitudes and behaviours, Post Hoc comparisons using Gabriel's Pairwise Comparison Test were carried out. The results concluded that there were no real differences across all variables.

H1.9 There is a significant difference between education of green hotel guests and attitude toward global environment.

H1.10 There is a significant difference between the education of green hotel guests and green hotel attitude.

H1.11 There is a significant difference between education of green hotel guests and green participation.

H1.12 There is a significant difference between the education of the green hotels guests and intention to stay at green hotels.

Table 4.9 The One-Way ANOVA comparison of hotel guests' education and their green attitudes and behaviours

Variables	Mean					F	P	Post hoc (Gabriel)
	Master Degree (M)	Bachelor Degree (B)	Diploma (D)	High school (H)	Other (O)			
Attitude toward global environment	3.74	3.62	3.43	3.37	3.17	4.48	.00**	M#H
Green hotel attitude	3.61	3.46	3.33	3.39	3.56	2.88	.02*	B#H
Green participation behaviour	3.92	3.89	3.60	3.57	3.39	3.66	.00**	M#H, M#D, B#H, B#D
Intention to stay	3.11	3.05	2.95	2.75	3.04	5.64	.01*	M#H

*p<0.05, **p<0.01

A one-way analysis of variances (ANOVA) was applied for establishing differences in hotel guests' education and their green attitudes and behaviours, to answer hypotheses 1.9 to 1.12 shown in Table 4.9. The respondents were divided into five groups, and

an examination of the ANOVA results indicate that hotel guests' education comprises statistically significant differences across all variables. These variables include attitude toward global environment ($F = 4.48, p = 0.00$), green hotel attitude ($F = 2.85, p = 0.02$), green participation behaviour ($F = 3.66, p = 0.00$), and intention to stay at a green hotel ($F = 5.64, p = 0.01$).

To test whether there were any significant differences between education and green attitudes and behaviours, Post Hoc comparisons using Gabriel's Pairwise Comparison Test were carried out. The results reflect the differences across all variables. The results according to the variable of attitude toward global environment revealed that the mean score for respondents who were in Master degree/Graduate or higher education level (mean = 3.74, S.D. = 0.64) differed significantly from respondents who were in other education levels (mean = 3.17, S.D. = 0.71).

Similarly, the variable of green hotel attitude showed a result that the mean score for respondents who were in Undergraduate/Bachelor degree education level (mean = 3.63, S.D. = 0.56) and Master degree/Graduate or higher education level (mean = 3.61, S.D. = 0.67) differed significantly from respondents who were in the High school education level (mean = 3.33, S.D. = 0.65) and other education levels (mean = 3.39, S.D. = 0.94).

The results according to the variable of green participation behaviour showed that the mean score for respondents who were in Master degree/Graduate or higher education level (mean = 3.92, S.D. = 0.58) differed significantly from respondents who were in the High school education level (mean = 3.57, S.D. = 0.73) and other education levels (mean = 3.39, S.D. = 0.69).

On the other hand, the variable of green hotel attitude showed a result that the mean score for respondents who were in Master degree/Graduate or higher education level (mean = 3.11, S.D. = 0.54), Undergraduate/Bachelor degree education level (mean = 3.05, S.D. = 0.61) and other education level (mean = 3.04, S.D. = 0.42) differed significantly from respondents who were in High school education level (mean = 2.75, S.D. = 0.66).

Referring to the results on Table 4.9, it could be summarised that the attitude toward global environment, green hotel attitude, green participation behaviour and intention to stay at a green hotel differed significantly across education levels. The mean values of

respondents who were in higher education levels were higher than the mean values of respondents who were in lower education levels.

H1.13 There is a significant difference between incomes of green hotel guests and attitude toward global environment.

H1.14 There is a significant difference between the incomes of green hotel guests and green hotel attitude.

H1.15 There is a significant difference between the incomes of green hotel guests and green participation behaviour.

H1.16 There is a significant difference between the incomes of green hotel guests and the intention to stay at a green hotel.

Table 4.10 The One-Way ANOVA comparison of the hotel guests' income and green attitudes and behaviours

Variables	Mean								F	P	Post hoc (Gabriel)
	(A)	(B)	(C)	(D)	(E)	(G)	(H)	(I)			
Attitude toward global environment	3.46	3.52	3.65	3.69	3.52	3.75	3.74	3.81	1.78	.09	-
Green hotel attitude	3.55	3.49	3.65	3.62	3.57	3.33	3.92	3.48	1.52	.16	-
Green participation behaviour	3.78	3.82	3.84	3.82	3.73	3.74	3.99	3.79	0.33	.94	-
Intention to stay	3.01	2.92	3.22	3.10	2.97	2.96	3.24	2.91	1.98	.06	-

*p<0.05, **p<0.01

(A) < 3,000 USD/~ 2,540 EUR,

(B) 3,001–6,000 USD/~ 2,541–5,080 EUR,

(C) 6,001–9,000 USD/~ 5,081–7,630 EUR,

(D) 9,001–12,000 USD/~ 7,631–10,170 EUR,

(E) 12,000 –15,000 USD/~ 10,171–12,720 EUR,

(G) 15,001–18,000 USD/~ 12,721–15,260 EUR,

(H) 18,001–21,000 USD/~ 15,261–17,800 EUR, (I) > 21,000 USD/~ 17,800 EUR

The differences in the hotel's guests incomes and green attitudes and behaviours were disclosed by the use of a one-way analysis of variance (ANOVA) to answer the hypotheses 1.13 to 1.16 as shown in Table 4.10. An examination on the ANOVA results of the aspect of green attitudes and behaviours suggest that the hotel guests' incomes were not statistically significantly different in all variables. These variables include attitude toward global environment ($F = 1.78, p = 0.09$), green hotel attitude ($F = 1.52, p = 0.16$), green participation behaviour ($F = 0.33, p = 0.94$), and intention to stay at a green hotel ($F = 1.98, p = 0.06$).

To test significant differences between the income levels and green attitudes and green behaviours. The respondents were divided into eight groups and ANOVA analysis was implemented and found out the significant differences in all variables. Post Hoc comparisons using Gabriel's pairwise comparisons test indicate differences in the income levels of green hotel behaviour. It showed that there are no differences in each level of income across all variables.

H2. There is a significant relationship between the attitude toward global environment and the green hotel attitude of green hotel guests.

Table 4.11 The relation between the green hotels' guests attitude toward global environment and green hotel attitude.

	Green Hotel Attitude			
	Standardized β	t	Std. Errors	p
Constant		12.757	0.144	0.000
Attitude Toward Global Environment	0.523	12.242	0.039	0.000
Adjusted R ²	0.272			
F	149.861			
p	0.000			
df	1/398			
Durbin-Watson	1.810			

Table 4.11 reported the results of the regression on attitudes and H2 testing. The model illustrated a moderate relation between the attitude toward global environment and green hotels attitude with the adjusted R2 of 27% ($F = 149.861$, $p = .000$). It was found that the attitude on green hotels contributed to the attitude on the global environment ($\beta = .523$, $t = 12.242$, $p = .000$).

H3. There is a significant relationship between attitude toward global environment and green participation behaviour of green hotel guests.

H5. There is a significant relationship between green hotel attitude and green participation behaviours of green hotel guests.

Table 4.12 The relationship between the green participation behaviour and green attitudes of hotels' guests.

	Green Participation Behaviour			
	Standardized β	t	Std. Errors	p
Constant		6.470	0.142	0.000
Attitude Toward Global Environment	0.395	9.661	0.038	0.000
Green Hotel Attitude	0.428	10.464	0.042	0.000
Adjusted R ²	0.514			
F	109.504			
p	0.000			
df	1/397			
Durbin-Watson	1.833			

In order to test hypotheses 3 and 5, the relationship of the attitude toward global environment and green hotel attitude on the green participation behaviour, a multiple regression was carried out. The result is reported in Table 4.12. Table 4.12 reports multiple regression results of attitudes as predictor variables for green participation behaviour as the dependent variable. The models were highly significant with 51.4% of the total variance being explained (adjusted R² =

.514, $F = 109.504$, $p = .000$). Both attitudes were noted to provide a positive relationship to green participation behaviour. The results demonstrate that green hotel attitude ($\beta = .428$, $t = 10.464$, $p = .000$) had a higher level of relationship on the green participation behaviours than attitude toward global environment ($\beta = .395$, $t = 9.661$, $p = .000$).

H4. There is a significant relationship between attitude toward global environment and intention to stay at a green hotel of green hotel guests.

H6. There is a significant relationship between green hotel attitude and intention to stay at a green hotel of green hotel guests.

Table 4.13 The relationship between the intention to stay at a green hotel and the green attitudes of hotel guests.

	Intention to Stay			
	Standardized β	t	Std. Errors	p
Constant		3.274	0.132	0.001
Attitude Toward Global Environment	0.103	2.550	0.036	0.011
Green Hotel Attitude	0.665	16.404	0.039	0.000
Adjusted R ²	0.523			
F	269.088			
p	0.000			
df	2/397			
Durbin-Watson	1.931			

In order to test hypotheses H4 and H6, the relationship of the attitude toward global environment and green hotel attitude on the intention to stay at a green hotel, a multiple regression was implemented. The result is presented in Table 4.13. Table 4.13 reports multiple regression results of attitudes as predictor variables for intention to stay at a green hotel as the dependent variable. The models were highly significant with 52.3% of the total variance being explained (adjusted R² = .523, $F = 269.088$, $p = .000$). Both attitudes were noted to provide a positive relationship to intention to stay at a green hotel. The results demonstrate that green hotel

attitude ($\beta = .665$, $t = 16.404$, $p = .000$) had the higher level of relationship on the intention to stay at green hotel than the attitude toward global environment ($\beta = .103$, $t = 2.550$, $p = .011$).

H7. There is a significant relationship between green participation behaviour and intention to stay at a green hotel of hotel guests.

Table 4.14 The relation between green participation behaviour and intention to stay of the hotel's guests.

	Intention to Stay			
	Standardized β	t	Std. Errors	p
Constant		5.716	0.142	0.00
Green Participation Behaviour	0.619	15.731	0.037	0.00
Adjusted R^2	0.382			
F	247.477			
p	0.000			
df	1/398			
Durbin-Watson	1.751			

Table 4.14 reported the results of the regression on behaviours and H7 testing. The model illustrated a moderate relation between green participation behaviour and intention to stay at a green hotel with the adjusted R^2 of 38% ($F = 247.477$, $p = .000$). It was found that the attitude in green hotels made a high contribution to the attitude on global environment ($\beta = .619$, $t = 15.731$, $p = .000$).

CHAPTER 5

CONCLUSIONS, DISCUSSIONS AND RECOMMENDATIONS

This chapter contains a conclusion, discussion, and recommendations for future studies and limitations. This chapter starts with the conclusion of the results, it briefly highlights the key findings in relation to the objectives of the study. This study aimed to examine the association among hotel guests' attitude toward global environment, green hotel attitude, green participation behaviour, intention to stay at a green hotel and personal demography. Based on the samples of independent Western guests who stayed at green hotels in Phuket, Thailand, the finding revealed four research questions including the differences of personal demography to green attitudes and behaviours; the relationship of green hotel guests' attitude toward global environment; green hotel attitude; green participation behaviour and intention to stay at a green hotel. The findings of this study are in line with previous research such as Han et al. (2011), Tilikidou and Delistavrou (2014), Kim et al. (2016), Verma and Chandra (2016), and Noor et al. (2014).

5.1 Conclusion

The global environmental crisis, especially the global warming issue, is a major concern for many people nowadays as it severely affects human beings' existence. Human activities, for example, transportation fuel, waste disposal, industrial processes, residential, commercial and other sources are a potential cause of global warming (Global Warming Facts, 2000). Because so many people are concerned about the environment, business sectors implement environmentally-friendly practices to get an advantage in market competitiveness and to attract other customer segmentation (Chen and Chen, 2012). Green Hotel is the term used for hotels that implement environmental practices and become certificated by environmental organisations such as the Green Leaf Foundation. During the past few years, green hotels have contributed to creating an eco-friendly image for approaching extensive market segmentation (Green Hotel Association, 2016). To increase the number of guests utilising green hotels, attention should be devoted to guests' environmental attitudes including attitude toward global environment and green hotel attitude which ultimately lead to green participation behaviours and

intentions to stay in green hotels should be developed. These research findings will help to understand the association of guests' green attitudes and green behaviours which offer an advantage for planning marketing strategies and designing communicative campaigns.

The focus group for this study was Western tourists who had experienced staying at green hotels in Phuket, Thailand. Western tourists, from the Americas and Europe, were selected based on their future potential to Thailand tourism, in accordance with statistics showing an increasing number of Western tourists, and the fact that Phuket is the most visited location for foreign tourists in the South of Thailand (TAT, 2017).

Based on the research, the majority of the Western hotel guests who responded were males (48.3%) and females (51.8%) almost equally who were aged 20-30 years (43%) and educated undergraduate degree (39.8%) with approximate income lower than 3,000 USD or 2,540 EUR (25.3%). Moreover, most of them had visited Thailand before.

From the findings, it was noticed that Western guests had positive global environment and green hotel attitudes. The environmental attitude consists of responsibilities to conserve the environment, avoid doing things harming the environment, doing best for the environment, anxiety about the destroyed environment, satisfying environmental needs, and concerns regarding the continued decrease of already limited natural resources. The green hotel attitude combined with the beliefs that staying at green hotels is a good social responsibility that helps to protect the environment and improves health benefits. It also included attitudes about convenience, reasonable pricing of green hotels and the ease of finding green hotels.

The behaviours in this study were split into two components, including participation behaviour and intention to stay at a green hotel. The findings show that Western guests often practised green hotel attributes such as turning off unnecessary lights and electronic devices in the room, not wasting water unnecessarily, reducing air-conditioner settings, as well as the reuse of towels and bedsheets. Referring to the intention to stay at green hotels, the results show that Western guests are willing to visit green hotels, sacrifice luxury, choose to stay at a green hotel on future travels, and are prepared to pay more for a green hotel.

According to the research questions, the study questioned the differences of green hotel guests' green attitudes and behaviours across personal demography, the relationship of green hotel guests' attitude toward global environment and green hotel attitude, the relationship

of green hotel guests' participation behaviour and intention to stay at a green hotel, and the relationship of green hotel guests' attitudes and behaviours.

As a result, the findings answered differences of hotel guests' green attitudes and behaviours across personal demography. The results illustrated that the attitude toward global environment, green hotel attitude, green participation behaviour, and intention to stay at a green hotel were not significantly affected by Western guests' genders, ages, and incomes. Only the education levels of the guests showed a significant influence on the guests' green attitudes and green behaviours. The higher education levels clearly reflect more positive green attitudes and green behaviours.

In terms of the relationship between green hotel guests' attitude toward global environment and green hotel attitude, it was found that there was a definite connection between them. This same connection is also reflected in the research results between green participation behaviour and intention to stay at green hotel behaviour. Similarly, the global attitude also related to green participation behaviour and intention to stay at green hotel behaviour, as well as the green hotel attitude that related positively to both behaviours.

Table 5.1 Summary of hypothesis test results

Hypothesis	Test result
H1.1 There is a significant difference between genders of green hotel guests and attitude toward global environment.	Not supported
H1.2 There is a significant difference between genders of green hotel guests and green hotel attitude.	Not supported
H1.3 There is a significant difference between the genders of green hotel guests and green participation behaviour.	Supported
H1.4 There is a significant difference between genders of green hotel guests and the intention to stay at a green hotel.	Not supported
H1.5 There is a significant difference between the ages of green hotel guests and attitude toward global environment.	Not supported
H1.6 There is a significant difference between the ages of green hotel guests and green hotel attitude	Not supported
H1.7 There is a significant difference between the ages of green hotel guests and green participation behaviour.	Not supported

Table 5.1 Continued

Hypothesis	Test result
H1.8 There is a significant difference between the ages of green hotel guests and the intention to stay at a green hotel.	Not supported
H1.9 There is a significant difference between education of green hotel guests and attitude toward global environment.	Supported
H1.10 There is a significant difference between the education of green hotel guests and green hotel attitude.	Supported
H1.11 There is a significant difference between education of green hotel guests and green participation.	Supported
H1.12 There is a significant difference between the education of the green hotels' Guest and intention to stay at green hotels.	Supported
H1.13 There is a significant difference between incomes of green hotel guests and attitude toward global environment.	Not supported
H1.14 There is a significant difference between the incomes of green hotel guests and green hotel attitude.	Not supported
H1.15 There is a significant difference between the incomes of green hotel guests and green participation behaviour.	Not supported
H1.16 There is a significant difference between the incomes of green hotel guests and the intention to stay at a green hotel.	Not supported
H2. There is a significant relationship between the attitude toward global environment and the green hotel attitude of green hotel guests.	Supported
H3. There is a significant relationship between attitude toward global environment and green participation behaviour of green hotel guests.	Supported
H4. There is a significant relationship between attitude toward global environment and intention to stay at a green hotel of green hotel guests.	Supported
H5. There is a significant relationship between green hotel attitude and green participation behaviours of green hotel guests.	Supported
H6. There is a significant relationship between green hotel attitude and intention to stay at a green hotel of green hotel guests.	Supported
H7. There is a significant relationship between green participation behaviour and intention to stay at a green hotel of hotel guests.	Supported

5.2 Discussions

5.2.1 The relationship between personal demography and attitudes and behaviours of Western guests

5.2.1.1 Gender

Previous studies indicated (eg., Eagly, 1987; Laroche et al., 2001; Han et al., 2011; Roberts, 1996), in general, that female guests tended to have more eco-friendly environmental awareness and that more mature guests exhibited more eco-friendly behaviours, positive attitudes on green hotels and also recommend staying at green hotels. The results of this study, however, reflected that gender and age did not affect green attitudes and behaviours of hotel guests. In fact, males and females appear to equally emphasize the importance of our natural environment.

Similarly, previous research on psychology, determined that females displayed more personal awareness than males and a greater responsibility towards making decisions to purchase environmentally friendly products (Saad and Gill, 2000). These findings also contrast with this research, that found that both males and females are willing to accept responsibility to help protect the environment by choosing to stay at green hotels. Unlike the participating in green hotel attributes on the gender factor, males and females are different on the behavior of environmentally friendly practices in the activities than green hotels provided. The study of Han and Ryu (2006) supported this finding that environmentally friendly participation differs between genders.

5.2.1.2 Age

On the age factor, previous research indicated that environmental awareness and purchase making decisions were, normally, found in older guests (Han et al., 2011). Age is an important factor that influences the willingness to stay at green hotels (Chen, 2014). On the contrary, this study found that guests in every age range had environmentally friendly attitudes and showed positive behaviours toward green hotel attributes and intentions to stay at green hotels. This study showed the result of the age factor was different from other studies. Other studies concerned the age factor that influenced guests' attitudes and behaviors unlike this study. Nationalities might be a reason for the differences. Other studies concentrated on a specific nationality and country while this study focused more extensively among the Western group

which contained varieties of nationalities and countries in the group. The results from various nationalities and countries in the Western group expressed green attitudes and behaviors which were not reflected by ages, while the results from a specific nationality were affected by ages.

5.2.1.3 Education

Many studies demonstrated that the level of education and income obviously affected eco-friendly attitudes and behaviours, the higher the education or income, the higher the positive attitudes and behaviours of environment conservation (Keaveney and Parthasaraty, 2001; Roberts, 1996). Compared to the previous literature, there are some similar findings and some different findings on this study. The similar findings are within the education factor.

Guests who have a high education level tend to also have high green attitudes, including environmental responsibilities and optimistic attitudes of green hotels. As an education generates knowledge (Roberts, 1996), the guests who have a high level of education tend to have more knowledge toward the natural environment which leads to more eco-friendly attitudes. In addition, the high educated guests have positive behaviours toward the natural environment. This research finds that highly educated guests tended to practice green hotel attributes frequently such as separating garbage, using the towel and bedsheets reuse program, and turning off unnecessary lights and electronic devices. They also intentionally selected green hotels on their travels which were supported by the study of Robert (1996) that the guests who have a high education were more likely to participate in eco-friendly activities and purchase green products.

5.2.1.4 Income

The result that was contributed from the income factor in this study was different to other literature which reviewed that guests who had higher incomes had higher environmental attitudes and were more powerful in making decisions on eco-friendly behaviours (Keaveney and Parthasaraty, 2001; Roberts, 1996). However, the findings of this study showed other aspects of green attitudes and behaviours regarding the income factor. High income did not reflect high environmental attitudes in both the global environmental attitude and green hotel attitude. This means that guests who have a high income will not have more positive environmental attitudes than guests who have a lower income. Also, in terms of participation behaviour and intention to stay at green hotels, it was found that a stable economic status from a high income does not

contribute to or assist to persuade guests to participate in green hotel activities or stay in green hotels.

5.2.2 The relationship between attitude toward global environment and green hotel attitude of Western guests

Consistent with Mohd Noor et al. (2014) and Stefanica and Butnaru (2015), eco-friendly attitudes encompassing beliefs, knowledge and opinion towards environment conservation, provided a positive connection to tourists' attitudes of green hotels. It supports this finding that shows the association of the attitude toward global environment and green hotel attitude. Therefore, the guests who have positive attitudes on the global environment tend to have positive attitudes on green hotels as well.

5.2.3 The relationship between green attitudes and green behaviours of Western guests

Based on the studies of Mongkol and Vannavanit (2015) and Noor et al. (2014), they agreed that guests' attitudes toward social responsibility and environmental issues generated the participation of guests in practising green hotel virtues and even accepting minor inconveniences during stays at green hotels. Guests who have a strong attitude on the global environment will intensively practice green activities (Mohd Noor et al. 2014). These relate to the result that revealed the importance of the attitude toward global environment to green participation in green hotel guests. Among Western guests, the attitude toward global environment was related to green participation behaviour. It differed from the group of Cyprus travellers' behaviours that were investigated by Gronau and Brohlburg (2011). Even though Cyprus travellers have an attitude on environment conservation, the convenience and quality of service were more of a priority concern (Gronau and Brohlburg, 2011). Therefore, from this finding, it can be summarized that the green participation behaviour of green hotel guests is influenced by the attitude toward global environment especially for the group of Western tourists.

In terms of the relationship between attitude toward global environment and intention to stay at a green hotel, the finding of this study indicated that guests who were concerned about the global environment tended to choose green hotels when travelling. The finding was supported by the studies of Mohd Noor et al. (2014) and Lita et al. (2013). They found that tourists who have an eco-friendly attitude were attracted by green hotels. The

environmental concept was also a significant factor to attract returning guests Lita et al.,2013). However, attitude toward global environment s might not be the priority factor for hotel selection in some groups or nationalities (Afrouz, 2012; Chen, 2014). Price was more important than an eco-friendly factor for Chinese tourists, unlike Taiwanese tourists (Chen, 2014). Western guests' attitude toward global environment from the finding of this study was similar to Taiwanese guests. The attitude toward global environment was meaningful for Western guests when making decisions on hotel selection.

There are many studies (e.g., Tilikidou and Delistavrou, 2014; Han et al., 2011; Han and Yoon, 2015; Mongkol and Vannavanit, 2015) that discuss the association of green hotel attitude and green behaviours. They mention that the green concept attitude influences eco-friendly behaviour which is proved in the results of this study. This study found that Western guests who have a green hotel attitude tend to have green participation behaviour and intention to stay at green hotels. Tilikidou and Delistavrou (2014) also researched the relationship of green concept attitude and eco-friendly behaviour on the Greek market. They found that guests in the Greek market who intended to stay at green hotels gave priority to the natural environment. However, price and convenience were also other factors that impacted green participation behaviour and intention to stay at green hotels (Mongkol and Vannavanit, 2015). Although Western guests had green hotel attitudes, were willing to participate in green hotel attributes and strongly intended to stay at green hotels, there might be other factors that slightly influence green behaviours.

5.2.4 The relationship between green participation behaviour and Western guest intention to stay at a green hotel

As a result of this study, guests who participate in green hotels' eco-friendly attributes probably intend to stay at green hotels. There is various literature that supports and rejects this finding. The studies that support this research finding are from Mongkol and Vannavanit (2015) and Bruns-Smith et al. (2015). They revealed that guests were willing to participate in the green hotels' attributes such as the towel and linen reuse program and to stay at green hotels, but their convenience was still important. However, Verma and Chandra (2016) presented another side of the green participation behaviour that there might not be all green attributes that guests were willing to practice such as towel reuse program, but guests had still

preferred to stay at green hotels. The study of Kim et al. (2016) rejected the result of this research. Green participation of guests does not influence guest satisfaction and intention to stay at green hotels, unlike service and product quality do (Kim et al., 2016). In conclusion, the guests whose regular behaviours of participation in green activities that the green hotel provided, tended to be the same group that preferred to stay at green hotels. Therefore, the intention of selecting green hotels is directly related to eco-friendly behaviour (Han and Yoon, 2015).

5.2.5 The connection of the research's findings.

In summing up, the personal demographic that significantly influences green attitude and green behaviour is the guests' level of education. Education refers to knowledge, which indicates that green attitudes and behaviours are affected by knowledge. According to the green attitudes, the global attitude is related to the green hotel attitude which means if guests have a global attitude, they will have a green hotel attitude as well. Similar to green behaviours, if guests are willing to participate in green hotel activities, they usually tend to favour staying at green hotels.

In addition, there is a definite connection between green attitudes and green behaviours. Guests who have a attitude toward global environment or green hotel attitude will be interested to participate in green hotel attributes and therefore prefer to stay at green hotels. It can be summarized that education is an important factor in green attitudes, and green attitudes, in turn, lead to green behaviours.

With reference to the Hierarchy of Effect which was created by Lavidge and Steiner (1961) to analyse the relation of attitude and behaviour, the Western guests of this study are in the high involvement group. The process of a high involvement group was started from cognition, which is knowledge or beliefs, and ultimately led to behaviours. Guests who are at this level have formulated their behaviours according to their knowledge or beliefs and selected the required solution to complement their needs. (Lavidge and Steiner, 1961). Therefore, to introduce green attitudes which link to green behavioural knowledge should be prioritised.

5.3 Recommendation

As the research proposed to investigate the relationship between Western guests' demography, attitude toward global environment, green hotel attitudes, green participation

behaviour, and intention to stay at green hotels, the findings of this research are expected to benefit hotels and green hotels to understand guests and plan for marketing strategies. With regards to the previous discussion, the suggestions can be developed as follows:

5.3.1 Develop the guests' green attitudes toward the global environment and green hotel to enhance the guests' green behaviours.

According to the research findings, the guests' green attitudes are influenced by education factors. This could be interpreted that to develop the green attitudes, in other words, to create awareness toward the global environmental crisis and to introduce the importance of green hotels, green knowledge should be provided to the guests. Hence, green hotels could develop guests' attitudes which, in turn, leads to the guests' green behaviour, by intending to improve guests' knowledge in respect of the global environment as well as green hotels as follows:

5.3.1.1 Improve guests' attitude toward the global environment.

- The executive managers should introduce Corporate Social Responsibility projects (CSR) which are related to protecting our global environment such as Mangrove planting, rare animal-release and Biodiversity conservation programs.

- The hotels should contact previous guests (through provided connection channels) inviting them to return and participate in hotel CSR activities. Hotels could also provide added incentives such as offering special gift vouchers for forthcoming activities that could attract, encourage and generate guest interest.

- CSR activities should also be consistently promoted through various media, predominantly on the hotel's website, but also through social media, forthcoming attractions and events, and OTA applications.

5.3.1.2 Improve guests' attitude toward green hotels.

- The hotel's logo and environmental certificates should be attractively published on travelling webpages and OTA applications to enhance the guest perception of the hotel's environmentally-friendly attitude and behaviour.

- The green hotel should create an internal public relations outlet that could continually promote and provide updates on current environmentally-friendly activities and facilities to guests.

- All hotel employees should undergo regular internal training in environmental conservation practices. The green hotel concept is not only to implement green attributes but should publicly lead by example. As such hotel employees should be seen by guests as representatives of the hotel's green mission by actively carrying out green practices with the ability and knowledge to respond to guest enquiries in an informative, encouraging and interesting manner.

5.3.2 Develop guests' green participation behaviour to further advance intentions to stay at green hotels.

Intentions to stay at green hotels is directly related to guests' green attitude and green participation behaviour. Therefore, to increase the probability of intentions to stay, green participation behaviour among the hotel guests should also be developed as follows:

Introduce attractive green hotel attribute information to develop guests' green participation behaviour.

- The hotel's green products should look appealing and be clearly labelled to enhance guests' understanding and clarify the differences between green and general products.
- Effective advertising should be created according to the interest and behavior of hotel guests differentiated between males and females to assure hotel guests that participation in green hotel attributes really does make a difference in helping to protect and save the environment.
- Clear and precise information should be provided to highlight the advantages of participating in green hotel characteristics (eg., reuse of towels and bedsheets, separating garbage, and shampoo dispensers). Negative aspects of the harmful effects caused by not adapting should also be advertised to educate and encourage guests to use eco-friendly amenities.

In summary, the recommendations are mainly focused on providing information about global environment, green hotel, and green hotel attributes to create the hotel customers' green attitude and attract them to participate on green attributes which effect to the customers' intention to stay at green hotel.

5.4 Limitations and Future Research.

Several limitations were discovered during this study, and therefore the findings should be interpreted with caution. Firstly, the study only focused on one group of guests, Westerners, hence, it might not apply to other groups of international guests. A recommended suggestion for future research is to expand this research to include other groups of visitors, who also impact the Thai hotel industry, such as Asian or domestic tourists.

Secondly, the results of this study were determined by data collected from a few selected nationalities which, therefore, may not be applicable when compared with other Western nationalities not included in this research whose national traditions, cultures and backgrounds may vary. In view of this, a suggestion for future research would be to consider studying nationalities on an individual scale which could increase the accuracy and credibility of the results.

Thirdly, the population of this research was tourists who had experienced accommodation in Green Leaf certified hotels which did not cover other certifications. There were other green certifications that were not considered in this research, such as Green Globe and ISO 14001. A suggestion for future research would be to consider collecting data from all green certified hotels in Phuket region which could increase the reliability of the research.

And finally, due to the fact that our research was based exclusively on certified green hotels in the Phuket region, these results may be found to differ in other areas of Thailand. Therefore, it is recommended that this study be expanded, in order to further benefit the Hotel and Tourism industry's current contribution to the international green mission by actively protecting our planet, future research should be extended to other regions that also provide green hotel facilities and amenities like Chiang Mai.

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Appendix A

Questionnaire

“Green Attitudes and the Behaviors of Western Visitors Toward Green Hotels in Phuket,
Thailand”

As a part of my MBA thesis at Faculty of Hospitality and Tourism, Prince of Songkla University, Phuket Campus, I am conducting a survey to study on “Green Attitude and Behavior of Green Hotels’ Western Visitors in Phuket, Thailand”. The purpose of this study is to investigate the relation between personal demography, attitude, and behavior of Western visitors toward green hotels. The result will help in design marketing strategies to attract Western visitors intent on staying at green hotels Therefore, I will be appreciated if you could complete the following questions.

Section A: Personal Profile

1. Gender: Male Female
2. Nationality: _____
3. Age: 20 – 30 years old 31 – 40 years old
 41 – 50 years old 51 years old and above
4. Marital Status
 Single Married Separated
 Divorced Others, (Please specify) _____
5. Education Level
 Master’s degree/ Graduate or higher Diploma
 Undergraduate/ bachelor’s degree High school
 Others, (Please specify) _____
6. Income (per month)
 Less than 3,000 USD / ~ 2,540 EUR
 3,001 – 6,000 USD / ~ 2,541 – 5,080 EUR
 6,001 – 9,000 USD / ~ 5,081 – 7,630 EUR
 9,001 – 12,000 USD / ~ 7,631 – 10,170 EUR
 12,001 – 15,000 USD / ~ 10,171 – 12,720 EUR
 15,001 – 18,000 USD / ~ 12,721 – 15,260 EUR

18,001 – 21,000 USD / ~ 15,261 – 17,800 EUR

Above 21,000 USD / ~ 17,800 EUR

Section B: General Information

7. How many times you have visited abroad in 3 years? _____ time (s)

8. Have you been to Thailand before?

Yes, _____ time (s) No

9. Please identifies the hotel in Phuket where you have stayed or currently stay.

- | | |
|--|---|
| <input type="checkbox"/> Access Resort & Villas | <input type="checkbox"/> Amari Coral Beach Phuket |
| <input type="checkbox"/> Andaman Cannacia Resort & Spa | <input type="checkbox"/> Andaman Seaview Hotel |
| <input type="checkbox"/> Aquamarine Resort and Villa | <input type="checkbox"/> Banyan Tree Resort Phuket |
| <input type="checkbox"/> Bundarika Villa & Suites Phuket | <input type="checkbox"/> By The Sea |
| <input type="checkbox"/> Centara Grand Beach Resort Phuket | <input type="checkbox"/> Centara Karon Resort Phuket |
| <input type="checkbox"/> Centara Kata Resort Phuket | <input type="checkbox"/> Deevana Patong Resort & Spa |
| <input type="checkbox"/> Duangjitt Resort & Spa | <input type="checkbox"/> Horizon Karon Beach Resort & Spa |
| <input type="checkbox"/> Horizon Patong Beach Resort | <input type="checkbox"/> JW Marriott Phuket Resort & Spa |
| <input type="checkbox"/> Karon Sea Sand Resort and Spa | <input type="checkbox"/> Kata Palm Resort & Spa |
| <input type="checkbox"/> Le Meridien Phuket Beach Resort | <input type="checkbox"/> Marriotts Mai Khao Beach |
| <input type="checkbox"/> Movenpick Resort & Spa Karon | <input type="checkbox"/> Orchidacea Resort |
| <input type="checkbox"/> Patong Lodge Hotel | <input type="checkbox"/> Patong Paragon Hotel |
| <input type="checkbox"/> Peach Hill Hotel & Resort | <input type="checkbox"/> Phuket Graceland Resort & Spa |
| <input type="checkbox"/> Royal Phuket City | <input type="checkbox"/> Sawaddi Patong Resort |
| <input type="checkbox"/> Sea Sun Sand Resort & Spa | <input type="checkbox"/> Sea View Patong Hotel |
| <input type="checkbox"/> Serene Resort | <input type="checkbox"/> Thara Patong Beach Resort & Spa |
| <input type="checkbox"/> The Blue Marine Resort & Spa | <input type="checkbox"/> The Kee Resort & Spa |
| <input type="checkbox"/> The Royal Paradise Hotel & Spa | <input type="checkbox"/> The Vijitt Resort Phuket |
| <input type="checkbox"/> Others, (Please specify) _____ | |

Section C: Your opinions, feelings and behaviors about environmental conservation and hotel green attributes.

10. Please circle the most appropriate number that indicates your attitude and behaviors in each following statement.

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Part 1: Attitudes on Global Environment Conservation					
- I am very worried about environmental issues because my country has limited resources.	1	2	3	4	5
- The earth is a closed system so I worry that the environment will not returns to normal after it is destroyed.	1	2	3	4	5
- I am willing to give up things that I like doing if they harm the natural environment.	1	2	3	4	5
- I am willing to take on responsibilities that will help conserve the natural environment.	1	2	3	4	5
- Even when it is inconvenient for me, I am willing to do what I think is best for the environment.	1	2	3	4	5
- I am willing to go out of my way to do what is best for the environment.	1	2	3	4	5
Part 2: Attitude toward Green Hotels					
- I believe that staying at a green hotel can protect the global environment.	1	2	3	4	5
- I believe that staying at a green hotel makes me more socially responsible.	1	2	3	4	5
- I believe that staying at a green hotel offers the experience of a healthy, environmentally friendly guestroom.	1	2	3	4	5

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
- I believe that the price for staying at a green hotel is reasonable.	1	2	3	4	5
- I believe that it is convenient to stay at a green hotel.	1	2	3	4	5
- I believe that finding a green hotel while travelling is not difficult.	1	2	3	4	5
Part 3: Intention to Stay at Green Hotel					
- I am willing to visit a green hotel.	1	2	3	4	5
- I plan to stay at a green hotel when travelling.	1	2	3	4	5
- I will book a green hotel to stay at my next time travelling.	1	2	3	4	5
- I am willing to pay more for a green hotel.	1	2	3	4	5
- I am willing to sacrifice quality by staying at a green hotel.	1	2	3	4	5
- I am willing to sacrifice convenience by staying at a green hotel.	1	2	3	4	5
- I am willing to sacrifice luxury by staying at a green hotel.	1	2	3	4	5

11. Please circle the most appropriate number that indicate on how often do you practice in each following statement while staying at the hotel.

Statement	Never	Seldom	Sometimes	Often	Always
Part 4: Participating in Green Activities					
- Towel reuse program.	1	2	3	4	5
- Bed sheet reuse program.	1	2	3	4	5
- Using water carefully when brushing your teeth, shaving or washing your hands and face.	1	2	3	4	5
- Separating garbage for recycling.	1	2	3	4	5
- Setting an air-conditioner at an appropriate temperature to save energy.	1	2	3	4	5
- Turning off electronic devices such as television, stereo, computer, fans when you are not using them.	1	2	3	4	5
- Turning off unnecessary light in the room to save energy when you are not using it.	1	2	3	4	5

12. Other comments (if any)

APPENDIX B**Certification of Participation**

VITAE

Name Miss Jantiwan Samati

Student ID 5930121002

Educational Attainment

Degree	Name of Institution	Year of Graduation
Bachelor of Arts	Bangkok University	2003
Master of International Business	University of Wollongong, Australia	2005

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List of Publication and Proceeding

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