Theory of Planned Behaviour and Pro-environmental Intention: Russian, Australian and Chinese Tourists in Phuket, Thailand

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Abstract

As environmental problems keep being concerned by many parties, not only actors in the production side are accused as roots of the problem, the consumer side should not also be neglected. Since it has been suggested that pro-environmental intention will probably lead to some responsible behavior, this study aims to explore factors influencing consumers’ pro-environmental behavioral intention by applying the framework of the theory of planned behavior (TPB). The study focused on exploring the behavior of international tourists from Russia, Australia and China who travel in Phuket Province, Thailand. The result of multiple regression analysis indicated that all factors were positively predictors of pro-environmental intention. Perceived behavioral control provided the highest impact (Beta = 0.543) whereas attitude toward pro-environmental behavior (Beta = 0.140) and subjective norms (Beta = 0.140) provided the lower impact and finally, perceived value (Beta = 0.087) provided the lowest impact.

Keywords: sustainable consumption, sustainable marketing, responsible behavior, tourist behavior

Introduction

For decades environmental problems become a global issue. Climate change, sea pollution, deforestation as well as human trafficking and employment injustice are examples that are more and more apparent. Business commercial activities and consumer behaviors seem to be one of the major concerns of these problems. Marketing activities has been accused as a root of materialism and overconsumption. However, after the concept of sustainable development has been introduced to the society, every partners with high hope work in cooperation toward the same direction where it is believed that sustainable consumption and socially responsible behavior will be able to lessen severity of the situation. Many companies invest massively to develop advanced technology and innovations to support the sustainable production process and patterns. However, while producers are able to save some energy and materials for their production and lower product prices, the demand keeps increasing. Environmentally friendly products such as eco car, LED lights and green home electronic devices are invented in order to help lessen negative environmental impact. However, the consumption rate never decrease and environmental problem still occurs.

Changes in tourism industry is another examples of how an attempt to save money and energy lead to reverse effect. Tourist business has become one of the world’s fastest growing industries which generates a lot of income and drives global economy. As a result, to be more attractive to every class of tourists, many airlines has established low-cost airlines to motivate consumers to travel more safely and
conveniently which is part of their sales promotion and marketing plan. They also decrease the use of unnecessary material by utilizing online service such as e-ticket which are beneficial for both providers and customers. Nevertheless, the more people travel, the higher level of consumption material footprint as mentioned in the United Nation Sustainable Development Goal Report (2019) are left behind. The sustainable development goal number 12 emphasizes on ensuring sustainable consumption and production patterns with the belief that human has a power to minimize the environmental problems.

This study aims to explore factors that influence on consumers’ pro-environmental behavioral intention since it has been suggested that pro-environmental intention probably lead to some responsible behavior (Dinan & Sargeant, 2000). The study focused on international tourists traveling in Phuket Province, Thailand. According to the Ministry of Tourism and Sport (2019), every year there are millions of tourists visiting Thailand especially Phuket, one of the world’s famous destination. The figure in table 1 showed that the number of tourists have increased year by year and the proportion of international tourists were greater than domestic tourists. In average, most of tourist came from China, Russia and Australia. With this large amount of number it is important to study and understand the behavior of the foreign visitors in order to develop the sustainable plan and management system.

| Countries          | Average 2013 | 2014 | 2015 | 2016 | 2017 |
|--------------------|--------------|------|------|------|------|
| China              | 1,999,920    | 2,537,995 | 2,255,632 | 2,789,640 | 1,277,060 |
| Russia             | 756,202      | 807,776 | 645,586 | 880,185 | 746,586 |
| Australia          | 558,742      | 535,968 | 590,696 | 520,886 | 715,877 |
| Germany            | 486,669      | 471,465 | 446,951 | 581,154 | 449,452 |
| United Kingdom     | 325,020      | 345,806 | 304,022 | 357,703 | 308,085 |
| Total top five countries | 4,129,552    | 4,272,861 | 3,344,284 | 4,711,866 | 3,189,183 |
| Other countries    | 4,330,370    | 4,498,794 | 4,473,987 | 4,043,191 | 4,527,604 |
| Total foreign tourists | 8,459,922    | 8,771,655 | 7,818,271 | 9,172,759 | 7,716,787 |
| Thai tourists      | 3,150,212    | 3,156,924 | 2,975,032 | 3,203,009 | 3,087,913 |
| Grand Total        | 11,610,134   | 12,023,148 | 10,793,303 | 12,500,939 | 10,804,700 |

Therefore, the objective of this study is a) to study the demographic characteristic of Russian, Australian and Chinese tourists traveling to Phuket, Thailand; b) to study travel characteristic of Russian, Australian and Chinese tourists traveling to Phuket, Thailand; and c) to investigate factors influencing pro-environmental intention of Russian, Australian and Chinese tourists traveling to Phuket, Thailand utilizing the framework of the theory of planned behavior.

**Literature Review**

**Theory of Planned Behavior (TPB)**

The theory of planned behavior (TPB) was developed following the theory of reasoned action (TRA), which is developed to explain and predict behavior in different context (Ajzen, 1991). The theory suggests that behavioral intention is determined by various intrinsic and extrinsic factors, namely, attitude toward the behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). Many studies in human behavior employed the framework of the theory of planned behavior to study human action (Ajzen, 2002). In the context of tourist behavior, the theory of planned behavior was often used to explore pro-environmental behavior attitudes and intention (Juvan & Donicar, 2014). Moreover, the theory effectively explained tourists’ behavior in terms of destination choices, tourist segmentation and satisfaction (Budeanu, 2007).
In general attitudes toward a specific behavior represents an individual’s assessment of good/bad; beneficial/harmful; pleasant/unpleasant; and like/dislike (Ajzen, 1991) and becomes a predictor of behavioral intention. In this study attitudes toward behavior emphasizes on pro-environmental behavior, which is believed as one of the influential factors of pro-environmental intention. According to Hawkins and Mothersbaugh, attitudes can be explained as “an enduring organization of motivational, emotional, perceptual and cognitive processes with respect to some aspect of our environment (2010, p. 392)”.

Subjective norms is a social factor which will determine the emergence of behavior due to the social pressure (Ajzen, 1991). Subjective norms in this study refers to the social pressure within the group of tourists traveling at the destination as well as the social pressure encouraged by local people.

Perceived behavioral control is the way a person perceives ease or difficulty when performing a specific behavior (Ajzen, 1991). This determinant also reflects a person’s past experience and ways to deal with unexpected situations. In sustainable tourist behavior studies, it is founded that independent tourists and backpackers are more likely to have higher responsibility at the destination and likely to behave in the climate friendly way (Shamsub & Lebel, 2012; Hergesell, 2011).

Perceived value refers to consumers’ overall assessment of a product or service they have purchased and consumed by weighing their giving and gaining (Zeithaml, 1988). Perceived value is suggested as an additional determinant of pro-environmental intention in this study as tourists’ perception is considered to have an effect on satisfaction which can determine their consumption behavioral intention at travel destination (Wang & Leou, 2015).

**Behavioral Intention**

Regarding the theory of planned behavior, a person will not perform behavior without intention. Behavioral intention is an immediate determinant that influence a given behavior (Ajzen, 1991). Wang, Zhang, Yu and Hu (2018) found that responsible environmental behavioral intention significantly influences on responsible environmental behavior. In the present study, pro-environmental intention refers to a) a person’s willingness to perform pro-environmental practices to protect the environment of travel destination; b) a person’s plan to act responsibly to protect the environment of travel destination; and c) a person’s effort to act responsibly to protect the environment of travel destination.
Conceptual framework

Based on the literature, the study proposed four potential influential factors, which are attitude toward pro-environmental behavior, subjective norms, perceived behavioral control, and perceived value as shown in figure 2.

Figure 2 Conceptual Framework

Methodology

Participants

The participants of this study were international tourists from Russia, Australia and China who traveled and stayed in Thailand at least 24 hours but not over 90 days. The objectives of traveling must be either to travel for a vacation, to visit friends/relatives, or to conduct business trip. The sampling technique used was probability sampling technique (simple random sampling).

Data Collection

In this study, the primary data collection – a quantitative-based method – was considered as a key method. To measure tourist behavior, a self-administered, close-ended questionnaire in English, Russian and Chinese was distributed and collected at the departure gate of the international terminal of Phuket International Airport during November 21, 2018 – December 10, 2018.

Data Analysis technique

The demographic characteristics of the respondents is analyzed by using descriptive statistics. Multiple regression technique was used to investigate the relationship between factors – attitude toward pro-environmental behavior, subjective norms, perceived behavioral control, perceived value and pro-environmental intention of Russian, Australian, and Chinese tourists traveling in Phuket, Thailand.

Reliability Test

The Cronbach’s alpha of attitude toward pro-environmental behavior (0.75), subjective norms (0.82), perceived behavioral control (0.78), perceived value (0.85) and pro-environmental intention (0.88). It can be seen that reliability estimates Cronbach’s coefficient alpha ranged from 0.75 to 0.88. All factors were above the level of reliability indicating that they were internally consistent enough to provide valuable data.
Result

Demographic Characteristics of the Respondents

The demographic profiles of the respondents were shown in table 2. The data indicated that 57.8% of the respondents were female and 42.2% were male. Among the three countries, 44.3% were from Russia, 32.1% were from China and 23.6% were from Australia. Those aged 20-29 years were the majority of the respondents which accounted for 41.9%. Regarding their education background, most respondents held a college diploma or equivalent (28.8%) and bachelor degree (26.4%). The majority of them were full-time employees (61.7%).

| Category                              | Frequency | Percentage (%) |
|---------------------------------------|-----------|----------------|
| Gender                                |           |                |
| Male                                  | 279       | 42.2           |
| Female                                | 382       | 57.8           |
| Country of permanent residence        |           |                |
| Russia                                | 293       | 44.3           |
| China                                 | 212       | 32.1           |
| Australia                             | 156       | 23.6           |
| Age                                   |           |                |
| (Average age 33.66 years old)         |           |                |
| Less than 20                          | 48        | 7.3            |
| 20-29                                 | 277       | 41.9           |
| 30-39                                 | 169       | 25.6           |
| 40-49                                 | 68        | 10.3           |
| 50-59                                 | 66        | 10.0           |
| 60 or above                           | 33        | 5.0            |
| Highest education qualification       |           |                |
| No formal qualifications              | 23        | 2.1            |
| Secondary/High school                 | 218       | 19.7           |
| College diploma or equivalent         | 318       | 28.8           |
| Undergraduate level                   | 292       | 26.4           |
| Master level                          | 211       | 19.1           |
| Doctoral level                        | 30        | 2.7            |
| Other                                 | 12        | 1.1            |
| Occupation                            |           |                |
| Employed full-time                    | 418       | 61.7           |
| Employed part-time                    | 21        | 4.3            |
| Self-employed                         | 50        | 9.5            |
| Freelance worker                      | 54        | 6.2            |
| Student                               | 61        | 9.3            |
| Unemployed                            | 16        | 2.7            |
| Retired                               | 33        | 4.9            |
| Other                                 | 8         | 0.5            |

Travel Characteristics of the Respondents

Table 3 illustrated travel characteristics of the respondents. Most of the respondents had an experience traveling abroad, where more than one-third (35.2%) travel abroad once a year and 56.4% visited Thailand for the first time. With regard to the current trip in Thailand, 37.2% of the respondents travel with tour agencies or operators and 25.7% arranged their own trip but booked tickets through tour agencies. When mentioning about responsible tourism more than a half of the respondents had never heard about this concept (53.4%) while 21.9% had met with the concept but could not tell exactly what it was. There was only 11% of the respondents who know exactly what responsible tourism was.
Table 3: Travel Characteristics of the Respondents (n = 661)

| Category                                | Frequency | Percentage (%) |
|-----------------------------------------|-----------|----------------|
| **Experience of traveling abroad**      |           |                |
| First time                              | 126       | 19.1           |
| Less than once in 2 years               | 51        | 7.7            |
| Every 2 years                           | 55        | 8.3            |
| Once a year                             | 233       | 35.2           |
| Twice a year                            | 116       | 17.5           |
| More than twice a year                  | 80        | 12.1           |
| **Experience of traveling to Thailand** |           |                |
| This is my first time                   | 373       | 56.4           |
| This is not my first time               | 288       | 43.6           |
| **Travel expenditure per day**          |           |                |
| Less than 500 Baht                      | 34        | 5.1            |
| 500-1000 Baht                           | 151       | 22.8           |
| 1001-2000 Baht                          | 224       | 33.9           |
| More than 2000 Baht                     | 252       | 38.1           |
| **Current trip arrangement**            |           |                |
| Join group tour completely              | 246       | 37.2           |
| Arrange individual tour; travel agency only helps for tickets | 170 | 25.7 |
| Arrange individual tour arranged through travel agency | 10 | 1.5 |
| No arrangement by travel agency         | 118       | 17.9           |
| No arrangement by travel agency but join some local trips | 117 | 17.7 |
| **Awareness of responsible tourism**    |           |                |
| I have never met with this concept      | 353       | 53.4           |
| I met up with this concept, but I do not know exactly what it is | 145 | 21.9 |
| I met up with this concept, and I know exactly what it is | 73 | 11.0 |
| Do not remember/ Hard to say            | 90        | 13.6           |

**Correlation Analysis**

Table 4 shows the relationship between the variables. According to Cohen (1988) Pearson Correlation (r) was employed to describe the strength of the relationship between two variables where the values of correlation coefficients indicate the strength of the relationship. The results of this study revealed that the correlation of all factors was significant at the 0.01 level. The positive correlation between perceived behavioral control and pro-environmental intention was in the strong level (r = 0.727, p < 0.01).
Table 4 Result of Correlation Analysis

| Variables                          | 1     | 2    | 3    | 4    | 5    |
|-----------------------------------|-------|------|------|------|------|
| 1 Attitude toward pro-environmental behavior | 1.00  |      |      |      |      |
| 2 Subjective Norms                | .500**| 1.00 |      |      |      |
| 3 Perceived behavioral control    | .514**| .584**| 1.00 |      |      |
| 4 Perceived value                 | .242**| .282**| .347**| 1.00 |      |
| 5 Pro-environmental intention     | .511**| .552**| .727**| .349**| 1.00 |

**Correlation is significant at the 0.01 level (2-tailed).

**Regression Analysis**

The multiple regression model with all predictors generated $R^2 = .574$, $F = 221.078$, $p < .05$. The analysis result from table 5 indicated that all of the four factors were positively significant predictors towards pro-environmental intention. It also found that perceived behavioral control provided the highest impact (Beta = 0.543) whereas attitude toward pro-environmental behavior (Beta = 0.140) and subjective norms (Beta = 0.140) provided the lower impact and finally, perceived value (Beta = 0.087) provided the lowest impact.

Table 5 Result of Multiple Regression Analysis

| Variables                          | Standardized Coefficient | t-value | Sig.     |
|-----------------------------------|--------------------------|---------|----------|
| Attitude toward pro-environmental behavior | 0.140                   | 4.517   | 0.000    |
| Subjective norms                  | 0.140                    | 4.267   | 0.000    |
| Perceived behavioral control      | 0.543                    | 16.044  | 0.000    |
| Perceived value                   | 0.087                    | 3.185   | 0.002    |

**Discussion and Conclusion**

The result of the study pointed out that the application of the theory of planned behavior could explain the indicators of pro-environmental intention. Even though the rate of responsible tourism awareness is quite low. It can be explained that the concept of responsible tourism might be new to some countries, or in some countries people are more familiar with the other terms such as ecotourism, natural-based tourism and green tourism, which are also recognized as alternative of sustainable development in tourism (Dinan & Sargeant, 2000). Nonetheless, the positive influence of all factors – attitude toward pro-environmental behavior, subjective norms, perceived behavioral control and perceived value – on pro-environmental intention, become crucial evidence that in the demand side consumers should be reinforced with pro-environmental attitudes and relevant factors. Thus, the result of this study will be useful for developing guidelines, policies and business strategies for both public and private sectors. Although, there are many arguments view marketing as a cause of undesirable consumption behavior, marketing can also support sustainable consumption if it is studied in the right direction.

This study is limited in a number of ways. For the future research, variety of counties of residence of the tourist should be added as well as the attributes since there are more indicators that can influence behavioral intention of consumers. In addition, the scope of area is Phuket Province, Thailand, which is famous for its natural beauty of white beaches and blue ocean much more than cultural site. Hence, the objective and motivation of traveling might not much different. A comparative study among tourists from different countries because each country has its own background which may affect the result of the study.
References

Ajzen, I. (1991). The Theory of Planned Behavior. *Organization Behavior and Human Decision Processes, 5*(2), 179-211.

Ajzen, I. (2002). Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior. *Journal of Applied Social Psychology, 32*(4), 665-683.

Budeanu, A. (2007). Sustainable Tourist Behavior - A Discussion of Opportunities for Change. *International Journal of Consumer Studies, 31*(5), 499-508. https://doi.org/10.1111/j.1470-6431.2007.00606.x

Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Dinan, C. & Sargeant, A. (2000). Social Marketing and Sustainable Tourism - Is There a Match?. *International Journal of Tourism Research, 2*(1), 1-14.

Hawkins, D. I., & Mothersbaugh, D. L. (2010). Consumer behavior: building marketing strategy. 7th ed. NY: McGraw-Hill/Irwin.

Hergesell, A. (2011). Climate Friendly Tourist Behavior. *Sustainable Tourism: Socio-Cultural, Environmental and Economic Impact*, 95-105.

Juvan, E. & Dolnicar, S. (2014). The Attitude-Behaviour Gap in Sustainable Tourism. *Annals of Tourism Research, 48*, 76-95. http://dx.doi.org/10.1016/j.annals.2014.05.012

Ministry of Tourism and Sport. (2019). *Tourist Statistic*. Retrieved from https://www.mots.go.th/more_news.php?cid=411

Shamsub, H., & Lebel, L. (2012). Identifying Tourists with Sustainable Behaviour: A Study of International Tourists to Thailand. *Journal of Environmental Management & Tourism, 1*(5), 26-40.

Wang, X & Leau, C. H. (2015) A Study of Tourism Motivation, Perceived Value and Destination Loyalty for Macao Cultural and Heritage Tourists. *International Journal of marketing Studies, 7*(6), 83-91. http://dx.doi.org/10.5539/ijms.v7n6p83

United Nations. (2019). Sustainable Development Goals Report 2019.

Zeithaml, V. A. (1988), Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing, 52*(3), 2-22. http://dx.doi.org/10.2307/1251446