Application of the Theory on Planned Behaviour to Green Hotel Visit Intention: An Extension of Self-Identity

Cheng Boon Liat¹, Brendon Bienvenido Enriquez Jr.², Thomas Thornborrow³ and Shaheen Mansori⁴

Publication Details: Received 06/07/2018; Revised 23/08/2018; Accepted: 05/09/2018

ABSTRACT

The demand for green products and services has increased in recent years, as customers are more concerned about global warming and environmental pollution. As a result, more companies focus on introducing environmental friendly solutions such as green concept hotels to meet consumers demand. Since the whole concept of green hotel is still novel in market, this article aims to investigate the relationship between attitude, subjective norms, perceived behavioural control, self-identity and intention to visit green hotels. The findings show that self-identity can enhance the predictive powers of the Theory of Planned Behaviour as it explains an additional variance of 9%. This findings can be useful the players in hospitality industry to promote their offering in market by using more effective marketing tools. Furthermore, this research enhances a growing body of knowledge that recognise self-identity as a genuine addition to the Theory of Planned Behaviour.

Keywords: Theory of Reasoned Action, Theory of Planned Behaviour, attitude, subject norm, perceived behavioural control, self-identity, visit intention

INTRODUCTION

Of late, the environment and its ills have been the subject of much discussion. Pollution has been a problem since the industrial revolution (Rees, 1993) such as environmental destruction, infertile soil, sick livestock as well as human health risks. At the consumer level, there have been calls to heed environmental concerns and for the serious consideration of environmental issues. Introduction to concepts such as greenhouse gases, global warming, carbon footprint and food miles have enabled consumers to responsibly discern and consume.

The hospitality business is the largest industry in the world (Bohdanowicz et al., 2001; Cham & Easvaralingam, 2012). According to the WTTC (2016a), it accounted for 9.8% of the global GDP in 2015 and provided 284 million jobs or 9.5% of the total global employment. Therefore, the hotel industry can play a significant role in environmental conservation by going green. Green hotels are defined as environmentally-friendly properties whose managers are eager to
institute programs that save water, energy and reduce solid waste - while saving money - to help protect our one and only Earth (Green Hotels Association, 2016).

Being green offers hotels a competitive edge over the homogeneity of products and services offered by the hotel industry (Martinez, 2015). In other words, hotels may face stagnation in the face of low differentiation brought about by the perceived similarity of consumers. They must differentiate. Apart from reducing the environmental impact, the reduction in the use of water and electricity as well as decreasing waste would mean that the operational cost of the property is further condensed. This cost efficiency translates to the bottom line (lower cost) and hotels can potentially charge more to customers.

In line with the efforts to heal the environment and minimise the onslaught on this fragile ecosystem, it is important to understand consumers’ decision-making processes and encourage the patronage of green hotels. Therefore, the aim of this study is to identify the decision-making processes of consumers using the Theory of Planned Behaviour. Since the Theory of Planned Behaviour is an enhancement from the Theory of Reasoned Action, it should prove to be superior in predicting consumer intention to visit green hotels. Therefore, the objectives of this study are three-fold: first, to study the relationship between attitude, subjective norms, perceived behavioural control and intention to visit green hotels; second, to incorporate self-identity as an additional determinant in the Theory of Planned Behaviour to further improve its predictive powers; and finally, to test the moderating effect of gender on the relationship between attitude, subjective norms, perceived behavioural control, self-identity and intention to visit green hotels.

LITERATURE REVIEW

Theory of Reasoned Action (TRA)

As the name suggests, this theory is based on the idea that as human beings, we are “usually quite rational and make systematic use of information available to [us]” (Ajzen & Fishbein, 1980, p. 5). Our actions are thought through and the actions taken reflect on our deliberation of all available information at a particular moment in time. Our actions are based on reason(s) and we act accordingly. More specifically, our behaviours are predictable.

The Theory of Reasoned Action was initially developed by Fishbein & Ajzen (1975). The authors reasoned that behaviour can be predicted from its immediate antecedent of intention to perform the behaviour. Similarly, intention can be determined by its antecedents of attitude toward the behaviour and subjective norm (see Figure 1 for the model). Combined, attitude and subjective norm shape intention which in turn, shape behaviour (Mishra, Akma & Mishra, 2014).
According to Fishbein and Ajzen (1975), our actions are (to a degree) tempered by the people around us. We are prone to act in line with what is expected from us and within acceptable bounds of our valued others. Ajzen and Fishbein (1980, p. 57) defined subjective norm as “the person’s perception that important others desire the performance or non-performance of a specific behaviour”. Subjective norm is different from social norms as “there is a distinction between whether society condones a behaviour and whether someone perceives that important others whose opinions matter condone the behaviour” (Manning, 2009). Realising this, Ajzen and Fishbein (1980) rightly included this perspective within the Theory of Reasoned Action.

The theory also assumes that we have volitional control or free will to act (Doane, Kelley & Pearson, 2015). In the absence of volitional control, our intention remains a motivation to act; an unfulfilled behaviour until and unless authorised or given the chance to act. According to Netemeyer and Bearden (1992), the Theory of Reasoned Action “has been widely used to predict behavioural intention towards marketing- and consumer-related behaviours”. It has been employed in various settings such as weight loss (Sejwacz, 1980), abortion (Smetana & Adler, 1980), consumer behaviour (Fishbein & Ajzen, 1980) and behavioural changes (Fishbein et al., 1980).

**Theory of Planned Behaviour (TPB)**

This theory is not much of a different from the Theory of Reasoned Action. In fact, it is an extension of it (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980; Ajzen, 1985; Ajzen, 1991). The TPB improved the predictive powers of TRA by accounting for “the original model’s limitations in dealing with behaviours over which people have incomplete volitional control” (Ajzen, 1991, p 181; Kautonen, Gelderen & Tornikoski, 2011). Incomplete volitional control can be attributed to internal and external factors (Ajzen, 1985) for which they are accounted for by perceived behavioural control (Ajzen, 1991). Figure 2 below illustrates the relationship among the independent variables and the dependant variables according to the Theory of Planned Behaviour.

The crucial factor in TPB is the intention to perform a particular behaviour (Ajzen, 1991). Similar to TRA, “the stronger the intention to engage in a behaviour, the more likely should be
its performance” (Ajzen, 1991). For example, the higher a person’s intention to buy the newly launched Apple iPhone 7 the higher the likelihood that he/she would actually buy one. The person would be motivated (intention) to buy the phone and friends (subjective norm) will be impressed. However, since money is an issue (perceived behavioural control) as the phone is expensive the person will not buy the new iPhone 7.

Atsalakis and Slep (1996) concurred by stating that it “is a modern theory in the area of social psychology that aims to predict and explain virtually all forms of behaviour”. Behavioural intention in turn was highly predictive of actual behaviour regarding enrolment in a business ethics course (Cham, Lim, Aik, & Tay, 2016; Cooke et al., 2014; Lim, Cham & Sia, 2018). TPB also proved to be superior in its predictive properties regarding a comparison study by Netemeyer, Andrews and Durvasula (1993). In their study, Netemeyer et al. compared TPB, TRA and the Miniard and Cohen Model in a Valentine’s Day gift-giving study, TPB was found to be superior in predicting behavioural intention. Furthermore, a meta-analysis by Armitage and Conner (2001) provided ample support for the efficacy of TPB while simultaneously encouraging more research to improve its efficacy.

**Figure 2: Theory of Planned Behaviour**

![Diagram](image-url)

**Attitude toward the Behaviour (Attitude)**

The concept of attitude has been in use for the longest time. Wicker (1969, p. 75) stressed that there was “little evidence to support the postulated existence of stable, underlying attitudes within the individual which influence both his verbal expressions and his action”. This led social scientists to conduct some soul searching since the study of attitude was central. About a decade later, the research by Fishbein and Ajzen (1975) made an important distinction of the attitude
concept and re-established the attitude-behaviour link; according to their theory, attitude is mediated through intention. They viewed attitude as an evaluative component on the target behaviour. In their research, attitude was estimated from behavioural beliefs and its evaluated outcomes.

It is thought that certain beliefs become relevant for certain behaviours and that the evaluation of the outcome of conducting the behaviour, whether positive or negative, together make up attitude (Cham, Ng, Lim & Cheng, 2018; Chen & Tung, 2014; Lim & Cham, 2015). Using the expectancy-value model, attitude is estimated based on the summed product of beliefs and outcomes to arrive at a single index for the attitude. This is known as the beliefs-based measure. Attitude can also be directly measured by asking what respondents’ attitudes are towards the behaviour. This is known as direct measure.

**Subjective Norm (SN)**

Jellema et al. (2013) refers to subjective norm simply as “the anticipation of approval of other behaviour”. The intention to perform a behaviour is dependent on the presupposed endorsement of other valued behaviours. The more the individual perceives the endorsement to the behaviour, the more likely his/her intention. Therefore, the motivation to comply to a close and respected person by the individual may shape their behaviour.

This “normative component” (Ajzen & Fishbein, 1980, p. 57) has had mixed receptions among researchers. Some studies have found that subjective norm is the least important of the predictors. While other studies like those of Liobikienė, Mandravickaitė and Bernatonienė (2016), found subjective norm to be the “biggest influence on green purchase behaviour”. Regardless, subjective norm can be valued the same way as attitude was previously; either through summed multiplication of normative beliefs and motivation to comply, or directly measured by asking the individual whether they perceive important what others would agree to the planned behaviour (Acker et al., 2013; Cham et al., 2018).

**Perceived Behavioural Control (PBC)**

According toAjzen (1991), perceived behavioural control refers to “the perceived ease or difficulty of performing the behaviour”. When the required resource(s), ability or control is deficient, the perceived behavioural control effects behaviour through behavioural intention as low probability to perform the behaviour. When the control is high or within the ability of the actor to perform the behaviour, perceived behavioural control then “reflects actual control and has direct link to behaviour not mediated by intentions” (Madden, Ellen & Ajzen, 1992).

Perceived behavioural control is similarly assessed to attitude and subjective norm with the expectancy-value model. Control, beliefs and perceived power are multiplied and summed up to provide a single index of perceived behavioural control. The direct measure is to ask the individual how much control they perceive to have over the behaviour. These two measures (the belief-based measure and direct measure) should strongly correlate to each other as they gauge a similar construct which is perceived behavioural control (Kim et al., 2013).
Self-Identity (SI)

According to Cook, Kerr and Moore (2002), “self-identity is generally interpreted as a label that people use to describe themselves”. Sparks (2000) added that self-identity essentially “refers to the relatively enduring characteristics that people ascribe to themselves, which take the form of (or incorporate) socially given linguistic categorizations”. Green Consumer, for example, is one example of self-identity that some people might ascribe to.

Self-identity seems to sit squarely in the personal category and should not directly affect behavioural intention but influence it through either attitude, subjective norm or perceived behavioural control. However, extant theories could guide more determinants to behavioural intention if it can be proven to add predictive value to the Theory of Planned Behaviour (Ajzen, 1991). The main argument, as suggested by Sparks and Shephard (1992), is that self-identity is reflected within the attitude construct and could not be divorced from it. Self-identity affects attitude which, in turn, affects behavioural intention. Self-identity does not affect behavioural intention directly, it’s independent of attitude (Hogg, 2016). This is in contrast to the findings from other researchers who have incorporated the use of self-identity in TPB such as Whitmarsh and O’Neill (2010), Cook et al. (2002), Smith et al. (2008) and Sparks and Guthrie (1998). They have all found self-identity to be significant and independent of attitude in predicting behavioural intention; in fact, at the end of Sparks and Shepard’s (1992) study, they discovered that self-identity is significant and independent of attitude.

Visit Intention (VI)

The intention to purchase accommodation in green hotel will be designated by visit intention. TPB is used to explain the relationship among visit intention and its predictors of attitude, subjective norm and perceived behavioural control. Several researchers have also argued against the dual role of perceived behavioural control. According to Armitage and Conner (1999), this contributed towards “weak internal reliability designed to measure the perceived behavioural construct”. If PBC was sufficiently operationalised, it will potentially invite problems during factor analysis as it will show up as two factors. If, however, factor analysis shows unidimensionality, the operationalisation of PBC could be construed as inadequate.

Another criticism is on the antecedent; subjective norm. It was found to be the weakest among the predictors in determining intention. Armitage and Conner (2001) speculated that this might be due to its measurement, while Godin and Kok (1996) indicated problems with the “operationalisation of this construct”. However, subjective norm influencing our intention as postulated by TRA/TPB is only up to a certain degree. According scholars, the Theory of Planned Behaviour does not account for “chronic or postponed intentions” (Orbell et al., 1997) or “inclined abstainers” (Sniehotta et al., 2014). These are instances where the intention is positive, but the intended behaviour is unnecessarily postponed indefinitely.
**Moderating Effect of Gender**

According to findings from researchers such as Laroche, Bergeron and Barbaro-Forleo (2001) and Roberts (1996), females seem to be more concerned about the environment and take necessary steps to exercise such concerns. Bussey and Bandura (1999) noted that gender roles are socially driven rather than biologically. Society prescribes feminine values to women while dispensing with masculine values to men. Women do women jobs while men do men jobs. It is hard to imagine male nurses or women pilots. Therefore, the feminine role (gender role) as being nurturing and caring towards others can be seen as extending to the environment and caring for more (Faqih & Jaraddat, 2015).

**Research Model and Hypotheses**

Based on the above arguments, the following research model (as in Figure 3) and hypotheses are proposed:

![Figure 3: Conceptual Model](image-url)

Note: SN = subjective norm; PBC = perceived behavioural control; SI = self-identity; VI = Visit intention
H1: Attitude positively influences visit intention.
H2: Subjective norm positively influences visit intention.
H3: Perceived behavioural control positively influences visit intention.
H4: Self-identity positively influences visit intention.
H5: Gender moderates the relationship between attitude and visit intention.
H6: Gender moderates the relationship between subjective norm and visit intention.
H7: Gender moderates the relationship between perceived behavioural control and visit intention.
H8: Gender moderates the relationship between self-identity and visit intention.

METHODOLOGY

Measures

The questionnaire used in the survey comprises of four sections. Section one contains the Participant Information Sheet which outlines the research and its goals. Section two consists of an expressed consent page where participants were formally asked for consent before contributing to the study. Section three outlines the measures for this study which are: Attitude, Subjective Norm, Perceived Behavioural Control, Self-identity and Visit Intention constructs. Section four contains questions for demographic information.

The measures employed in the questionnaire are all adapted from studies that had previously validated them. Attitude was measured using a 7-item scale adapted from Han, Hsu and Sheu (2010). Subjective Norm was measured via a 3-item scale adapted from Han et al. (2010). Perceived Behavioural Control was measured with a 3-item scale adapted from Han et al. (2010). Visit intention was measured using a 3-item scale adapted from Han et al. (2010). For the Self-identity construct, measures were adapted from Sparks and Shepherd (1992), Whitmarsh and O’Neill (2010), Cook et al. (2002) and Smith et al. (2008). The measures’ wording for Self-identity were slightly altered to suit the present study. The adjustments made were in line with Francis et al.’s (2004) as well as Ajzen and Fishbein’s (1980) questionnaire construction recommendations.

Sampling and Data Collection

The questionnaire was distributed via e-mail linked to a web-based survey software, Qualtrics (www.lancaster.ac.uk/qualtrics). Prior to collecting samples, a test using the G*Power software, a stand-alone power analysis programme, was conducted to ascertain the minimum number of samples required (Faul et al., 2007). Its predictors yielded a minimum sample requirement of 85. Within 229 survey responses, 39 were incomplete and unusable leaving only 190 responses that could be employed. Based on the sample size requirement yielded by the G*Power software, the collection of 190 samples was more than sufficient for statistical significance and power.
RESULTS

Sample Characteristics

The gender distribution among respondents was quite even (Male = 45.7%; Female = 54.3%). The respondents were also relatively young with 90.5% being 45 years old and below. On the education front, undergraduates and postgraduates accounted for 89.4% of respondents.

Descriptive Analysis

As shown in Table 1, the mean values for the variables are ranging from 3.17 to 3.93, which are very close to the centre point value of 3.5; indicating that the data collected are not distorted. In term of standard deviation across the variables, the dispersion of all data values are minimal, this means the data is concentrated around the mean. In addition, the skewness values of the variables are between -0.328 and 0.292; and kurtosis values are ranging from -0.302 to 0.346 respectively. Kline (2005) state that the criteria outlined skewness index to below the absolute value of >-3, while kurtosis index below the absolute value of >10. According to the findings of the data collected, the results for the normality test supports the assumption which are normally distributed. According to (Hair et al., 2010), normality analysis is to ensure the collected data is normally distributed by the validity of the statistical results achieve from the current study.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>3.74</td>
<td>0.597</td>
<td>0.292</td>
<td>-0.062</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>3.17</td>
<td>0.763</td>
<td>0.028</td>
<td>0.346</td>
</tr>
<tr>
<td>Perceived Behavioural Control</td>
<td>3.93</td>
<td>0.555</td>
<td>-0.328</td>
<td>0.281</td>
</tr>
<tr>
<td>Self-identity</td>
<td>3.24</td>
<td>0.704</td>
<td>-0.047</td>
<td>-0.302</td>
</tr>
<tr>
<td>Visit Intention</td>
<td>3.56</td>
<td>0.670</td>
<td>-0.067</td>
<td>0.068</td>
</tr>
</tbody>
</table>

Reliability Analysis

As shown in Table 2, all the variables in this research had Cronbach’s Alpha (α) values above 0.70 (Kline, 2005, p. 70; Hair et al., 2007, p. 244) except for Perceived Behavioural Control which was at 0.66. However, this is still considered acceptable as it shows that the internal consistency reliability is moderate rather than poor (Hair et al., 2007). Overall, the values indicating that all measurement items within the five variables being examined in this research met the requirement for further statistical analyses.
Table 2: Reliability Test for the Variables

<table>
<thead>
<tr>
<th>Scale</th>
<th>α Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>0.92</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>0.91</td>
</tr>
<tr>
<td>Perceived Behavioural Control</td>
<td>0.66</td>
</tr>
<tr>
<td>Self-Identity</td>
<td>0.89</td>
</tr>
<tr>
<td>Visit Intention</td>
<td>0.82</td>
</tr>
</tbody>
</table>

**Pearson Correlation**

As indicated in Table 3, the Pearson correlation coefficients showed that there was a significant linear relationship between the dependent variable (visit intention) and all its independent variables. It is interesting to note that the proposed addition of the predictor ‘self-identity’ had the most significant linear relationship with visit intention, $r (184) = 0.65, p<0.001$. Table 3 also shows the mean and standard deviation for each variable; e.g. the mean (SD) for self-identity was 3.24 (0.70) and 3.56 (0.67) for visit intention.

Table 3: Pearson Correlation Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Visit Intention</th>
<th>Attitude</th>
<th>Subjective Norm</th>
<th>Perceived Behavioural Control</th>
<th>Self-Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit Intention</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Attitude</td>
<td>0.54**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>0.49**</td>
<td>0.43**</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Perceived Behavioural Control</td>
<td>0.39**</td>
<td>0.34**</td>
<td>0.15*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Self-Identity</td>
<td>0.65**</td>
<td>0.48**</td>
<td>0.64**</td>
<td>0.35**</td>
<td>-</td>
</tr>
<tr>
<td>Mean</td>
<td>3.56</td>
<td>3.73</td>
<td>3.17</td>
<td>3.93</td>
<td>3.24</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.67</td>
<td>0.60</td>
<td>0.76</td>
<td>0.55</td>
<td>0.70</td>
</tr>
</tbody>
</table>

**p<0.01 (2-tailed), *p<0.05 (2-tailed)**

**Simple Linear Regression**

The analysis indicated that a significant linear relationship between attitude and visit intention exist; $\beta=0.603$, SE=0.07, $p<0.001$. As summarised in Table 4, similar significant relationships were also found with other predictors: subjective norm ($\beta=0.430$, SE=0.560, $p<0.001$), perceived behavioural control ($\beta=0.469$, SE=0.082, $p<0.001$) and self-identity ($\beta=0.621$, SE=0.053, $p<0.001$) with visit intention. This indicates that all predictors are valid and significant in predicting visit intention in isolation.
Table 4: Simple Linear Regression Analysis

<table>
<thead>
<tr>
<th>Predictors</th>
<th>R²</th>
<th>β</th>
<th>SE</th>
<th>beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>0.288</td>
<td>0.603**</td>
<td>0.07</td>
<td>0.537</td>
</tr>
<tr>
<td>SN</td>
<td>0.240</td>
<td>0.430**</td>
<td>0.560</td>
<td>0.489</td>
</tr>
<tr>
<td>PBC</td>
<td>0.151</td>
<td>0.469**</td>
<td>0.082</td>
<td>0.389</td>
</tr>
<tr>
<td>SI</td>
<td>0.426</td>
<td>0.621**</td>
<td>0.053</td>
<td>0.653</td>
</tr>
</tbody>
</table>

Note: SN = subjective norm; PBC = perceived behavioural control; SI = self-identity.

**p<0.001

Hierarchical Linear Regression

Three models were produced with the hierarchical linear regression, as presented in Table 5. Model 1 equates to TRA, Model 2 to TPB and Model 3 to eTPB. The analysis found that all predictors for the Theory of Reasoned Action (F (2,183) = 53.627, p<0.001, R²=37%) and Theory of Planned Behaviour (F (3,182) = 43.491, p<0.001, R²=42%) are significant. In the extended Theory of Planned Behaviour (F (4,181) = 47.066, p<0.001, R²=51%) all predictors, except subjective norm, were found to be significant.

Table 5: Hierarchical Linear Regression of Visit Intention on its Predictors

<table>
<thead>
<tr>
<th>Theory of Reasoned Action (TRA)</th>
<th>Theory of Planned Behaviour (TPB)</th>
<th>Extended Theory of Planned Behaviour (eTPB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>Attitude</td>
<td>0.449**</td>
<td>0.073</td>
</tr>
<tr>
<td>SN</td>
<td>0.278**</td>
<td>0.057</td>
</tr>
<tr>
<td>PBC</td>
<td>0.281**</td>
<td>0.073</td>
</tr>
<tr>
<td>SI</td>
<td>0.409**</td>
<td>0.070</td>
</tr>
<tr>
<td>R²</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>R² Change</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>Sig. F Change</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

Note: SN = subjective norm; PBC = perceived behavioural control; SI = self-identity.

**p<0.001, *p<0.05, ns p>0.05

Model 1 was essentially the multiple linear regression of visit intention on attitude and subjective norm. Collectively, this made up the Theory of Reasoned Action. TRA predictors (attitude and subjective norm) significantly (p<0.001) accounted for 37% (R²=0.37) of the variance of visit intention. This was also improved by the addition of PBC in Model 2. PBC further contributed 5% (R² change= 0.05) with statistical significance (p<0.001) to the prediction of visit intention. This is consistent with the literature; TPB is superior to TRA in predicting visit intention by explaining about 42% (R² =0.42) of its variance with statistical significance (p<0.001).

Finally, the proposed addition of self-identity to TPB was represented in Model 3. The self-identity variable has shown to further improve TPB’s explained variance of visit intention to 51%
(R²=0.51). Controlling statistically for attitude, subjective norm and PBC, self-identity has shown to significantly contribute (p<0.001) about 9% (R² change=0.09) in the explained variance for visit intention. According to the model, the results of Table 5 are depicted in Figures 4 to Figure 6 below.

**Figure 4: Model 1: Theory of Reasoned Action**

Note: SN = subjective norm; VI = visit intention.

**p<0.001

**Figure 5: Model 2: Theory of Planned Behaviour**

Note: SN = subjective norm; PBC = perceived behavioral control; VI = visit intention.

**p<0.001

Published by Sarawak Research Society
Figure 6: Model 3: Extended Theory of Planned Behaviour

\[ \beta = 0.275^{**}, SE=0.07 \]
\[ \beta = 0.075^{**}, SE=0.061 \]
\[ \beta = 0.172^{*}, SE=0.069 \]
\[ \beta = 0.409^{**}, SE=0.07 \]

Note. SN = subjective norm; PBC = perceived behavioural control; SI = self-identity; VI = visit intention.
**p<0.001, *p<0.05, ns p>0.05

Moderation Effect of Gender

Table 6 presents the p value for the interaction variables. No significant relationship was found indicating that gender does moderate the relationship between independent variables and the dependent variable.

<table>
<thead>
<tr>
<th>Interaction variable</th>
<th>Visit intention</th>
<th>( \beta )</th>
<th>SE</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude x Gender</td>
<td>-0.124</td>
<td>0.142</td>
<td>0.387</td>
<td></td>
</tr>
<tr>
<td>SN x Gender</td>
<td>-0.127</td>
<td>0.114</td>
<td>0.266</td>
<td></td>
</tr>
<tr>
<td>PBC x Gender</td>
<td>-0.009</td>
<td>0.167</td>
<td>0.959</td>
<td></td>
</tr>
<tr>
<td>SI x Gender</td>
<td>0.026</td>
<td>0.106</td>
<td>0.808</td>
<td></td>
</tr>
</tbody>
</table>

Note. SN = subjective norm; PBC = perceived behavioural control; SI = self-identity; VI = Visit Intention.

Hypothesis Testing and Discussion

As presented in Table 7, three out of eight hypotheses developed in this study were supported. Based on the results, the more positive the attitude towards the behaviour, the more positive the perceived behavioural control. Moreover, the more positive the self-identity, the more likely the intention to purchase accommodation in green hotels. Therefore, in order to encourage visit intention, it is recommended that these antecedents be influenced so that a positive outcome is attained and ultimately culminates with visit intention. On the other hand, subjective norm, although a significant predictor of visit intention in isolation, became insignificant in the presence of self-identity.
### Table 7: Hypothesis testing results

<table>
<thead>
<tr>
<th>Path</th>
<th>B</th>
<th>SE</th>
<th>p</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude → VI</td>
<td>0.275**</td>
<td>0.07</td>
<td>0.000</td>
<td>H1: Supported</td>
</tr>
<tr>
<td>SN → VI</td>
<td>0.075ns</td>
<td>0.061</td>
<td>0.220</td>
<td>H2: Not supported</td>
</tr>
<tr>
<td>PBC → VI</td>
<td>0.172**</td>
<td>0.069</td>
<td>0.014</td>
<td>H3: Supported</td>
</tr>
<tr>
<td>SI → VI</td>
<td>0.41**</td>
<td>0.07</td>
<td>0.000</td>
<td>H4: Supported</td>
</tr>
<tr>
<td>Attitude x Gender</td>
<td>-0.124ns</td>
<td>0.142</td>
<td>0.387</td>
<td>H5: Not supported</td>
</tr>
<tr>
<td>SN x Gender</td>
<td>-0.127ns</td>
<td>0.114</td>
<td>0.266</td>
<td>H6: Not supported</td>
</tr>
<tr>
<td>PBC x Gender</td>
<td>-0.009ns</td>
<td>0.167</td>
<td>0.959</td>
<td>H7: Not supported</td>
</tr>
<tr>
<td>SI x Gender</td>
<td>0.026ns</td>
<td>0.106</td>
<td>0.808</td>
<td>H8: Not supported</td>
</tr>
</tbody>
</table>

Note. SN = subjective norm; PBC = perceived behavioural control; SI = self-identity; VI = Visit Intention.

**p<0.001, ns p>0.05

It was found that the Theory of Planned Behaviour (F (3,182) =43.491, p<0.001, R²=42%) was more effective as it explained 42% (R²=0.42) of the variance in visit intention compared to 37% (R²=0.37) by the Theory of Reasoned Action (F (2,183) =53.627, p<0.001, R²=37%). The inclusion of self-identity as an additional antecedent to the Theory of Planned Behaviour helped increase the explained variance in visit intention by up to 51% (R²=0.51). This extended Theory of Planned Behaviour (F (4,181) =47.066, p<0.001, R²=51%) was more effective than both original theories. The self-identity construct contributed an additional 9% (R² change=0.09) of the explained variance in intention and proved to be a major predictor of visit intention, followed by attitude and, finally, perceived behavioural control. Subjective norm was found to be an insignificant predictor of visit intention.

Furthermore, self-identity’s influence on visit intention was consistent with the findings of Barbarossa et al. (2015), Whitmarsh and O’Neill (2010), Cook et al. (2002), Smith et al. (2008), Sparks and Guthrie (1998) and Sparks and Shephard (1992); that self-identity is a significant predictor of behavioural intention. Marketers and managements should take heed of this finding since the more positive consumers identify themselves as patrons of green hotels, the more likely they are to stay in green hotels. Therefore, hotels should differentiate themselves from traditional ones and declare themselves as part of the green hotel family to have an advantage. Inclusion into the green family can be done through eco-label certification. Since it is hard for consumers to fully comprehend the certification process, it is easier to depend on third party authorities to verify such green claims. Therefore, consumers can confidently identify green hotels, avoid cognitive dissonance (Festinger, 1957) and choose to stay with them to be in line with their self-identity.

The next influential predictor was attitude. The more positive the attitude towards the behaviour of visiting green hotels, the more likely the consumer will visit a green hotel. Marketers should work on advertisements to increase positive attitudes toward staying in green hotels. Promotional videos or articles portraying constructive values of staying in green hotels should be aired in multiple marketing channels. To capture Baby Boomers, traditional channels such as newsprints, magazines and television should be capitalised.

Perceived behavioural control was the weakest of the predictors. According to Ajzen (2011), when control over the behaviour is a problem, perceived behavioural control will not affect the
dependent variable. Papers such as those of Han et al. (2010) found that despite the low availability of green hotels as a control problem over the behaviour, respondents in Malaysia do not seem to view this as an issue. The lack of green hotels in Malaysia also contribute to the low predictive properties of PBC. More hotels must be converted to green hotels to address the shortage. Perhaps the need to stay in a green hotel is only salient when such establishments are available, and being unable to fulfil this need is not viewed as critical. This seems to point to the lack of environmental awareness or programs that educate consumers about staying in green hotels.

According to Paul, Modi and Patel (2016), perceived behavioural control can be increased via “infomercial ads”. The idea is to encourage trials of green hotel stays. It is hoped that these trials will be positive since guests will be exposed to further promotions and become more aware of green hotel benefits. Such advertisement is also expected to attract guests with “variety seeking behaviour” (Fahy & Jobber, 2015, p. 65) where the perception of limited difference between green and traditional hotels exist.

Subjective norm was found to be an insignificant predictor of behavioural intention, which is consistent with the findings of Paul et al. (2016) and Brewer et al. (1999). As noted earlier, this is due to the lack of social pressure to stay in green hotels because it is not perceived as important to loved ones and significant others. Community wide efforts must be launched to instil the importance of caring towards the environment such as Earth Day and Earth Hour which get the entire community involved.

In contrast to previous findings (e.g., Laroche et al., 2001; Roberts, 1996) where women have a tendency to display more ecological concerning behaviours, gender was found to be of no significance in moderating attitude, perceived behavioural control, self-identity and subjective norm. Although the initial suggestion by Bussey and Banura (1999) outlined that gender roles are socially driven rather than biologically prompting them to be more nurturing and caring to the environment, the contrast of this study indicates that additional future research on the topic should be conducted.

CONCLUSION

More tourists (when on holiday, business or travel) would go a long way to use such facilities so as to reduce the negative impact on the environment. With a positive attitude towards staying in a green hotel, constructive perceived behavioural control as well as completely identifying with green hotels through self-identity, taking up accommodation in a green hotel is more likely. In the interest of the environment and our collective wellbeing, the following recommendations are advanced for encouraging guests to take up accommodations in green hotels.

Firstly, consumer education is paramount for introducing green hotels. Consumers can be made aware of our degrading environment through documentaries. The documentaries, skits and videos should be available in green hotels to strengthen and reaffirm guests’ decisions to stay; while advertorials and advertisements can be made available in newspapers, magazines or aired on television to reach out to more people.
Furthermore, green hotels are recommended to participate or initiate corporate social responsibility (CSR) for higher visibility in the community as a way of giving back. This can be done through activities such as *Plant a tree a day* or *Adopt a river* campaign. Apart from the publicity gained, green hotels can show first-hand how the environment matters, engage the local community and exhibit tangible efforts in keeping the environment healthy.

This study, like any other study, is not without limitations. Firstly, this research would have immensely benefited if conducted longitudinally. This would have extended the scope of the study to test for actual behaviour or reported behaviour 6 months or 1 year after the initial survey was conducted. Secondly, pilot testing the questionnaire with more respondents would have also been advantageous. Thirdly, future research designed to obtain the views of hotel employees would further help achieve a better understanding of the variables. Instead of using convenience sampling, this research would have benefited from a random pooling of respondents which ideally represents the population. In addition to the close-ended questions, the use of open-ended questions would have assisted in obtaining richer information from respondents.

REFERENCES


---

*Published by Sarawak Research Society*


