Tourists' intention to visit green hotels: building on the theory of planned behaviour and the value-belief-norm theory

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Abstract

Purpose – *This study integrates the theory of planned behaviour (TPB) and value-belief-norm (VBN) theory to investigate tourists' intention and behaviour to visit green hotels in Malaysia.*

Design/methodology/approach – *A total of 160 valid questionnaire responses were collected via an online survey. The partial least square–structural equation modelling (PLS-SEM) technique was utilised to assess the study framework and the hypothesised relationship.*

Findings – *The study's results confirmed that tourists' intention to stay at a green hotel is directly influenced by their subjective norms and perceived behavioural control. Besides, the study confirms the insignificant relationship between green trust, personal norms and tourists' stay intention. On the other hand, perceived morals, responsibility, willingness to pay more and perceived consumer effectiveness were significant in explaining the customer's subjective norms, personal norms and perceived behaviour control.*

Research limitations/implications – *The hotel industry may benefit from this empirical outcome to devise effective marketing strategies for retaining their customers, particularly in rejuvenating the impact of the COVID-19 pandemic on the industry.*

Practical implications – *This study provides valuable practical implications for green hotel operators to develop effective strategies to attract tourists to green hotel visits.*

Originality/value – *This study is the first to integrate the extended TPB and VBN theory to understand tourist intention to visit a green hotel. Notably, the extended TPB and VBN theory was practical and helpful in predicting tourist intention to visit a green hotel.*

Keywords *Tourist, Green hotel, Extended TPB, Value-belief-norm theory, Malaysia*

Paper type *Research paper*

Introduction

Tourism has emerged as one of the world's fast-growing industries (Trang *et al.*, 2019). Despite its economic contribution, tourism growth and activities have side effects. Tourism-related activities have caused pollution, generated a large amount of waste and natural resource depletion (Dolnicar *et al.*, 2019). This has changed the business operations landscape by altering their business methods and daily operations, including turning towards green practices. Hence, sustainability is now an important part of many businesses in the sector, which requires players to contribute towards achieving sustainability goals. Since then, the global hotel industry has launched various initiatives to support sustainability through the green hotel concept (Wang, 2020). These include big hotel chains such as Marriott International, Choice Hotels International, Hilton Worldwide and the InterContinental Hotels Group (Anh and Kwon, 2020).

According to the Green Hotels Association, green hotels are lodging establishments that perform various eco-friendly practices to reduce operational waste and costs (Laroche *et al.*, 2001). The green hotel concept attributes include the efficiency in utilising water, energy and natural

resources; natural lighting and ventilating; using recyclable-based materials for furnishings; and offering environmental information to increase the environmental awareness of their guest (Choi et al., 2015). The hoteliers believe that the benefits of sustainable practice improve the quality of life and products/services and help remain competitive in the rapidly changing business environment (Stylos and Vassiliadis, 2015). Since the prominent players in the hotel industry turned to the green hotel concept, the rest of the lower-level hotel chains tried to keep up by changing and altering their strategies to attract tourists by also adopting the green hotel concept (Asadi et al., 2020; Suki and Suki, 2015; Tachmitzaki et al., 2020).

The 'green hotel' adoption mainly depends on the consumer's demand – as they decide whether to engage in green practices or not (Han et al., 2019; Trang et al., 2019). Consumers' awareness and concern for the environment have grown both generally and in sustainable tourism contexts, and thereby, more people are now opting for green hotels (Groening et al., 2018; Stylos and Vassiliadis, 2015). Recent studies further support this, which show that customers tend to recommend hotels that apply green initiatives rather than those with conventional practices (Robin et al., 2017; Erdem and Tetik, 2013). However, despite green hotels' relevance in mitigating environmental impacts, there are still issues of hesitance and barriers that hinder tourists from choosing green hotels. First, it is still a relatively new concept to the public (Yeh et al., 2021), vague perception of the purpose of green practices (Chen et al., 2021; Hou and Wu, 2021; Lasuin and Ng, 2014), and the uncertain benefits of participating in the green initiatives (Mohamad et al., 2014; Yi et al., 2018). Besides, the COVID-19 pandemic has severely destroyed the hotel sector demand, which led to elevated financial and operation issues (Hanafiah et al., 2021).

Malaysia's tourism sector is the second-largest contributor to the country's economy after manufacturing (Anh and Kwon, 2020). As the country moves towards achieving the Sustainable Development Goals (SDGs), the hotel industry initiative going green is seen as a viable medium to enhance the country's support towards the SDGs agenda, thus allowing empirical study on the acceptance and the success of the green hotel concept. The emergence of green practices in the Malaysian hospitality industry is further supported by certification with the ASEAN Green Hotel Standard (AGHS) or the Green Building Index (GBI). However, to date, the green hotel development is not satisfactory as only 24 hotels in Malaysia are rated as green hotels (Ministry of Tourism, 2020), as compared to the total number of hotels in Malaysia (4,750 registered hotels in 2018) (My Tourism Data, 2020).

Studies on green hotels in the Malaysian context are scarce (Ahn and Kwon, 2020; Talib et al., 2019; Suki and Suki, 2015). Notably, Ahn and Kwon (2020) argue that there was limited information on the green hotel context in a developing country such as Malaysia. Besides, studies exploring influential factors in green hotel customers' decision-making processes remain limited. In addition, the literature seems to be lacking, especially on utilising a theoretically driven approach to exploring how consumers behave towards green hotel accommodation consumption (Kim et al., 2017; Talib et al., 2019. Suki and Suki (2015) proposed various factors influencing individuals' acceptance of green products. They also argue that there is limited empirical insight regarding consumer environmental concern regarding green products in the Malaysian setting.

The present study aims to extend the body of knowledge within the broader scope of the hotel visitation framework, underpinned by the psychosocial factors of the theory of planned behaviour and the norm activation model (NAM). Specifically, we empirically test the relationship between the two theories with environmental factors and perceived morals to present a holistic framework within the study context. This study contributes to the extant literature on green hotel visit intention in the future context of hotel business operation and its potential benefits in achieving the environment-related sustainable development goals (SDGs), especially those related to clean water and sanitation (SDG 6), affordable and clean energy (SDG 7) and responsible consumption and production (SDG 12).

Literature review

Theoretical background

The theory of planned behaviour (TPB) and the value-belief-norm (VBN) theory will be used in this study since these theories have been shown to provide good explanations of consumer behavioural intention. Past studies reported consumers' attitudes, subjective norms, perceived behavioural control (PBC), beliefs, personal norm and ethical concerns as the main predictors of green consumption (Ali *et al.*, 2019; Han *et al.*, 2019; Han and Hyun, 2018; Yadav and Pathak, 2016). Notably, these predictors are the key variables of the TPB and the VBN theory. However, there is a gap in whether individual behavioural intention would influence the values and norms within the VBN theory (Kiatkawsin and Han, 2017). Notably, researchers who focus on pro-social motives generally utilise the VBN theory. In contrast, researchers who focus on self-interest motives mostly rely on rational-choice models such as the TPB (Han, 2015). However, recent scholars have tried to integrate them to explain different consumers' intentions, although these models are usually employed separately (Gkargkavouzi *et al.*, 2019; Han, 2015; Zhang *et al.*, 2020). Moreover, recent hospitality researchers propose that the TPB could be integrated with the VBN theory to predict consumers' green hotel intention (Yarimoglu and Gunay, 2020; Yadav *et al.*, 2019; Yeh *et al.*, 2021). The integration of TPB and VBN would provide a theoretical underpinning from the perspective of individual planned behaviour and supplement with values and norms based on the rational-choice model. This study posits that the two theories would predict the fundamental determinants of consumers' intention to visit green hotels.

Theory of planned behaviour

The TPB has been considered the best theory for explaining human environmental behaviour (Fauzi *et al.*, 2018; Yadav *et al.*, 2019). The TPB model consists of three psychological domains: attitude, subjective norm and PBC. Attitude is one feeling of favourableness towards a specific behaviour. On the other hand, the subjective norm is the perception of significant others that influence decision-making (Ajzen, 1991). Meanwhile, PBC is a person's ability and opportunity to engage in a particular behaviour (Ajzen, 1991). The TPB asserts that attitude, subjective norms and PBC are antecedents of behavioural intention. Past studies have proven that TPB has been adopted to explain pro-environmental behaviour in green purchasing, recycling, organic food consumption and other related green behaviour (Han *et al.*, 2019; Han and Hyun, 2018; Yadav and Pathak, 2016). Moreover, many hospitality researchers have applied the TPB framework in green hotel studies to determine consumers' intention to choose and stay at green hotels (Chen and Tung, 2014; Suki and Suki, 2015; Verma and Chandra, 2018; Yarimoglu and Gunay, 2020; Yadav *et al.*, 2019; Yeh *et al.*, 2021). Most of them argue that individuals' awareness and concern towards environmental problems play a critical role in generating their pro-environmental attitude, subjective norm and PBC. This, in return, forms their behavioural intention to visit green hotels.

Value belief-norm theory

The VBN theory was formed based on pro-environmental objectives towards understanding human green/sustainable consumption behaviour. The VBN theory is a broadened version of the NAM to explain human pro-environmental behaviour (Choi *et al.*, 2015; Han, 2020). In the initial NAM, the three central concepts in conceptualising one pro-social intention and behaviour are the personal norm, awareness of consequence and responsibility (Han, 2015). It suggests that individuals' pro-environmental intention and action are determined by their value orientation and ecological worldview, leading to norm activation. The norm activation domain serves as a form of adverse consequence, sense of obligation and ascribed responsibility to engage in pro-environmental action (Klockner, 2013). Stern *et al.* (1999) then developed the VBN by accounting for human pro-environmental intention and behaviour values by incorporating the values and ecological worldview. The VBN theory proposes that individual's norm, value and belief predict their pro-environmental behaviour. Specifically, the role of value and ecological worldview is

emphasised in VBN theory (Zhang et al., 2020). The VBN causal model moves from personal values to the new environmental paradigm, which explores how individuals' awareness of consequences, responsibility and pro-environmental personal norms influence their pro-environmental behaviours (Han, 2015). However, contrarily to the TPB, the VBN focuses on the predictive roles of values and moral norms but neglects to assess cognition and reasoning on particular issues. Recent studies by Kiatkawsin and Han (2017) and Choi et al. (2015) have adapted VBN to green hotel visits and discovered that the theory could predict sustainable tourist consumption.

Hypothesis development

Environmental belief is a proven antecedent of intention to visit the green hotel. Individual beliefs and values are imperative in purchasing decisions and eventual behaviour (Verma et al., 2019). Studies show that consumers who score high on environmental beliefs are more willing to adopt green behaviours. They willingly become environmentally friendly in their daily lives while sacrificing conveniences and value-for-money products (Han, 2015). Consistently, previous environmental behaviour researchers propose that their beliefs lead to their ecological worldview and awareness of adverse consequences, influencing their pro-environmental behaviour (Chen, 2015; Liobikienė and Poškus, 2019; Zhang et al., 2014).

> *H1.* Environmental beliefs positively influence tourist attitudes towards a green hotel

Besides beliefs and motives, individuals' ecologically friendly intentions may be influenced by their commitment to the environment. According to Rahman and Reynolds (2016), their environmental commitment heightens when they feel psychologically connected to and familiar with nature. Past researchers argue that environmental commitment influences individuals' environmental attitudes and intentions (He et al., 2018; Yusliza et al., 2020). Notably, commitment is a psychological state that captures the attachment towards a specific behaviour (Afsar and Umrani, 2020). It is strongly associated with individual readiness to sacrifice their self-interest for the sake of environmental well-being (Chou, 2014). In the context of green hotel visit, behaviour and intention stem from individual person-environment relationship under psychological attachment and orientation to nature (Han, 2015; Rahman and Reynolds, 2016). Hence, this study proposes travellers' environmental commitment leads to favourable attitudes towards the green hotel.

> *H2.* Environmental commitment positively influence tourist attitude towards a green hotel

Tourists with more significant environmental concerns are likely to spend on a green hotel than those less environmentally concerned (Hou and Wu, 2021). A considerable environmental concern would influence pro-environmental intention by opting for ecological products and willingness to pay (WTP) higher than ordinary non-environmentally friendly products (Holmgren et al., 2017). Environmental concern is a critical determinant of tourist behaviour in visiting green hotels (Hou and Wu, 2021; Verma et al., 2019; Wang, 2020). Moreover, tourists are aware that tourism-related industries, including building, travelling and purchasing, contribute to the degradation of the environment on a large scale (Suki and Suki, 2015). Hence, this study assumes that tourists' environmental concern is essential in deciding to stay and visit a green hotel.

> *H3.* Environmental concern positively influence tourist attitude towards a green hotel

Moral obligation can be defined as the code of conduct regulating one's behaviour (Kujala, 2001). It reflects how one's behaviour fits social norms and can be influenced by moral identification and emotion. Perceived moral obligation (PMO) reflects the feeling of responsibility to perform behaviour in a moral way when a person is divided in choosing an ethical decision (Chen and Tung, 2014). Literature suggests that one feeling of moral obligation is crucial in examining their willingness to perform behaviour (Chen and Tung, 2014; Sia and Jose, 2019). The moral obligation reflects individuals caring about their moral actions, values, and schemas by translating into

positive behaviour (Afsar and Umrani, 2020). Ajzen (1991) pointed out that PMO must be incorporated within TPB when dealing with ethical issues as it produces higher predictive power within the theory. In the context of pro-environmental studies, predicting consumers' adoption of environmental behaviour may contain an element of social responsibility and personal morality (Kaiser, 2006). Notably, PMO exhibited a solid relation to norms as a form of moral reflectiveness.

H4. PMO positively influences tourists' subjective norms.

H5. PMO positively influences tourists' personal norms.

Ascription of responsibility is a belief possessed by an individual on whether a human can either prevent or magnify the possibility of expected negative consequences (Han, 2020; Kiatkawsin and Han, 2017). Responsibility is characterised by morality and conventional essence (Verma *et al.*, 2019). Thus, an individual ascription of responsibility must strongly predict one personal norm between one judgement to visit a green hotel while travelling. Ascription of responsibility effectively predicted individual pro-environment behaviour in green hotel visits (Choi *et al.*, 2015; Verma *et al.*, 2019) and another context of environmental behaviour (Kim and Hwang, 2020; Kiatkawsin and Han, 2017).

H6. Ascription of responsibility positively influence tourists' personal norm.

WTP reflects the guest's intention to pay more than the usual price for a green hotel (Balaji *et al.*, 2019). As the hotel has to spend more to practice green initiatives, they will charge more to cover the overhead cost. Hence, consumers were forced to pay more to stay at green hotels (Yadav *et al.*, 2019). Studies on customers' WTP for consuming green services are relatively scarce (Line and Hanks, 2016; Yarimoglu and Gunay, 2020). WTP for green hotel services is influenced by an individual's sense of the right thing to do and the influence of normative pressure. They are sceptical about paying higher premiums when visiting and staying in green hotels (Gao and Matilla, 2016). In this study context, WTP is conceptualised as an antecedent of PBC related to one WTP more for a premium green hotel and their ability to control and execute such behaviour.

H7. WTP positively influence tourist PBC to visit a green hotel.

Past studies on green consumer behaviour have proven that perceived consumer effectiveness (PCE) was regarded as one of the critical antecedents of green behaviour (Jaiswal and Kant, 2018). PCE is associated with a personal belief that actions can result in a positive outcome in protecting the environment (Wang *et al.*, 2018a, b, c). PCE is regarded as a pro-social behaviour with consumer belief that can stimulate associated environmental behaviour (Wang *et al.*, 2018a). It demonstrates that individual perception of their ability can effectively impact a specific environmental behaviour (Wang, 2020). In a more precise word, PCE in this study context is the subjective reasoning and apprehension of one effort in solving environmental problems via green hotel consumption. Such effectiveness is estimated directly related to one evaluation of environmental issues related to a green hotel visit.

H8. Perceived customer effectiveness positively influences tourist's PBC to visit a green hotel

Trust is essential in consumer behavioural studies (Wang *et al.*, 2018a). Trust is an individual emotional state that can be described as the "willingness of an individual to rely on acquaintances due to confidence". Past studies on green hotels depicted that consumers concerned about the environment are more cautious about how businesses or hotel operators engage in green activities and practices (Choi *et al.*, 2015). In today's marketing buzz, the promotion of green hotels is adapted as a mere ploy to attract customers, but in reality, green practices were never in place. Hence, the notion of having trust in hotel adoption of green practices is highly anticipated to attract tourists to visit. In this study, green trust refers to individuals' willingness to rely on services or products due to confidence in hotel performance and preserving the environment (Martínez, 2015). The green hotel practices would stimulate positive psychological outcomes, including trustworthy and institutional norms.

H9. Green trust positively influences tourist intention to visit a green hotel.

Attitude is the extent of favourable or unfavourable individual assessment of behaviour (Ajzen, 1991). It is the most critical element of behaviour as a higher positive attitude will lead a person towards a particular behaviour (Fauzi *et al.*, 2019). Studies on tourists' green hotel visits have demonstrated that a favourable attitude towards green hotels positively influences green hotel visits (Ahn and Kwon, 2020; Chen and Tung, 2014; Line and Hanks, 2016). After visiting a green hotel, the customer's loyalty would develop a revisit intention due to the pleasure and favourable attitude towards the green hotel (Ahn and Kwon, 2020). These customers would further spread positive word-of-mouth and pay a higher premium than regular people (Rahman and Reynolds, 2016). On the other hand, Verma and Chandra (2018) found that attitude is the most critical predictor of tourists' intention to visit green hotels by incorporating the TPB within the social-psychological model.

H10. Attitude positively influences tourist intention to visit a green hotel.

The subjective norm reflects tourists' validation of whether their specific behaviour is socially right, ultimately guiding them to believe in a particular behaviour (Kim and Hwang, 2020). In most decision-making, a person would behave or develop intention based on approval or disapproval of other people they perceive as significant such as family, friends, colleagues and significant others (Choi *et al.*, 2015). Subjective norm consists of the normative belief that depicts other people's thinking about whether to engage in a specific behaviour (Yarimoglu and Gunay, 2020). This study tends to unveil the perception and influence of others close to the individual that lead to their intention to visit a green hotel. Individual intention to visit a green hotel will be increased as one would believe that opting for a green hotel is considered responsible and sensible.

H11. Subjective norms positively influence tourist intention to visit a green hotel.

Personal norm is contemplated as a person's internal moral factor (Han and Hyun, 2018). Unlike the subjective norm, personal norm is conceptualised as a person's internalisation belief (Sia and Jose, 2019). It is predicted in past studies by individual beliefs based on their responsibility, consequences, values and overall environmental relations (Choi *et al.*, 2015). Awareness of the threat due to unfavourable behaviour towards the environment should be enhanced to stimulate personal norm. It corresponds to the degree to which one should contribute to the underlying problems and take considerable action to solve environmental problems (Choi *et al.*, 2015). Personal norm reflects individual social rules that dictate how a person should act and behave based on their beliefs (Kiatkawsin and Han, 2017).

*H12.* Personal norms positively influence tourist intention to visit a green hotel

PBC is an individual's perception that they can perform such behaviour (Ajzen, 1991). PBC was shown to be a strong predictor of intention and behaviour as it predicts one behaviour on one ability and opportunities to perform a particular behaviour (Fauzi *et al.*, 2019; Yadav *et al.*, 2019). Many studies have demonstrated that green purchase intention is positively influenced by PBC in the hospitality context (Chen and Tung, 2014; Han, 2015; Verma and Chandra, 2018; Wang *et al.*, 2018b). Most researchers showed that an individual's PBC would positively influence their intention to visit green hotels besides attitude and subjective norms. With this, it is proposed that PBC would positively be associated with visiting a green hotel.

H13. PBC positively influences tourist intention to visit a green hotel

Methodology

This study proposes a research model by integrating the TPB and VBN theory. The following Figure 1 illustrates the study model with the proposed hypotheses.

Figure 1 Research model
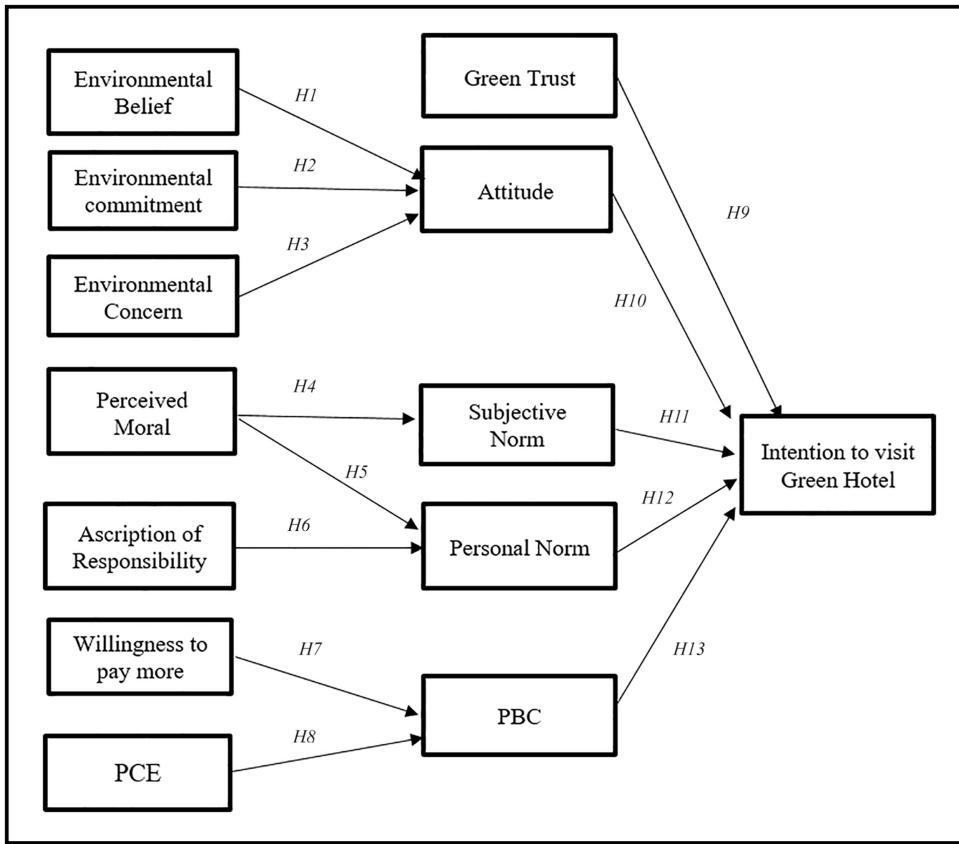
A quantitative approach through a cross-sectional with a self-reported and self-administered survey questionnaire is used for information gathering. The population for this study was domestic green hotel customers in Malaysia staying at hotels certified by AGHS or the GBI (refer to Appendix 1). The survey items were adapted from past studies. The TPB items were adapted from Wang *et al.* (2018b) and Verma and Chandra (2018), while the VBN items were adapted from Wang *et al.* (2018a), Line and Hanks (2016), Choi *et al.* (2015) and Chen and Tung (2014). Finally, the behavioural intention was adapted from Han and Hyun's (2018) and Han *et al.* (2018) studies. The items were measured using a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Besides face validity, the instrument's reliability was assessed via the pilot test with 40 respondents. The survey instruments were evaluated using Cronbach's check, in which all the tested research dimensions exceed the minimum reliability threshold (>0.70).

Through the purposive sampling methodology, hotel guests who have experienced staying at these green hotels were asked to answer survey questions about their perceptions, attitudes and behaviours towards the green hotel services. The G*Power 3.1 software was used to determine the minimum sample size based on the type-1 error probabilities set to 0.05 ($N > 92$). A minimum sample size of 92 was deemed appropriate to reach sufficient statistical power of 80% for a moderate effect size of 0.15 (Kang, 2021). The Google survey form was shared with prospective respondents via the QR code application. The respondents were selected using the snowball sampling method, also known as sampling by reference (Kumar and Ghodeswar, 2015). All respondents were informed that their participation was voluntary, confidential and anonymous.

The survey was carried out and successfully circulated for four months, from November 2020 to February 2021. A total of 160 valid responses were collected. The sample size of this study is deemed adequate to ensure that the results of the statistical method are robust (Hair *et al.*, 2017).

Moreover, we found that past studies within the green consumerism context in Malaysia (Taufique and Islam, 2021; Yen et al., 2020) also utilised a small number of sample sizes (less than 200 samples), which is in line with the green hotel market trends. As the study is collected using a single source collection, common method bias is a pertinent issue. Guide and Ketokivi (2015) suggested that Harman single factor test is no longer viable for assessing the common method bias but instead a full collinearity test by evaluating the variance inflation factor (VIF). Kock and Lynn (2012) stated that a VIF value below 3.3 does not suffer from common method bias. All the variables were regressed against a common variable, where a VIF value should be less than 3.3 to conclude that there is no bias from single-source data. Table 1 depicted that all the VIF of the variable computed values less than three. Thus, it can be concluded that a single source presents no bias in our data.

Next, the partial-least square-structural equation modelling (PLS-SEM) was chosen to estimate the structural equation models and test the hypothesis. This study utilised the PLS-SEM due to the complexity of the proposed conceptual framework and the study's exploratory nature (Hanafiah, 2020). Furthermore, the research data were not normally distributed, and PLS-SEM is suitable for studies involving data with a non-normal distribution (Hair et al., 2017). Past studies also suggest that applying the PLS-SEM approach is the best way to derive the predictive model on the grounds of a small sample size (Sharma et al., 2021). In addition, because TPB and VBN integration studies are relatively new and the theoretical model has yet to be explored, PLS-SEM is a suitable method for this study (Hair et al., 2017).

Findings and analysis

Demographic profiles

A total of 160 domestic tourists were surveyed. The limited participation reflects the tourist's obscure experience or lack of knowledge of the green hotel concept despite having experience patronising the green hotels. The majority of them aged below 25 years (136, 85%), 15 of them were between 25 and 34 years old (9.4%), three between 35 and 44 years old (1.9%) and six respondents over 45 years (3.8%) have participated in this study. Female respondents account for 112 (70%) while males 48 (30%), with most of them ($n = 100$) with an undergraduate degree (see Table 2).

Table 1	Collinearity test						
Construct	ARP	ATT	EB	ENC	ECR	GT	INT
VIF	1.822	2.543	1.212	1.671	1.414	2.541	2.874
Construct	PBC	PCE	PM	PN	SN	WILL	
VIF	3.304	1.958	1.739	2.685	2.000	2.076	

Table 2	Demographic information of the respondents		
Item	Type	Frequency	Percentage
Gender	Male	48	30
	Female	112	70
Age	Under 25 years old	136	8.0
	25–34 years old	15	9.40
	35–44 years old	3	1.90
	45 years old and above	6	3.75
Highest education level	PhD	2	1.25
	Master's degree	5	3.13
	Undergraduate Degree	100	62.5
	Diploma/Foundation	41	25.6
	High school certificate	12	7.50

Measurement model

This study conducted the reflective measurement assessment that includes: 1) internal consistency reliability, 2) individual indicator reliability, 2) convergent validity of measured construct and 3) discriminant validity as proposed by Hair *et al.* (2019), Ramayah *et al.* (2018) and Hanafiah (2020). The factor loading ($\geq$ 0.5) and the composite reliability ($\geq$ 0.7) the average variance extracted (AVE) ($\geq$ 0.5). As presented in Table 3, all the AVEs are higher than 0.5, and the CR passes the 0.7 value. The loading was also adequate, with only PBC1 being deleted, having a value of 0.533. It can be said that the items and constructs in this study are valid and reliable for further analysis.

The Heterotrait-Monotrait ratio of correlation (HTMT) is assessed to measure discriminant validity. HTMT value should not exceed >0.90 (Henseler *et al.*, 2015). As shown in Table 4, the HTMT indicate no discriminant validity issue in the data. It can be concluded that this study achieved a considerable pass in its discriminant validity assessment.

Structural model

The structural path was reported using the 5,000-bootstrapping resampling technique from the SmartPLS algorithm. Table 5 reports the path analysis result.

From the analysis, it was found that 11 hypotheses were supported while two were not. First, the three predictors on attitude show that the R^2 was 0.236, indicating that the three predictors explained 23.6% of the variance in attitude. Environmental belief ($\beta = 0.143$, $p < 0.01$), environmental commitment ($\beta = 0.258$, $p < 0.005$) and environmental concern ($\beta = 0.323$, $p < 0.001$) were all positively associated to attitude, hence supporting H_1, H_2 and H_3. For the subjective norm, the R^2 was 0.037, which shows that PMO ($\beta = 0.211$, $p < 0.01$) only explains 3.7% of the variance and supports H_4. While PN shows an R^2 of 0.338, indicating a 33.8% variance. PMO ($\beta = 0.207$, $p < 0.01$) and AR ($\beta = 0.451$, $p < 0.001$) were positively related to PN, which consequently supporting H_5 and H_6. As for PBC, the R^2 was 0.508, which indicates the two predictors explained 50.8% of PBC variance. WTP ($\beta = 0.592$, $p < 0.001$) and PCE ($\beta = 0.245$, $p < 0.001$) were all positive towards PBC and thus H_7 and H_8 were supported. Finally, the R^2 for the intention was observed to be 0.608, displaying that the five predictors proposed in this study explain 60.8% of the variance. Attitude ($\beta = 0.174$, $p < 0.01$), subjective norm ($\beta = 0.140$, $p < 0.01$) and PBC ($\beta = 0.584$, $p < 0.001$) exhibit positive relationship on intention which supported H_{10}, H_{11} and H_{13}. Meanwhile, green trust ($\beta = -0.057$) and subjective norm ($\beta = 0.075$) were insignificant; thus, H_9 and H_{12} were rejected. The following Figure 2 presents the result of the path analysis.

Discussion

This study's main objective is to integrate the extended TPB and VBN theory as the underlying concepts in understanding tourist green hotel visit intention to Malaysia. TPB was proven to explain individual intention to visit green hotels (Verma and Chandra, 2018; Yeh *et al.*, 2021; Yarimoglu and Gunay, 2020), as reflected in this study. To some extent, the originality of this study can be observed by extending the TPB by incorporating green trust and personal norms as antecedents that would explain green hotel visits amongst tourists in Malaysia. Adding new variables tested in this study would help increase TPB's predicting power in understanding green hotel visit intention (Yarimoglu and Gunay, 2020). The study model was extended with environmental values consisting of belief, concern and commitment. In addition, the model was broadened by integrating moral obligation and the ascription of responsibility within individual norms, which were not available or studied by previous scholars. At the same time, predictors of PBC were explained by individual WTP more and perceive consumer effectiveness. Such integration in a unified model through a theoretically-driven approach produces a fitting contribution to the hospitality and environmental research domain and the understanding of tourists' eco-friendly behaviour.

Table 3   Measurement model analysis

Construct/Indicators	Mean	Std. Dev	Loading
Ascription of responsibility: α = 0.815, CR = 0.878 AVE = 0.645			
I feel jointly responsible for the energy problems	4.07	0.72	0.850
I feel jointly responsible for the exhaustion of energy sources	4.04	0.81	0.839
I feel jointly responsible for global warming	3.93	0.95	0.818
My contribution to the energy problem is negligible	4.37	0.76	0.696
Attitude: α = 0.875, CR = 0.906 AVE = 0.617			
For me, staying at a green hotel when travelling is extremely desirable	4.40	0.76	0.696
For me, staying at a green hotel when travelling is extremely favourable	4.45	0.73	0.825
For me, staying at a green hotel when travelling is extremely enjoyable	4.37	0.75	0.819
For me, staying at a green hotel when travelling is extremely positive	3.92	0.82	0.823
For me, staying at a green hotel when travelling is extremely foolish	4.07	0.80	0.699
For me, staying at a green hotel when travelling is extremely pleasant	4.23	0.80	0.838
Environmental belief: α = 0.633, CR = 0.79 AVE = 0.557			
Staying at a green hotel is personally satisfying	3.95	0.82	0.828
Staying at a green hotel may improve the health of nature	3.73	1.02	0.695
Staying at a green hotel makes me feel good because I am not harming the environment	3.93	0.89	0.709
Environmental Commitment: α = 0.843, CR = 0.894 AVE = 0.679			
I am committed to keeping the best interests of the environment in mind	4.20	0.77	0.745
I am interested in strengthening my connection to the environment in the future	4.31	0.72	0.818
I feel very attached to the natural environment	4.19	0.80	0.872
I expect that I will always feel a strong connection with the environment	4.11	0.83	0.853
Environmental Concern: α = 0.763, CR = 0.849 AVE = 0.585			
I make additional efforts to purchase plastic and paper products that are made from recycled material	4.05	0.80	0.704
I have shifted to other products due to ecological concerns	3.98	0.76	0.830
When I have to choose between two equal products, I buy the one which is less harmful to other people and the environment	3.93	0.77	0.773
Mankind was created to rule over the rest of nature	3.82	0.88	0.747
Green Trust: α = 0.886, CR = 0.916 AVE = 0.687			
I feel that the green hotel's environmental commitments are generally reliable	4.04	0.78	0.786
I feel that the green hotel's environmental performance is generally dependable	4.23	0.79	0.803
I feel that the green hotel's environmental argument is generally trustworthy	4.43	0.68	0.863
I feel that the green hotel's environmental concern meets my expectation	4.19	0.71	0.841
I feel that the green hotel keeps promises and commitment towards environmental protection	4.11	0.71	0.849
Intention: α = 0.829, CR = 0.897 AVE = 0.744			
I am willing to stay at a green hotel when travelling	4.23	0.71	0.891
I plan to stay at a green hotel when travelling	3.89	0.81	0.865
I will make an effort to stay at a green hotel when travelling	3.56	1.01	0.830
Perceived Behavioural Control: α = 0.838, CR = 0.902 AVE = 0.755			
Whether or not I stay at a green hotel when travelling is entirely up to me	3.51	1.02	0.861
I have resources, time and opportunities to stay at a green hotel when travelling	4.12	0.82	0.871
I am confident that if I want, I can stay at a green hotel when travelling	3.64	1.06	0.874
Perceived Consumer Effectiveness: α = 0.794, CR = 0.876 AVE = 0.702			
I feel capable of helping solve environmental problems	3.90	0.87	0.839
I can protect the environment by buying products that are friendly to the environment	4.40	0.70	0.806
I feel I can help solve natural resource problems by conserving water and energy	4.13	0.78	0.867

(*continued*)

Table 3	Continued			
Construct/Indicators		Mean	Std. Dev	Loading
Perceived Moral Obligation: α = 0.727, CR = 0.878 AVE = 0.783				
Everybody is obligated to treasure natural resources		3.98	0.83	0.857
Everybody should save natural resources because they are limited		4.15	0.76	0.912
Personal Norm: α = 0.851, CR = 0.890 AVE = 0.575				
I feel morally obliged to use a green hotel instead of a regular hotel		4.27	0.76	0.802
People like me should do everything they can to save the environment		3.87	0.94	0.683
I feel obliged to bear the environment and nature in mind in my travel behaviours		3.80	0.96	0.763
I feel morally obliged to use green hotels, regardless of what others do		3.80	0.87	0.789
I feel personally obliged to save as much energy as possible		4.20	0.67	0.810
I would be a better person if I stay in a green hotel and use environmentally friendly products and services		4.37	0.65	0.695
Subjective Norm: α = 0.858, CR = 0.905 AVE = 0.707				
Most people that are important to me think while travelling I should stay in a green hotel		4.29	0.77	0.865
When travelling, people that are very important to me will want me to stay at a green hotel		3.56	1.01	0.915
People that are very important to me think I should protect the surroundings of the scenic areas		3.74	0.94	0.695
People whose opinions I value would prefer that I stay at a green hotel when travelling		3.82	0.90	0.872
Willingness to Pay: α = 0.837, CR = 0.901 AVE = 0.753				
I would spend extra money to stay in an environmentally friendly hotel at this destination		3.76	0.90	0.778
When visiting this destination, it is acceptable to pay more for a hotel engaging in green practices		3.84	0.97	0.919
I would be willing to pay more to stay in a green hotel at this destination		3.98	0.78	0.900

Note(s): N = 160

The predictors of attitude comprising environmental belief, environmental commitment and environmental concern were significant in explaining attitude. These three variables are conceptualised as the environmental values indicating that this study's sample is substantial value within the VBN theory. The three environmental values significantly impact attitude towards visiting a green hotel. The study results also reveal that environmental concern possessed a vital relationship towards attitude amongst the three, as supported by previous findings (Hou and Wu, 2021; Wang, 2020; Verma *et al.*, 2019). Other studies also indicate that environmental belief is critical for developing attitude, as shown in past studies (Line and Hanks, 2016; Yeh *et al.*, 2021). The results further reveal that environmental beliefs influence green hotel consumers' functional, social and emotional value. This finding highlights the importance of environmental belief in assisting consumer attitudes towards green hotel accommodation.

At the same time, the environmental commitment that reflects individuals who favour the natural environment and display cautious behaviour towards the planet shows that they have environmental commitments (Afsar and Umrani, 2020). The significance of environmental concern shows that environmental values embedded within individual cautious and sub-cautious minds are valuable in the theoretical context of attitude-intention towards green hotel visits (Hou and Wu, 2021). The three values and beliefs of the environment domain narrate that today's general public has high environmental values on the environment. However, the values might not necessarily translate to actual behaviour, which is considered the most crucial element in preserving the environment. This study's significant "attitude-intention" relation is consistent with prior research that highlights how imperative consumer perception is in building their patronisation intentions of green accommodation.

Table 4	Heterotrait-Monotrait ratio of correlation (HTMT)											
	AR	*ATT*	*EB*	*ECM*	*ECN*	*GT*	*INT*	*PBC*	*PCE*	*PMO*	*PN*	*SN*	*WTP*
AR													
ATT	0.517												
EB	0.352	0.222											
ECM	0.528	0.428	0.294										
ECN	0.351	0.461	0.167	0.344									
GT	0.525	0.807	0.238	0.365	0.469								
INT	0.346	0.59	0.112	0.452	0.404	0.566							
PBC	0.426	0.544	0.177	0.386	0.433	0.637	0.894						
PCE	0.597	0.565	0.316	0.517	0.366	0.552	0.539	0.529					
PMO	0.658	0.433	0.235	0.629	0.211	0.478	0.258	0.315	0.625				
PN	0.666	0.702	0.231	0.571	0.41	0.598	0.627	0.611	0.715	0.566			
SN	0.37	0.465	0.068	0.38	0.504	0.541	0.648	0.658	0.318	0.268	0.639		
WTP	0.414	0.503	0.144	0.4	0.431	0.549	0.697	0.793	0.428	0.378	0.575	0.559	

Note(s): AR = Ascription of responsibility, ATT = Attitude, EB = Environmental belief, ECM = Environmental commitment, ECN = Environmental concern, GT = Green trust, INT = Intention to visit green hotel, PBC = Perceived behavioural control, PCE = Perceived consumer effectiveness, PMO = Perceived moral obligation, PN = Personal norm, SN = Subjective norm, WTP = Willingness to pay

Table 5	Path analysis					
Hypothesis		β-Value	t-value	p-value	f^2	*Decision*
H1: Env Belief → Attitude		0.143**	2.013	0.045	0.026	Supported
H2: Env Commitment →Attitude		0.258***	3.861	0.000	0.077	Supported
H3: Env Concern → Attitude		0.323***	4.172	0.000	0.126	Supported
H4: PMO → SN		0.211**	2.411	0.016	0.045	Supported
H5: PMO→ PN		0.207***	2.801	0.005	0.050	Supported
H6: AR → PN		0.451***	5.486	0.000	0.229	Supported
H7: WTP → PBC		0.592***	9.775	0.000	0.630	Supported
H8: PCE →PBC		0.245***	4.193	0.000	0.108	Supported
H9: Green Trust → Intention		−0.057	0.93	0.353	0.004	Not supported
H10: Attitude → Intention		0.174**	2.149	0.032	0.033	Supported
H11: Subjective Norm → Intention		0.14**	2.004	0.046	0.030	Supported
H12: Personal Norm →Intention		0.075	1.050	0.294	0.008	Not supported
H13: PBC → Intention		0.584	8.786	0.000	0.494	Supported

Note(s): ***Significant at $p < 0.001$; **Significant at $p < 0.05$

On the other hand, PMO influenced subjective norms and personal norms. Past studies have proven that PMO is the dominant factor that leads to individual norms and values towards the green hotel. Identifying generic moral traits would stimulate individual underlying motives to engage in pro-environmental behaviour, such as visiting green hotels (Afsar and Umrani, 2020). Studies have shown that morality plays a pivotal role in forming consumers' environmental intention and behaviour (Chen and Tung, 2014; Verma and Chandra, 2018), as supported by this study. Meanwhile, the ascription of responsibility significantly influences personal norms, as proven in other studies (Han, 2020; Kiatkawsin and Han, 2017; Verma et al., 2019). This finding is not uncommon; most recent studies also claimed that consumers' morality and ascription of responsibility form their behavioural intentions.

Meanwhile, this study also found that tourists who intend to visit green hotels would be willing to pay an extra premium by staying at a green hotel. Most previous studies proposed WTP as the endogenous variable. It is a plausible explanation for tourists' willingness to make the extra effort depicting their cautiousness towards the environment (Balaji et al., 2019; Line and Hanks, 2016; Yarimoglu and Gunay, 2020) except for Yadav et al. (2019) that evaluate WTP as antecedents for intention to visit a green hotel. Similarly, this study adapted WTP as the antecedents of intention to visit the green hotel. It corresponds well with VBN as it explains individual possession of value

Figure 2 Result of structural modelling

Note(s): $*p < 0.05$; $**p < 0.01$; $***p < 0.001$
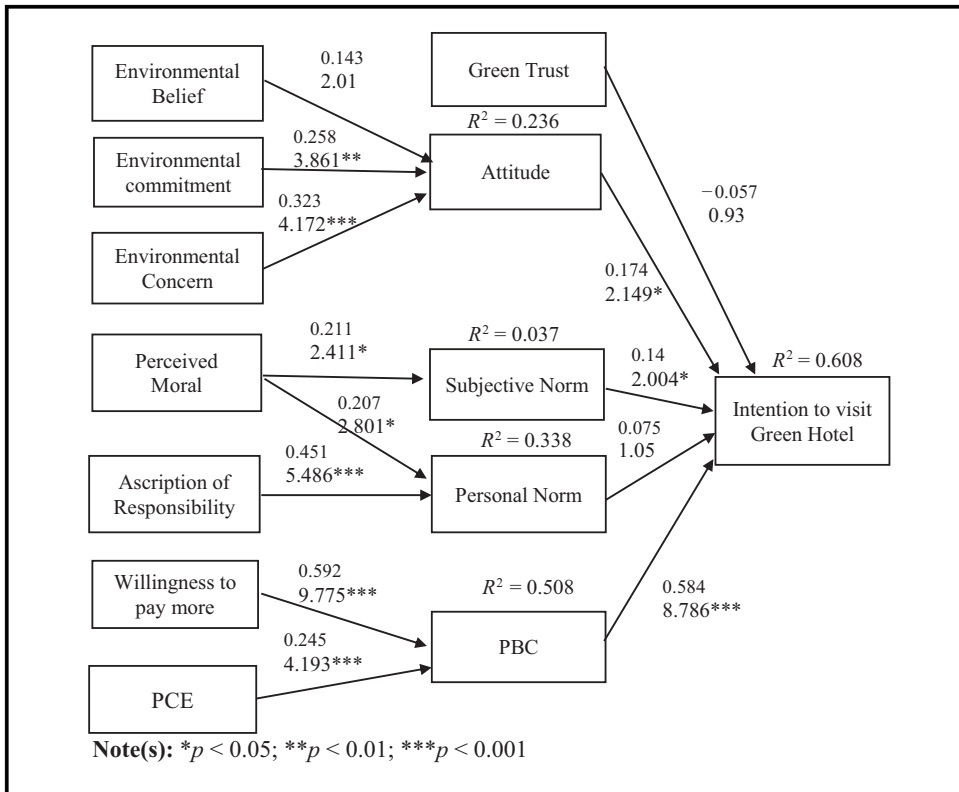
towards environmental protection. Having substantial PCE would lead to developing a positive attitude towards green behaviour as having the urge to choose the green hotel (Wang, 2020). As most of the previous study focuses on PCE on attitude, this study evaluates PCE to develop one control ability can be considered as novel results. It has been proven that PCE reflects firmly on PBC to choose a green hotel over the belief that they would be able to make changes together having the ability to do so (Jaiswal and Kant, 2018; Wang et al., 2018b). The findings provide useful implications that WTP and PCE encourage pro-environmental PBC by means of influencing travellers' intention to visit green hotels.

As for the TPB domain, all three variables of attitude, subjective norm and PBC strongly reflect green hotel visit intention. The study finding is in line with the proposition made by previous studies on the ability of TPB to predict green hotel visit intention (Chen and Tung, 2014; Suki and Suki, 2015; Yarimoglu and Gunay, 2020; Yeh et al., 2021; Yadav et al., 2019). In contrast, the two proposed variables complementing the TPB, green trust and personal norm, were insignificant towards attitude. This study confirms otherwise as opposed to other findings that found a significant relationship between green trust and intention (Balaji et al., 2019; Yadav et al., 2019).

The most probable explanation from this result is that green scepticism is considered a substantial factor that deters tourists from forming green trust in the Malaysian context. Green scepticism was found to lower consumers' trust and intention to engage in pro-environmentally behaviour (Dwivedi et al., 2022; Goh and Balaji, 2016). Others have claimed that with substantial proof of firm action that can lower environmental impact, consumer scepticism may fluctuate according to their trust and belief in hotel operators (Patel et al., 2017). In addition, the insignificant relationship might be contributed by the young respondent's demographic. We believe they have yet to develop trust towards hotel operators due to their lack of experience and awareness of the green hotel concept, which highlights the need for further investigation. Meanwhile, within the two norms tested in this

study, only the subjective norm was significant on intention, while the personal norm was insignificant. The findings of these two variables contrast with Choi et al. (2015) results. Most likely, tourists responsible for protecting the environment will develop this belief through their behaviour. As personal norm was not a predictor of green hotel visits in the current study, it does not mean it is less critical than the subjective norm.

Study implications

The theoretical integration between TPB and VBN theory is promising; notably because the TPB has been criticised to overlook people's moral and normative drives. The role of VBN theory in the form of the ascription of responsibility, willingness to purchase and PCE shows that the theory supplements the all-time-relevant TPB as the underpinning theory that explains individual pro-environmental behaviour. The finding indicates that ascription of responsibility, willingness to purchase and PCE significantly influence the attitude, subjective norms and PBC and, subsequently, the intention to visit green hotels. Furthermore, the inter-relationship between environmental roles constructs (belief, commitment and concern) on attitude yield mixed results, as the environmental belief was insignificant towards attitude. This phenomenon explains that beliefs do not always translate into consumer purchase of green products (Line and Hanks, 2016), as shown by this finding. Even though the respondents opted for green hotels, they probably do not believe that green hotels would contribute to the environment or reduce climate change. Henceforth, belief should be translated into an actionable and tangible response. Meanwhile, the results show that environmental commitment and concern strongly influence consumers' attitudes. It shows that one psychological state is predicted by the commitment to engage in pro-environmental behaviour and concern for the current state of the environment.

This study contributes to the future understanding of the role of TPB and its integration with other relevant theory (e.g. VBN), especially in explaining the future behaviour of consumers' green hotel visitation. Notably, the integration of extended TPB and VBN theory in this study was practical and helpful in predicting tourist intention to stay at green hotels (Choi et al., 2015; Kiatkawsin and Han, 2017; Yadav et al., 2019; Yeh et al., 2021), especially in emerging economies. Likewise, TPB alone has been criticised for its limitation in considering cognitive and emotional aspects (i.e. fear and anger) that could interfere with consumers' beliefs towards green hotels (Thoradenia et al., 2015; Yarimoglu and Gunay, 2020; Yadav et al., 2019; Yeh et al., 2021)). Integrating TPB with other behavioural theories is advisable to understand modern consumer behaviour. For instance, future studies could investigate consumer green hotel visits from the protection motivation theory, which highlights the triggering of an individual's self-protective behaviours through fear (Chen, 2020; Pang et al., 2021). Apart from that, consumer travelling behaviour can be examined from the stimuli-organism-response (SOR) perspective and the theory of consumption value (Asl and Khoddami, 2022). Besides, it is evident that future studies can consider other variables to address the study problem, such as green image, consumption values and green identity – which may assist scholars on how these environmental constructs may impact the customers' green consumption behaviour within the tourism and hospitality realm.

From the managerial standpoint, results from this study contribute to newly found dimensions and variables within the context of green hotel visits, especially in the context of a developing country like Malaysia. Firstly, it is of utmost importance to players in the tourism and hospitality industry to capture and behold tourists' interest to come to the hotel. As green hotels are considered to be profoundly new in emerging economies like Malaysia, it is more important to address issues that are dwindling the hesitance to come to green hotels despite knowing the benefits and long-term gain of such visits. To reach, engage and influence tourists with environmentalist values are challenging for eco-friendly businesses. Therefore, hotel management should invest in proper marketing by infusing green awareness and concern elements that can engage the interest of travellers. Besides, as the market for green hotels is relatively small but growing worldwide (Yeh et al., 2021), hotel operators need to explore the best practice to encourage the demand for green hotels in the local market. Hopefully, the hotel operators and registered authorities such as the

Malaysian Association of Hotels (MAH) should conduct extensive awareness programs to stimulate personal norms by ascribing responsibility and moral obligation. Likewise, knowledge sharing on how green hotel practices benefit the industry should be normalised (Fauzi, 2019).

As modern consumers become more environmentally conscious, they tend to be more responsible and oblige their daily lives to protect the environment. Tourists with a sense of responsibility would lead them to possess personal norms for visiting a green hotel. Dolnicar (2020) argues that pro-environmental appeals would activate or modify individuals' beliefs and desired behaviour. However, it would only be effective if the proposed environmentally friendly behaviour is convenient, modest effort and occurs with limited constraints. On the other hand, Santos et al. (2019) argue that hotels that practice green must introduce and communicate their sustainable practices more effectively and enthusiastically through a mixed rational appeal. This would allow tourists to value and engage in sustainable practices as they react better to messages with emotional content. Verma et al. (2019) suggest that the way marketers advertise their products should be changed to augment the elements of responsibility amongst tourists. For example, improving people's interest in green hotels is by changing the sign from "choose green hotel" to "tourists today choose the green hotel to save the planet". It can be in the form of provoking a deep sense of responsibility amongst tourists. These measures can help them foster consumers' environmental awareness and form a favourable and positive attitude towards green hotels in the future.

Due to green hotel's popularity and growth potential, there is an urgent need to evaluate the performance of green hotels: whether they are really 'green' or only claiming to be 'green' for marketing purposes. Only a handful of studies mentioned the need for a green hotel rating system (Abdulaali et al., 2020; Hou and Wu, 2021), but none has proposed actual working criteria for its implementation. Henceforth, future studies could develop unified green hotel rating tools or systems that can assess the sustainability practices of the green hotel. The tool can be constructed as a methodology to measure green hotels from several perspectives, either as a new building or refurbishing an existing building. As far as the author's knowledge, currently, there is no rating tool in the market specifically developed for the green hotel rather than the Green Building Index (GBI) rating. Perhaps, future studies could formulate a rating tool developed from the existing GBI rating tool (Liang et al., 2021; Sartori et al., 2021) following the green building requirements. However, to ensure the holistic measurement of the proposed rating system, incorporation of 'soft' criteria or weightage that includes human values, people interaction and green service quality towards consumers should be considered. Hopefully, the tool can be an effective measurement system to evaluate green hotels and offer an appropriate legal framework to regulate the use of 'green' in the hospitality industry in the near future.

Conclusion

This paper's focal point was to explore the predictive power of the TPB and VBN theory in determining tourists' intention and behaviour to visit green hotels. This study proposes and demonstrates that TPB, in support of VBN, as a novel integrated framework, is able to predict tourist intention to visit a green hotel. The study empirically validates that subjective norms and PBC influence tourists' intention to stay at a green hotel. On the other hand, the study also upheld the existing literature on the significant impacts of perceived morals, responsibility, WTP more and PCE were significant in explaining the tourist's subjective norms, personal norms and perceived behaviour control. However, surprisingly, the study also confirms the insignificant relationship between green trust, personal norms and tourists' stay intention. Notably, this study shows that green trust and personal norms cast an increasingly significant influence on tourists' intention to patronise green hotels, while the green hotel perceived values play a key role in establishing a connection between one's personal beliefs and their green hotel visit intention. Despite the literature showing the importance of green trust and personal norms, this study's finding was in contrast, perhaps because it came from the emerging economy perspective.

As consumers become thriftier and more prudent in spending, paying more premiums on a green hotel might be their last choice. Nevertheless, the current awareness of environmental depletion and detrimental consequences out of ignorance due to negative behaviour will entice tourists to patronise the green hotel. Nonetheless, the issue of tourist scepticism on the green hotel (green scepticism) had a probable unfavourable impact as green hotel implementation is still in its infancy in this country. Perhaps, it could be an opportunity for hoteliers to strategically market the significance of green hotel practices to their potential consumers.

This study has its fair share of limitations, which can be further improved in future research. First, this study data was mainly collected using a cross-sectional survey amongst Malaysian tourists. Hence, it cannot be generalised to other countries, except for nearby regions with the same economic status, such as Indonesia and Thailand. Besides, the cross-cultural issue was overlooked; further studies in different settings might add value to the proposed model. Furthermore, besides conducting longitudinal research, the sample size could be extended so that the findings would have better explanatory power. Lastly, future studies could focus on other green-hospitality sectors such as fast-food restaurants, homestays and convention centres.

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Appendix

Table A1	List of Hotel registered under AGHS and GBI
Hotel registered with AGHS	*Hotel registered with GBI*
1. The Shangri-La Tanjung Aru Resort and Spa, Sabah 2. Holiday Inn Resort, Penang 3. The Shangri-La Rasa Ria Resort and Spa, Sabah 4. Borneo Tropical Rainforest Resort, Sarawak 5. Miri Marriot Resort and Spa, Sarawak 6. Mandarin Oriental Hotel, Kuala Lumpur 7. The Shangri-La Hotel, Kuala Lumpur 8. The Zenith Hotel, Pahang 9. Frangipani Langkawi Resort and Spa, Kedah 10. The Shangri-La Rasa Sayang Resort and Spa, Penang	1. Hotel Penaga, Penang 2. Hyatt House Hotel, Kuala Lumpur 3. The Grand Hyatt Hotel, Menara Darussalam, Kuala Lumpur 4. Vivatel, Kuala Lumpur 5. THE FACE Suites, Kuala Lumpur 6. Airside Transit Hotel KLIA2, Selangor 7. Sunway Clio Hotel, Sunway Phase 3, Kuala Lumpur 8. The Everly Putrajaya, Putrajaya 9. Tune Hotel KLIA2, Selangor 10. Kings Green Hotel, Melaka 11. Boutique Hotel Alila Bangsar KL, The Establishment, Kuala Lumpur 12. St. Regis, Kuala Lumpur 13. Tune Hotel Jalan Putra, Kuala Lumpur 14. V.E. Hotel & Residence, Kuala Lumpur 15. Ibis Styles Hotel Sri Damansara, Kuala Lumpur 16. Somerset Medini, Johor

Source(s): Tourism Malaysia (2016); Green Building Index (2016)

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