



# Investigating tourists' intention toward green hotels in Malaysia: a direction on tourist sustainable consumption

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## Abstract

International tourists in Malaysia have been playing a significant role in the economy. However, tourists' consumption of natural resources could be a threat to the environment. Green practices in the hotel industry have triggered a great opportunity to save water and energy consumption and maintain sustainable practices in the tourism and hospitality industries. This is a study on international tourists' intention to visit green hotels in Malaysia with related factors such as green availability, green price sensitivity, attitude, and subjective norm. For data collection, the researchers used self-administered questionnaires and distributed them to international tourists in Malaysia. For the analysis, structural equation modeling (PLS-SEM) was applied for analysis. Results found that green price sensitivity, attitude, subjective norm, and perceived behavioral control positively influence tourists' intention to visit green hotels in Malaysia. Attitude also mediated between green price sensitivity and tourists' intention to visit green hotels in Malaysia. This study has shown the novelty by establishing the relationships among variables and contributing to the Theory of Planned Behaviour, which will benefit future researchers. The study posed several recommendations for practitioners as there is a need to maintain appropriate standards of environmentally friendly practices in hotels, and consumers' support for consuming green-related products impacts their survival, growth, and sustainability. It will help hotel managers learn more about their guests and create more effective marketing plans.

**Keywords** Sustainable consumption · Green practices · Tourists' intention · Hotel industry · Malaysia

## Introduction

Tourism is considered one of the world's largest and fastest developing industry (Sofronov 2018; Wu and Wu 2019). Many countries consider tourism a growth engine for present and future generations attributed to its socioeconomic contributions (Mahadevan et al. 2017). Based on the United Nations World Tourism Organization (UNWTO) annual report, the year 2017 has been proven as another remarkable year for the growth of international tourism. Tourist arrivals worldwide have increased for the eighth consecutive year to reach 1.332 billion (6.8% over 2016), with the most substantial growth recorded in Africa and Asia. In 2018, the

Asian and Pacific regions, in particular, recorded 348 million arrivals and generated USD435 billion in tourism receipts.

The growth of the tourism industry in these countries will lead to various economic and social benefits. One of the most significant economic impacts of tourism is a job creation for millions of people worldwide (Haque et al. 2016). Tourism industry generates one out of ten jobs worldwide and has been multiplying, outperforming other employment categories for the sixth consecutive year in the global economy.

Although the tourism industry contributes positively to boosting the economy of destination countries, it may as well negatively impact the natural environment and local society (Akadiri et al. 2020; MacNeill and Wozniak 2018; Postma and Schmuecker 2017). According to UNWTO (2018), tourism and hospitality could not disclaim responsibilities for climate change such as rising sea levels, desertification, deforestation, or snow and ice melting. Overall, tourism contributes to the global warming process just by existing.

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As decided in the Paris Agreement, the hotel industry has been asked to reduce its carbon dioxide emissions to 66% by 2030 and 90% by 2050 to maintain the average temperature increase below the 2° C threshold (International Tourism Partnership, 2017). The Paris Agreement has set the target to keep the average global temperature increase far below 2° C and as near as possible to 1.5 °C. Attaining this target is crucial to avoiding the harsh consequences of climate change, including fires, floods, and water scarcity that may threaten tourism destinations worldwide. Currently, the hotel industry produces 1% of greenhouse gas emissions worldwide (United Nations World Tourism Organization, 2018). Studies have shown that hotels' operations affect the environment in various ways (Dube and Nhamo 2020). Firstly, a large amount of energy is utilized in hotels' day-to-day operations to provide customers with comfortable services. For instance, hotels provide lavish amenities like dazzling lighting, heated pools, air-condition services, room heaters, and many more, which consume a significant amount of energy. Secondly, hotels worldwide are also responsible for waste generation. For example, hotels use disposable items to cater to hotel customers (Dube and Nhamo 2020). Further, hotels are also blameable for wasting an abundant amount of water in their daily activities like laundering and recreational activities like swimming pools, water parks, and golf courses (Heung and Pun 2013).

Thus, the above environmentally degrading activities of the hotel industry have triggered consumers' attention toward green practices to protect the environment. Green practices have a strategic value for hotel companies, representing the "right thing to do" and "the smart thing to do" to succeed in the future. Thus, this is a great opportunity for the hotel industry to react to this new phenomenon in the market and remain competitive (Nimri et al. 2017). Today, the number of individuals who book green hotels remains unknown (Chong and Verma 2013; Kwon and Ahn 2020). Therefore, the presence of green consumers in hotels is still uncertain in Malaysia (Kwon and Ahn 2020). Green consumers are recognized for their positive behavior, contributing to environmental protection. Unfortunately, very little research has been conducted in Malaysia to establish green consumer profiles. For instance, green consumers should opt for the least polluting transit alternatives, such as busses, ferries, or trains, because these are better options instead of driving alone, which can lead to the emissions of carbon monoxide gas (Jaini et al. 2019; Suki et al. 2016). Besides that, worldwide travelers and vacations are growing in numbers looking for green hotels (Chuah and Lu 2019; Weber 2019). Green customers will, therefore, search for green hotels and continue to choose a greener service while at the same time avoiding products and services that threaten the environment.

Furthermore, according to Kautish and Sharma (2019), to protect the ecological balance of the environment, there is a need for optimism in people's behavior and attitude toward protecting the environment. However, Zainuddin et al. (2018) stated that bringing optimism to people's behavior is impossible until people adopt a positive lifestyle that encourages the preservation of nature and the environment. Moreover, researchers have also found that people may still choose not to practice the go-green behavior even though they know the positive outcomes of such behavior (Rezai et al. 2013). Hence, people's positive lifestyle is crucial to practice positive behavior and attitude toward protecting and preserving the environment. Yet, most people still think that going green is costly. Therefore, Mohamad et al. (2014) reported that Malaysia still has limited green products, particularly in the hotel sector. Previous research has shown that the availability of green products is important for consumers to become proenvironmental (Khalil 2020; Nisar et al. 2021; Yan and Chai 2021).

This research will help understand which factors stimulate the consumers' intention on purchasing green products in the hotel industry. Existing researchers have yet to systematically investigate the key factors that affect consumers' attitudes and purchase intention, namely, green availability, green price sensitivity, subjective norm, and perceived behavioral control. Thus, this study examines the role of green availability and green price sensitivity, attitude, and subjective norm on international tourists' intention to visit green hotels in Malaysia. Establishing the relationships among variables in this study demonstrates the novelty and contributes to the Theory of Planned Behaviour. Practitioners will be benefit from this study as there is a need to maintain appropriate standards of environmentally friendly practices in hotels, and consumers' support for consuming green-related products impacts their survival, growth, and sustainability.

The remaining sections of the study included the literature reviews, research methodology, data analysis and reporting, and discussion and conclusion. Literature reviews consist of theoretical underpinning, hypothesis development, and research framework. The research methodology discusses the sample, data collection, measurement, and analysis. Data analysis and reporting consist of outliers, multicollinearity, normality checking, construct validity, reliability, model quality, and hypothesis testing. The last section emphasized the discussion and conclusion and theoretical implications.

## Literature review

### Theoretical underpinning

From a theoretical perspective, this study will underpin Ajzen (1991) Theory of Planned Behavior to emphasize

tourists' intention to visit green hotels in Malaysia. Han et al. (2011) confirmed that the Theory of Planned Behaviour has a relevant and strong predictive power while measuring the intention of the individuals compared to the Theory of Reasoned Action. Unfortunately, studies using TPB in international tourists' intention to visit green hotels have been scarce. Previous tourism studies underpinned the Theory of Planned Behaviour to examine tourists' attitudes and intentions toward green practices in hotels (Patwary et al. 2020; Verma and Chandra 2018), the intention of the green hotel (Li et al. 2022; Teng et al. 2015; Yarimoglu and Gunay 2020).

Thus, this current study is filling the gap by proposing a newly developed intention to visit the green hotels model through the integration of TPB by including green price sensitivity, green availability, attitude, perceived behavioral control, subjective norm, and intention. Although the variables used in this study have been tested before, they have never been integrated simultaneously into a single framework in the context of international tourists, particularly in measuring the intention to visit green hotels. Although researchers have examined the green purchasing intention directly, many inconsistencies exist. Consumers' attitude has been argued to mediate the relationship between purchase intention and other related factors (Aman et al. 2012; Alom et al. 2019; Indriani et al. 2019; Rizvi and Oney 2018; Sreen et al. 2018). In addition, tourists' attitude is also a mediator in the above relationships. Including the mediating role attitude and this model with the integration of TPB and other relevant constructs can significantly contribute to the literature on international tourists' intention to visit green hotels.

## Hypothesis development

Several researchers have used price sensitivity and perception as positively related to consumers' attitudes toward buying the products (Danes and Lindsey-Mullikin 2012; Nagle and Holden 1995; Raghubir and Corfman 1999). According to Suki et al. (2022), price is one of the influential factors when buying organic foods. Bunte et al. (2010) found that price influences consumers' attitudes; it is not considered a barrier to purchasing certain products. Additionally, although consumers tend to purchase green products, they do not compromise on performance, convenience, and price (Patwary 2022; Narula and Desore 2016). Even though the price is higher or green seems expensive, the literature indicates that consumers tend to positively visit green hotels to support proenvironmental initiatives regardless of pricing (Patwary et al. 2021). Therefore, this study also posits the following hypothesis:

H1: There is a positive effect on tourists' green price sensitivity and attitude toward visiting green hotels in Malaysia.

Availability of green products refers to what extent consumers have available access to buy products for their use (Khalil 2020). The availability or nonavailability of products is important for consumers' buying decisions and conversion of their purchase attitude to purchase intention (Nisar et al. 2021; Wang et al. 2018). Thus, this study also posits the following hypothesis:

H2: There is a positive effect of tourists' green availability on attitude toward visiting green hotels in Malaysia.

A common misconception fails to acknowledge the trade-off of attributes that consumers use when choosing price, convenience, and value. Consumers are reluctant to pay extra (premium) money for green goods (Wasik 1992). Additionally, consumers' price sensitivity also affects the buying of green products (Mandese 1991). This factor is considered one of the most significant purchasing criteria for green products (Roberts 1996). Although green products or particularly green hotels seem expensive to many consumers, it eventually could lead to positive intention or decision to visit green hotels due to strong environmentally responsible behavior (Deraman et al. 2017). Therefore, this study also posits the following hypothesis:

H3: There is a positive effect on tourists' green price sensitivity and intention to visit green hotels in Malaysia.

If the consumers know where to get information and the products, they will be more willing to purchase those. In some parts of the world, the nonavailability of green products is another barrier to buying green products (Bonini and Oppenheim 2008). For instance, empirical studies (Wu et al. 2021; Nisar et al. 2021) confirmed green availability has a significant positive impact on purchasing green products and services. Thus, this study also posits the following hypothesis:

H4: There is a positive effect of tourists' green availability on the intention to visit green hotels in Malaysia.

Attitudes serve as functions for a person that drives a person's motives. Similar attitudes toward an object can exist for a variety of reasons, some of which may or may not be shared among individuals (Solomon 2010). Attitude and attitude change could impact individuals' personal feelings directly and indirectly affect their behavior in several situations (Scott 1996). For instance, consumers' actions

and beliefs may diverge from their attitudes under varying conditions. Past studies have examined the factors that influence consumers' decisions to make green purchases, as well as the gap that exists between those decisions and their actual attitude and intentions (Carrington et al. 2010). Thus, this study also posits the following hypothesis:

H5: There is a positive effect of tourists' attitudes on the intention to visit green hotels in Malaysia.

Perceived behavioral control refers to controlling consumers' behaviors that need to be performed toward visiting green hotels in Malaysia. Several researchers (e.g., Karatu and Mat 2015; Mahesh and Ganapathi 2012; Sadati and Mohammadi 2012) shows that the TPB model is the direct determinant of intention. Their studies show that PBC plays a crucial factor in predicting behavioral intentions. Thus, this study also posits the following hypothesis:

H6: There is a positive effect of tourists' perceived behavioral control on the intention to visit green hotels in Malaysia.

Subjective norms are important predictors of behavioral intention that have been studied in different areas of marketing, psychology, and consumer behavior (Han and Stoel 2017; Han and Stoel 2017; La Barbera and Ajzen 2020; Savita and Kumar 2010). The TPB explains subjective norms and attitudes well to predict behavioral intentions. For instance, several studies (Rabiul et al. 2022; Erul et al. 2020; Islam and Patwary 2013) proved that subjectivity is an underlying predictor of behavioral intention. Their research findings reveals that subjective norms positively affect individuals' intentions toward environmental behaviors. As stated earlier, ethical and socially responsible characteristics are needed to show positive environmental behaviors because ethics and social responsibility generate more psychological pressure that leads to more engagement in environmental behaviors. Thus, this study also posits the following hypothesis:

H7: There is a positive effect of tourists' subjective norm on the intention to visit green hotels in Malaysia.

Several studies have used attitude as a mediating variable. In this study, environmental knowledge, altruism, perceived environmental responsibility, green availability, and green price sensitivity indirectly influence intention through attitudes. Thus, it follows the traditional mediation approach by Baron and Kenny (1986); direct paths from the predictor variables to the dependent variable are also included in this study. Few scholars argue that having such direct effects is not necessary for establishing mediation (Preacher and Hayes 2004; Wood et al. 2008; Zhao et al. 2010). Thus, this study also posits the following hypotheses:

H8: Tourists' attitude mediates the relationship between green price sensitivity and behavioral intention to visit green hotels in Malaysia.

H9: Tourists' attitude mediates the relationship between green availability and behavioral intention to visit green hotels in Malaysia.

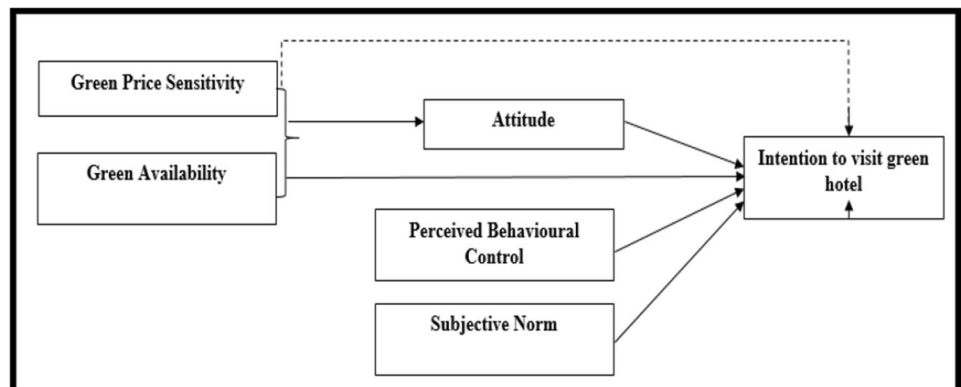
Figure 1 shows the conceptual framework.

## Research method

### Sample and data collection

In this research, the population is defined as Malaysian international tourists staying in a hotel during their trip. According to Tourism Malaysia (2019), the number of international tourists in 2018 was 25.83 million. According to Thompson (2012), a sample size of 384 cases is considered adequate to test the hypotheses for an unknown population. Based on these considerations, we determined that a sample size of 384 was adequate to capture the range of variation in the annual number of international tourists to Malaysia.

Fig. 1 Conceptual framework



Data were gathered in 2019 from June to October. Previous studies (such as Nulty 2008) have suggested that a response rate of more than 50% is acceptable for a pen-and-paper survey. In order to get at least 384 replies, 800 questionnaires were given out to foreign visitors using the purposive sampling method. Questionnaires were distributed in popular tourist destinations with the most hotels.

The researchers informed the visitors of the study's goals in an effort to lower the number of recommendations for participation, and only those visitors who expressed a willingness to participate were given questionnaires. Direct dissemination of surveys reduces prejudice and verifies the respondents' confidentiality and anonymity. In total, 443 questionnaires were returned to us for a response percentage of 55.37%. 393 responses to the questionnaires were deemed valid for testing the hypotheses after missing data and incomplete questionnaires were eliminated.

## Measurement

International tourists rated their opinion on green availability, green price sensitivity, attitude, subjective norm, perceived behavioral control, and intention on a seven-point Likert scale. Green availability is measured using four items adapted from previous studies. Green price sensitivity is measured using the following six items. These items were adapted from previous studies. Attitude is measured using the following eleven items. These items were adapted from previous studies. Perceived behavioral control is measured using the following eleven items adapted from previous studies. Subjective norm is measured using the following six items adapted from previous studies. The intention is measured using four items adapted from previous studies. These items are well-established and used by previous authors. The validity and reliability of the items used by previous researchers were considered while choosing the measurement for this study.

## Data analysis

PLS-SEM, the ideal instrument to test theory and path analysis, has been used by us (Ali et al. 2018; Rasoolimanesh and Ali 2018). To represent uncertainty regarding a latent variable structure, SEM measures and accommodates observed variables. At the same time, it also explains casual interactions between latent and observed variables (Lowry and Gaskin 2014). Additionally, PLS-SEM with numerous latent variables can be used to address some of the measurement problems that are common in tourism resource databases (Dijkstra and Henseler 2015; Rasoolimanesh and Ali 2018; Henseler et al. 2015).

## Results

### Outliers, multicollinearity, and normality

Following the advice of Lynch (2013), we first looked for and removed multivariate outliers with a significance level of more than 0.001. Because there was only one data source, we took steps both statistical and procedural to eliminate the possibility of common method variance (Podsakoff et al. 2012). In addition, Harman's single factor test was performed, and the results showed that only 16.54 percent of the variance (63.23%) could be accounted for by a single factor. Due to the fact that it is less than 50%, it can be concluded that the data does not share a common method variance (Podsakoff and Organ 1986). Skewness and kurtosis were used to ensure the data was otherwise normal. The data is slightly outside of normality, with skewness and kurtosis both less than 3 (Kim 2013). Tolerance values, the variance inflation factor (VIF), and the correlation between variables were analyzed to ensure there was no multicollinearity in the data (see Table 1).

### Construct validity, reliability, and model quality

Convergent validity requires a minimum item load of 0.60, a composite reliability (CR) of 0.70, and an average variance extracted (AVE) of 0.50 throughout the entire set of items (Dijkstra and Henseler 2015). Loadings between 0.686 and 0.911 (shown in Fig. 2) are considered satisfactory for all construct elements (Amin et al. 2017; Hair et al. 2020).

Besides, AVE values were more than the suggested values of 0.50 (see blue circle in Fig. 2). The CR values were for attitude (0.946), green availability (0.930), green price sensitivity (0.881), intention (0.918), perceived behavioral control (0.875), and subjective norm (0.844), respectively. Thus, all the constructs meet the criterion for convergent validity (Amin et al. 2017; Hair et al. 2020).

**Table 1** Collinearity diagnosis

Variables <sup>a</sup>	Tolerance	VIF < 3.0
1. Green price sensitivity	.901	1.155
2. Green availability	.825	1.684
3. Perceived behavioral control	.854	1.451
4. Subjective norm	.844	1.156
5. Attitude	.928	1.754
6. Intention	.818	1.651

<sup>a</sup>Dependent variable: intention

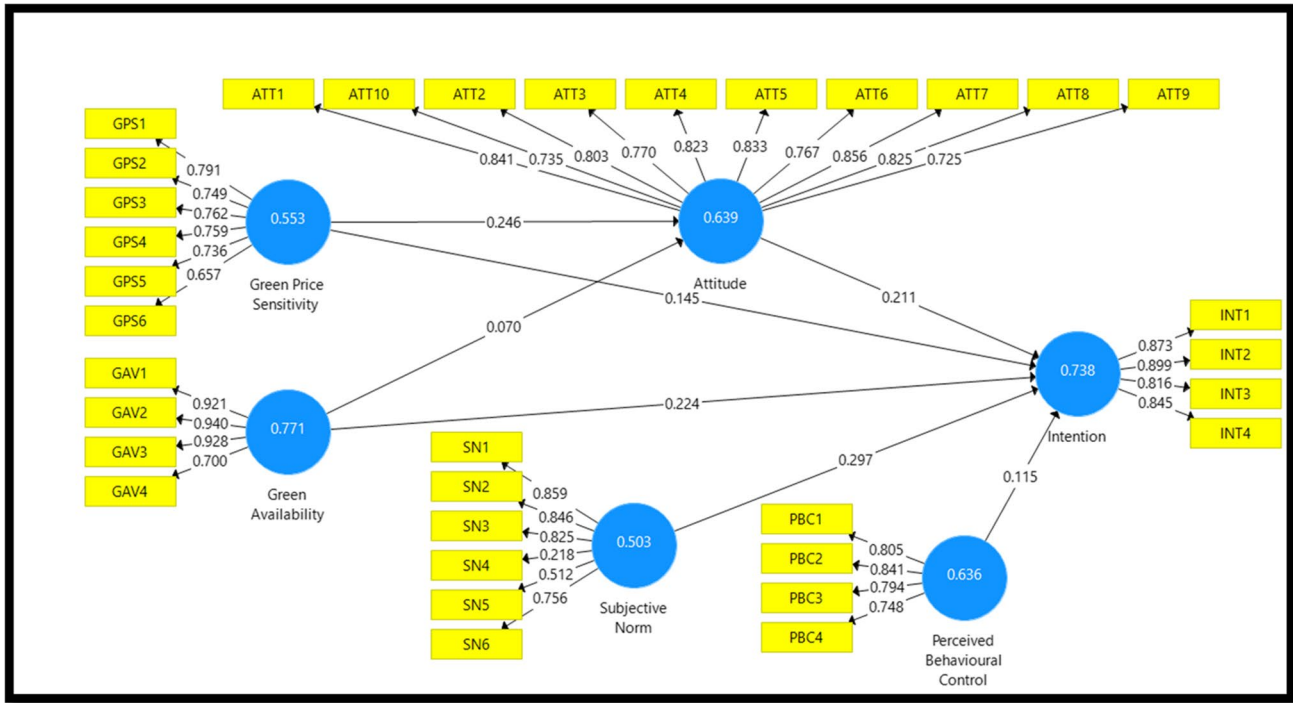


Fig. 2 Measurement model (loading and AVE)

Table 2 HTMT (Heterotrait and Monotrait) ratio criterion for discriminant validity

Variables	1	2	3	4	5	6
1. Attitude						
2. Green availability	0.113					
3. Green price sensitivity	0.270	0.181				
4. Intention	0.354	0.379	0.251			
5. Perceived behavioral control	0.041	0.243	0.061	0.212		
6. Subjective norm	0.224	0.327	0.109	0.437	0.123	

In addition, the Heterotrait and Monotrait (HTMT) ratio needs to be between 0.85 and 0.90 for discriminant validity (Adedeji et al. 2017; Hair et al. 2020). The ratios of HTMT were lower than the optimal value of 0.85 (see Table 2). Also, all indication constructs (primary) were superior to all other constructs. Since all of the constructs pass the discriminant validation, further study is possible, as stated by Hair et al. (2020) and Henseler et al. (2015).

Despite the fact that  $R^2$  values of 0.07 and 0.314 represent a modest and a moderate influence (Hair et al. 2020). For a decent model in PLS,  $Q^2$  must be larger than 0.02, and SRMR must be less than 0.08 (Cheah et al. 2018) (Table 3).

**Hypothesis testing**

We applied structural equation modeling in PLS and consistent bootstrapping with above 5,000 resamples against 393 respondents to test the proposed hypotheses. Out of

Table 3 Quality of the model

Variables	Adjusted $R^2$ (coefficient of determination)	$Q^2$ (cross-validated redundancy)	SRMR (standardized root mean residual)
Attitude	0.070 (weak)	0.12 (moderate)	0.078
Intention	0.314 (moderate)	0.10 (moderate)	

10 hypotheses, seven hypotheses were supported, while three were not supported (see  $t$  values,  $p$  values, and path coefficient in Table 4).

Rasoolimanesh et al. (2021) test the direct and indirect effects (see Table 4). We have used the statistical method (i.e.,  $p$  values and  $t$  values) and bootstrapping suggested by Nitzl et al. (2016) and Zhao et al. (2010). For example, for direct effects, as shown in Table 4 and Fig. 3, green price sensitivity, attitude, perceived behavioral control, and

subjective norm positively influences consumers' intention. Besides, green price sensitivity also positively influences consumers' attitudes.

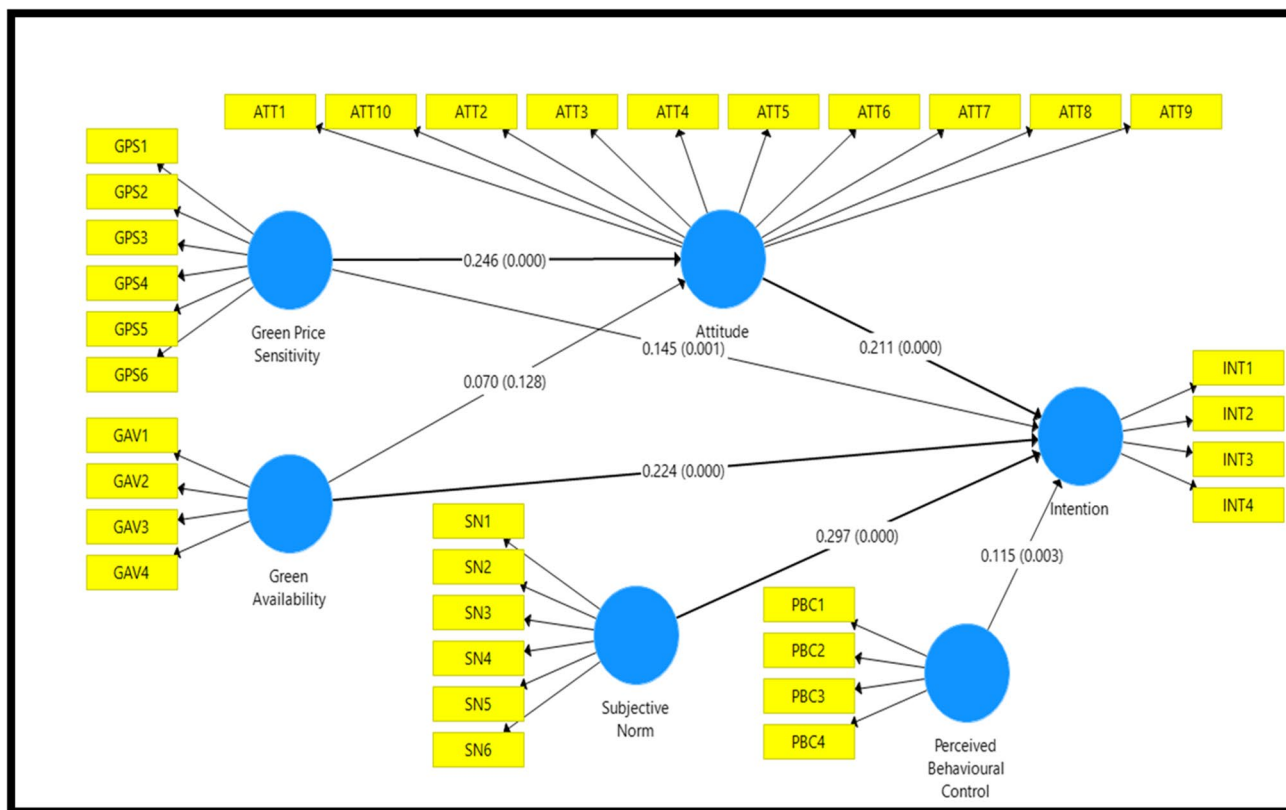
If an independent variable does not have a statistically significant effect on the dependent variable when mediated

by the mediator variable, then the mediator variable does not mediate (Nitzl et al. 2016). For instance, attitude does not mediate the relationship between green price sensitivity and intention (see Table 4 for detailed *p* values and *t* values).

**Table 4** Direct hypotheses

No	Hypothesis	$\beta$	Std. Dev.	<i>t</i> values	<i>p</i> values	Supported
H1	Green price sensitivity → attitude	0.246	0.051	4.828	<b>0.000*</b>	Yes
H2	Green availability → attitude	0.070	0.046	1.524	<b>0.128 ns</b>	No
H3	Green price sensitivity → intention	0.145	0.045	3.253	<b>0.001*</b>	Yes
H4	Green availability → intention	0.224	0.045	4.954	<b>0.000*</b>	Yes
H5	Attitude → intention	0.211	0.048	4.430	<b>0.000*</b>	Yes
H6	Perceived behavioural control → intention	0.115	0.039	2.942	<b>0.003*</b>	No
H7	Subjective norm → intention	0.297	0.056	5.337	<b>0.000*</b>	Yes
Indirect or mediated hypotheses						
H9	Green price sensitivity → attitude → intention	0.052	0.015	3.413	<b>0.001*</b>	Yes
H10	Green availability → attitude → intention	0.016	0.011	1.363	<b>0.173 ns</b>	No

\**p* ≤ 0.001 or *t* ≥ 3.29; \*\**p* ≤ 0.01 or *t* ≥ 2.58; \*\*\**p* ≤ 0.05 or *t* ≥ 1.96;  $\beta$  = path coefficient. ns = not significant



**Fig. 3** Structural model (*p* values and path coefficients)

## Discussion and conclusion

Price consciousness was adopted as a significant predictor of attitude in consumer studies. The findings concluded that there is a positive effect on tourists' green price sensitivity and attitude toward visiting green hotels. Previous studies support this finding (Mansor et al. 2011). This indicates that consumers consider the price very seriously while planning to visit green hotels in Malaysia. The gap between consumers' positive attitudes and their intentions to make sustainable green purchases is widened by the limited availability and inconvenience of products (Joshi and Rahman 2015). The findings revealed that green availability does not significantly affect attitude toward visiting green hotels in Malaysia. Scholars from prior studies who commended that availability is not related to the attitude of the consumers while purchasing green products agree with this finding. This is contrary to the result found in other studies. The availability of green hotels does not affect the tourists' attitude toward purchasing green hotel services.

Nevertheless, Ajzen and Fishbein (1980) stated that individuals might engage in different behaviors because of certain beliefs, which might lead them toward either positive or negative attitudes in choosing any services. The results indicated that tourists' green price sensitivity has a crucial link with the intention to visit green hotels in Malaysia. This hypothesis is supported by previous research (Mansor et al. 2011). Consumers in the tourism industry also pay attention to the availability of green hotel services. According to Young et al. (2010), difficulties in getting access to green hotels and scarcity of room service in green hotels also force consumers not to choose green hotels. This hypothesis is supported by previous studies. The findings revealed that attitude significantly influences behavioral intention to consider green practices in the Malaysian hotel industry. This hypothesis is supported by previous studies. Reason Action is the continuation of the Theory of Planned Behaviour (Ajzen and Fishbein 1975). Theory of Reason Action established that consumers' behavioral intentions influence individuals' attitudes toward any behavior. Perceived behavioral control, as described by Ajzen and Madden (1986), indicates prior experience and anticipated constraints in carrying out the behavior in question. However, a person's ability to regulate their behavior may increase if they have command of their environment, including their access to resources and the likelihood of a positive setting with few barriers. The findings revealed that perceived behavioral control has a positive effect on the behavioral intention of tourists toward consideration of green practices in the Malaysian hotel industry. This result is supported by previous studies (Sadati and Mohammadi 2012). The literature also reveals that subjective norms impact consumers' behavioral intentions toward buying environmentally friendly services (Ajzen, 2002; Park, 1999).

Biswas (2020) conducted a study to determine the relationship between consumers' green behaviors and social influences. The findings revealed that subjective norms significantly affect tourists' behavioral intention to consider green practices. The study findings reveal that individuals' social influences positively impact their behaviors. Several studies have been done in the tourism industry context to determine the relationship between subjective norms and green purchase behaviors. The studies above indicate that subjective norms directly correlate with consumers' green purchase behaviors. Thus, a subjective norm is also one of the influencing factors for the particular attitude of consumers toward buying green products.

The findings revealed that consumers' attitude mediates the relationship between green price sensitivity and behavioral intention in considering green practices in the Malaysian hotel industry. Gleim et al. (2013) also reported that price sensitivity affects the consumers' attitudes, leading to behavioral intention. The findings also revealed that consumers' attitude does not mediate the relationship between green availability and the behavioral intention of tourists toward consideration of green practices in Malaysian hotel. When green hotels are available at the destination, consumers may not choose to stay in green hotels or have no influence over their attitude. Customers would rather not spend too much time looking for green products and would rather buy what is already readily available (Amberg and Fogarassy 2019). Further, customers choose low-effort purchases whenever possible, and they tend to avoid behaviors that they perceive as being more difficult.

## Theoretical contributions

Previous studies found that empirical analysis of the issues that impact attitude and purchase intention is somewhat uncertain and showed inconsistent results (Ahmad and Juhdi, 2010; Karatu and Mat 2015). In green marketing and tourism-related research, past research had mainly concentrated on the promotional side, with only a small percentage of efforts directed toward the environmental aspect of tourism management (Serra-Cantalops et al. 2018). Additionally, it was recommended that tourism studies from the environmental context have to catch up, especially in emerging markets such as Malaysia (Afthanorhan et al. 2017). Consequently, an intense gap was discovered to contribute to the tourism literature by conducting studies on the sensitivities and attitudes of tourists concerning green practices of the hotel industry in protecting the environment (Patwary et al. 2022). This study tested new variables that may impact consumers' attitudes and purchase intentions. It leads to further theoretical development with an appropriate construct while measuring green purchase attitudes and intentions.



## Practical contributions

Theoretically, and as is commonly seen in markets around the world, there may be instances in which consumers actually have a positive attitude about some aspects of intention to acquire a product or service. More “green” hotels, which prioritize environmental sustainability by minimizing their use of nonrenewable resources like energy, water, and raw materials without sacrificing service quality or guest satisfaction, have sprung up in recent years. When comparing the effects of subjective norm and perceived behavioral control, the green hotel demonstrates that attitude toward a behavior has a much larger impact on visit intention. The goal in the real world should be to improve guests’ perceptions of eco-friendly lodgings. Therefore, in order to attract more international guests, hotel managers must address environmental issues by marketing their services as eco-friendly and green. Hotel management can use the study’s comprehensive approach to better understand the motivations of international visitors to book stays at eco-friendly properties. As a result, we were able to assist them in developing effective initiatives to promote eco-friendly lodgings throughout Malaysia.

## Limitations and future research directions

Directions for future research are presented based on limitations and the findings of this study. This study surveyed only international tourists because, like the literature, foreigners were less concerned about the environment of the visiting country. However, local tourists also can be an important sample for future research. This study’s findings cannot be generalized to Malaysia’s entire tourism and hospitality industry. Including local tourists in the next study would provide better insights into this problem. Besides, this study did not consider demographic variables and their links to the main research model. These controlled demographic variables could have produced more meaningful results and provided better justifications for the study outcomes. Thus, it is suggested that the subsequent research considers demographic aspects like gender, age, ethnicity, religion, and employment status in understanding consumers’ preference for green practices in the hotel industry. Tourists do provide useful insights in the context of the current study. However, it will also be helpful to consider hotel managers to conduct future studies to offer value-added opinions. The opinions of managerial staff would assist the practitioners in expanding their existing markets by consolidating their marketing strategies.

**Author contribution** Ataúl Karim Patwary: conceptualization, idea generation and final review, data analysis, and discussion. Roslizawati Che Aziz: literature review and editing. Nik Alif Amri Nik Hashim: methodology, literature review, data screening, and coding.

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**Data availability** The data that support the findings of this study are openly available on request.

## Declarations

**Ethical approval and consent to participate** N/A.

**Consent for publication** We do not have any individual person’s data in any form.

**Competing interests** The authors declare no competing interests.

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