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## **Enhancing Behavioural Intention among Young Consumers to Choose Green Hotels: Evidence from a Frontier Market**

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### **A B S T R A C T**

Despite the increasing popularity of green hotels, there is a dearth of research and literature on consumer attitudes toward green hotels. The purpose of this study is to investigate consumer intention to visit a green hotel in Sri Lanka by examining the effect of biospheric and egoistic values on consumer attitudes toward green hotels and desire for green hotels. An online survey was distributed among young consumers through google forms by using social media networks (Facebook and LinkedIn). Three-hundred and twenty-six (326) consumers were eligible to participate in the survey and 280 respondents were used for the further analysis. Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to analyse the collected data, assess the model and test hypotheses. The findings indicate that biospheric value is a highly significant predictor of consumer attitudes and desires toward green hotels. Additionally, it appears that the desire for green hotels is a stronger predictor of green hotel visit intention than the attitude toward green hotels. This is the first study to deepen our understanding of the two psychological theories namely goal-directed behaviour and value-belief-norm theory in the context of green hotel. To this end, the findings of the study provide unique cues for managers and green hotel practitioners in developing marketing strategies to enhance behavioural intention among young consumers to choose green hotels.

**Keywords:** biospheric value, consumer attitude, consumer desire, egoistic value, green hotel visit intention

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## 1. Introduction

Consumption activities of people around the world contribute to environmental degradation (Nguyen et al., 2017; Phan et al., 2017; Han, 2020). To enhance a nation's green revolution, more environmentally sustainable consumption is needed (Lorek & Spangenberg, 2014). Consumers in advanced countries are more likely to engage in environmentally friendly behaviours and consumption (Morren & Grinstein, 2016). On the other hand, consumers in developing countries in South Asia, Southeast Asia, and Africa are still in the early stages of switching their consumption habits from conventional products to green goods (Nguyen et al., 2017; Sethi et al., 2018). Furthermore, studies are needed to investigate new insights in developing countries, as studies in this field appear to be complicated. Although some studies had shown that consumers are concerned about environmental concerns (Teng, Khong, & Goh, 2015), others had found that consumers are sceptical of environmental practices and feel that paying more for green goods is unnecessary (Gao et al., 2016; Yeh et al., 2021).

Over the last decade, the tourism industry in emerging market has become increasingly concerned about its environmental impact (Han, 2015; Verma et al., 2019). Because of the increased awareness and desire among travellers to choose eco-friendly goods and services, eco-friendly practices have received a lot of attention from hoteliers in emerging market (Gao et al., 2016; Han, 2015; Butler, 2008). Many hotels, in particular, are investing significant resources in environmentally sustainable practices such as waste reduction, energy consumption reduction, low-flow faucets and shower heads, green supplier selection, and recycling practices (Yadav et al., 2019; Pinto et al., 2011; Han et al., 2011). Despite this, studies concerning green hotel choices have just begun to emerge across developing countries but still require extensive investigation (Yadav et al., 2019). Hence, the primary aim of this study is to investigate the determinants of green hotels choice in the developing country context, notably in Sri Lanka.

By 2030, the Sri Lankan government aims to ensure that people have access to relevant information and awareness regarding sustainable development and nature-friendly lifestyles (Department of Census and Statistics, 2017). This further infers that the Sri Lankan government is attempting to foster sustainable consumption among the people by focusing on the key areas of eco-standards and certification, taxes and charges, subsidies and incentives, communication campaigns and environmental education (Department of Census and Statistics, 2017). Despite the governmental support towards sustainable consumption, researchers have paid little attention to identifying the determinants of green hotels choice among young travellers, who are more passionate about eco-tourism (Gao et al., 2016). Further, environmentally sustainable practices are gaining prominence in Sri Lanka's hotel industry (Kularatne et al., 2019). Thus, the research investigating the factors which influence green hotel choice among young travellers in the frontier market like Sri Lanka is warranted. A frontier market is a country that is more developed than the least developed countries but less developed than emerging markets due to its size, inherent risk, or illiquidity (Wiprächtiger et al., 2019).

This study is significant academically and practically. Academically, the study deepens the current understanding of green consumption literature by empirically examining the comprehensive model of behavioural intention to choose green hotels, which is underpinned by two key psychological frameworks namely value-belief-norm framework and model of goal directed behaviour. Practically, the findings of this study will inform hotel operators and policy makers which factors trigger consumer behavioural intentions towards green hotels. Consequently, they will be able to focus on those drives in developing marketing and communication strategies.

## **2. Literature review and hypotheses development**

### **2.1. Environmental sustainability in hotels**

Customers, operators, and investors are becoming more aware of the environmental impact of hotel operation and development (Legrand et al., 2013; Jones et al., 2014; Han, 2015; Ahn & Kwon, 2020). A green hotel is simply an environmentally friendly hotel that takes steps to protect the environment (Verma et al., 2019). As a result, green hotels are involved in investing significant resources in environmentally sustainable activities such as the use of renewable energy (e.g. solar, wind, biomass), energy efficient appliances, rainwater harvesting units, card system for lighting control, water efficient appliance, recycling bins, and so on (Lee et al., 2010; Han et al., 2011). To this end, many hoteliers are keen to implement creative green management guidelines and successful sustainable-development strategies in response to these initiatives (Sloan et al., 2009; Ham & Han, 2013; Jones et al., 2014; Han, 2015; Verma et al., 2019).

### **2.2. Model of goal directed behaviour (MGB)**

The MGB is an expanded version of the Theory of Planned Behaviour (TPB) (Perugini & Bagozzi, 2001). Particularly, the MGB defined antecedents toward a certain behaviour in the original TPB (i.e., attitude, subjective norms, and perceived behavioural control) that influences intention indirectly through desire (Leone et al., 2004; Perugini & Bagozzi, 2001). In the MGB, the role of desire as a major predictor of intention mediates attitude, subjective norm, perceived behavioural control, and anticipated emotions (Hunter, 2006; Leone et al., 1999; Meng & Choi, 2016). Given that, the notion of desire as a psychological construct can possibly impact consumers' level of intention towards green hotels. Despite this, the application of the MGB in eco-tourism research is in infancy level. As a result, the MGB is one of the underpinning theories used by the researchers in this study to explore the behavioural intentions of customers seeking green hotels.

### **2.3. Value-Belief-Norm (VBN) theory**

Values are seen as a key motivator in deciding whether or not to engage in pro-environmental behaviours (De Groot & Steg, 2008). The VBN theory proposes that pro-environmental personal norms decide one's pro-environmental behaviours, and that these personal norms are triggered by a sequential mechanism of values / ecological worldview / perception of negative consequences / ascribed responsibility (Klößner, 2013; Stern, 2000; Stern et al., 1999). The influence of values on behaviour is mediated by beliefs and environmental concerns. Han et al. (2015) proposed that values serve as an administrative guide for greater environmental concern in an individual's life. Stern et al. (1993) suggested a three-dimensional value orientation that includes egoistic, altruistic, and biospheric values, all of which are important in influencing sustainable behaviours. Biospheric and altruistic values, unlike egoistic values, are more likely to retain their environmental worldview (Stern, 2000; Klößner, 2013). Biospheric value is associated with nature and the biosphere; altruistic value is concerned with the welfare of others; and egoistic value emphasizes maximizing individual benefits (Klößner, 2013; De Groot et al., 2007). According to existing research, values have a positive impact on an individual's environmental concern, norms, and attitude, which in turn has a positive impact on their pro-environmental actions (Choi et al., 2015; Han, 2015; Jakovcevic & Steg, 2013; Riper & Kyle, 2014).

### **2.4. Biosphere values**

Individuals with biospheric values care deeply about the environment and make choices based on the ecosystem's costs and benefits (Steg et al., 2014). Biospheric value system tends

to cover a wide range of motivations for green behaviour and can thus be considered a more significant driver of norms and intentions than other antecedents (Steg et al., 2011). An individual's environmental behaviour was found to be consistently and significantly associated with biospheric value orientation (Katz-Gerro et al., 2017). Previous research has found that personal values influence the purchase and consumption of environmentally friendly products because consumers believe that such behaviour contributes to the social good and creates social capital (Han, 2015). For example, Perlaviciute and Steg (2015) discovered that consumers with strong biospheric values are more likely to prioritize environmental considerations when purchasing renewable energy equipment. Biospheric values were found to be positively associated with an individual's desire and attitude toward the consumption of local products (Steenkamp et al., 2010). Based on the preceding discussion, it is possible to hypothesise:

*H1a:* Biospheric values significantly and positively influence consumer's desire towards green hotels.

*H1b:* Biospheric values significantly and positively influence consumer's attitude towards green hotels.

## **2.5. Egoistic values**

McDougle et al. (2011) claimed that individuals with more egoistic environmental value orientations are more likely to engage in pro-environmental behaviours due to self-interested concerns. Stern et al. (1993) stressed that egoistic values, rather than altruistic or biospheric values, may be more predictive of pro-environmental behaviour, particularly when personal wants and desires take precedence. Extant literature claimed that egoistic values influence the attitude towards green offerings and green buying behaviours (Stern et al., 1993; Verma et al., 2019; McDougle et al., 2011). In green hotel context, individual egoistic values such as health and safety considerations, as well as hedonistic values such as enjoyment and pleasure of hospitality services, may motivate an individual customer's desire to visit green hotels. Hence, the following hypotheses are developed:

*H2a:* Egoistic values significantly and positively influence consumer's desire towards green hotels.

*H2b:* Egoistic values significantly and positively influence consumer's attitude towards green hotels.

## **2.6. Desire towards green hotels**

Consumers are motivated to act in an eco-friendly manner because of their positive attitudes toward the environment (He et al., 2019). The MGB asserted that desire mediates the relationship between attitudes and intentions (Davis, 1984). For instance, someone intends to do something only if he or she has the desire to do it. As a result, scholars believed that attitudes could not activate intention without desire (Meng & Choi, 2016; Perugini & Bagozzi, 2001; Taylor et al., 2009). Drawing on the MGB, it is suggested that changing consumers' attitudes is more likely to stimulate a desired behaviour (Taufique et al., 2017). Further, desire is the motivation that drives the formation of that intention, which indicates that desire towards green hotels has a significant, positive influence on tourist visit intention. Thus, this study posits the followings:

*H3:* Attitudes towards green hotels positively and significantly influence desire towards green hotels.

*H4*: Desire towards green hotels positively and significantly influences green hotels visit intention.

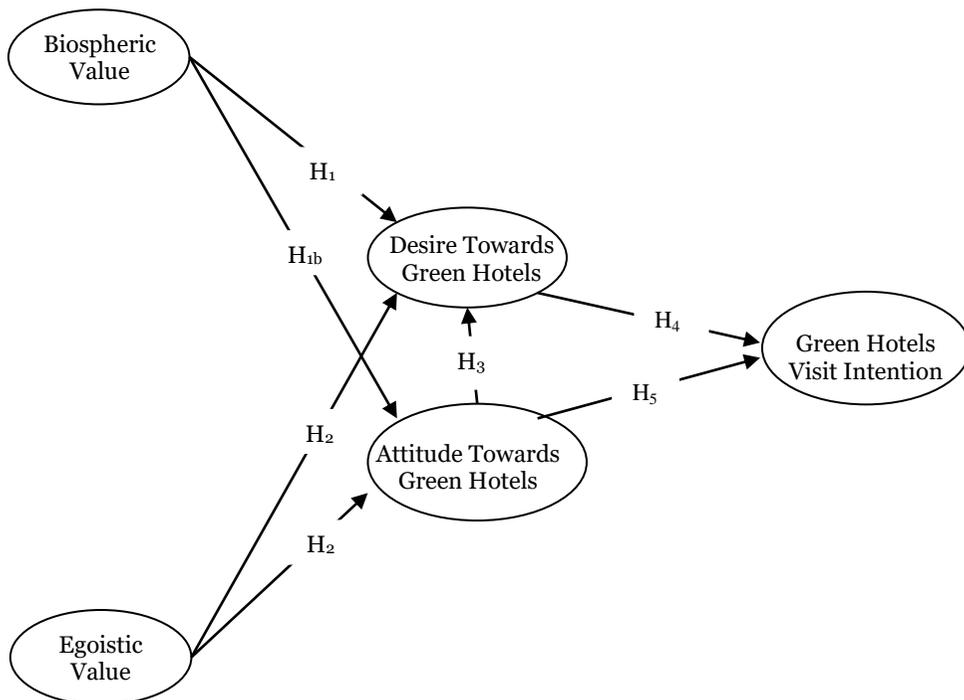
### 2.7. Attitudes towards green hotels

The assessment of some types of environmentally friendly goods or activities, such as green product choice, green hotel stays, or organic food choice, is known as an individual's attitude toward green products (Verma et al., 2019). According to previous research, individual attitudes enhance the pro-environmental action, (Tanner & Wölfling, 2003; Chen & Tung, 2014; Kun-Shan & Yi-Man, 2011). In the context of green hotels, Chen and Peng (2012) pointed out that one of the key factors that increases a tourist's willingness to stay at a green hotel is the individual's attitude. Further, Consumers' favorable evaluation of green hotels increases their willingness to pay premium for green hotels (Hultman et al., 2015). From the above discussion, it can be hypothesised that;

*H5*: Attitudes towards green hotels positively and significantly influence green hotels visit intention.

### 2.8. Conceptual model

Based on the literature review and preceding hypotheses, a conceptual model is proposed. Figure 1 illustrates the model.



**Figure 1: Conceptual Model**

### 3. Methods

A self-administered questionnaire was used to collect data from the respondents. The study constructs were measured using previously validated scales. However, these scales were modified to suit the green hotel context, where appropriate. The four items (04) measuring biospheric value were adopted from De Groot and Steg (2007) and Stern et al. (1999),

whereas egoistic value was measured using three items (03) adopted from De Groot & Steg (2008). Attitude towards green hotels was measured using six items (06), which were adopted from previous studies (Han & Kim, 2010; Teng et al., 2015; Han et al., 2011). Desire towards green hotels was operationalised with three items (03) obtained from Han et al. (2017), whilst six items (06) adopted from Han and Kim (2010) and Ajzen (1991) were used to operationalise green hotel visit intention. All the items measuring study constructs (i.e. apart from consumer demographics) were operationalised using a seven-point Likert scale (i.e. ranging from 1 = strongly disagree to 7 = strongly agree).

A survey pre-test was run with 30 green hotel customers from Sri Lanka, prior to the actual survey administration. Slight modifications were made to the survey instrument based on feedback from the pre-test. The survey instrument was in the English language, as the professional language in workplace is English in Sri Lanka. Further, the medium of instruction for higher education is also English in Sri Lankan universities. Thus, the respondents of this study, mainly young professionals and university students are proficient in English. The survey was administered before the COVID-19 pandemic (from August 2019 to October 2019). Thus, the study has not accounted the impact of COVID-19 on green hotels. The final questionnaire consisted of three sections. In the section A, researchers included three screening questions (i.e., young consumers aged 18 to 30, traveled in the last six months, and stayed at a hotel in the last six months). The section B contained study constructs and the section C collected the demographic information of the survey respondents.

The online survey was distributed among hotel customers through google forms by using social media networks (Facebook and LinkedIn). Three-hundred and twenty-six (326) consumers were eligible to participate in the survey and 280 respondents were used for the further analysis. Of these 280 valid responses, the majority of respondents fall into the age group of 18 to 30 years of age, which is 65.4%. 21.1% of the respondents were aged 31 to 40 years, 8.9% of the respondents were aged 41 to 50 years, and 4.6% of the respondents were aged above 51 years. Further, 58.2 percent were males whereas 41.8 percent were females. The demographic data of the sample show that in terms of educational qualification, the majority of the respondents were Graduates representing 47.5%. Meanwhile, 36.4% of respondents are in the category of G.C.E (A/L) qualification. The respondents who are holding Post graduates comprise 11.1% and the respondents who account for 3.8% fall into Professional Qualification. Lastly 1.1% represent G.C.E (O/L) and below. With regard to Monthly Income of Family, respondents in this study frame, who hold the monthly family income less than LKR 50000, were 24%, while respondents, who hold the monthly family income between LKR 50,000 to LKR 100,000, were 29.4 %. Further, 30.2% of the respondents hold the monthly family income between LKR 100,000 and LKR 150,000, and the respondents who hold the monthly family income between LKR 150,000 and LKR 200,000 were 9.2%. Finally, 7.2% of the respondents hold the income more than LKR 200,000.

#### **4. Findings and results**

The research hypotheses were tested using partial least squares (PLS), which is a variance-based structural equation modelling (SEM) method. SmartPLS version 3.0 software was used for the PLS analysis in this study. The PLS model was run at two phases: measurement model (outer model) and structural model (inner model). The results presented in Table 1 summarize the result of the reflective measurement model assessment. Based on this table, factor loading of all the items measuring study constructs was above 0.5. Further, the values

of Average Variance Extracted (AVE) and composite reliability were above 0.5 and 0.7, respectively confirming convergent validity (Hair et al., 2010).

**Table 1: Summary of the Measurement Model**

<b>Construct</b>	<b>Statement</b>	<b>FL</b>
Biosphere Values AVE (0.57), CR (.84), $\alpha = 0.76$	Preventing pollution, conserving natural resources	0.68
	Respecting the earth, harmony with other species	0.75
	Unity with nature, harmonizing with nature	0.82
	Protecting the environment, preserving nature	0.77
Egoistic Values AVE (.68), CR (.92), $\alpha = .77$	Social power: control over others, dominance	0.78
	Wealth: material possessions, money	0.87
	Influential: having an impact on people and events	0.82
Attitudes towards Green Hotels AVE (.58), CR (.89), $\alpha = .86$	For me, staying at a green hotel when traveling is Extremely bad /Extremely good	0.72
	For me, staying at a green hotel when traveling is Extremely unpleasant / Extremely pleasant	0.80
	For me, staying at a green hotel when traveling is Extremely unfavorable / Extremely favorable	0.77
	For me, staying at a green hotel when traveling is Extremely unenjoyable / Extremely enjoyable	0.81
	For me, staying at a green hotel when traveling is Harmful / Beneficial	0.78
	For me, staying at a green hotel when traveling is Foolish / Wise	0.69
Desire towards Green Hotels AVE (.64), CR (.84), $\alpha = .72$	I desire to stay in this eco-friendly accommodation establishment in the near future	0.79
	I want to stay in this eco-friendly accommodation establishment in the near future.	0.82
	I wish to stay in this eco-friendly accommodation establishment in the near future.	0.78
Visit Intention AVE (.67), CR (.92), $\alpha = .90$	I am willing to stay at a green hotel when traveling	0.81
	I plan to stay at a green hotel when traveling	0.85
	I will make an effort to stay at a green hotel when traveling	0.82
	I am willing to stay at a green hotel when traveling in the future	0.80
	I plan to stay at a green hotel instead of a conventional hotel when traveling in the future	0.82
	I will expend effort on staying at a green hotel instead of a conventional hotel when traveling in the future	0.81

Further, results presented in Table 2, indicated that the square root of the AVE value of study constructs (displayed diagonally across constructs) is higher than the correlation with other variables indicating the discriminant validity (Fornell & Larcker, 1981). Construct reliability (Cronbach's alpha) shown in Table 2 was above 0.7, signifying the reliability of the constructs' measures.

#### 4.1. Hypotheses testing

The last stage was testing the hypotheses using a structural equation modeling (SEM) procedure with SmartPLS. In this process of testing hypotheses, researchers fulfill the structural model criteria to ensure the Structural model fit. The findings suggested that variance inflation factor (VIF) value for all study constructs was less than threshold value of 5, which confirms non-presence of multicollinearity. Besides, standardized coefficients and their respective p-values, R<sup>2</sup>, and Q<sup>2</sup> value of the structural model were presented in Figure 2. Based on Figure 2, the explained variance of green hotels visit intention was 59.4% (adjusted R<sup>2</sup>=0.594). In order to ensure the model validity, Chin et al. (2008) classified the endogenous latent variables as substantial, moderate or weak based on the R<sup>2</sup> values of 0.67, 0.33 or 0.19, respectively. This explained variance indicates that the proposed model has moderate and satisfactory explanatory power on green hotels visit intention.

**Table 2: Correlation Matrix for the Study Constructs**

Construct	ATT	BIO	DES	EGO	INT
ATT	0.762 <sup>a</sup>				
BIO	0.502 <sup>**</sup>	0.758 <sup>a</sup>			
DES	0.730 <sup>**</sup>	0.436 <sup>**</sup>	0.797 <sup>a</sup>		
EGO	0.296 <sup>**</sup>	0.203 <sup>**</sup>	0.243 <sup>**</sup>	0.825 <sup>a</sup>	
INT	0.725 <sup>**</sup>	0.454 <sup>**</sup>	0.712 <sup>**</sup>	0.218 <sup>**</sup>	0.818 <sup>a</sup>

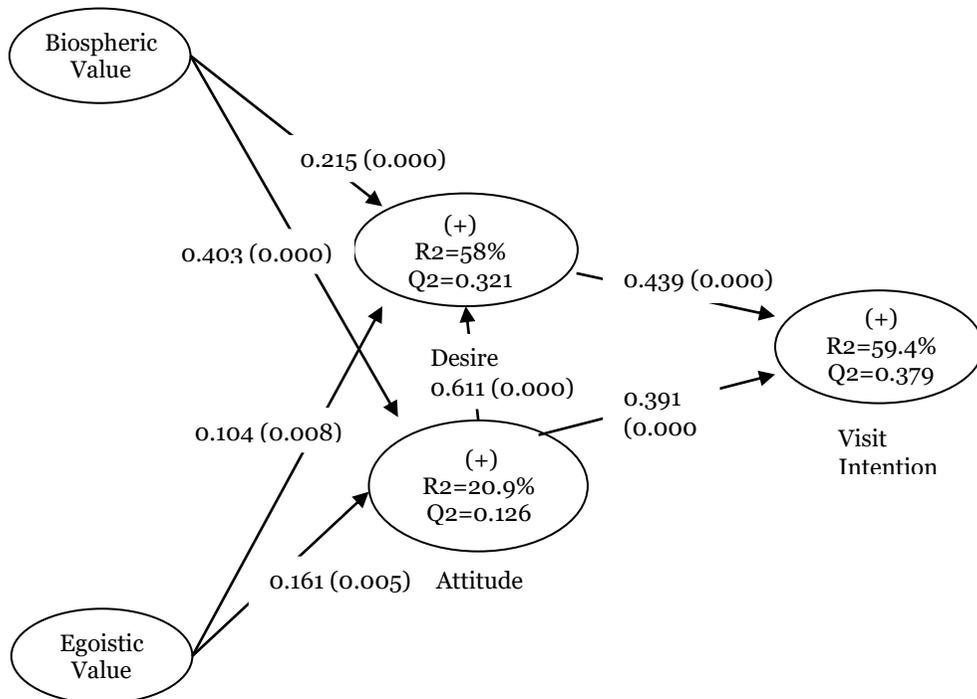
Notes:

ATT = Attitudes towards Green Hotels, BIO = Biosphere Values, DES = Desire towards Green Hotels, EGO = Egoistic Values, INT = Green Hotels Visit Intention;

\*\* Correlation is significant at  $p < 0.01$

<sup>a</sup> Diagonal value indicates the square root of AVE of individual latent construct

In addition to the value of R<sup>2</sup>, the predictive sample reuse technique (Q<sup>2</sup>) can effectively be used as a criterion for predictive relevance (Akter et al., 2011; Chin, 2010). Based on the study of Fornell and Cha (1993), a Q<sup>2</sup> value greater than 0 means that the model has predictive relevance, whereas a Q<sup>2</sup> value of less than 0 means otherwise. Based on the result, the Q<sup>2</sup> values for desire towards green hotels, attitudes towards green hotels, and green hotels visit intention are 0.321, 0.126 and 0.379, respectively and all above 0 indicate acceptable predictive relevance. As suggested by Wong (2013), researcher(s) need to calculate the effect size (f<sup>2</sup>) of the model when dependent/endogenous variables are predicted by more than one predicting/exogenous variable. In this study, green hotels visit intention was predicted by attitudes and desire towards green hotels. According to Cohen (1988), a f<sup>2</sup> value of 0.02 shows a small effect, 0.15 shows a medium effect and 0.35 shows a large effect. In this regard, desire towards green hotel (f<sup>2</sup> = 0.22), and attitude towards green hotel (f<sup>2</sup> = 0.18), had medium predicting effect on green hotel visit intention.



**Figure 2: Structural Model**

**Table 3: Structural Estimates (Hypotheses Testing)**

Hypotheses	Beta	t-value	Sig.	Decision
<i>H1a</i> : Biospheric values → desire towards green hotels.	0.215	4.718	0.000	Supported
<i>H1b</i> : Biospheric values → attitude towards green hotels.	0.403	6.620	0.000	Supported
<i>H2a</i> : Egoistic values → desire towards green hotels.	0.104	2.683	0.008	Supported
<i>H2b</i> : Egoistic values → attitude towards green hotels.	0.161	2.795	0.005	Supported
<i>H3</i> : Attitudes towards green hotels → desire towards green hotels.	0.611	14.280	0.000	Supported
<i>H4</i> : Desire towards green hotels → green hotels visit intention.	0.439	7.532	0.000	Supported
<i>H5</i> : Attitudes towards green hotels → green hotels visit intention.	0.391	7.205	0.000	Supported

The results of the proposed model (Table 3: Structural estimates) show that the proposed hypothesised variables; Biospheric values significantly and positively influence consumer's desire towards green hotels ( $\beta= 0.215$ ,  $p<0.001$ ), and consumer's attitude towards green hotels ( $\beta= 0.403$ ,  $p<0.001$ ). Egoistic values significantly and positively

influence consumer's desire towards green hotels ( $\beta= 0.104$ ,  $p<0.01$ ) and consumer's attitude towards green hotels ( $\beta= 0.161$ ,  $p<0.01$ ). Attitudes towards green hotels ( $\beta= 0.611$ ,  $p<0.001$ ) positively and significantly influence desire towards green hotels. Further, desire towards green hotels ( $\beta= 0.439$ ,  $p<0.001$ ), and attitudes towards green hotels ( $\beta= 0.391$ ,  $p<0.001$ ) positively and significantly increase consumer's green hotels visit intention. Hence, H1a, H1b, H2a, H2b, H3, H4, and H5 were all accepted.

## 5. Discussion and implications

The study's findings contribute to the existing body of knowledge by empirically investigating the travelers' visit intentions to green hotels in Sri Lanka. The aim of the study was to investigate the influence of values (biospheric values and egoistic values), attitude towards green hotels and desire towards green hotels in terms of green hotel visit intention. The results suggested that all the proposed hypotheses were supported. Besides, the findings proved that biospheric value appeared to be a main significant predictor of consumers' attitude towards green hotels. Despite this, egoistic value also enhances consumers' attitude towards green hotels. Moreover, the role of desire in enhancing green hotel visit intentions has been realised among Sri Lankan consumers.

From a theoretical perspective, this is the first study to deepen our understanding of the two psychological theories namely goal-directed behaviour and value-belief-norm theory in the context of green hotels. The present research also provided a comprehensive conceptual framework comprising, how both biospheric values and egoistic values trigger attitude towards green hotels and desire towards green hotels, which in turn drives consumer's intention to visit green hotels. From a practical viewpoint, the current study has several insightful practical implications for green hotel practitioners. For example, it is recommended that policymakers, green campaigners and marketers targeting consumers in the frontier markets develop educational and promotional campaigns and initiatives highlighting key aspects of biosphere values such as equality, a world of peace, social justice and unity with nature. Due to the extensive rivalry among the hotel industry, practitioners are searching new cues to develop effective marketing strategies to improve their hotel image, reputation and customer experience. Thus, the findings of this study will be useful to them in developing effective marketing strategies to better serve green hotel consumers, thereby increasing their market share.

Despite the meaningful theoretical and practical contributions, the study has certain limitations that future researchers can resolve. The study was conducted on green hotel consumers in the frontier market in Asia—Sri Lanka. Hence, generalising the findings to all green hotel consumers is questionable. Replicating this study in other countries will enable a better generalisation of these findings. Moreover, hotel industry undergoes rapid changes with COVID-19 pandemic. Consequently, consumer responses to green hotels, such as their values, attitudes, and intention tend to vary over time, indicating that using cross-sectional data is another limitation of the study. Replicating this study with longitudinal data may show how the results of the hypotheses vary over time.

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