Application of theory of Planned Behavior to Anticipate Consumers' intention to visit Green Hotels

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ABSTRACT

The basic aim of the study is to explore the intention of the consumer to visit green hotels through the application of the theory of planned behavior. The intention of the consumer has been investigated through the mediating effect of attitude, subjective norm, perceived behavioral control, perceived moral obligation and perceived green cost. However, their antecedent is an environmental concern. These constructs were tested through SEM analysis using a 293 sample size. The target population was the respondents of lodging customers of 08 green hotels from the five cities. According to ethical and sustainable hotels there are 08 hotels that are practicing green activities. Non-probability convenience sampling technique has been deployed in this study. The results indicate that perceived green cost has a negative and inconsistent relationship between environmental concern and intention to visit the green hotel. However, the remaining mediators significantly mediate between environmental concern and intention to visit a green hotel. This study has several practical consequences for the green hotel sector. Finally, it is hoped that the study's recommendations will be extremely valuable in both academia and practice.

INTRODUCTION

Rapid economic advancements, non-sustainable usage of resources, technological progressions, and the increasing population of humanity are bearing too much cost in terms of environmental destruction and degradation that impacts industries. (Sreen, Purbey, & Sadarangani, 2018; Knox, Marston, & Imort, 2016). Manufacturing, outsourcing, promotion, selling, logistics, and use of all businesses that have a significant environmental impact. (Nuttavuthisit & Thøgersen, 2017). Hotel businesses refer to human behavior as the mainstream objective for their environmental concerns. It is so because consumer purchasing behavior is significantly guided by public awareness about environmental issues (Bashir, Khuwaja, Turi & Toheed, 2019).

Similarly, according to Rahman et al. (2019), those hotels that are chain-affiliated adopt more green practices or environmental policies as compared to the independently owned hotels. It is seen that potential lodgers prefer to stay in green hotels, therefore the lodging industry now implements these green practices as their fundamental motive to enhance the welfare of society and underlie the management effort in this regard (Han, Hsu, Lee, & Shue, 2011). The green initiative in the hotel sector is considered to be of central importance for dealing with growing consumer demands for environmentally conscious practices and strategies on a large scale (Han & Yoon, 2015).

The idea of TPB is a widely used and generalized model of cognitive behavior. Yet according to the TPB, behavior is a feature of basic behavioral intentions, has been stated by Fishbein and Ajzen, (2005), thus it can be defined by factors of belief such as normative, behavioral, and influence over a specific action. However, for studying green consumer behavior TPB is considered as a robust model, various researchers (e.g., Armitage & Conner, 2001; Mancha & Yoder, 2015; Miller, 2017; Moon, Javaid, Kiran, Awan, & Farooq, 2018;), in which the theory has been criticized on paying heavy attention towards individual behavior and complete reliance on the comparative impact of normative, control beliefs and behavioral on that particular issue which is the understudy.

Individual consumers' intentions to visit green hotels can perhaps be predicted by not only three major variables (Subjective norm, attitude, and perceived behavior control) but also an additional variable perceived moral obligation (Chen & Tung, 2014). It is also further argued that three major principle variables affect significantly the intention to visit a green hotel (ATT, SN, and PBC), and perceived moral obligation is an antecedent, whose predictor is the environmental concern of the consumers. Such a significance has been observed in several other studies as well, although with other origins offered to enhance the concept of planned behavior. Nonetheless, the research study was found to be done about mediating role of ATT, PBC, SN, considered a PMO, and PGC in the relationship between intention to visit green hotels and environmental concern.

As a result, a more extensive study is necessary to establish a concept emphasizing the role of (ATT, SN, PBC, PMO, and PGC) as a mediator in the association between EC and intention to stay in a green hotel.

Many environmental and social science scholars have studied the theoretical relationship between "environmental concern" and "intention to visit green hotels" (i.e., Han et al., 2009; Jiang & Kim, 2015) reported inconsistencies in the results of their research work: For example, mixed or inconsistent results on the relationship between environmental triggers (e.g., environmental concern and the outcome, i.e., Intention has been observed (Chan, 2014).

Regarding the above-mentioned research grounds, the debate of the 'consistency' (between EC and ITVGH) as the case may be addressed by investigating the mediating roles of ATT, SN, PBC, PMO, and PGC. This study aims at the intention of customers to lodge in green hotels, in most cases they have not experienced it, and their intention to recommend others is also not included.

Sustainability is emerging trend in many business now a days, including hospitality and tourism sector, where it is crucial element for rapid growth. however, it is illustrated by many authors (Agag, 2021; Hou & Wu 2020) that consumption in hospitality industry is very high, either it is in case of food, electricity, water conservation and lightning which ultimately creating problem for whole global system. On the other hand many hotels have adopted green practices to reduce this harmful impact on the society to improve the lives of the people (Basana, Andreani, Tarigan & Suprapto; 2021). The influence of environmental consciousness on the green purchase decision has been widely studied, however, the research also indicates the inconsistency of the relationship between consumer attitude and purchase decision (Hou & Wu, 2020). This study addresses this concern in the context of the hospitality industry. It investigates the effects of customers' EC on their intention to visit a green hotel and the possible mediation effect of the customers' (ATT, SN, PBC, PGC, and PMO). Moreover, referring to the TPB, Ajzen (1991) has mentioned that TPB can be extended with the inclusion of such variables which offer significant contribution within specific contexts. For instance, Han and Kim (2010) extended the TPB to study the intention to stay at green hotels and found that overall the model's predictive ability was enhanced. Owing to the above argument, this study includes mediators (ATT, SN, PBC, PGC, and PMO) as well as other constructs to illustrate why young people want to visit a green hotel. The results of this study would provide valuable information about the causes of the intention of the consumer to stay or visit in green hotel. The basic aim of this study is to examine the inconsistent association between EC and ITVGH, as well as the mediating position of the above-mentioned research issue (ATT, SN, PBC, PMO and PGC). Furthermore, it is assumed that consumers attitude strongly affect the intention of the consumer (Amaro & Duarte, 2015; Eid & Agag 2020). Various studies have examined attitude as a single, construct (Chen, 2014; Yadav, 2017). In this study, the formation of customer attitude has been studied by using the three components of an attitude (behavioral, cognitive, and affective). However, the basic purpose of this study is not just an extension of theory but also to build a complete model of the green hospitality sector and customer behavior based on subsequent theory. Theoretically, in this research, there is an addition of a new path for future researchers by incorporation of TPB theory in the green hotel industry research. In addition, this study extended the knowledge of this study by integrating a conceptual model focused on attitude and marketing strategy in relation to customer intention to stay or visit green hotels. The topic of this research is relatively new to the context of the green hotel concept in Pakistan. This study led to the identification of consumer attitude as a features (Affective, Behavioral, and cognitive) as well as consumers' perspectives on the intention to visit in a green hotel. It will finally impart a suggestion for the Pakistani Government to encourage the green hotel plan all over the country to save natural resources and protect the environment.

RESEARCH OBJECTIVES

RO1: To investigate the relationship between consumers' environmental concern and their (ATT, SN, PBC, PMO, PGC, and IVGH).

RO2: To investigate the relationship between (ATT, SN, PBC, PMO and PGC), and intention to visit green hotels.

RO3: To investigate the mediating role of (ATT, SN, PBC, PMO and PGC) between the significant association of Environmental concern and intention to visit green hotels.

LITERATURE REVIEW

The TPB is the most widely used theoretical aspect for identifying consumer behavior indicators. Consequently, Fishbein and Ajzen (1975, 1980) propose that persons regulate their socially beneficial activities, with their intention to participate as a significant source of this action.

The TPB meticulously deals with consumer attitudes even towards the micro aspects of their choices in choosing the hospitality services. Teng et al. (2013) conducted a study for analyzing the attitudes of customers toward visiting a green hotel. The study was aimed to construct a framework for defining customers' attitudes towards green hotels with the help of various elements and principles (e.g. PBC, PMO, SN, PGC, and ATT). Not only this, but the study also analyzed how the consumers' intentions to visit the green hotels are shaped. Park, Kim, and McCleary (2014) studied the attitudes of top management of hospitality companies towards environmental aspects and its impact on the broader company's policies and actions in terms of environmental responsibility.

An attitude is a belief towards the behavior of an individual that will occur if she or he executes the behavior (Chou, 2020). Attitudes can be positive or negative and it is shaped by the judgment of an individual, about the projected results of executing a behavior (Ajzen, 2011). A behavioral belief is considered as the perception of the individual of outcome in performing the behavior (Ajzen, 2011).

Previous work on this research area favored the existence of more specific attitudes when it comes to eco-friendly behavior (Eid et al. 2020; Nimri, 2019; Tanner & Wolfing Kast, 2003). For instance, when the customers' intentions were assessed concerning the purchase of energy-efficient products, it was concluded that customers' attitudes were very specific towards such products and it was positively related to their buying intentions (Tan et al, 2017). The SN is described as the social pressure to engage in a specified activity (Chen, 2020). Yadav and Pathak (2017) explained SN as the level of social constraints felt by the individual for the behavior. However, understanding the relationship between the intention of the person and SN, most of the previous research affirms that behavioral intention is positively affected by the SN (Han et al. 2009; Tonglet et al. 2004). Thus, if the people have positive SN, then their intentions become stronger to act (Nimri et al. 2019). Then the intention of the consumer to opt for a green hotel for stay increases (Nimri et al. 2019).

PBC is a non-volitional element that determines an individual's purpose. Previous studies have also elaborated that the behavioral intention of an individual is positively and significantly influenced by PBC to behave in a specific way (Baker et al. 2007; Yadav & Pathak, 2017; Cheng et al. 2006). However, in this context, when persons who are very close to an individual say that it is proper behavior, the social pressure of an individual to stay in a green hotel will enhance his/her motivation to observe (Eid & Agag, 2020). However, it is presumed in concluding the preceding segment that a positive picture of an organization has a positive impact on customer behavioral intentions and therefore activates a positive role in the intention of the consumer to visit or revisit the hotel (Han & Kim, 2018).

Green consumers having EC have become a considerable portion of the market (Yadav & Pathak 2017). It has been researched that those customers who are inclined towards environmental sustainability are more likely to pay a premium price for availing of green hotel services and hence enabling them to become green (Yadav & Pathak 2017).   EC is regarded to be the general attitude of an individual that can be considered as an indirect determinant of a particular behavior (Nimri et al. 2019).). It is studied and analyses that environmentally friendly behavior is dependent upon one's EC (Bamberg, 2015; Dunlap & Van Liere, 1978; Fernández & Font, 2019; Paul et al. 2016).

Considering PMO to be a critical and inevitable determinant of pro-environmental behavior, the research study included this to extend the TPB model for advancing its scope (Chen, 2020). So, concerning the above claim, the inclusion of PMO is very critical in the model in addition to other factors. So, EC is investigated to be an influential force in affecting perceived moral control, moral obligation, attitude, and SN. In the same, way PMO came out to be a major contributor in developing the customer's intention to stay in green hotels.

It is found in the literature that the customers forego and give up to acquire and avail of certain products or services respectively. Those customers who forego environmentally friendly products incur a cost that is beyond monetary value. (Han et al., 2009; Li and Wei, 2013; Roberts, 1996). Price is one of the mainstream variables of the marketing process therefore it is a very frequently researched situational factor. This is so because the price of a green product/service can hinder the customers to opt an eco-friendly behavior and the various researches have supported the fact that green behaviors of the customers are often negatively affected by the prices (Aertsens, Mondelaers, Verbeke, Buysse, & Huylenbroek, 2011; Gleim, Smith, Andrews, & Cronin, 2013; Vermeir & Verbeke, 2006). Another study by Barbossa and Pastore (2015) concluded that high price perception of green products among the customers causes them to think that green purchasing behaviors are expensive.

Extending the TPB model allows for the calculation of "customer's intention to pay traditional hotel rates at a green hotel" (Kim and Han, 2010). Additional variables, such as PMO, and PGC, are included in the analysis to develop an in-depth understanding of the intention of the young consumers for visiting green hotels.

THE ESTABLISHMENT OF HOLISTIC MODEL

The word "holistic" refers to our way of thinking that the factors in this study are all interconnected (i.e., PMO, PGC, ITVGH, and EC) are closely linked and difficult to understand without comparison to the overall. Such relation will include not just direct impacts, but also indirect or mediating effects. The likelihood that any theoretical association can be diminished by applying and introducing more variable(s) to the theory of planned behavior triggers for studying mediating/indirect effects taking a holistic approach. Although it is proved that the theory's main independent variables (ATT, SN, and PBC) significantly affect the behavioral intention, whereas behavioral intention affects the behavior significantly, in turn, this mediating role is not validated by the existing practices in the TPB. The independent variable of PBC has a strong demonstration on behavior in the absence intention. However, given the circumstances of the current research, the potential of mediation cannot be neglected. As a result, numerous basic arguments might be used as a point of reference for research. For instance, while planning a lodging at a green hotel, a consumer may frequently take environmental measures to assure that the purchasing choice fits their personal preferences. Is this hotel environmentally friendly? Is this hotel going to provide sustainable personal products and bath and hand towels for me? Have they changed their bed linen and blanket covers? What about biodegradable plastic mineral

water bottles? If a consumer has a personal interest in these issues, his or her behavioral intentions toward that hotel may decrease, but their environmental concern may increase. Conceptual model has been presented in figure 1.
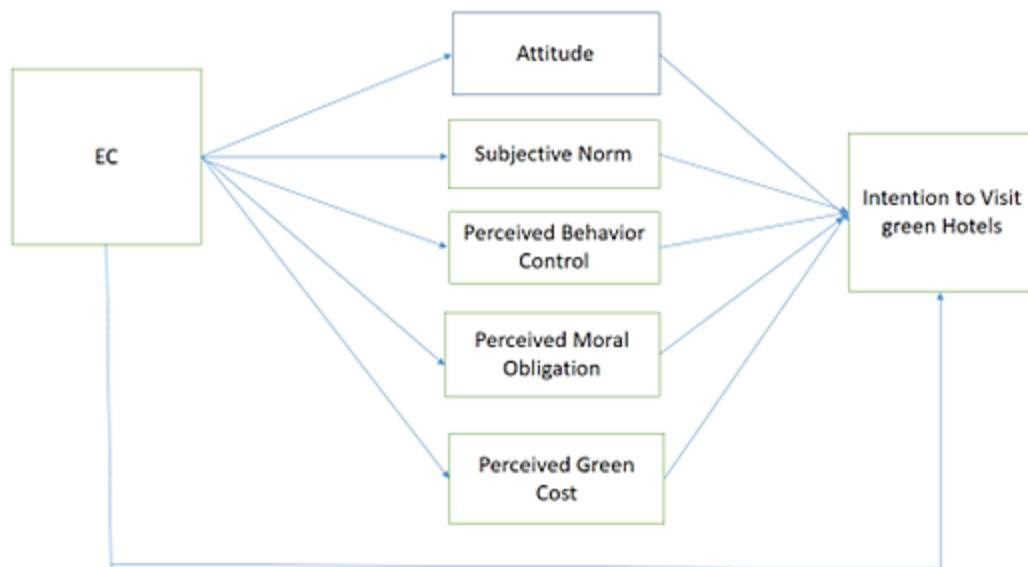

Figure 1: Conceptual Model

The following hypotheses are formulated to analyze the relationship.

H1: Environmental concern and attitude are significantly related to each other.
H2: Environmental concern and subjective norms are significantly related to each other.
H3: Environmental concern has a significant relationship with perceived behavioral control.
H4: Environmental concern and perceived moral obligation are significantly related to each other.
H5: Environmental concern and perceived green cost are significantly related to each other.

Now, to investigate what will be the effect of subjective norm, attitude, and perceived behavioral control, perceived moral obligation, and perceived green cost on intention to visit green hotels to the model, H6, H7, H8, H9, and H10 are proposed:

H6: Intention to visit green hotels is significantly related to the attitude
H7: Intention to visit green hotels is significantly related to the subjective norm.
H8: Intention to visit green hotels is significantly related to the Perceived behavioral control
H9: Intention to visit green hotels is significantly related to the Perceived moral obligation
H10: Intention to visit green hotels is significantly related to the Perceived green cost

A framework may be measured as a mediator, according to Preacher and Leonardelli (2004), when it distributes control from an independent variable to a dependent variable. When a mediating variable is significantly affected by the independent variable; the dependent variable is equally affected by the mediator; when the mediator is eliminated the dependent variable is strongly affected by the independent variable; however this effect is changed and decreased with the addition of mediator in the framework, mediation can occur. As a result, the strong impact of an independent variable (EC) on the mediator (ATT, SN, PBC, PMO, and PGC), as well as the strong impact of the mediator on the dependent variables (intention to visit green hotels), is hypothesized (H11, H12, H13, H14 and H15).

H11: Attitude significantly mediates the relationship between environmental concern and intention to visit green hotels.
H12: Subjective norms significantly mediate the relationship between environmental concern and intention to visit green hotels.
H13: Perceived behavioral control significantly mediate the relationship between environmental concern and intention to visit green hotels.
H14: Perceived moral obligation significantly mediate the relationship between environmental concern and intention to visit green hotels.
H15: Perceived green cost significantly mediate the relationship between environmental concern and intention to visit green hotels.

For the direct effect assessment, the last hypothesis is postulated as

H16: Environmental concern has a significant relationship with the intention to visit green hotels.

3. METHOD
3.1. MEASURES

A 5-point Likert scale (1-strongly disagree, 2-disagree, 3-neutral, 4- agree, and 5-strongly agree) was used in developing the survey questionnaire for measuring the dimensions for this investigation. Based on feedback from hotel and business professionals, the questionnaire was revised to include a total of 26 items. In this study following the number of items has been used, attitude (4 items), subjective norm (3), perceived behavioral control (3), perceived moral obligation (4), perceived green cost (4), environmental concern (4 items) and Intention to visit green hotels (4 items).

Item of attitude has been adapted from the study of (Han & Kim, 2010), items of the subjective norm have been adapted from the research work of (Han et al., 2010), items of perceived behavioral control has been adapted and validated from the study of (Han et al., 2010), items of perceived moral obligation has been adapted and validated from the work of (Lam, 1999), items of perceived green cost has been adapted and validated from the study of (Han et al, 2009), the items of environmental concern has been adapted and validated from the study of (Urban & Scasny,   2012), in the last the dependent variable intention to visit green hotels items has been adapted and validated from the study of (Kim, Kim, & Wachter, 2013). The reliability and validity of the mentioned scales are evaluated in the next section in detail.

3.2. SAMPLES AND DATA PROCEDURES

A survey questionnaire has been administered through personal visits to the hotels as well as through emails. Green hotels have been selected for this current study. According to the sustainable and eco-hotels in Pakistan, 08 hotels in 5 cities of Pakistan are practicing green and sustainable activities withholding of green certifications. All these 08 hotels, Serena hotel Faisalabad, Marriot Karachi, Serena Quetta, Ramada Multan, Marriot Islamabad, Avari Karachi, Avari Towers Karachi and Ramada Karachi have been selected and data has been collected from all the cities where they are located and practicing green activities Faisalabad, Karachi, Multan, Quetta, and Islamabad. The population of the respondents has been unknown, so non-probability convenience sampling has been applied. A total of 400 questionnaires has been floated among the lodging consumers of green hotels. Out of which 340 have been received (47 have been removed due to filter questions). A test run with 50 usable surveys utilizing the same lodging industry was also undertaken before the survey's debut. Cronbach's analysis was used to evaluate the test run, and the result was 0.931. After a thorough assessment, slight changes were incorporated and a survey was distributed in its final version to green hotel guests. These consumers were selected through convenience sampling because their population was unknown. The survey's cover letter included information about the study's goals and intention to visit green hotels. Moreover, the anonymity of participants for their comments in the cover letter was assured.

There are 66.6 percent males and 33.3 percent females among the participants (Table 1). Their average age ranged from 40 to 49. They have a pretty high educational level (48.1 percent graduate level).

The majority of them (76.4 percent). The Serena hotel has been visited by the majority of people (24.6 percent). Finally, the majority of them (38.2%) stay at green hotels at least once a month.

Table 1. Results of Respondents Demographics

Table 1. Respondent's Demographic profile.			
Gender	Male	195	66.6%
	Female	98	33.3%
Age (in years)	20-29	7	2.4%
	30-39	82	28%
	40-49	120	41%
	50-59	69	23.5%
	60 and above	15	5.1%
Qualification	Under graduate level	29	9.9%
	Graduate-level	141	48.1
	Post graduate level	123	42%
Visits	Weekly	19	6.5%

	Twice a week	22	7.5%
	Once a month	112	38.2%
	Twice a year	120	41%
	One a year	20	6.8%
Hotel	Serena	72	24.6%
	Marriot	68	23.2%
	Avari	54	18.4%
	Ramada	63	21.5%
	others	36	12.3%

Note: Demographics Table

3.3. FINDINGS

The SPSS 20 and AMOS 21 software packages were used to analyze the data. Data normality was checked before determining causality. Table 2 shows the results of data normalization. Furthermore, Table 2 indicates that all of the constructs' skewness and kurtosis values are within the permissible ranges provided by Kline (2015) for mesokurtic, platykurtic, and leptokurtic distributions (between +2 and -2 for skewness and +3 and -3 for kurtosis). As a result, there are no difficulties with normalcy in the data. The common method variance (CMV) test also known as common method bias (CMB) was taken to see if the data set contained any biased responses. The CMB was examined using Harmon's Single Factor Variance Test, where all the elements (measure latent constructs) were set into a single common factor. A common variance of 24% was reported by the results which is much lower than the 50% threshold value, indicating that the data is free of CMB issues (total variance for one element is less than 50%). (Podsakoff et al., 2003).

Table 2: Data Normalization

Variables	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
ENMCm	293	1.00	4.88	3.5664	.83777	-1.274	.142	1.270	.284
SNm	293	1.00	4.89	3.6245	.95029	-1.162	.142	.809	.284
PBCm	293	1.67	5.00	3.7901	.76315	-.879	.142	.081	.284
PMOm	293	1.00	5.00	3.6319	.76943	-.712	.142	.615	.284
ATTDm	293	1.50	5.00	3.6662	.69845	-.867	.142	.461	.284
IVGHm	293	1.00	5.00	3.6198	.84578	-1.015	.142	.540	.284
PGCm	293	1.00	5.00	3.0536	1.03713	-.402	.142	-.506	.284

Confirmatory Factor Analysis (CFA), according to Gerbing and Anderson (1988), should be used to determine if all the items are placed rightly in their respective scales. After that, a Structural Equation Model (SEM) is suggested to be implemented for identifying important pathways coefficients between latent variables. As a result, the CFA was confirmed first. The findings of the Harmon single factor are shown in Table 3.

Note: Normality table

Table 3 Harmons One Factor Test

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
31	6.916	24.702	24.702	6.916	24.702	24.702
2	2.919	10.424	35.125	2.919	10.424	35.125
3	2.207	7.884	43.009	2.207	7.884	43.009
4	1.805	6.448	49.457	1.805	6.448	49.457
5	1.511	5.396	54.853	1.511	5.396	54.853
6	1.362	4.864	59.718	1.362	4.864	59.718
7	1.218	4.349	64.067	1.218	4.349	64.067
8	1.062	3.793	67.860	1.062	3.793	67.860
9	.903	3.225	71.084			
Extraction Method: Principal Component Analysis.						

Note: Harmons single Factor analysis

For this study, multicollinearity has been checked. After checking the multicollinearity it is assured that no issue of multicollinearity was found in the data all values are within the prescribed range.

Table 4 Multicollinearity

Sr	Constructs	Tolerance	VIF
1	Environment Concern	.759	1.142
2	Attitude	.425	1.452
3	Subjective Norm	.729	1.269
4	Perceived Behavioral Control	.851	1.047
5	Perceived Moral Obligation	.569	1.471
6	Perceived Green Cost	.833	1.075

Note: Dependent variable: Intention to Visit Green Hotel; VIF= Variance Inflation Factors

4 STRUCTURAL EQUATIONAL MODELING

When the data file was prepared and the basic screening analysis was performed, structural equation modeling is required. The first step in SEM is to examine the validity of the measurement model, also called confirmatory factor analysis. The structural framework, which represents the suggested hypothesis and study findings, is examined in the second step.

The first important and major part of SEM is the measurement model which describes whether observed variables are depending on unobserved variables or not. Thus, confirmatory factor analysis has been done through the measurement framework to analyze the validity and reliability of each construct individually.

In the initial measurement model of this study, all indices are not within the range of best fit. There is a need for further re-specification in the model because a few values of indices are not within the best fit range and the loading of two items is <0.50.

In the re-specification measurement model of this study, it is observed that the following indices have these particular results TLI=.940, IFI=.950, PCLOSE=0.00, CMIN/DF=1.606 RAMSEA=.042, NFI=.877, GFI=.904, CFI=.949 and AGFI=0.904. In the re-specification measurement model of this study, all indices are within the range of reasonable and best fit except NFI which is a poor fit just with a few points. There is no need for further re-specification in the model because

values of indices are within the range and the loading of all items is>0.50. Results of the model fit indices of this study are explained as below:

The TLI indices had the best fit with an initial CFA value of 0.975. IFI secured the best fit having an initial CFA result of 0.980. PCLOSE was marked as the best fit with the resulting value of 0.00. CMIN/DF gained the best fit with a score of 1.247. RMSEA scored .029 with the best fit. CFI again proved to be the best fit with a value of 0.979. Lastly, AGFI was also the best fit with a value of 0.904. However, NFI and GFI resulted to be the reasonable fits with the values of 0.905 and 0.926 respectively. Figure 2 shows the pictoral dipiction of measurement model for confirmatory factor analysis.
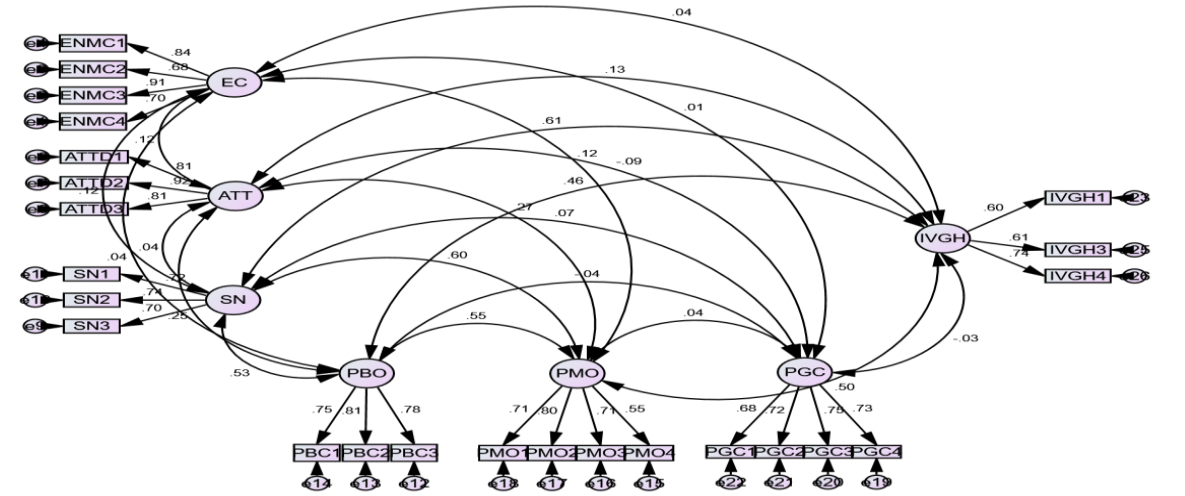

Figure 2: Measurement Model for CFA

Model Note: ATTD (Attitude), SBN (Subjective Norm), PBC (Perceived Behavioral control), PMO (Perceived Moral Obligation), PGC (Perceived Green Cost), ENOM (Environmental Concern), and IVGH (Intention to Visit Green Hotel).

Table 5. Convergent Validity: Factor Loadings, Average Variance Extracted (AVE) and Construct Reliability

Name of Variable/Construct	Items	Factor Loading	AVE Score	CR Value	DV Value
PGBO			.50	.80	.71
	PGB1	.69			
	PGB2	.64			
	PGB3	.71			
	PGB4	.79			
ENMC			.66	.81	.83
	ENMC1	.840			
	ENMC2	.678			
	ENMC3	.910			
	ENMC4	.705			
PGC			.53	.80	.72
	PGC1	.680			
	PGC2	.717			
	PGC3	.751			
	PGC4	.734			
IVGH					
	IVGH1	.599	.51	.75	.71
	IVGH3	.614			
	IVGH4	.741			

PBC			.59	.81	.79
	PBC1	.754			
	PBC2	.809			
	PBC3	.783			
SBN			.52	.82	.81
	SN1	.717			
	SN2	.740			
	SN3	.699			
PMO			.59	.81	.77
	PMO1	.706			
	PMO2	.802			
	PMO3	.714			
	PMO4	.547			
ATTD			.64	.88	.83
	ATTD1	.811			
	ATTD2	.918			
	ATTD3	.814			

Table Note: ATTD (Attitude), SBN (Subjective Norm), PBC (Perceived Behavioral control), PMO (Perceived Moral Obligation), PGB (Perceived Green Benefit), PGC (Perceived Green Cost), ENOM (Environmental Concern), and IVGH (Intention to Visit Green Hotel).

After analyzing the reliability and validity of the initial measurement model, the structural model was subjected to a final analysis. The hypothesized correlations among different variables have been evaluated in the structural model, which was constructed on a theoretical foundation. The process of confirming hypotheses that were created on a conceptual foundation is known as structural equation modeling.

The figure and table presented below are the detailed SEM results; the analysis was carried out using the Maximum Likelihood approach, i.e. the default software function. The impact of each variable given on the dependent variable is measured by the beta value. The table also includes a t-value, which is acceptable if it is greater than 1.96. (95 percent level of confidence). To highlight the significance of the association, the p-value is presented in the table. P-values greater than 0.05 indicate that a variable does not affect the dependent variable. Figure 3 presented below to explain the structural equation modeling in a comprehensive way.
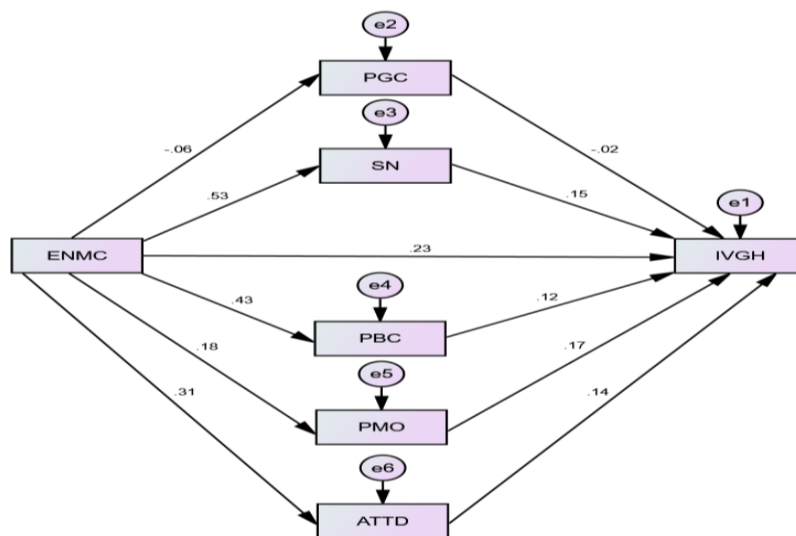

Figure 3: Structural Equation Model stating causal relationship

Figure: SEM Analysis

Note: ENOM=Environment Concern, ATTITD=Attitude, SBN=Subjective Norm, PBC=Perceived Behavioral Control, PMO=Perceived Moral Obligation, PGCO=Perceived Green Cost, PGBA=Perceived Green benefit, IVGH=Intention to visit green hotel.

The interpretation of the above figure is given in the below.

Table 6: Results of hypothesis testing

Hyp	Structural Path			Beta	t-Values	P-values	Decision
H1	ENMC	→	IVGH	.234	3.526	***	Supported
H2	ENMC	→	PGC	-.063	-1.073	.283	**Not Supported**
H3	ENMC	→	PMO	.179	3.114	.002	Supported
H4	ENMC	→	PBC	.428	8.102	***	Supported
H5	ENMC	→	SN	.534	10.797	***	Supported
H6	ENMC	→	ATTD	.309	5.542	***	Supported
H7	PGC	→	IVGH	-.016	-.314	.754	**Not Supported**
H8	PMO	→	IVGH	.174	3.425	***	supported
H9	SN	→	IVGH	.155	2.626	.009	Supported
H10	PBC	→	IVGH	.124	2.248	.025	Supported
H11	ATTD	→	IVGH	.137	2.609	.009	Supported

According to the structural equation framework, H1, H3, H4, H5, and H6, signal that an intention to visit green hotels is affected by high environmental concern, considered a moral obligation, perceived behavioral control, subjective norm, and attitude, as shown in the table above. These results were consistent with the previous research works (e.g., Stern, 2000; Han et al., 2010; Chen & Tung, 2014; Huang et al., 2014; Choi et al., 2015; Han and Yoon, 2015; Yadav & Pathak, 2017, Bashir, Khawaja, Turi & Toheed; 2019).

However, hypotheses H8, H9, H10 and H11 are supported in this study which was also persistent with the previous studies (Han et al., 2010; Chen & Tung 2014; Yadav & Pathak, 2017). The results show that the relationship between environment concern (ENOM) and perceived green cost (PGC) is insignificant (p-value >0.05), similarly perceived green cost (PGC) has an insignificant impact on intention to visit green hotels (IVGH) where p-value >0.05. So H2 and H7 are not supported by the result of the current study which was consistent with the study of (Tan; 2020).

The role of mediators (ATT, SB, PBC, PMO, and PGC) was investigated using mediation analysis. The results/findings state that there will be full mediation in case the mediating variable is adjusted and the independent variable has no significant impact left. However if the impact of the independent variable does not remain significant (i.e., the dependent variable is strongly predicted by both mediating and independent variables), partial mediation is supported (Baron and Kenny, 1989; Mackinnon, Fairchild, and Fritz, 2007; Hayes, 2013). H12, H13, H14, H15, and H16 are postulated to see if the environmental concern influences the intention to visit a green hotel decreases when their ATT, SN, PBC, PMO, and PGC are included in the model: the results of mediation are briefly presented below.

For the explanation of mediating relationship, the above table is split into different parts.

Table 7 Mediation

Structural Path					Beta	t-Values	P-values	Decision
ENOM	→	PGC	→	IVGH	-.043	-1.317	.543	Not supported
ENOM	→	PMO	→	IVGH	.184	2.853	.004	Supported
ENOM	→	PBC	→	IVGH	.183	2.784	.005	Supported
ENOM	→	SN	→	IVGH	.304	4.307	.000	Supported
ENOM	→	ATTD	→	IVGH	.142	2.289	.022	Supported

Only H16, PGC has no mediation influence between intention to visit a green hotel and the environmental concern (p-value>0.05, t-value 1.96) according to the findings. The construct attitude fully mediates between the variables of environmental concern and intention to visit green hotels, and its values are within the range (p-value 0.05, t-value >1.96). The relationship between environmental concern and intention to visit a green hotel is completely mediated by the rest of the variables as in the H13 subjective norm, and their values are within the range (p-value 0.05, t-value >1.96). Furthermore, H14 perceived behavioral control strongly mediates the impact of environmental concern and the intention to visit a green hotel,

and its values are within the range (p-value 0.05, t-value >1.96). H15's perceived moral obligation has a beta value of.184, indicating that it fully mediates between the intention to visit a green hotel and environmental concern.

Table 8 Results of mediation analysis

Hypothesis	Path	Results
H12	Attitude acts as a strong mediating variable between the environmental concern and the intention to visit green hotels.	Accepted
H13	Subjective norms strongly mediate the relationship between environmental concern and intention to visit green hotels.	Accepted
H14	Perceived behavioral control mediate the relationship between environmental concern and intention to visit green hotels significantly.	Accepted
H15	Perceived moral obligation significantly mediates the relationship between environmental concern and intention to visit green hotels.	Accepted
H16	Perceived green cost significantly mediate the relationship between environmental concern and intention to visit green hotels.	Rejected

4. DISCUSSION

This research work acts as an extension to the idea of planned behavior theory in the hotel business. An expansion like this is proposed based on empirical findings of consumers' ITVGH, EC, ATT, SN, PBC, PMO, and PGC. The mediated and unmediated model assessments assured that path coefficients exist among the latent variables. Like H1, H3, H4, H5, and H6 were accepted it shows that a strong EC exists just like the ITVGH, ATT, SN, and PMO. Although the results of the mentioned hypotheses were supported by the previous studies (e.g., Stern, 2000; Han et al., 2010; Chen & Tung, 2014; Huang et al., 2014; Choi et al., 2015; Han and Yoon, 2015; Yadav & Pathak, 2017, Bashir, Khawaja, Turi & Toheed; 2019). However, the addition of mediators (i.e., ATT, SN, PBC, PMO, and PGC) to the TPB through the involvement of H12, H13, H14, H15, and H16 is a unique theoretical contribution. It was discovered that a consumer's willingness for visiting a hotel (that is affected positively by environmental concerns) predicts a positive behavior for green hotels strongly. Hence, the consumer's environmental concerns make it easier to link their perceived behavioral control, subjective norm, perceived moral obligation, intention to visit green hotels, and perceived green cost. The studies of Huang et al. (2014) and Tan, (2020) are also in the favor of the relationship between environmental concern of the consumer and their intention to visit green hotels; however, the customers who are environmentally conscious express some additional values, like recycling of their waste products and avoiding the frequent purchase of over-packaged goods.

CONCLUSION

The hotel industry can benefit from the multiple implications of this study. For instance, the services of hotels can be molded according to the customers' environmental concerns by the management. For example, they can incorporate more environmentally friendly stuff inside the hotel premises, improve their footprint on the surrounding environment and gain more knowledge and information about the environmental issues.

The consumer's environmental concern will also be affected by the study's contributions (i.e., people are becoming increasingly aware of their surroundings and the environment.) attitude (i.e., high level of consequence awareness has been linked to higher motivation for social contributions and a more supportive attitude towards the green hotels.) Subjective norm (i.e., a wish to save energy and preserve the environment by opting for a green hotel for stay and using environmentally friendly products/services), perceived behavioral control (i.e., What a person thinks about the availability of opportunities or resources needed for a particular behavior as in this case, for staying in a green hotel) Perceived moral obligation (i.e., using environmentally friendly products or preserving the natural resources like water through controlled pressure), perceived green cost (i.e., the willingness to pay extra for staying in green hotel or availing their services), and intention to stay in the green hotel (i.e., when traveling, have the desire, plan, and make an effort to stay in a green hotel, and recommending the same to others). Hence the results suggest that hotels need to enhance the customer testimonials in their green marketing tactics so that the customers prefer green hotels over the typical ones with greater trust.

Polonsky (2011) and Huang et al. (2014) argue that such marketing campaigns showing consumer testimonials are more effective, rather than just a symbol or slogan, has become a viable marketing method. When environmentally conscientious customers recognize the implementation of green marketing promises, it can improve a company's overall success.

5. LIMITATIONS AND FUTURE STUDIES

Despite the study's contributions to the literature, some limitations still exist to guide future research. First of all, the TPB framework was used for determining the customers' intention to stay in green hotels. Some other variables that might have a strong relationship with the consumers' intention for lodging in a green hotel also need to be evaluated. These variables include the perceived worth of green hotels, trust in green hotels, self-identity, etc. Secondly, as this study did not incorporate the cross-cultural aspects, similar studies need to be conducted in different countries to establish the validity of this proposed model in different contexts.

Thirdly, this study's proposed framework was studied concerning the hospitality industry; therefore, future research can also study it concerning other industries like traditional and fast-food restaurants. However, because consumers may re-evaluate the worth of green consumption after experiencing it, future studies may perform longitudinal research. Finally, it is hoped that the study's recommendations will be extremely valuable in both academia and practice.

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It is declare that all authors don't have any conflict of interest. It is also declare that this article does not contain any studies with human participants or animals performed by any of the authors. Furthermore, informed consent was obtained from all individual participants included in the study.

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