

Relationship Between Green Marketing Mix and Consumer Behavior: A study of hospitably firms in North India

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ABSTRACT

The purpose is to examine the relationship between green marketing strategies (green product, green price, green promotion and green place) and consumer behavior towards hospitality firms in the north India.

The study used data responses of one hundred hospitality customer respondents. The data were conveniently collected in field survey by using self-administered questionnaire and analyzed through a regression analysis.

The findings of the study confirmed significant influence of green marketing strategies (green product, green price, green promotion, and green place) on behavior of hospitality consumer in north India.

The current data were only collected from respondents within one area which may not represent the entire population of India.

The study may benefit the hospitality industry in formulating effective marketing strategies in a sustainable manner besides profit maximization and offers a new forward motion to literature on green marketing and consumer behavior and suggests the basis for further research.

Keywords: Green; marketing-mix; hospitality; consumer behavior.

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Received on: 2021/03/31

Approved on: 2021/05/31

Evaluated by a double blind review system

1. INTRODUCTION

Over the last few decades, the hospitality industry has been contributing to global economic growth (UNWTO, 2018), as well as being the main job creator. This industry has also acquired the role of economic support in many countries and areas followed by more impacts of this growth are observed in different fields (Font & Lynes, 2018; Han & Hyun, 2018). In light of this, various countries are implementing measures for diversification, innovation, and sustainability in organizations (Sharpley, 2014). In this respect, some organizations already press to carry out a more sustainable use of natural resources (Alomari & Alomari, 2020).

As a result of the increase in awareness of the environment among companies growing proportion of consumers are considering the so-called “green options” with regard to their consumption behavior (Jones, Hillier & Comfort, 2014; Martinez, 2015). It is from this emerging preference that the green marketing appears, highlighting that hospitality and tourism companies aim to minimize negative effects on the environment, as well as improving the quality offered to the consumer (Chen, 2010).

According to Priego, Najera and Font (2011), the change in consumers’ behavior towards these “green products” is of great interest because it may entail potentially significant changes in the implementation of sustainability measures. This fact causes true organizational innovations towards green marketing in the company (Han, Lee & Kim, 2018). Moreover, this may also generate a large potential with regard to customers’ behavior with the organization.

Thus, the contemporary time requires both the implementation of sustainability measures such as green marketing is increasingly necessary (Font & McCabe, 2017), not only because this can entail an improvement in the sustainable way but also influence customer

preference and behavior (Untwo,2018; Vantamay, 2018). With regard to this, the theoretical approach providing the green marketing mix has grown in tourism and hospitality literature over recent years (Font & Lynes, 2018) with an aim to generate income for the organization and benefits for the environment.

On this basis, the main research subject is to delve into knowledge on the influence of green measures implemented in the hospitality industry and, particularly, what different variables relating to the aforementioned need to change consumers' behavior (Martinez, 2015). Moreover, to this date, numerous green marketing-based studies have focused on the other of products from different sub-sectors and industries. However, as stated by Chan (2013), "studies on green marketing in the hospitality industry are seen as less sensitive". Therefore, this research aims to provide an empirical study for the hospitality industry on the relationship between their products' green marketing and consumer behavior.

More specifically, this research analyses the relationship between green marketing mix (green product, green price, green promotion, green place) in the hospitality industry and their influence on consumer buying behavior in north India. In this sense, following research questions framed, (i) What perception do consumers have of green marketing (green product, green price, green promotion, green place) in the hospitality industry; and (ii) how does it influence consumer buying behavior?.

The current study presented in different sections and starts with the introducing the concept of green marketing mix tools and consumer behavior in its first section. The next section based on overview of extensive review of literature to understand the theoretical, methodological perspectives, development of hypothesis and formulating research framework for the study. The next section described about the methodological perspective to be used in the study. The next section provides result explanation derived from application different statistical tools by using tables. This is followed by discussion of result by linking current study to previous studies provides a clear line of understanding among readers. The final section of conclusion section dealt with conclusion drawn from findings followed by implications, limitations and directions for future research.

2. LITERATURE REVIEW, HYPOTHESIS DEVELOPMENT, AND RESEARCH FRAMEWORK

For providing a more concise understanding of the research topic, current section provide inclusion of different studies based on consumer behavior and green marketing mix tools followed by hypothesis development and research framework.

2.1 Consumer behavior

Consumer behavior refers to how individuals make decisions to spend their available resources on consumption-related items (Schiffman, Kanuk, & Wisenblit, 2010), particularly how they select, purchase, use, or dispose of products, services, ideas, or experiences to satisfy needs and desires. The behavior of consumer in the field of hospitality and tourism is influenced by green practices implemented by businesses, such as practices of the lodging industry (Manaktola & Jauhari, 2007).

The consumers' decision to return to a hotel is due to the positive feeling they experience, and the instant gratification for doing something good for the environment (Manaktola & Jauhari, 2007). Foregoing research noted that hospitality customers' environmentally friendly behavior positively affects their intention to prefer to stay at a green hotel (Han, Hsu, & Sheu, 2010; Lien, Huang, & Chang, 2012), spread positive word-of-mouth commendation and willingly pay more for hotels involved in green practices (Han, Yu, & Kim, 2019; Han & Kim, 2010). Therefore, Han et al. (2019) has been noticed that a green hotel's guest behavior is determined by the environmental concerns of a firm and hence, it requires an investigation to understand its relationship with different business operations including marketing strategies of the firm.

The idea of green marketing came into existence during the 1980's as a result to measure increasing environmental degradation (Yazdanifard & Mercy, 2011; Alomari & Alomari, 2020). Green marketing incorporates marketing activities that entail manufacturing, differentiating, pricing and promoting goods or services which are environmentally safe and are able to satisfy consumers' environmental needs (Singh, 2012; Ansar, 2013; Diglel & Yazdanifard, 2014).

Many studies have shown that consumers prefer eco-friendly and green products and have a favorable attitude towards companies that follow green practices (Bhatia & Jain, 2013). Hence, it has been observed that there has been a significant increase in the demand for green products and services. Therefore, over the last decade, hospitality industry has decided to take more of a chance on applying green marketing policies, that is, strategies

which respect the environment and aim to sustain it (Chen,2010;Luo,2006). Thus, this rising phenomenon directly associated with the quality of a service offered from business ethics while they aim to satisfy customers.

2.2 Green product strategies

Diglel and Yazdanifard (2014) identify a green product as an item that is produced in a manner that is environmentally conscious, has minimum negative effects on the environment, product or product packaging made from recycled materials, preserves natural resources and is manufactured locally. Ottoman and Mallen (2014) believe that individuals are seeking out green products, because they perceive them to be healthy and organic, of higher quality, safe and help preserve the environment. In this sense, Kang and Hustvedt (2014) have noticed that how green product strategies relating to consumers' buying behavior with regard to their efforts to be environmentally responsible aspect. Therefore, this all indicates that if companies include green product strategy in their firms, this can positively influence consumers' buying behavior (Kang & Hustvedt, 2014; Martinez & Del-Bosque, 2013). Within the context of our research, the first hypothesis is formulated as follows:

Hypothesis 1 (H1): Green product strategy of hospitality firms significantly influences consumers' buying behavior in north India.

2.3 Green price

Price refers to the amount an individual must pay in order to obtain an item (Burrow, 2008). It is considered to be a crucial element of the green marketing mix. Bukhari (2011) presumes price to be the main reason consumers choose not to buy green products, on the other hand, green price strategy has been analyzed as the companies' innovative pricing strategies that keep company profitability with environment protection (Kang & Hustvedt,2014; Chaudhuri & Holbrook,2001; Sirdeshmukh, Singh & Sabol,2002). Thus, green pricing strategy is positively affected consumer behavior (Martinez, 2015; Ko, Hwang & Kim, 2013). Moreover, green pricing actions may ensure high paying intention among consumers (Homburg, Stierl & Bornemann, 2013). Ultimately, it is essential to investigate how green pricing techniques influence consumer behavior in a hospitality business firm and this is established in the second hypothesis:

Hypothesis 2 (H2): Green pricing strategy of hospitality firms significantly influences consumers' buying behavior in north India.

2.4 Green promotion

Green promotion refers to the adoption and selection of different promotional and marketing channels that committed to work in an environmentally responsible manner and the inclination to maintain firms' profitability (Nguyen & Leblanc, 2001). Agyeman (2014) believes that a consumer's choice of a green product is heavily influenced by the promotion if it is through eco-friendly practices. Although there is no well-established study in case of hospitality sector that suggest relationship of green promotion tools with buying behavior of consumers. But, to general business organizations, the research area received lesser consideration (Kang & Hustvedt, 2014; Luo & Bhattacharya, 2006). Thus, this study in case of hospitality industry translates into our third work hypothesis:

Hypothesis 3 (H3): Green promotion strategy of hospitality firms significantly influences consumers' buying behavior in north India.

2.5 Green place

Product placing is an important element of the green marketing mix to ensure the marketing messages resonate with target consumers and compel them to take action. Kontic (2010) believes that the location of, and accessibility to goods or services have an impact on consumer behavior. As previously stated, different references have reported how green place or environment friendly distribution system and the consumer buying behavior associated with each other (Kang & Hustvedt, 2014; Chaudhuri & Holbrook, 2001; Swait & Erdem, 2004). In case of hospitality sector, growing number of firms, may include environment friendly measures that effectively operate distribution system and, from this, a recommendation for said hotels on using contact free digital platform for booking and selling of hospitality services (Kang & Hustvedt, 2014; Han & Hyun, 2018). Based on these ideas and bearing in mind the context of this study, the fourth hypothesis is proposed as follows:

Hypothesis 4 (H4): Green place strategy of hospitality firms significantly influence consumers' buying behavior in north India.

2.6 Research Framework

In order to study the existing relationships between green marketing mix and consumer behavior in the hospitality industry, the authors from existing literature (Martinez, 2015) built the conceptual framework. The research framework developed and assumed that association of consumers' behavior towards the green marketing mix approach of a hospitality firm. However, when concerned variables have been introduced to this direct

relationship (e.g., green product, green price, green promotion, green place), green marketing components have presented a clearer impact (positive) on consumers' behavior (Davari & Strutt, 2014). Hence, the researcher identified four independent variables namely green product, green price, green promotion, green place and one dependent variable i.e., consumer behavior.

3. RESEARCH METHODOLOGY

In the current section, an explanation of material and method used in the study is given. More specifically, it describes study area, sample participants, procedures to collect data, development of questionnaire and statistical tools to be used.

3.1 Participants and procedure

The study focussed on hospitality firms including hotels, resorts, and restaurants located in northern region of India. The study selected the hospitality organizations which were approved by the Ministry of Tourism, Government of India and list of hospitality firms taken from its official website (Ministry of Tourism, Govt. of India, 2021). The study planned to collect at least 100 sample responses in order to maintain statistical equality in the round figure with the help of self designed questionnaire distributed by using convenience sampling technique to allow the researcher to control the representativeness of the sample. Respondents were pre-screened and restricted to north India region that had experience staying at a green hotel at least once a year. Data collection were held from October 2019 to February 2020.

3.2 Questionnaire development and instrument

The structured close-ended questionnaire was designed in three parts on the basis of the objectives of this study. The first part of the questionnaire contained general demographic questions, relating to such matters as gender, age, marital status, educational background, occupation and income level. The measurement scale for first part of the questionnaire used nominal scale for variables gender, marital status, educational background and occupation. The use of nominal scale for these variables was adopted in line of existing literature (Dalati, 2018). Two variables i.e. age and income level that involves a specific range of options was based on ratio scale after considering its utility in consultation from the study of Sarstedt and Mooi (2014). The second part comprised questions about the respondents' perception about green marketing strategies (green product, green price, green promotion, green place) in case of hospitality firms and was based on 5 point Likert

scale ranging from 1 (strongly disagree) to 5 (strongly agree). The third part of the questionnaire contained questions on behavior of consumer arises from consumption of different products and services of hospitality firms and was based on 5 point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The second and third part of the questionnaire involves measurement of psychological rating of consumers was based on 5 point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) and rationale to use Likert scales is justified from consultation of existing literature (Wong & Yeh, 2009; Han et al., 2010; Dalati, 2018) suggesting it ideal for consumers' psychological ratings towards different services and products.

3.3 Data analysis techniques

The collected quantitative data was filtered and analyzed by using the Statistical Software Package (SPSS). The researcher used descriptive statistics such as frequency, percentages, average and standard deviation to get a closer view of the respondents' opinion about green marketing mix strategies and its influence on consumer buying behavior. The study applied regression analysis to determine the relationship of green marketing mix variables on consumer behavior towards hospitality firms of north India. Tabular presentation was used to make the study more meaningful and easily understandable.

4. RESULT ANALYSIS AND DISCUSSION

The present section presented the demographical background of the customer respondents followed by their perception about green marketing mix, consumer behavior and finally relationship among these two constructs.

4.1 Demographic information of respondents

The descriptive analysis highlights that more than 70% of the respondents were males indicates that male respondents were easy to contact to collect information through survey. Age wise classification described that nearly eighty percent (79%) respondents were below the age of 40 years and thus belongs to younger age group. Among customer participants almost equal representation was shared by married and unmarried consumers in study area. The data also revealed more than half of the respondents (52.5%) were having at least graduate degree and remaining were below graduate. Almost 2/5th of the respondents were businessperson followed by serviceperson and other occupational activities such as freelancers, shopkeepers, professionals and student interns etc. Furthermore, 70% respondents indicating annual income level up to rupees 4 lakhs and

remaining more than that. This indicates that customers of every income group in northern India participated in the survey.

4.2 Customer perception about green product strategy of hospitality firms

A mean based distribution analysis was carried out on responses to the nine statements about green products in Table 1.

Table 1. Average score of green product-related statements

Sr. No.	Statements	Mean	Std. Dev.
1	Green hospitality products and services provide an opportunity for product differentiation	4.30	0.608
2	Green hospitality marketing involves green product and service design (such as room occupancy sensors that save energy in guest rooms)	4.18	0.747
3	Green hospitality elevate industry members' image and reputation to attract green tourists who demand green accommodation when travelling	4.05	0.677
4	Guests desires for green hospitality products and practices	3.72	0.686
5	hospitality firms are seeking to bring innovative green products and services to the market	3.46	0.790
6	Green hospitality product and service performance plays a key role in influencing customers' revisit intention	3.31	0.893
7	Hospitality companies are carrying out the extensive product- specific market research necessary to ensure green product and service success	3.15	0.812
8	Hospitality firms are sincere in instituting programmes that save water and energy, reduce solid waste, use resources economically and protect the planet's ecosystem	3.15	0.975
9	Green hospitality firms provide products and services that do no harm to human health	2.97	1.088

The above table show that respondents strongly agreed/agreed with three green product-related statements. The result indicated that the green products are different from standard products (M=4.30, SD=0.608). Hospitality firms have green products before they launch their green marketing (M=4.18, SD=0.747); and hospitality firm promote their green image and reputation (M=4.05, SD=0.677). However, some respondents indicated they preferred not to choose green accommodation when travelling because they view green products as harmful to human health (M=2.97, SD=1.088). Respondents were unsure

about six out of the nine statements. In particular, they did not have a clear idea about whether they really want green products when travelling ($M=3.72$, $SD= 0.686$). Hospitality firms are actively researching to improve their green products ($M=3.46$, $SD=0.790$). Green products influenced customers' revisit intention ($M= 3.31$, $SD=0.893$). Hospitality firms are active doing market research to ensure their green products are acceptable ($M=3.15$, $SD=0.812$); and hospitality firms are sincere in instituting green practices within their premises ($M=3.15$, $SD=0.975$).

4.3 Customer perception about green price strategy of hospitality firms

Six green price-related statements were analyzed using a central distribution tendency analysis and shown in Table 2.

Table 2. Average score of green price-related statements

Sr. No.	Statements	Mean	Std. Dev.
1	Hospitality customers who are more receptive to environmentally friendly products and services are more willing to pay extra for same	3.58	0.931
2	Green hospitality products and services are priced at a premium relative to conventional offerings	3.45	0.876
3	Green pricing (is an optional utility service that allows customers an opportunity to support a greater level of utility company investment in renewable energy technologies) works only when green products and services reduce firms' guest costs	3.31	0.766
4	Customers are willing to pay a higher price if part of the amount paid is donated to green activities	2.90	0.900
5	Hotel customers are willing to pay a higher price for eco-facilities	2.73	0.877
6	Environmentally friendly products and services to recover the additional costs incurred in their production, marketing and disposal	2.58	1.010

Respondents evaluated three out of six statements related to green pricing as least effective. In particular they disagreed with the statement that customers could be charged a premium to recover costs incurred by hospitality players from instituting green practices ($M= 2.58$, $SD= 1.010$). Respondents were reported unwilling to pay a higher price for eco-facilities ($M= 2.73$, $SD= 0.877$); although part of the amount paid is donated to green

activities ($M=2.90$, $SD=0.900$). Responses suggest an uncompromising attitude with regard to their financial contribution to whatever additional costs may be on-charged to them. Respondents did not have an opinion about whether those regarded as green consumers would be willing to pay a higher amount for green products ($M=3.58$, $SD=0.931$). Furthermore, green products are almost priced at a premium relative to conventional offerings ($M=3.45$, $SD=0.876$); and green pricing works when green products reduce hospitality customers' costs ($M=3.31$, $SD=0.766$).

4.4 Customer perception about green promotion strategy of hospitality firms

The findings on green promotions on the minds of the respondents are shown in Table 3.

Table 3. Average score analysis of green promotion-related statements

Sr. No.	Statements	Mean	Std. Dev.
1	Hospitality companies collaborate with environmental groups to promote their green image more effectively	3.90	0.744
2	Hospitality companies often use eco-labels on packaging, and display them on their corporate web sites	3.70	0.791
3	Hospitality companies see simple compliance with environmental legislation as an opportunity to promote their green credentials	3.69	0.614
4	Environmental labels create incentives for the hospitality business to change the market	3.63	0.667
5	Environmental labels (certificates for green hotel, such as, ISO certified) are an effective promotional tool in the hospitality industry	3.55	0.846
6	Green promotions and advertisements influence hotel guests and industrial buyers because they reflect the hospitality firm's commitment to the environment	3.53	0.751
7	Hospitality customers are suspicious of environmental advertising and claims	3.45	0.846
8	Hospitality companies try to convince customers to be environmentally friendly during direct sales activities	3.23	0.842
9	Environmental claims in advertisements are often met with criticism from competitors and consumer Organizations	3.10	0.641

Respondents were unsure about all six-green promotion-related statements. However, they mostly agreed with the statement about collaboration with environmental groups to promote green image ($M=3.90$, $SD=0.744$). Respondents considered such collaboration

useful in assisting the organizations' efforts in preserving the environment. Respondents were unsure about the use of eco-labels. Respondents were not sure about the functionality of eco-labels in promotion ($M=3.70$, $SD= 0.791$); eco-labels may create incentives to change the market ($M=3.63$, $SD= 0.667$); and eco-labels as effective promotional tools ($M=3.55$, $SD= 0.751$). This result suggests that, in the opinion of the respondents, the functions of eco-labels are unclear.

4.5 Customer perception about green place strategy of hospitality firms

The six-green place- or distribution- related statements were also analyzed and presented in Table 4.

Table 4. Average score analysis of green place- or distribution- related statements

Sr. No.	Statements	Mean	Std. Dev.
1	The internet is an effective channel for marketing a hospitality firm's green initiatives directly to customers	4.15	0.540
2	The image of business partners, such as travel agencies, tour operators, wholesalers and airlines, are consistent with the green image that a hospitality company wants to project	4.05	0.605
3	Hospitality firm using environmentally friendly distribution channels (path which hotel's product and services travel from vendor to customers) to build a green image	4.03	0.707
4	Joining commercial green marketing and central reservation associations that advertise and promote green hospitality firm to reach green travelers	3.85	0.630
5	Hospitality firms develop green certification programmes to gain green customer confidence	3.49	0.601
6	The selection of business partners, such as travel agencies, tour operators, wholesalers and airlines, is influenced by environmental issues.	3.24	0.913

Respondents agreed with three out of six statements related to green place or distribution. In particular they agreed that the Internet is an effective channel in disseminating green initiatives to customers ($M= 4.15$, $SD= 0.540$). Furthermore, the image of business partners was also considered important as it needs to be consistent with the green image of green hotels ($M=4.05$, $SD= 0.605$); and respondents agreed that hotels should use environmentally friendly distribution channels, from vendors to customers ($M=4.03$,

SD=0.707). Respondents were unsure about three statements that green hotels joining third parties to assist hotels with green advertising (M=3.85, SD=0.630); developing green certification programmes on their premises (M=3.49, SD=0.601); and selecting business partnerships is influenced by environmental issues (M=3.24, SD=0.913) indicating that respondents were uncertain about the effectiveness of these distribution channels.

4.6 Overall – perception about statements of green marketing

The overall assessment about respondents' perceptions of green marketing statements observes effective strategy for green marketing.

Table 5. Average distribution analysis of green marketing strategies

No.	Statements	Mean	Std. Dev.
1	Green product	3.59	0.655
2	Green price	3.09	0.714
3	Green promotion	3.53	0.703
4	Green place	3.80	0.641

Of the four Ps of the marketing mix green place-related statements were regarded as the most effective (M= 3.80, SD=0.420), perhaps indicating respondents agreed with the Internet distribution channel, that business partnerships need to be consistent with hospitality firms' green image and green products must come from environmentally friendly sources. The respondents were unsure about green products (M= 3.59, SD= 0.477) and green promotions (M= 3.53, SD= 0.408); and green prices were evaluated as the least effective strategy (M= 3.09, SD= 0.506), suggesting an unwillingness on the part of respondents to pay extra for green products.

4.7 Consumer buying behavior

The descriptive statistics on environmental behavior of returning consumers at green hospitality firm is presented in Table 6.

Table 6. Descriptive statistics on consumer behavior towards green marketing

Sr. No.	Item	Mean	Std. Dev.
1	Compared to an average person, I am familiar with hospitality firms' environmental policies	3.36	0.806
2	Compared to my friends, I am familiar with hospitality firm's green programmes	3.28	0.879
3	Compared to people who travel a lot, I am familiar with hospitality company's green labels	3.32	0.868
4	For me, consuming of products and services in green hospitality firm when visiting other countries is good	3.73	0.716
5	For me, staying at a green hospitality when visiting other countries is desirable	3.75	0.680
6	For me, staying at a green hospitality when visiting other countries is positive	3.86	0.592
7	Most people who are important to me would want me to stay and consumer different products in a green hospitality firm when touring	3.15	0.761
8	People whose opinions I value would prefer that I use and prefer green hospitality firm when touring	3.18	0.807
9	Whether or not I prefer green hospitality firm when going for tourism activities is under my control	3.49	0.834
10	I am confident that if I want, I can use green hospitality firms' products when touring	3.60	0.766
11	I have resources, time, and opportunities to visit and be consumer of green hospitality firm when touring	3.53	0.812
12	I am willing to be the consumer of green hospitality firm when touring	3.54	0.683
13	I plan to stay at a green hospitality and consume its products in near future	3.58	0.754
14	I will make an effort to say positive things about green hospitality firms	3.57	0.752
	Overall average score of consumer behavior construct	3.48	0.770

Respondents expressed favorable opinions on environmental behavior at green hospitality firm as they stated that staying and consuming products in a green hospitality firm when visiting other countries is positive ($M=3.86$, $SD=0.592$), besides staying at a green hospitality firm when visiting other countries is desirable ($M=3.75$, $SD=0.680$). This is trailed by the statement “staying at a green hospitality firm consuming its products when visiting other countries is good” with almost similar mean score ($M=3.73$, $SD=0.716$).

Empirical evidence has also ascertained that returning customers are confident that they can stay and consumer different services at green hospitality firm when touring ($M=3.60$, $SD=0.766$) and they plan to stay at a green hospitality firm and consume its products in future when going on holiday ($M=3.58$, $SD=0.754$). Thus, it can be deduced that respondents exhibit positive environmental behavior at green hospitality firms.

As far as overall average score of all the items statements of consumer behavior construct, the descriptive analysis reported it moderate average score ($M=3.48$, $SD=0.770$) of consumer behavior towards green marketing mix strategies of hospitality firms in north India. This indicates the existence of green marketing strategies in business operations of hospitality firms and also moderate level of awareness, knowledge and attitude towards those strategies among consumers. This indicates hospitality firms to increase the extent of adoption of green marketing strategies in its business operations.

4.8 Relationship or influence of green marketing mix strategy on consumer buying behavior

The research analyzed relationship between consumer behavior against green marketing mix (green product, green price, green place and green promotion by using regression analysis.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where; Y represents the dependent variable (Consumer Behavior)

X1 to X4 represent the independent variables (Green Product, Green Price, Green Promotion and Green Place).

β_1 to β_4 represent the coefficients of the independent variables

α is the Constant

ϵ is the error term.

Table 7. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.651 ^a	.641	.640	1.9261

a. Predictors: (Constant), Green Place, Green Price, Green Product, Green Promotion

As shown in the table above, the coefficient of determination R^2 is 0.641 and R is 0.651. This implies that the variable consumer behavior can be predicted up to 25% by the

marketing mix with a standard error of 1.926. The smaller value for standard error of the estimate (regression model) also reported accuracy and thus model effectively fit for the analysis. All the values of R, R², adjusted R² and standard error of the regression model indicates that model fit well for the analysis and also in line with existing literature (Gibbs et al., 2006) indicating criterion for a good regression model. Further, this indicates that 64% of the variation in consumer behavior is explained by the variation in green marketing mix adopted by the establishment i.e., green place, green price, green product and green promotion. Further this implies that the rest change of consumer is determined by other factors not analyzed in this study.

Table 8. ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	16.447	3	4.111	4.798	.001 ^b
Residual	245.896	86	.856		
Total	262.341	99			

a. Predictors: (Constant), Green Product, Green Price, Green Promotion, Green Place.

b. Dependent Variable: Consumer Buying Behavior

Testing the significance (for relationship between consumer behavior and green marketing mix tools) of the coefficient of determination can be seen in the ANOVA Table above where it is evident that at $\alpha = 5\%$, the value of f statistic is 4.79. There is a p value of $0.001 < 0.05$ which is significant. This means that green marketing mix is significant in predicting consumer behavior.

Table 9. Coefficients

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
1 (Constant)	4.593	.692		6.640	.000
Green Product	.286	.126	-.157	-2.259	.015
Green Price	-.167	.151	-.081	-1.099	.020
Green Promotion	.183	.177	.097	1.044	.019
Green Place	.431	.165	-.189	-2.601	.010

a. Dependent Variable: Consumer Buying Behavior

The findings indicate that there is a relationship between green marketing mix and consumer behavior with Green Product recording $p= 0.015 < 0.05$ and thus, $H1_0$ postulating no significant relationship between green product strategy of hospitality firms and consumer buying behavior in north India is rejected by supporting that a positive and significant association exist between these two constructs.

While in case of green price ($p= 0.020 < 0.05$) approach of selected hospitality firms, the proposed $H3_0$ assuming no significant relationship between green price tool of hospitality firms and consumer behavior in north India is rejected by reporting a positive and significant connection among these two constructs. Furthermore, the negative (-) value of price coefficient indicates a reverse relationship between price tool of marketing mix and consumer behavior in case of hospitality firms in north India. More specifically, it indicates, rise in price of hospitality services will bring decline in favorable consumer behavior and vice versa. This reverse relationship among two groups of variables is in line with previous studies (Gibbs et al., 2006; Tırınk, 2020) and also indicating no effect on model fitness and total effect on dependent variable by independent variables.

In terms of green promotion approach ($0.019 < 0.05$) of selected hospitably firms in north India, the testing for significance was noticed as $\alpha= 0.05$ whereby significance occurs when p values are less than 0.05. This means that proposed $H4_0$ perceiving no significant relationship between green promotion and consumer behavior, on the basis of empirical finding, green promotion strategy of hospitality firms in north India has a significant relationship with consumer behavior.

Green Place recording $p=0.010 < 0.05$ and hence, and $H2_0$ postulating no significant relationship between green place approach of hospitality firms and consumer behavior in north India is rejected by indicating a positive and significant relationship between these two as reported by significance value in above regression table.

Thus, the linear regression equation is therefore substituted as follows;

$$Y = 4.593 + 0.286 X1 + -0.167 X2 + 0.184 X3 + 0.431 X4 + \epsilon$$

Where Y is Consumer behavior, X1 is Product, X2 is Price, X3 is Green Promotion and X4 is Green Place.

The findings indicated that taking all other independent factors variables at zero, a unit increase in green product factor in the green marketing mix will lead to a 0.286 change in consumer behavior, a unit increase in green price factor in the green marketing mix will

result to 0.167 changes in consumer behavior, a unit increase in green promotion in the green marketing mix factor will result in 0.183 variation in consumer behavior, and finally a unit increase in green place factor in the green marketing mix of hospitality firms will result in 0.431 change in consumer behavior. Thus, on the basis above empirical evidence, the proposed null hypotheses (H_{1_0} , H_{2_0} , H_{3_0} , and H_{4_0}) were rejected by accepting the corresponding alternate hypotheses. Hence, from the finding, it can be ascertained that the green marketing mix strategies (product, price, promotion, and place) of selected hospitality firms in north India are significantly influence behavior of consumers.

5. DISCUSSION

The current study from regression analysis reported a clear association of green marketing mix strategies to consumer behavior in case of hospitality firms in north India. These findings suggest that respondents viewed green products as special compared to equivalent traditional products. This finding is consistent with those of Manaktola and Jauhari (2007), who found that Indian respondents viewed eco-friendly products as different, which encouraged their purchases at a green hospitality firm. As outlined in the study, inconclusive opinions about this issue create difficulties for green hospitality business players in developing green pricing strategies. Thus, this study explored that respondents expressed their disagreement with charging a premium to recover the additional costs expended by the green hospitality firms; willingness among customers to pay a higher price for eco-facilities. The findings in this study are similar to previous studies (Fairweather, Maslin, & Simmons, 2005). Findings show that most respondents had little idea about the effectiveness of green promotion strategies implemented by green hoteliers, except for one strategy, which is that collaboration between green hotels and environmental groups can help to promote a green image more effectively. The findings are perhaps due to various customers' perceptions and the lack of detailed information about the environment credentials of green products and services (Hartmann & Ibanez, 2006). The findings of this study indicate that the internet is an effective channel to promote green products and the green image of a hospitality firm influences the respondents' decision making on whether to stay and consume different service at hospitality firm. This is consistent with findings of Chan (2013), who found that customers evaluate the Internet as the most effective and efficient distribution channel to publicize

green marketing information, as customers can access Hospitality Company's information at any time and place.

In terms of consumer behavior, respondents were found to be inclined to spend more money on green products and services in hospitality firm if this contributes to a less negative impact on the environment. The study reported about consumer behavior towards green marketing strategies of hospitality firms in north India that respondents' awareness and attitude is positive towards intention to consumer products of services of hospitality firms using green marketing approach in its operations. This finding is comparable with that of prior studies (Chen & Peng, 2012) which found that hospitality customers' behavior towards environmental concern positively affect their intention to stay at a green hospitality firm, their intention to talk about their experience and willingness to pay more for the hospitality firms practicing green activities and initiatives.

6. CONCLUSION

The current section provides overview of conclusion followed by implications, limitation and direction for future research.

From the study, it has been ascertained that rising demand for sustainable development the green marketing mix is rapidly becoming important tool for hospitality industry in order to enhance consumer behavior towards different services. Hence, it becomes crucial to understand this phenomenon. The present study on the basis of regression analysis concluded that green marketing mix tools including green product, green price, green promotion, and green place/distribution positively and significantly associated to buying behavior of consumers in case of selected hospitality firms in north India.

6.1 Managerial Implications

For environmental protection to become a reality, it is important for all stakeholders of hospitality sector to take part. On this point of view, certain initiatives were already taken by regional government in study area to raise environmental awareness focusing on different aspects of environment. This should be done in collaboration and cooperation with all sectors of the agencies involved in tourism and environment field. While awareness about activities related to environmental protection is not obvious, the hospitality firms may strengthen the benefits of green practices in their promotional activities to induce green purchasing and consumption behavior.

6.2 Limitations and Future Research

Even though the method selected for this study includes limitations to interpretations and generalization of results to larger populations (Patton, 2002), yet it still offers some insights on how the evidence can be further studied in the process of establishing a relationship between hospitality companies and their customers. In addition, examination of the impact of various age groups towards hospitality and tourism firms' green consumption would be a meaningful extension of this study.

REFERENCES

- Agyeman, C.M. (2014). Consumer's Buying Behavior towards Green Products: an exploratory study, *International Journal of Management Research and Business Strategy*, 3(1), 188-197.
- Alomari, B. (2020). Green Marketing and Its Impact on Consumer Purchasing Behavior and the Tourism Sector/an Analytical Study-The Jordanian Green Market. *Journal of Economics, Business and Market Research*, 1 (1) 8-24.
- Ansar, N. (2013). Impact of Green Marketing on Consumer Purchase Intention, *Mediterranean Journal of Social Science*, 4(11), 650-655.
- Bhatia, M., & Jain, A. (2013). Green Marketing: A Study of Consumer Perception and Preferences in India, *Electronic Green journal*, 1(36), 1-19.
- Bukhari, S.S. (2011). Green Marketing and its Impact on Consumer Behavior, *European Journal of Business and Management*, 3(4), 375-383.
- Burrow, J.L. (2008). *Marketing*. 2nd ed. Ohio: Thomson South-Western.
- Chan, E. (2013). Gap analysis of green hotel marketing. *International Journal of Contemporary Hospitality Management*, 25(7), 1017-1048.
- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and Brand affect to Brand performance: The role of brand loyalty. *Journal of Marketing*, 65(2), 81-93.
- Chen, A., & Peng, N. (2012). Green hotel knowledge and tourists' staying behavior. *Annals of Tourism Research*, 39(4), 2211-2216.
- Chen, Y. S. (2010). The drivers of green brand equity: Green brand image, green satisfaction, and green trust. *Journal of Business Ethics*, 93, 307-319.
- Dalati, S. (2018). Measurement and Measurement Scales. In J.Marks Gomez, & S. Mouselli (eds) *Modernizing the Academic Teaching and Research Environment* (pp.79-96), Springer: Switzerland.
- Davari, A. A., & Strutt, D. (2014). Marketing Mix Strategies for Closing the Gap between Green Consumers' Pro-Environmental Beliefs and Behaviors. *Journal of Strategic Marketing*, 22(7), 563-586.
- Diglel, A., & Yazdanifard, R. (2014). Green marketing and its Influence on Buying Behavior and the Attitudes of Purchasers towards Eco-friendly products. *Global journal of Management and Business Research*, 7(11), 11-18.
- Fairweather, J. R., Maslin, C., & Simmons, D. G. (2005). Environmental values and response to eco-labels among international visitors to New Zealand. *Journal of Sustainable Tourism*, 13(1), 82.
- Font, X., & Lynes, J. (2018). Corporate social responsibility in tourism and hospitality.

Journal of Sustainable Tourism, 26, 1027–1042.

Font, X., & McCabe, S. (2017). Sustainability and marketing in tourism: Its contexts, paradoxes, approaches, challenges and potential. *Journal of Sustainable Tourism*, 25, 869–883.

Gibbs Y. Kanyongo, G.Y., Certo, J., & Launcelot, B.I. (2006). Using regression analysis to establish the relationship between home environment and reading achievement: A case of Zimbabwe. *International Education Journal*, 7(5), 632-641.

Han, H., & Hyun, S.S. (2018). What influences water conservation and towel reuse practices of hotel guests? *Tourism Management*, 64, 87–97.

Han, H., & Kim, Y. (2010). An investigation of green hotel customers' decision formation: Developing an extended model of the theory of planned behavior. *International Journal of Hospitality Management*, 29(4), 659-668.

Han, H., Hsu, L. T. J., & Sheu, C. (2010). Application of the theory of planned behavior to green hotel choice: Testing the effect of environmentally friendly activities. *Tourism Management*, 31(3), 325-334.

Han, H., Lee, M.J., & Kim, W. (2018). Promoting towel reuse behavior in guests: A water conservation management and environmental policy in the hotel industry. *Business Strategies and Environment*, 27, 1302–1312.

Han, H., Yu, J., & Kim, W. (2019). Environmental corporate social responsibility and the strategy to boost the airline's image and customer loyalty intentions. *Journal of Travel and Tourism Marketing*, 36, 371–383.

Hartmann, P., & Ibanez, V. A. (2006). Green value added. *Marketing Intelligence & Planning*, 24(7), 673–680.

Homburg, C., Stierl, M., & Bornemann, T. (2013). Corporate Social Responsibility in Business-to-Business Markets: How Organizational Customers Account for Supplier Corporate Social Responsibility Engagement. *Journal of Marketing*, 77, 54–72.

Jones, P., Hillier, D., & Comfort, D. (2014). Sustainability in the global hotel industry. *International Journal of Contemporary Hospitality Management*, 26, 5–17.

Kang, J., & Hustvedt, G. (2014). Building trust between consumers and corporations: The role of consumer perceptions of transparency and social responsibility. *Journal of Business Ethics*, 125, 253–265.

Ko, E., Hwang, Y.K., & Kim, E.Y. (2013). Green marketing' functions in building corporate image in the retail setting. *Journal of Business Research*, 66, 1709–1715.

Kontic, I. (2010). *Greening the marketing mix: A case study of the Rockwool Group*. BBA, Jönköping International Business School, Sweden.

Lien, C., Huang, C., & Chang, H. (2012). The influence of green consumption cognition of consumer on behavioral intention – a case study of the restaurant service industry. *African Journal of Business Management*, 6(26), 7888-7895.

Luo, X., & Bhattacharya, C.B. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of Marketing*, 70, 1–18.

Manaktola, K., & Jauhari, V. (2007). Exploring consumer attitude and behavior towards green practices in the lodging industry in India. *International Journal of Contemporary Hospitality Management*, 19(5), 364-377.

Martínez, P. (2015). Customer loyalty: Exploring its antecedents from a green marketing perspective. *International Journal of Contemporary Hospitality Management*, 27, 896–917.

Martínez, P., & Del Bosque, I.R. (2013). CSR and customer loyalty: The roles of trust, customer identification with the company and satisfaction. *International Journal of Hospitality Management*, 35, 89–99.

- Ministry of Tourism, Government of India (2021, Jan 24). *Hotel and Restaurant Reports. National Database for Accommodation Units*. <https://www.nidhi.nic.in/MOT/RptHotel.aspx> (Rep.).
- Nguyen, N., & Leblanc, G. (2001). Corporate image and corporate reputation in customers' retention decisions in services. *Journal of Retailing and Consumer Services*, 8, 227–236.
- Ottoman, J., & Mallen, D. (2014). 5 Green Marketing strategies to earn consumer trust. <https://www.greenbiz.com/article/5-green-marketing-strategies-earn-consumer-trust>.
- Patton, M.Q. (2002). *Qualitative Evaluation and Research Methods*, 3rd ed. Sage, Thousand Oaks, CA.
- Priego, M.J.B., Najera, J.J., & Font, X. (2011). Environmental management decision-making in certified hotels. *Journal of Sustainable Tourism*, 19, 361–381.
- Sarstedt, M., & Mooi, E. (2014). *A concise guide to market research*. Heidelberg: Springer: Berlin, Heidelberg.
- Schiffman, L.G., Kanuk, L.L., & Wisenblit, J. (2010). *Consumer Behavior*, 10th ed., Prentice Hall, Upper Saddle River, NJ.
- Sharples, R. (2014). Host perceptions of tourism: A review of the research. *Tourism Management*, 42, 37–49.
- Singh, S. (2012). Green Marketing: Challenges and Strategy in the changing scenario. *International Journal of Advanced Research in Management and Social Sciences* (online), 1(6), 164-172.
- Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumer trust, value, and loyalty in Relational Exchanges. *Journal of Marketing*, 66(1), 15-37.
- Swait, J., & Erdem, T. (2004). Brand Credibility, Brand Consideration, and Choice. *Journal of Consumer Research*, 31, 191–198.
- Tırnık, C. (2020). Estimating of Birth Weight Using Placental Characteristics in The Presence of Multicollinearity. *Black Sea Journal of Engineering and Science*, 3(4), 138-145.
- United Nation World Tourism Organization (2018). *Report on Tourism and Culture Synergies*. UNWTO: Madrid, Spain.
- Vantamay, N. (2018). Investigation and Recommendations on the Promotion of Sustainable Consumption Behavior among Young Consumers in Thailand. *Kasetsart Journal of Social Science*, 39, 51-58.
- Wong, J.Y., & Yeh, C. (2009). Tourist hesitation in destination decision making. *Annals of Tourism Research*, 36(1), 6-23.
- Yazdanifard, R., & Mercy, I.E. (2011). The Impact of Green Marketing on Customer satisfaction and Environmental Safety. *International Conference on Computer Communication and Management*, 5(1), 637-641.

How to cite this article:

Singh, L. (2021). Relationship Between Green Marketing Mix and Consumer Behavior: A study of hospitably firms in North India, *International Journal of Marketing, Communication and New Media. Special Issue on Sustainable Marketing*, June 2021, 82-103.