

IMPACT OF GREEN MARKETING ON PERCEIVED IMAGE AND BEHAVIOURAL INTENTIONS OF CONSUMERS: EMPIRICAL EVIDENCE FROM RESTAURANT PRACTICES

Arup Kumar Baksi
Bengal Institute of Technology & Management

Bivraj Bhusan Parida
The University of Burdwan

The detrimental effects of global environmental turbulence have influenced consumers' preferences towards consuming eco-safe products/services, more popularly nomenclated as 'green products/services'. Industries have also identified this shift and are not only redesigning their products/offers but also projecting themselves as 'green firms'. This study empirically attempts to investigate the possible causal impact of green marketing initiatives on the perceived image of restaurants and its subsequent influence on the behavioural intentions of the consumers. Four tourist destinations in West Bengal, India, were identified for the study and eight restaurants were surveyed. Appropriate statistical procedures and structural equation modeling were applied. The results revealed a significant correlation between the variables under study with perceived consumer effectiveness playing a critical role in segmenting consumers on the basis of their affinity to greenness as an element to perceive restaurant image. The study has future scopes where demographical effects and price-sensitivity may be tested.

Keywords: *green marketing, restaurant, image, behavioural intention*

JEL Classification: *L83, M1, O1*

INTRODUCTION

Global climatic changes and environmental hazards not only started to affect our immediate acclimatization process but also triggered redefining marketing processes. The traditional marketing mix elements

are giving way to a new set of 4Ps : planet, people, profits and progress compelling the firms to re-prioritize their objectives. Awareness campaigns across all the cross-sections of social hierarchy has been instrumental in changing the perception of product and service quality amongst the consumers. Contemporary consumers have started to prefer products/services which environmentally sustainable. The consumers' perspective for green products/services includes the basic characteristics, which are functional performance and non-essential characteristics that convey secondary benefits namely environmental performance (Manaktola and Jjauhari, 2007). Green marketing initiatives which started as a trend has been converted to a way of doing business, so much so, that green marketing initiatives were highlighted in corporate communications and in many occasions this has been used as a unique selling proposition or a differentiator. Hospitality and tourism industry adopted green marketing as a potential tool to detangibilize their offers when it comes to perception of service quality. However, Driessen (2005), in a study, found that an optimum level of green-adopted must be found to avoid being perceived as a niche-green marketer and loosing competitive advantage in the long run. Therefore while designing their green offers, particularly the service sector namely the hospitality and tourism firms, must evaluate the inclination of their consumers towards greenness by analysing their values and beliefs as they lead to pro-environmental behaviours (Reser and Bentrupperbaumer, 2005; Stern, 2000). Pooley and O'Connor (2000) observed that mere advertisements, highlighting green initiatives by a firm, do not foster pro-environmental behaviours. Therefore, for sustainable image development based on green marketing initiatives, a profound environmental education requires to be disseminated.

The objective of this study were (a) to examine possible cause and effect linkages between perceived green practices by the restaurants, perceived green image of the same by the consumers and behavioural manifestation of the consumers, (b) to identify the mediating effects of perceived consumer effectiveness on the aforesaid link and (c) to justify the research model framework (Fig.1). The layout of this paper following the introduction is displayed as review of literature with hypotheses formulation and research model framework, methodology, data analysis and interpretation and conclusion.

REVIEW OF LITERATURE

In the latter half of the 1980s the concept of environmental marketing or green marketing surfaced for the first time (Peattie and Crane, 2005,

D'Souza, Taghian, Lamb and Peretiakos, 2006). The hospitality sector realized that overlooking environmental issues will accelerate environmental decline, thereby, limiting sustainable growth (Amposta, 2008). With the deterioration of global ecological balance and increase in awareness to restore the same, the consumption pattern of the consumers gradually started to favour products and services which promised to be less damage-causing on environment. Richins and Scarinci (2009) confirmed the notion of environmental damage being caused by the emission of green house gases by resorts in Florida, USA and affirmed the issue of green consumption. Researchers explored the hospitality industry, which covers a broad spectrum of services namely hotel and restaurant, tourism, logistic support provider etc., to understand the changing decision making pattern of the consumers with regard to consumption of green products and services (Choi and Parsa, 2006, Han et al., 2009). Sustainable tourism has emerged as a new paradigm in response to destination vulnerability under tourism pressure. Baros and David (2007) proposed a sustainable value map as a pavement towards sustainable tourism development. In a study conducted by Han et al. (2009), it was revealed that the intention of customers to visit a green hotel is stimulated by predictors' attitude, subjective norm and perceived behavioural control. Dutta, Umashankar, Choi and Parsa (2008) in a comparative study on restaurants in India and USA found different reasons for customers willing to pay higher price for green practices. As green marketing practices became a compulsive strategic initiatives of the hospitality industry, researchers pondered over the impact of green practices on consumer behaviour. Jeong and Jang (2010) observed that customers' perceived ecological image of a restaurant positively affects customers' ecological behavioural intention. Hoteliers have started deploying environmental management system (EMS) with an objective to ensure greener services and to suit the behavioural pattern of the consumers. Specific measures were taken up to address the issues regarding energy consumption by the hoteliers and restaurant operators following analysis of consumption pattern of the same (Kasim, 2007, Deng, 2003, Dascalaki and Balaras, 2004, Becken et al., 2001), nature and gamut of water consumption (Bohdanowicz, 2005, Alexander, 2002), waste management (Kazim, 2007) and overall sustainable environmental management (Bohdanowicz and Martinac, 2003, Revilla, Dodd and Hoover, 2001). Tinsley and Pillai (2006) pointed out that growing environmental concern has considerably resulted in an increase in concern of the firm towards ensuring environmental risk minimization. Based on the notion put forward by Khairat and Maher (2012) that environmental

tourism lacks adequate strategic implementation from the perspective of tour operators. Sandalidou et al. (2000) pointed out to the preference of the consumers towards foodstuffs that are produced and processed by natural methods. In addition, Gavruchenku et al. (2003) considered that nowadays consumers are interested in ecologically clean products due to health and environmental reasons as well as the increasing concern of safe and quality food. Shubert, (2008) was also of the opinion that consumption of healthy food is a growing demand for the consumers in the face of degrading environment owing to pollution. As health promotion has evolved from a major focus on individual change toward a greater focus on the environments in which people live, work and recreate, restaurants are now being targeted as appropriate organizations for change (Sebally, 2011). Potter and Williams, (1996) studied the Australian consumers attitudes towards green and healthy restaurants which are known to provide healthy food choices, smoke free dining areas and good standards of food hygiene in order to estimate the consumers' views about using restaurants as a setting for health promotion and, specifically, for providing low-fat healthy food choices. The results of the study indicated that consumers showed interest in green restaurants, specifically females consumers, people concerned with fitness, overweight people, people on dietary constraints for health reasons, and finally the image-conscious consumers. Moreover, Shubert (2008) found that with the increasing awareness of global climate change and natural disasters, environmental protection is an issue of high topicality and relevance and this is also true for the hospitality and tourism industry where businesses often rely on the integrity of the environment. Employing and marketing green practices, could help restaurants to establish a new niche for environmentally concerned customers, and therefore increase sales and long-term profits. In fact, restaurants who exhibit strong interest in environmental issues and actively participate in eco-friendly practices could distinct themselves from other businesses, hence creating a significant competitive advantage.

The consumer decision related to selection of hotels and restaurants also has been influenced by this novel marketing domain. Gustin and Weaver (1996), in a study, observed that consumers' interest to stay in a hotel and avail its allied services, namely restaurant and dining facilities was influenced by the pro-environmental policies adopted and executed by the hoteliers. A study conducted by Hines, Hungerfor and Tomera (1987) in the hospitality industry revealed that consumers' intent to purchase the services offered by hotels is predominantly influenced by the factors of environmental behavioural model namely consumers'

awareness level about environmental issues, consumers' attitudes towards environmental strategy and their perceived self efficacy. Vieregge et al (2007) explored consumer perception of green restaurant chain in Switzerland and found that consumers appreciate the initiatives taken up by the chain to promote green marketing. Being green and offering green has emerged as an image-building tool for the hospitality industry.

Researchers indicated that a good corporate image helps companies establish and maintain loyal relationship with customers (Andreassen & Lindestad, 1998; Nguyen & Leblanc, 2001; Robertson, 1993). However, the past studies on green product consumption are mainly focused on demographical and psychological characteristics of green consumers or investigated the relationship between consumers' behavioral intentions and other antecedents of green purchasing in the decision-making process (Chan & Lau, 2000; D'Souza, Taghian, & Khosla, 2007; Straughan & Roberts, 1999). Perceived image of a restaurant and its impact on consumers is considered to be of utmost significance as the services of restaurant cannot be evaluated before dining experience (Jeong and Jang, 2010) due to its inherent intangibility and heterogeneity. Therefore in alignment with consumers' gradual shift towards greenness, perceived green image can act as a significant differentiator of services. A number of researchers in hospitality industry explored the eco- friendly decision-making processes of hotel customers (Choi & Parsa, 2006; Han et al., 2009). The perceived green image of a restaurant can be influenced by the green practices and can serve as an evaluative criteria (Bloemer and Ruyter, 1998; Ryu et al., 2008). A number of studies conducted by the researchers found that the behavioural pattern of the consumers having inclination towards green purchases is mostly influenced by perceived consumer effectiveness (PCE) towards solving environmental problems and that higher the PCE greater will be the probability of the consumers investing in green products and services (Chan and Lau, 2000; do Paco, Arminda, Raposo and Lino, 2009; Gilg et al., 2005; Gustin and Weaver, 1996; Straughan and Robberts, 1999). Researchers also tried to correlate consumers' desire to adopt green products and services with the cost of adoption. In their study on Indian hotels, Manaktola and Jauhari (2007) found that although consumers' are behaviourally inclined towards green products/services, only 15% are willing to bear the hike in cost due to integration of environmental initiatives by the firms while the rest of the consumers feel that it should be either borne by the hotel or be shared. While identifying the impact of tourist demand in hotel rooms on the investment of hotel chains on environmental quality, Accinelli, Brida and Carrera (2007), observed that the hotel chains must increase the

investment towards maintaining environmental quality in the face of increased tourist activity.

Review of literature revealed a dearth in study concerning green initiatives by the restaurants and the subsequent impact of the same on consumer perception of firm image and behavioural manifestation. Literature has also remained inconclusive with respect to studies conducted on restaurants of Indian origin. This study empirically attempts to explore the link between green initiatives adopted and communicated by the restaurants, perceived image of the same by its consumers and the possible impact of firm-image (restaurant) based on green marketing, on consumers' behavioural manifestation. Additionally, the researchers aim to test a conceptual framework exploring the causal relationship between the major variables namely perceived green practices by the restaurants, perceived green image and behavioural manifestation of consumers (attitudinal loyalty, propensity to switch, will to pay more, external response and internal response). As a concluding effort the researchers seek to identify the difference, if any, between the high PCE and low PCE consumers in perceiving restaurant image on the basis of green offers and their subsequent behavioural intention.

Formulation of hypothesis and research model framework

Apropos to the literature reviewed, the following hypotheses were formulated:

H₁: Perception of green practices adopted by the restaurants will have an impact on perceived image of the consumers regarding the same

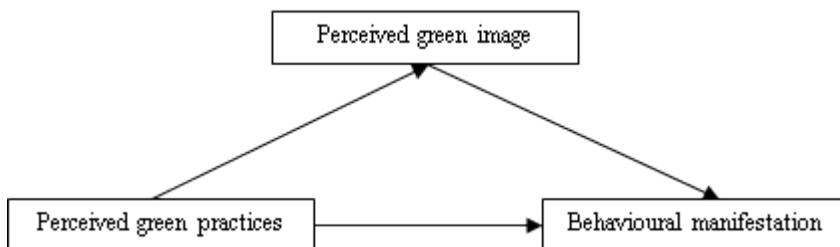
H₂: Perceived image of the consumers will have an effect on the manifestation of their behavioural intention.

H₃: Consumers with higher perceived consumer effectiveness (PCE) will have greater impact on perceived green practices-perceived image-behavioural link.

H₄: Consumers with lower perceived consumer effectiveness (PCE) will have lesser impact on perceived green practices-perceived image-behavioural link.

Based on the literature reviewed and hypotheses framed, the following model framework was proposed (Fig.1):

Figure 1 Proposed research model framework



METHODOLOGY

The objective of the study were (a) to examine possible cause and effect linkages between perceived green practices by the restaurants, perceived green image of the same by the consumers and behavioural manifestation of the consumers, (b) to identify the mediating effects of perceived consumer effectiveness on the aforesaid link and (c) to justify the research model framework (Fig.1). To conduct the study eight (8) restaurants were identified in four distinct tourist destinations in West Bengal namely S.K. restaurant and Salbithi (Santiniketan), Keventers and Cake Lady (Darjeeling), The Palm Resort and Hotel Sea Coast (Digha), Sundarban Mangrove Retreat and Tiger View Point Resort (Sundarbans). The study was comprised of two phases. Phase-I involved a pilot study to refine the test instrument with rectification of question ambiguity, refinement of research protocol and confirmation of scale reliability was given special emphasis (Teijlingen and Hundley, 2001). FGI was administered. Cronbach's α coefficient (>0.7) established scale reliability (Nunnally and Bernstein, 1994). The structured questionnaire thus obtained after refinement contained four sections. Section-I asked the respondents to rate the importance of green practices adopted by the restaurants, section-II asked the respondents (customers) about their perception of green practices adopted by the restaurants where they dine frequently, section-III was intended to generate response from the respondents with regard to their level of perceived green-image about the restaurants where they dine frequently, section-IV was designed to understand their behavioural intention as an output to perceived green image of the restaurant, section-V was designed to assess the respondents' attitudes and beliefs which may positively influence the out-come of ecological problems (perceived consumer effectiveness) and section-VI

focused on demographic data of the respondents. The second phase of the cross-sectional study was conducted by using the structured questionnaire. Systematic simple random sampling technique was administered as every fifth customer coming out of the restaurant was requested to fill-up the questionnaire. A total number of 1000 questionnaires was used which generated 589 usable responses with a response rate of 58.90%.

Factor constructs measurement

To develop a measure for perception of significance of green practices 12 items used by Jeong and Jang (2010) were used, to measure perceived green practices 12 items were identified following the literature reviewed and adopted by Jeong and Jang (2010). The study used four 'perceived green image' items based on the studies conducted by Jeong and Jang (2010), Schwaiger (2004) and LeBlanc and Nguyen (1996). To obtain response with regard to behavioural intentions of customers, the Behavioural Intention Battery (BIB) developed by Zeithaml et al (1996) was used consisting of 13 items. Finally, to develop the constructs for perceived consumer effectiveness (PCE), 3 items were used (Jeong and Jang, 2010, Straughan and Roberts, 1999). A 7 point Likert scale (Alkibisi and Lind, 2011) was used to generate response, with '1' indicating extremely unimportant/strongly disagree and '7' indicating extremely important/strongly agree.

Reliability and validity test

Exploratory factor analysis (EFA) was deployed using principal axis factoring procedure with orthogonal rotation through VARIMAX process with an objective to assess the reliability and validity of all factor constructs. Secondly confirmatory factor analysis (CFA) was used to understand the convergence, discriminant validity and dimensionality for each construct to determine whether all the items measure the construct adequately as they had been assigned for. Finally, LISREL 8.80 programme was used to conduct the Structural Equation Modeling (SEM) and Maximum Likelihood Estimation (MLE) was applied to estimate the CFA models.

DATA ANALYSIS AND INTERPRETATIONS

The demographic data collected from the respondents were presented in Table 1.

Table 1 Demographic data of the respondents

| Demographic Variables | Factors | Frequency | % |
|----------------------------------|-------------------------------------|------------------|----------|
| Gender | Male | 402 | 68.25% |
| | Female | 187 | 31.75% |
| Age | ≤ 21 years | 7 | 1.19% |
| | 22-32 years | 309 | 52.46% |
| | 33-43 years | 172 | 29.20% |
| | 44-54 years | 69 | 11.71% |
| | ≥ 55 years | 32 | 5.44% |
| Income | ≤ Rs. 14999.00 | 9 | 1.53% |
| | Rs. 15000-Rs. 24999.00 | 211 | 35.82% |
| | Rs. 25000-Rs. 44999.00 | 249 | 42.27% |
| | ≥ Rs. 45000.00 | 120 | 20.38% |
| Occupation | Service [govt./prv] | 382 | 64.85% |
| | Self employed | 131 | 22.24% |
| | Professionals | 18 | 3.05% |
| | Student | 12 | 2.03% |
| | Housewives | 46 | 7.83% |
| Educational qualification | High school | 8 | 1.37% |
| | Graduate | 410 | 69.60% |
| | Postgraduate | 149 | 25.30% |
| | Doctorate & others (CA, fellow etc) | 22 | 3.73% |

The results of Exploratory factor analysis (EFA) (Table-2) revealed that the Cronbach's Coefficient alpha was adequate for the measure

justifying the internal consistency of the constructs. Each construct displayed an acceptable construct reliability with estimates well over .6 (Hair, Anderson, Tatham and William, 1998). Further to this the average variance extracted (AVE) surpassed minimum requirement of .5 (Haier et al., 1998). The KMO measure of sample adequacy (0.908) indicated a high-shared variance and a relatively low uniqueness in variance (Kaiser and Cerny, 1979). Barlett’s sphericity test (Chi-square=1082.315, $p < 0.001$) indicated that the distribution is ellipsoid and amenable to data reduction (Cooper and Schindler, 1998).

Items with very low factor loadings/cross loadings (< 0.500) and poor reliability (Cronbach’s α) were discarded. Thus the perceived green practices were reduced to 8 items and the BIB items were reduced to 7.

Table 2 Measurement of reliability and validity of the variables

| Items | Factor loadings | t-value | Cronbach’s α | Composite reliability | Average variance extracted |
|---|-----------------|---------|---------------------|-----------------------|----------------------------|
| Perceived green practices | | | | | |
| My restaurant offers recycling bins for disposing plastic and paper cups (PGP1) | 0.854 | - | 0.911 | 0.911 | 0.791 |
| My restaurant has take-out containers which are recyclable (PGP2) | 0.799 | 27.875 | 0.911 | 0.911 | 0.791 |
| My restaurant uses energy-efficient lights in the seating areas (PGP3) | 0.801 | 25.356 | 0.911 | 0.911 | 0.791 |
| My restaurant uses eco-friendly cleaners for the furniture and floors (PGP4) | 0.816 | 28.187 | 0.911 | 0.911 | 0.791 |
| My restaurant uses eco-friendly cleaners for the utensils (PGP5) | 0.786 | 21.019 | 0.911 | 0.911 | 0.791 |
| My restaurant maintains greenery in its premises both indoor & outdoor (PGP6) | 0.821 | 29.709 | 0.911 | 0.911 | 0.791 |

| | | | | | |
|--|-------|--------|-------|-------|-------|
| My restaurant uses energy-saving and eco-friendly cooling & ventilation system (PGP7) | 0.823 | 30.321 | 0.911 | 0.911 | 0.791 |
| My restaurant serves organic food on demand (PGP8) | 0.798 | 22.298 | 0.911 | 0.911 | 0.791 |
| Perceived green image | | | | | |
| My restaurant indulges in corporate social responsibility | 0.775 | - | 0.907 | 0.907 | 0.787 |
| My restaurant address the environmental issues seriously | 0.776 | 19.216 | 0.907 | 0.907 | 0.787 |
| My restaurant is concerned about environmental preservation | 0.812 | 23.081 | 0.907 | 0.907 | 0.787 |
| I perceive my restaurant to be a socially and environmentally responsible organization rather than solely profit-oriented. | 0.824 | 26.117 | 0.907 | 0.907 | 0.787 |
| Behavioural intentions | | | | | |
| I shall talk positive things about my restaurant | 0.765 | - | 0.923 | 0.923 | 0.769 |
| I shall advice to avail the dining service of my restaurant | 0.798 | 23.327 | 0.923 | 0.923 | 0.769 |
| I shall increase the frequency of availing dining services from my restaurant | 0.759 | 22.091 | 0.923 | 0.923 | 0.769 |
| I shall do less business with my restaurant in next few years | 0.801 | 27.265 | 0.923 | 0.923 | 0.769 |
| I shall pay more to avail | 0.812 | 28.106 | 0.923 | 0.923 | 0.769 |

| | | | | | |
|--|---------------------|--------|-------|-------|-------|
| enhanced services offered by my restaurant | | | | | |
| I shall complain to the service provider in case of any problem | 0.798 | 23.327 | 0.923 | 0.923 | 0.769 |
| I shall complain to an external agency in case of any problem | 0.776 | 25.189 | 0.923 | 0.923 | 0.769 |
| Perceived consumer effectiveness | | | | | |
| Green initiatives by restaurants will address environmental issues | 0.875 | - | 0.914 | 0.914 | 0.799 |
| I believe to invest and consume green products/services to arrest ecological degradation | 0.849 | 29.401 | 0.914 | 0.914 | 0.799 |
| I recommend others to invest and consume green products/services as I believe that it will arrest ecological problems. | 0.854 | 31.009 | 0.914 | 0.914 | 0.799 |
| KMO | 0.908 | | | | |
| Barlett's sphericity | Chi-square=1082.315 | | | | |

Bivariate correlations were obtained to assess the relationship between the variables. The results were displayed in Table-3. Correlation results revealed a positive and significant relationship between perceived green practice and perceived green image ($r=.206^{**}$, $p<0.01$), perceived green practice shared positive and significant relationship between attitudinal loyalty ($r=.143^{**}$, $p<0.01$), customer advocacy ($r=.213^{**}$, $p<0.01$) and perceived consumer effectiveness ($r=.426^{**}$, $p<0.01$), and exhibited a negative and significant relationship with propensity to switch ($r=-.089^*$, $p<0.05$). Perceived green image demonstrated strong and positive relationship with attitudinal loyalty ($r=.117^{**}$, $p<0.01$), customer advocacy ($r=.227^{**}$, $p<0.01$), perceived consumer effectiveness ($r=.329^{**}$, $p<0.01$), while it revealed a negative and significant relationship with propensity to switch ($r=-.101^*$, $p<0.05$). Based on the results of bivariate correlation H1 and H2 were accepted.

Confirmatory factor analysis (CFA) was deployed to understand the convergence, discriminant validity and dimensionality for each construct to determine whether all the 22 items (Table-2) measure the construct adequately as they had been assigned for. LISREL 8.80 programme was used to conduct the Structural Equation Modeling (SEM) and Maximum Likelihood Estimation (MLE) was applied to estimate the CFA models. A number of fit-statistics (Table-7) were obtained. The GFI (0.987) and AGFI (0.975) scores for all the constructs were found to be consistently >.900 indicating that a significant proportion of the variance in the sample variance-covariance matrix is accounted for by the model and a good fit has been achieved (Baumgartner and Homburg, 1996; Hair et al, 1998, 2006; Hulland, Chow and Lam, 1996; Kline, 1998; Holmes-Smith, 2002, Byrne, 2001).

Table 3 Bivariate correlation between the variables

| Variables | Perceived green practice (PGP) | Perceived green image (PGI) | Attitudinal loyalty (AL) | Propensity to switch (P2S) | Customer advocacy (CA) | Perceived consumer effectiveness (PCE) |
|--|--------------------------------|-----------------------------|--------------------------|----------------------------|------------------------|--|
| Perceived green practice (PGP) | 1 | | | | | |
| Perceived green image (PGI) | 0.206** | 1 | | | | |
| Attitudinal loyalty (AL) | 0.143** | 0.117** | 1 | | | |
| Propensity to switch (P2S) | -0.089* | -0.101* | -0.176** | 1 | | |
| Customer advocacy (CA) | 0.213** | 0.227** | 0.314** | -0.309** | 1 | |
| Perceived consumer effectiveness (PCE) | 0.426** | 0.329** | 0.243** | -0.076* | 0.321** | 1 |

***Correlation significant at 0.01 level (2-tailed), *Correlation significant at 0.05 level (2-tailed),*

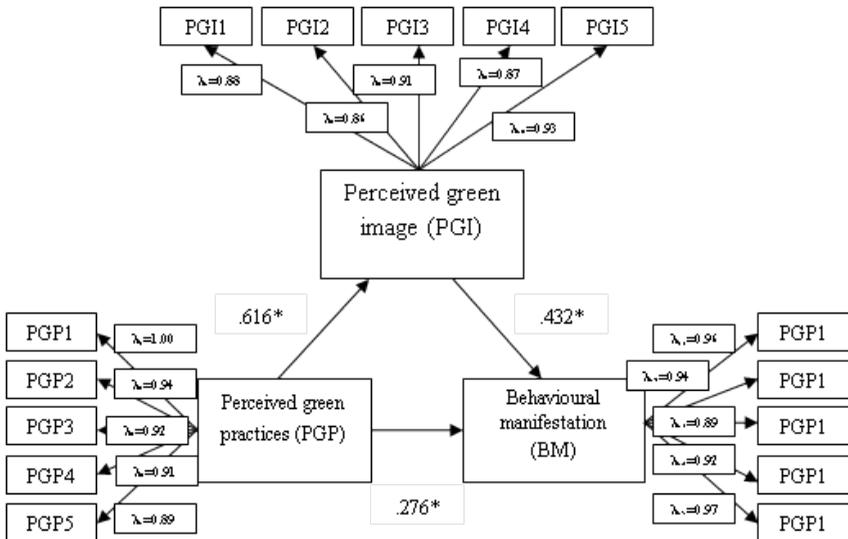
The CFI value (0.979) for all the constructs were obtained as $> .900$ which indicated an acceptable fit to the data (Bentler, 1992). The RMSEA value obtained (0.056) is < 0.08 for an adequate model fit (Hu and Bentler, 1999). The probability value of Chi-square is more than the conventional 0.05 level ($P=0.20$) indicating an absolute fit of the models to the data.

Table 7 Summary of fit indices

| Fit indices | χ^2 | df | P | GFI | AGF I | CFI | RMR | RMSEA |
|-------------|----------|----|-------|-------|-------|-------|-------|-------|
| Values | 189.09 | 83 | 0.000 | 0.987 | 0.975 | 0.979 | 0.049 | 0.056 |

Structural Equation Modeling (SEM) was used to test the relationship among the constructs. All the 18 paths drawn were found to be significant at $p<0.05$. The research model holds well (Fig.2) as the fit-indices supported adequately the model fit to the data. The double-curved arrows indicate co-variability of the latent variables. The residual variables (error variances) are indicated by $\epsilon_1, \epsilon_2, \epsilon_3$, etc. The regression weights are represented by λ . The co-variances are represented by β . To provide the latent factors an interpretable scale; one factor loading is fixed to 1 (Hox & Bechger).

Figure 2 Structural model for the proposed research model framework



A multiple group analysis (Jeong & Jang, 2010) was conducted to understand and estimate the moderating effects of perceived consumer effectiveness (PCE) on perception of green practices-perceived green image-behavioural intention link. The median value of PCE (5.08) was used to segment the respondents into three groups with >5.08 ($n=197$) (termed as pro-greens), with $=5.08$ ($n=239$) (termed as neutra-greens) and <5.08 ($n=153$) (termed as anti-greens). Three structural results were obtained. Fig.2 represented the structural model for pro-greens with PCE median value >5.08 . All the three paths representing relationship between perceived green practices and perceived green image, between perceived green image and behavioural intention and between perceived green practices and behavioural intention were found to be significant at $p < 0.01$. Fig.3 is the structural model for anti-greens with PCE median value <5.08 . Although path relationship between perceived green practices and perceived green image was found to be significant at $p < 0.001$, the path relationships between perceived green image and behavioural intention and perceived green practices and behavioural intention were found insignificant. Fig.4 is the structural manifestation for neutra-greens where all the three paths were found to be significant at $p < 0.01$.

Figure 3 Structural model for pro-greens with PCE median value >5.08

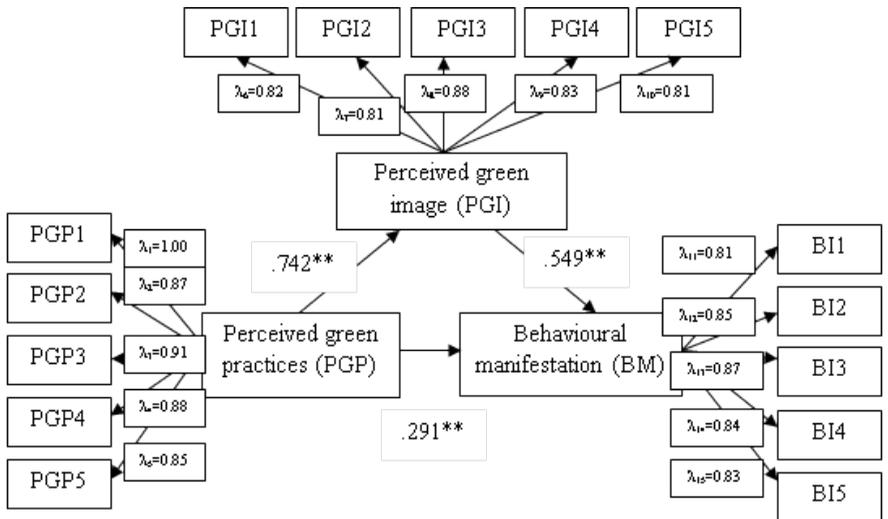


Figure 4 Structural model for anti-greens with PCE median value <5.08

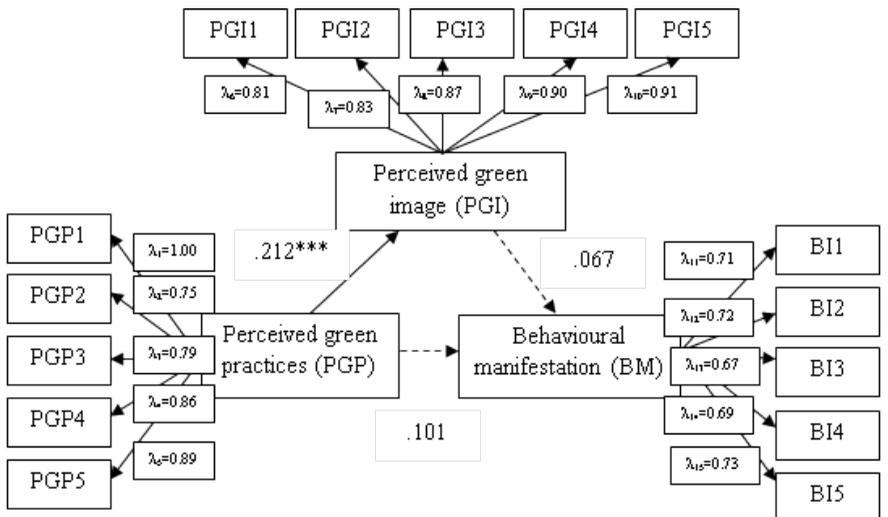
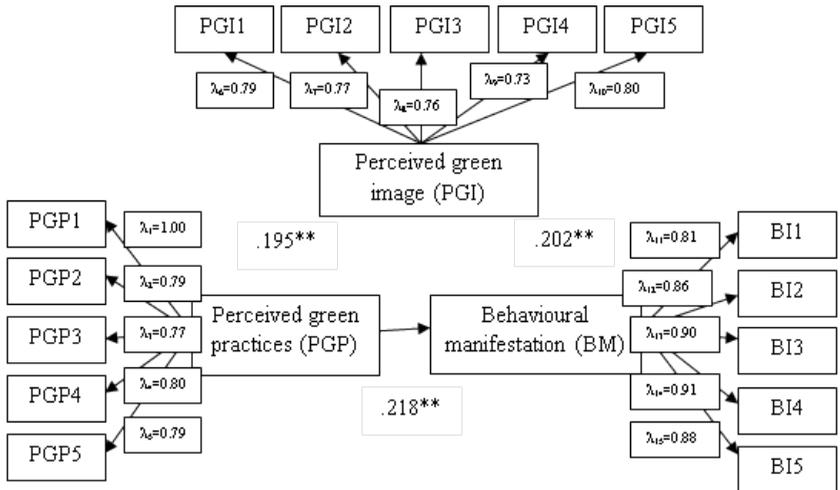


Figure 5 Structural model for neutra-greens with PCE median value =5.08



The total effect of perceived green practices (PGP) on behavioural intention was calculated for all the three segments of customers. The total effect of PGP on BI for the pro-greens were calculated to be 0.698 ($.742 \times .549 + .291$). The total effect of PGP on BI for the anti-greens was same as the relation coefficient between PGP and PGI ($.212^{***}$) as the other two paths namely between PGI and BI and between PGP and BI were found to be insignificant. The total effect of PGP on BI for the neutra-greens were calculated to be 0.257 ($.195 \times .202 + .218$). The comparative study between the three groups indicated that the consumers with high PCE are better correlated with behavioural intention via direct and indirect routes through perceived green practices and perceived green image.

Table 8a Regression coefficients and Collinearity statistics for pro-greens (PCP>.508)

| <i>Independent variable: PGP, dependent variable: PGI</i> | | | | | | | | | | | | | |
|---|-------|-----|------|-----|------|---------------|---------|---------|-----|------|--------------|-----|---|
| Model | ANOVA | | | | | Unstd. Coeff. | | Std. d. | t | Sig. | Collinearity | | |
| | Sum | df | Mean | F | Sig. | B | Std. d. | β | | | Tol | VIF | |
| 1 | Regr | 54. | 6 | 9.0 | 462 | .0 | | | | | | | |
| | Resi | 1.3 | 5 | .00 | | | | | | | | | |
| | Total | 55. | 5 | | | | | | | | | | |
| | (Con | | | | | | .1 | .0 | | 6.3 | .0 | | |
| | PGP1 | | | | | | .2 | .0 | .4 | 58. | .0 | .8 | 1 |
| | PGP2 | | | | | | .0 | 2. | .0 | 12. | .0 | .9 | 1 |
| | PGP3 | | | | | | .1 | .0 | .3 | 26. | .0 | .9 | 1 |
| | PGP4 | | | | | | .1 | .0 | .1 | 14. | .0 | .8 | 1 |
| | PGP5 | | | | | | .0 | 1. | .0 | 5.4 | .1 | .6 | 1 |
| | PGP6 | | | | | | .1 | .0 | .3 | 52. | .0 | .9 | 1 |
| | PGP7 | | | | | | .1 | .0 | .4 | 11. | .0 | .7 | 1 |
| PGP8 | | | | | | .0 | .1 | .0 | 2.0 | .6 | .8 | 1 | |

Multiple regression analysis were conducted to contrast high (pro-greens) with low (anti-greens) consumer group (according to PCE) to understand the probable difference in strength of association between perceived green practices (PGP) (as an independent variable) with perceived green image (PGI) and behavioural intention (BI) (dependent variables) between the same. The results of the multiple regression analysis were displayed in Table-8a & 8b and Table-9. To determine the degree of multi-collinearity, the variance inflation factor (VIF) was computed for each independent variable in regression equation. The results suggested that the ‘Structural Model for Path Analysis’ was worth pursuing as the ‘tolerance’ value is over 0.200 for each of the independent variable suggesting absence of correlation. The VIF values also did not reveal a considerably high value to 1 confirming non-collinearity as VIF values considerably greater than 1 are indicative of multi-collinearity (Netter et al, 1996) and greater than 2.5 are cause of concern (Allison, 1999) (VIF=1/tolerance). The results showed that while the pro-greens perceived image of their restaurant strongly on the basis of green

practices adopted namely usage of recycle bins ($\beta = .414, t=58.488, p<.01$), usage of energy-efficient illumination system ($\beta = .324, t=26.075, p<.01$), maintenance of greenery ($\beta = .319, t=52.477, p<.01$) and moderately on the basis of usage of eco friendly cleaners for furniture and floors ($\beta = .121, t=14.056, p<.05$) and usage of energy-saving cooling and ventilation system ($\beta = .469, t=11.007, p<.05$), while the anti-greens only framed green-image of their restaurant on the basis of usage of recycle bins ($\beta = .565, t=17.839, p<.01$) and maintenance of greenery ($\beta = .619, t=32.651, p<.01$). Probably lack of awareness amongst the anti-greens about the impact level of the measures can be a possible reason for absence of significant association with other green initiatives.

Table 8b Regression coefficients and Collinearity statistics for pro-greens (PCP>.508)

| <i>Independent variable: PGP, dependent variable: BI</i> | | | | | | | | | | | | |
|--|-------|-----|-------|-----|-------|---------------|-------|---------|-----|-------|---------------|------|
| Model | ANOVA | | | | | Unstd. Coeff. | | St d. | t | Si g. | Collin earity | |
| | Su m | df | Me an | F | Si g. | B | St d. | β | | | T ol | V I |
| 1 | Regr | 54. | 6 | 9.0 | 462 | .0 | | | | | | |
| | Resi | 1.3 | 5 | .00 | | | | | | | | |
| | Total | 55. | 5 | | | | | | | | | |
| | (Con | | | | | | .2 | .0 | | 9.3 | .0 | |
| | PGP1 | | | | | | .6 | .0 | .5 | 75. | .0 | .6 1 |
| | PGP2 | | | | | | .0 | .3 | .0 | 17. | .0 | .7 1 |
| | PGP3 | | | | | | .2 | .0 | .3 | 14. | .0 | .9 1 |
| | PGP4 | | | | | | .1 | .0 | .3 | 12. | .0 | .8 1 |
| | PGP5 | | | | | | .0 | .1 | .0 | 5.4 | .1 | .6 1 |
| | PGP6 | | | | | | .2 | .1 | .5 | 48. | .0 | .8 1 |
| PGP7 | | | | | | .0 | .1 | .0 | 4.7 | .5 | .6 1 | |
| PGP8 | | | | | | .0 | .2 | .0 | 3.1 | .3 | .6 1 | |

Table 9 Regression coefficients and Collinearity statistics for anti-greens (PCP<.508)

| <i>Independent variable: PGP, dependent variable: PGI</i> | | | | | | | | | | | | |
|---|-------|-----|------|-----|------|---------------|---------|---------|-----|------|--------------|-----|
| Model | ANOVA | | | | | Unstd. Coeff. | | Std. d. | t | Sig. | Collinearity | |
| | Sum | df | Mean | F | Sig. | B | Std. d. | β | | | Tol | VIF |
| 1 | Regr | 63. | 1 | 63. | 318 | .00 | | | | | | |
| | Resi | 136 | 5 | .20 | | | | | | | | |
| | Total | 200 | 5 | | | | | | | | | |
| | (Con | | | | | | .5 | .2 | | 1.9 | .0 | |
| | PGP1 | | | | | | 1. | .0 | .5 | 17. | .0 | .8 |
| | PGP2 | | | | | | .0 | 3. | .0 | 3.1 | .3 | .6 |
| | PGP3 | | | | | | .0 | 1. | .0 | 5.0 | .2 | .5 |
| | PGP4 | | | | | | .0 | .0 | .0 | 3.0 | .2 | .7 |
| | PGP5 | | | | | | .0 | 1. | .1 | 8.4 | .0 | .6 |
| | PGP6 | | | | | | .2 | .0 | .6 | 32. | .0 | .9 |
| PGP7 | | | | | | .0 | .0 | .0 | 2.0 | .4 | .7 | |
| PGP8 | | | | | | .1 | .1 | .0 | 1.0 | .2 | .5 | |

Table 8b displayed the results between the associationship and dependability of perceived green practices (PGP) and behavioural intention (BI) for the pro-greens. The results revealed that behavioural intention of the consumers with high level of PCE is influenced by the perceived green practices of their restaurants namely usage of recyclable bins ($\beta = .549, t=75.488, p<.01$), usage of energy efficient lighting ($\beta = .367, t=14.005, p<.05$), usage of environment friendly floor and furniture cleaners ($\beta = .321, t=12.056, p<.05$) and maintenance of greenery ($\beta = .542, t=48.477, p<.01$). The results indicated that perceived green practices can be an useful predictor towards formation of image of the restaurants as well as behavioural attitude of the customers. Regression analysis for the low PCE group (anti-greens) was not carried out as the structural model did not indicate a significant path relationship between perceived green practices (PGP) and behavioural intention. The results on structural path analysis and multiple analysis supported H3 and H4.

CONCLUSIONS

The study entered into a relatively unexplored area in the context of India market and tried to empirically investigate the impact green marketing-as a relatively novel business trend on consumer behaviour, specifically, on consumer perception of firm image and subsequent behavioural intention of the consumers. The study was carried out on some selected restaurants in southern part of West Bengal which are projecting themselves to be carrying out eco-friendly operations while running their business and offering products/services to their customers.

The study revealed that consumers availing restaurant services can be categorized into segments on the basis of criteria called perceived consumer effectiveness (PCE) which reflects their attitude and beliefs that might positively influence environmental issues. The study reflected that consumers with high PCE are more enlightened and concerned about environmental hazards and considers pro-environmental practices as an important element to perceive image of firms and their subsequent behavioural intention is also influenced by their firm image perception. It was revealed that consumers with high PCE level and with better green-image perception of their firms tend to be more loyal and displayed lesser propensity to switch and increased positive customer advocacy. The study also brought forward that organic food consumption is still not considered to be an important perceived green practice of restaurants. Probably cost is a potential factor to explain the issue.

The study had major managerial implications. As perception of green practices emerged as a potential factor to perceive green image, employees of firms pursuing eco-friendly marketing should initiate communication with the consumers explaining the green initiatives adopted by them and stating what triggered them to adopt such strategy.

Future expansion of the study can be made by incorporating demographic influence on perceived image and vis-à-vis behavioural intention. In addition, price-sensitivity study may be conducted as a measure towards adoption of green services. A longitudinal study should be done to identify the gradual shift in perception and adoption of pro-environmental consumer behaviour.

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REFEREED ANONYMOUSLY

Arup Kumar Baksi (baksi.arup@gmail.com) is a Assistant Professor at Bengal Institute of Technology and Management, Santiniketan (West Bengal University of Technology), Department of Management Science, BITM Campus, Sriniketan Bypass Road, P.O. _Doranda, Pin Code: 731236, District: Birbhum, State: West Bengal, India.

Bivraj Bhusan Parida (bivraj@gmail.com) is a Professor at The University of Burdwan, Department of Tourism Management, Golapbag, P.O.- Burdwan, Pin Code: 713104, District: Burdwan, State: West Bengal, India.