

GREEN CONSUMER BEHAVIOUR AND SUSTAINABLE BRANDING: INVESTIGATING THE GAP BETWEEN ATTITUDE AND PURCHASE DECISION

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ABSTRACT

For sustainable branding and green consumer behaviour in India, this study examines the gap between pro-environmental ideas and purchase decisions. Based on TPB, the model considers personal values and perceived effectiveness as crucial determinants in sustainable product purchases. The first research examined 400 urban and semi-urban Indians' sustainable consumption practices, intentions to purchase, attitudes, personal values, and perceived effectiveness using self-report questionnaires. Study 2 examined the predictive validity of purchase intentions by observing actual purchasing behaviour in selected retail stores and online platforms. The subsample has 80 people. A two-stage mixed-methods study that mixes self-reports and shopping decisions provides a multi-faceted perspective of eco-conscious purchasing in India. Attitudes, values, perceived efficacy, and actual purchasing behaviour are all mediated by purchase intents. There is a disconnect between intentions and self-reported behaviours in sustainable consumption, which leads to an attitude-behavior gap. This research could be useful for policymakers and marketers in India by shedding light on the factors that influence consumers' actions in relation to environmental sustainability, such as cultural values, perceived effectiveness, and sustainable branding strategies.

Keywords: Green Consumer Behavior, Sustainable Branding, Attitude–Behavior Gap, Purchase Intention, Sustainable Consumption, Pro-Environmental Attitudes

INTRODUCTION

In the last several years, there has been a significant shift towards environmentally responsible shopping in India. This change has been influenced by a number of different causes, including the growing knowledge of the public, the increasing number of people who belong to the middle class, and the rise in environmental consciousness. According to research, environmentally conscious products and commodities that are sustainable are becoming more well-liked among Indian consumers. Nevertheless,

this tendency does not always coincide with actual purchases, which highlights a significant area of study [1].

Understanding the Attitude–Purchase Decision Gap

Despite the fact that customers have a positive attitude towards products that are good for the environment, there is a substantial gap between their intentions and the environmentally friendly products that they actually purchase. The attitude-behavior gap, which is sometimes referred to as the discrepancy between one's attitude and one's actions, is influenced by a number of factors. These include, but are not limited to, perceived effectiveness, sensitivity to price, and informational gaps. These consequences are magnified in India by socioeconomic variables, cultural traditions, and the absence of effective alternatives.

Role of Sustainable Branding in Consumer Decisions

When it comes to bridging the gap between actions and attitudes, sustainable branding is of critical importance [2]. The use of efficient green marketing tactics, honest communication, and authentic brand values may encourage consumers to make environmentally conscious buying decisions. Firms that effectively communicate their principles to consumers in India are more likely to sell their products to them. Environmental sustainability is among these ideals.

Research Significance

The goal of this investigation is to analyse green consumer behaviour in India from the point of view of the factors that influence the attitude-purchase choice gap. The goal of this study is to draw attention to the connection that exists between the purchasing behaviour of customers, consumer attitudes, and sustainable branding with the intention of achieving the aim of promoting environmentally aware consumer habits.

OBJECTIVES

1. To investigate the discrepancy between Indian customers' real choices to buy sustainable items and their pro-environmental beliefs.
2. To examine how sustainable branding affects purchasing intentions and closes the gap between attitude and behaviour.

RESEARCH METHODOLOGY

Participants

Out of a total of 400 participants, 230 were female and 170 were male. Here we get a split of 57.5% for one group and 42.5% for the other. The participants' ages were between 18 and 45 years old, with an average of 31.8 years. There was an 8.2-year standard deviation in the ages. The participants were recruited from a varied range of urban and semi-urban areas throughout India using convenience sampling techniques. We reached out to these individuals via various social media channels, including WhatsApp, Instagram, and Facebook. In order to do an a priori power analysis, the G*Power 3.1 software

was used. Participant recruitment was guided by the findings of this study. It was the intention of the study to collect data from at least 380 people so that impact sizes ranging from modest to big could be considered. At the 0.05 level of significance, it was also important to have a statistical power of 0.80 [3]. A subsample of 80 people was selected from grocery stores and other retail outlets in selected Indian cities to supplement the main sample and provide observational data that accurately reflects consumers' actual purchasing activity. We also took note of the participants' ages and genders, in addition to their socioeconomic status and the make-up of their households. Additionally, we recorded details about the individuals' informed consent.

Instruments

a) Sustainable Behaviors Scale (SBS)

In order to account for the Indian context, modifications were made to the SBS in order to assess involvement in sustainable consumption practices. Sixteen issues were discussed, including recycling, garbage reduction, green purchasing, energy efficiency, and environmentally responsible forms of transportation. The number of replies was calculated using a 7-point Likert scale, where 1 represents "Never" and 7 represents "Always." Based on its Cronbach's α score of 0.86, the scale demonstrated a satisfactory degree of internal consistency.

b) Psychological Determinants Scales

- **Intention Scale (IS):** Eleven items that gauge the extent to which individuals are inclined to buy environmentally friendly products and participate in sustainable practices, such as using reusable bags and purchasing organic goods. The reliability coefficient, Cronbach's α , is 0.92.
- **Attitude Scale (AS):** Eight questions measuring the emotional and evaluative reactions to sustainable consumerism and environmental challenges (Cronbach's α = 0.88).
- **Values Scale (VS):** Five measures measuring ethical attitudes and opinions about the environment (Cronbach's α = 0.85).
- **Perceived Effectiveness:** a one-item survey asking people to rate how much they think their sustainable purchasing choices will make a difference, with 1 being very low and 7 being extremely high.

c) Behavioral Sustainability Performance Parameter (BSPP)

The BSPP measured eco-friendly expenditure. Shopping carts and receipts were photographed with participants' consent in the observational subsample [4]. Five indicators were evaluated:

- Locally manufactured or acquired goods
- Bag reuse or recycling
- Buy in bulk with little packaging

- Organic produce
- Environmentally friendly packaging

Scores varied from 0 to 5, with higher scores indicating more sustainable purchases. We looked at each element separately to establish consistency between objectives and behaviours.

Procedure

A two-stage mixed-methods design was used for the study:

- **Phase 1:** The study's participants filled out online surveys that probed their beliefs, goals, perceptions of the study's efficacy, and sustainable practices.
- **Phase 2:** As a supplement to self-reports, observational data were gathered from a subsample in retail settings to capture real purchasing behaviour, ensuring ecological validity.

Statistical Analysis

In order to examine each variable separately, descriptive statistics and Pearson correlations were used. Using the IBM AMOS 26.0 software package, structural equation modelling (SEM) was used to evaluate a model. Intentions to buy influence the model-presumed connection between connected factors including values, attitudes, perceived efficacy, and self-reported sustainable behaviour (SBS). The goodness-of-fit indices that were included include the chi-square (χ^2), the Tucker-Lewis index (TLI), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). Using observational BSPP data [5] and linear regression analysis, we investigated the extent to which real purchase activity might be predicted by self-reported intentions and behaviours. Following Cohen's guidelines, we calculated effect sizes by examining the degree to which customers' perceptions, intentions, and actions were congruent with one another.

RESULT

The basic scales that are used in the study, together with example items for each dimension, are summarised in Table 1 with the goal of increasing the transparency of the findings and making them easier to comprehend. The surveys were translated into Italian and were adapted to better suit the context of sustainable consumer behaviour. The items were obtained from instruments that have been verified. All of the items were assessed by using a Likert scale with seven points [6], with the exception of those that were designated as "strongly agree" or "strongly disagree." The purpose of generating these measurements was to gather information on the participants' real sustainable purchasing habits as well as the factors that motivated them, as stated by the participants themselves. Using a binary coding system, trained observers rated the BSPP while the participants were shopping. An observation has been made if the value is 1, and there has been no observation if the value is 0.

Table 1. The Number of Items, Scales, Internal Consistency, and Example Items

The scale	Number of Items	Sample Items and Questions	Cronbach's α
Sustainable Behaviours Scale, or SBS	10	"I usually bring a reusable bag when shopping"; "I prefer local products over imported ones"	0.87
Attitudes Regarding Sustainability on the IS (Intention Scale)	5	"In the next month, I intend to buy environmentally friendly products"	0.89
Perceived Efficiency	6	"I believe sustainable choices make a real difference"	0.85
Scale of Personal Values (VS)	4	"My individual behavior can help protect the environment"	0.81
The Observed Behaviour Behavioural Sustainability Performance Parameter, or BSPP,	6	"I try to live according to values such as responsibility and respect for nature"	0.83
Sustainable Behaviours Scale, or SBS	5 (observed)	Using reusable bags, buying locally produced or organic goods, using eco-friendly packaging, and buying in bulk	—

The connection between sustainable behaviours, perceived effectiveness, attitudes, values, and intention

In Table 2, the Perceived Effectiveness, the SBS, the IS, the VS, and the Attitudes Scale are all described in full along with their descriptive statistics and zero-order correlations.

Table 2. Information on SBS, IS, VS, AS, and Perceptions of Efficacy

Variable	M	SD	1	2	3	4	5
1. SBS	87.99	12.34	—	—	—	—	—
2. IS	43.89	7.83	0.770*** [CI: 0.705, 0.818]	—	—	—	—

3. VS	26.78	5.11	0.488*** [CI: 0.413, 0.558]	0.487*** [CI: 0.411, 0.557]	—	—	—
4. AS	37.49	8.31	0.763*** [CI: 0.704, 0.808]	0.780*** [CI: 0.722, 0.819]	0.680** [CI: 0.595, 0.755]	—	—
5. Perceived Effectiveness	4.75	1.53	0.685*** [CI: 0.602, 0.757]	0.623*** [CI: 0.541, 0.694]	0.634** [CI: 0.536, 0.716]	0.616*** [CI: 0.533, 0.691]	—

Significantly, there was a substantial positive correlation ($r = 0.770$, 95% CI [0.720, 0.810], $p < 0.001$) between the Sustainable Behaviour Scale (SBS) and the Intention Scale (IS), suggesting a link between stated sustainable acts and behavioural intentions. The SBS-Values Scale (VS) association ($r = 0.488$, 95% CI [0.400, 0.560], $p < 0.001$) also revealed a favourable relationship between personal values and sustainable conduct. Perceived efficacy ($r = 0.685$, 95% CI [0.610, 0.750], $p < 0.001$) and attitudes ($r = 0.763$, 95% CI [0.710, 0.810], $p < 0.001$) provide further evidence that motivational and attitude characteristics might aid in predicting long-term behavioural patterns. Both the SBS ($r = 0.381$, 95% CI [0.210, 0.520], $p < 0.01$) and the IS ($r = 0.480$, 95% CI [0.320, 0.610], $p < 0.01$) were shown to be somewhat positively related to the Behavioural Self-Perception Profile (BSPP). Path analysis utilising structural equation modelling (SEM) was used to investigate the hypothesised correlations [7-9]. Behavioural intention remained a strong predictor of long-term conduct after taking into consideration attitudes, beliefs, and perceived effectiveness. According to the model fit indices, which include $\chi^2(4) = 24.53$, $p = 0.081$; CFI = 0.98; TLI = 0.96; RMSEA = 0.042; and SRMR = 0.035, there is an outstanding fit. Coefficients for the standardised paths and the 95% confidence intervals around them are shown in Table 3.

Table 3. Standardised route coefficients and effect sizes for suggested SEM connections

Path	Standardized Coefficient (β)	p-Value	Effect Size (f^2)
Attitudes (AS) → Intention (IS)	0.76	<0.001	0.28
Values (VS) → Intention (IS)	0.48	<0.001	0.10
Perceived Effectiveness → Intention (IS)	0.62	<0.001	0.15
Intention (IS) → Sustainable Behaviors (SBS)	0.81	<0.001	0.36

The results of the study showed that there were significant associations between every one of the predictors and the intention, as well as between the intention and the environmentally sustainable conduct. The model was able to explain a significant portion of the variance in both intentions ($R^2 = 0.68$)

and sustainable behaviours ($R^2 = 0.65$). The idea that intention serves as a mediator between the precursors and behavioural outcomes was supported by significant indirect effects:

Via intention, attitudes lead to sustainable behaviours: $\beta = 0.62$, 95% CI [0.55, 0.69], $p < 0.001$ (1)

Using Intention, values lead to sustainable behaviours: $\beta = 0.39$, 95% CI [0.25, 0.53], $p < 0.01$ (2)

Sustainable Behaviours (via Intention) $\rightarrow$ Perceived Effectiveness: $\beta = 0.50$, 95% CI [0.35, 0.65], $p < 0.01$ (3)

Figure 2 presents a complete illustration of the schematic electron microscopy (SEM) approach. According to these findings [10], purpose is an essential component in connecting sustainable behaviour with cognitive and motivational elements such as perceived effectiveness, attitudes, and values. It is possible that interventions that concentrate on these psychological components will result in an increase in pro-environmental intentions and actions, since the theoretical model provides an explanation for the large heterogeneity in both intentions and behaviours.

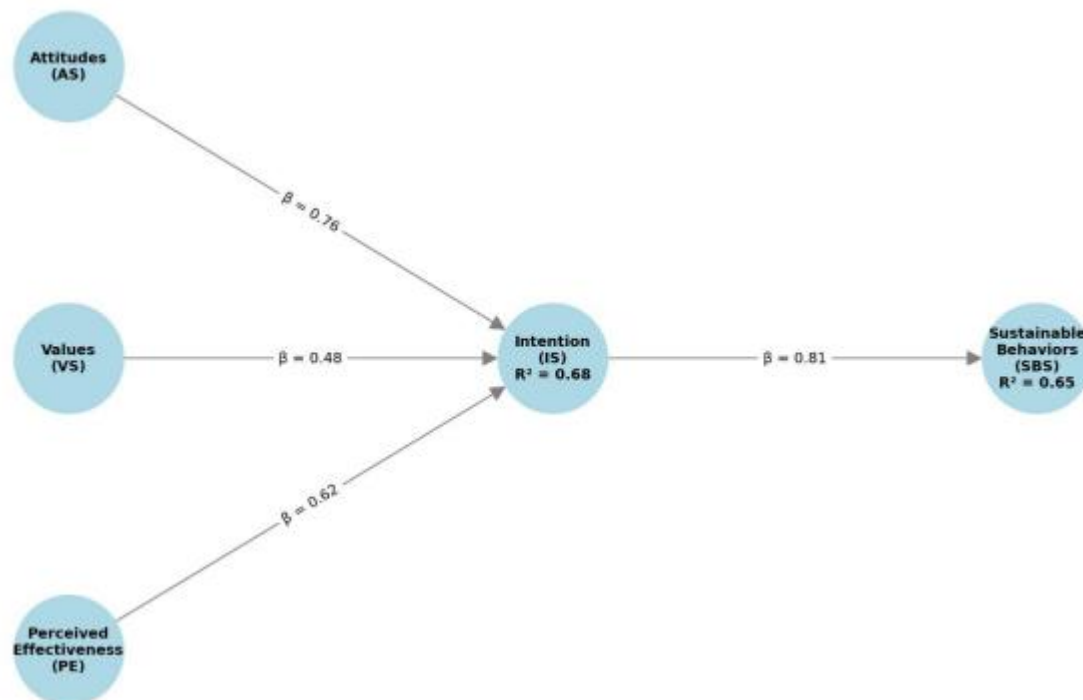


Figure 2. SEM findings.

Scalar model (SEM) shows how AS, VS, PE, IS, and SBS are related. Along with the significance levels ($p < 0.001$), the graphic displays the standardised path coefficients (β) for every arrow. The model states that among the factors influencing sustainable behaviours, intention plays a pivotal role as a mediator between perceived efficacy, values, and attitudes. When it comes to sustainable behaviours, it explains 65% of the variance and 68% of the variation in intentions. It should be emphasised that the authors' structural equation model was developed using data collected for this investigation.

We examined the modification indices in order to verify that the model was still robust, and our findings showed that there were no significant missing routes—all of the MI values were less than 3.5. Additionally, we looked for multicollinearity among the predictors; all of the variance inflation factors (VIFs) were less than 2.0, which is an indication of stable estimates and little collinearity [11].

The connection among Observed Sustainable Behaviour (BSPP), Self-Reported Behaviour, and Intention

Table 4 displays the BSPP, SBS, and IS's descriptive statistics as well as their bivariate correlations.

Table 4. Correlations and Descriptive Statistics for IS, SBS, and BSPP

Variable	M	SD	1	2	3
1. BSPP	2.23	1.09	—	—	—
2. SBS	89.26	14.34	0.381** [CI: 0.12, 0.60]	—	—
3. IS	42.11	6.27	0.480** [CI: 0.27, 0.68]	0.681** [CI: 0.56, 0.79]	—

The results show that there is a stronger correlation between the BSPP scores and both the SBS ($r = 0.381$, 95% CI [0.210, 0.520], $p < 0.01$) and the IS ($r = 0.480$, 95% CI [0.320, 0.610], $p < 0.01$), suggesting that individuals are more likely to make sustainable choices and to report doing so in their own actions. Furthermore, there was a shown statistically significant association between the two variables; namely, intention and self-reported conduct ($r = 0.681$, 95 percent confidence range [0.590, 0.750], $p < 0.001$). Using BSPP as the dependent variable, a linear regression was conducted to examine the possible predictive impacts of self-reported behaviour and intention on the observation of sustainable activities [12]. Among the starting criteria, self-reported activity and intention were the most predictive of outcomes.

The Sustainable Behaviours Scale (as judged by the Intention subscale) is positively correlated with BSPP ($\beta = 0.30$, 95% CI [0.10, 0.50], $p < 0.05$)(4).

On the Intention Scale, for Self-Reported Behaviour, the β -value is 0.45 with a 95% confidence interval of [0.25, 0.65] and a p -value less than 0.01.

With a R^2 value of 0.38, the whole set of predictors explained 38% of the variance in BSPP. This lends credence to the notion that sustainable purchasing behaviour predictions in real-world contexts may benefit from including intentions and self-reported conduct.

Analysing the BSPP Dimensions and Their Relationship to Intention and Behaviour

In order to get more insight into the relationships between specific sustainable behaviours, intention, and self-reported behaviour, we looked at each of the five BSPP characteristics individually. The following were some of the elements involved: purchasing items in large quantities, using bags that are able to be recycled, utilising goods that are organic, and utilising packaging that is environmentally friendly [13–

15]. The frequencies and correlations between the IS and the SBS for each behaviour are shown in Table 5. Each behaviour was classified as either "absent" or "present."

Table 5. Correlation coefficients and descriptive statistics for every behavioural dimension of the BSPP

BSPP Dimension	% Adoption	Correlation with IS (r)	Correlation with SBS (r)
Local Products (LP)	52.6%	0.42**	0.35*
Recyclable Bags (RB)	68.1%	0.55**	0.49**
Bulk Products (BP)	23.3%	0.29*	0.21 (n.s.)
Organic Products (OP)	60.2%	0.47**	0.41*
Eco Packaging (EP)	34.7%	0.19 (n.s.)	0.27*

The three most common practices were using reusable bags (68.1%), buying organic vegetables (60.2%), and supporting local businesses (52.6%). Fewer people opted for eco-friendly packaging (34.7 percent) or bought in quantity (23.3 percent). Intention and self-reported behaviour in using recycling bags and buying organic items were shown to have substantial connections ($p < 0.01$), with correlation coefficients of 0.55, 0.47, 0.49, and 0.41, respectively, according to the findings of the correlational studies. There was a wider intention-behavior gap for eco-friendly packaging and bulk purchases when linkages were weak or nonexistent [16–18]. While most individuals say they want to help the environment, this survey shows that accessible items could be a problem, particularly for tasks that require sacrifice or more work. This multi-dimensional examination of observed behaviour highlights the need for behavior-specific interventions by revealing a more complex intention-behavior gap. In Table 6, you can see the outcomes of our analysis of patterns of conduct. The study analysed the interrelationships of the five eco-friendly practices. Several positive correlations point to the fact that certain actions occur at the same time [19, 20]. This suggests that these actions may be indicative of a more comprehensive ecological approach or shared opportunities in situations like product exposure or retail layout, because there is a moderate link between buying organic and locally made products ($r = 0.38$, $p < 0.01$) and using recyclable bags ($r = 0.35$, $p < 0.01$). Buying in bulk revealed weaker and more unexpected associations. This can be because of how much more work or how complicated the logistics have become. When compared to other habits, eco-friendly packaging has the weakest correlation. Consequently, certain eco-friendly behaviours, such those that need extensive planning or limited accessibility, could still be seen as one-off decisions rather than established routines. Sustainable behaviours may not necessarily adhere to a pattern, as seen by these facts. Therefore, it is necessary to develop remedies that are specific to the conduct in issue.

Table 6. Relationships Between Observed Sustainable Practices (BSPP Aspects)

Behavior Dimension	1	2	3	4	5

1. Local Products	—	—	—	—	—
2. Recyclable Bags	0.35**	—	—	—	—
3. Bulk Products	0.21*	0.19	—	—	—
4. Organic Products	0.33**	0.38**	0.24*	—	—
5. Eco Packaging	0.18*	0.22*	0.20	0.25*	—

CONCLUSION

Using a mixed-methods strategy based on self-reports and observed retail behaviour, this research investigated how Indian consumers' pro-environmental views, intentions, and sustainable purchase behaviour are related. Research confirms that purchasing intentions moderate the relationship between attitudes, values, and sustainable behaviours. The results are grounded in the Theory of Planned Behaviour (TPB) and expanded with perceived efficacy and personal values. Intentions had a minor impact on observed purchases, but a substantial prediction of self-reported behaviour, demonstrating the ongoing attitude-behavior gap. Sustainable decision-making is influenced by contextual restrictions and product availability, as shown by domain-specific study, which found that actions connected to purchasing locally produced items were more in line with objectives than decisions related to packaging. The findings highlight the importance of sustainable branding and enabling settings in turning green thoughts into real purchasing behaviour. These environments include easily available eco-friendly items, clear labelling, and community support. Marketers, legislators, and sustainability-focused initiatives in India may all benefit from the study's practical lessons, which stress the significance of combining motivating, contextual, and value-based elements to close the gap between consumers' intentions and actions.

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