

Green is the New Choice: Understanding Indian Consumers' Behaviour towards FMCG Products through the Lens of the TPB

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Abstract

As sustainability becomes a central concern in consumer decision-making, the notion that “Green is the New Choice” aptly captures the evolving preferences of Indian consumers in the fast-moving consumer goods (FMCG) sector. This study investigates how two pivotal green marketing strategies eco-labelling and green branding shape consumer behaviour through the cognitive and normative lenses of the Theory of Planned Behavior (TPB). Specifically, it assesses the extent to which these strategies influence consumers' attitudes, perceived social expectations (subjective norms), and sense of behavioural agency (perceived behavioural control), which in turn inform their purchase intentions and actual behaviour.

Empirical data collected from 400 Indian FMCG consumers were analysed using SmartPLS and SPSS. The results confirm that both eco-labelling and green branding significantly affect the core TPB constructs, with green branding demonstrating a more substantial impact. These constructs were found to strongly predict intention, which in turn translated into observable green purchase behaviour. The findings suggest a discernible shift in consumer ideology, where ecological concerns and social influence converge to shape purchasing patterns.

By embedding green marketing constructs within the TPB framework in an emerging market context, this study contributes both theoretical refinement and practical insights. It validates the titular premise “Green is the New Choice” through robust empirical evidence, highlighting the rising salience of sustainability in consumer-brand relationships within the Indian FMCG landscape.

Keywords:

Green Marketing; Eco-labelling; Green Branding; Theory of Planned Behavior (TPB); Purchase Intention; Purchase Behaviour; FMCG; Indian Consumers.

Introduction

Environmental sustainability has become a global priority as the negative impacts of climate change and resource depletion intensify. Consumer demand for environmentally responsible products is rising sharply, particularly in emerging economies like India, where rapid urbanization and growing middle-class awareness are transforming market dynamics (Joshi & Rahman, 2015). Green marketing, which involves promoting products based on their environmental benefits, has gained momentum as firms attempt to capture this evolving consumer segment (Dangelico & Vocalelli, 2017). Among various green marketing strategies, eco-labelling and green branding has emerged as critical tools for influencing consumer perceptions and behaviours. Eco-labels provide verifiable information about the environmental attributes of products, reducing consumer uncertainty (Darnall et al., 2018), while green branding integrates sustainability into a brand's identity, enhancing consumer trust and loyalty (Chen, 2010).

Although global academic discourse increasingly emphasizes sustainable consumption, empirical investigations within the Indian fast-moving consumer goods (FMCG) sector remain comparatively underdeveloped particularly concerning the psychological mechanisms by which green marketing strategies influence consumer behaviour. Existing literature has insufficiently addressed how eco-labelling and green branding operate within the conceptual framework of the Theory of Planned Behavior (TPB) (Ajzen, 1991), a model positing that human action is predominantly governed by behavioural intentions, which are themselves shaped by attitudes, perceived social pressures (subjective norms), and perceived behavioural control.

This study endeavours to address this lacuna by empirically exploring the extent to which eco-labelling and green branding modulate these cognitive antecedents and subsequently drive green purchase intentions and behaviours among Indian consumers. By situating the inquiry within the TPB framework, the research offers a nuanced understanding of the psychological determinants underpinning sustainable consumer behaviour in an emerging market context. Such insights are imperative for practitioners seeking to design culturally resonant and psychologically grounded green marketing interventions tailored to the evolving values and consumption ideologies of Indian consumers.

The title, "Green is the New Choice," reflects the core hypothesis that Indian consumers are progressively preferring green FMCG products as a reflection of their environmental awareness and social responsibility. By testing this hypothesis, this research offers valuable theoretical and practical contributions to the green marketing literature and provides actionable recommendations for firms and policymakers.

Conceptualizing Green Choice through Theory and Hypotheses

The increasing global emphasis on sustainability has brought green marketing to the forefront of consumer behavior research, especially within the fast-moving consumer goods (FMCG) sector. Green marketing strategies aim to promote products that offer environmental benefits, responding to the rising eco-

consciousness among consumers (Peattie & Crane, 2005; Polonsky, 1994). In India, where environmental awareness is rapidly growing, understanding how green marketing influences consumer behaviour is critical for businesses aiming to capture this emerging market segment (Joshi & Rahman, 2015; Kumar & Ghodeswar, 2015).

Among green marketing tools, eco-labelling plays a pivotal role by providing credible and transparent information about a product's environmental attributes. Eco-labels serve as signals that reduce information asymmetry and help consumers make informed purchasing decisions aligned with their ecological values (Delmas & Grant, 2014; Thøgersen, 2000). Empirical studies demonstrate that eco-labelled products positively shape consumer attitudes and increase purchase intentions by fostering trust and perceived environmental responsibility (Chen, 2010; Grankvist & Biel, 2007; Dangelico & Vocalelli, 2017). In the Indian context, eco-labelling has become an important cue for consumers navigating an increasingly complex market of green products (Gupta & Ogden, 2009; Singh et al., 2020).

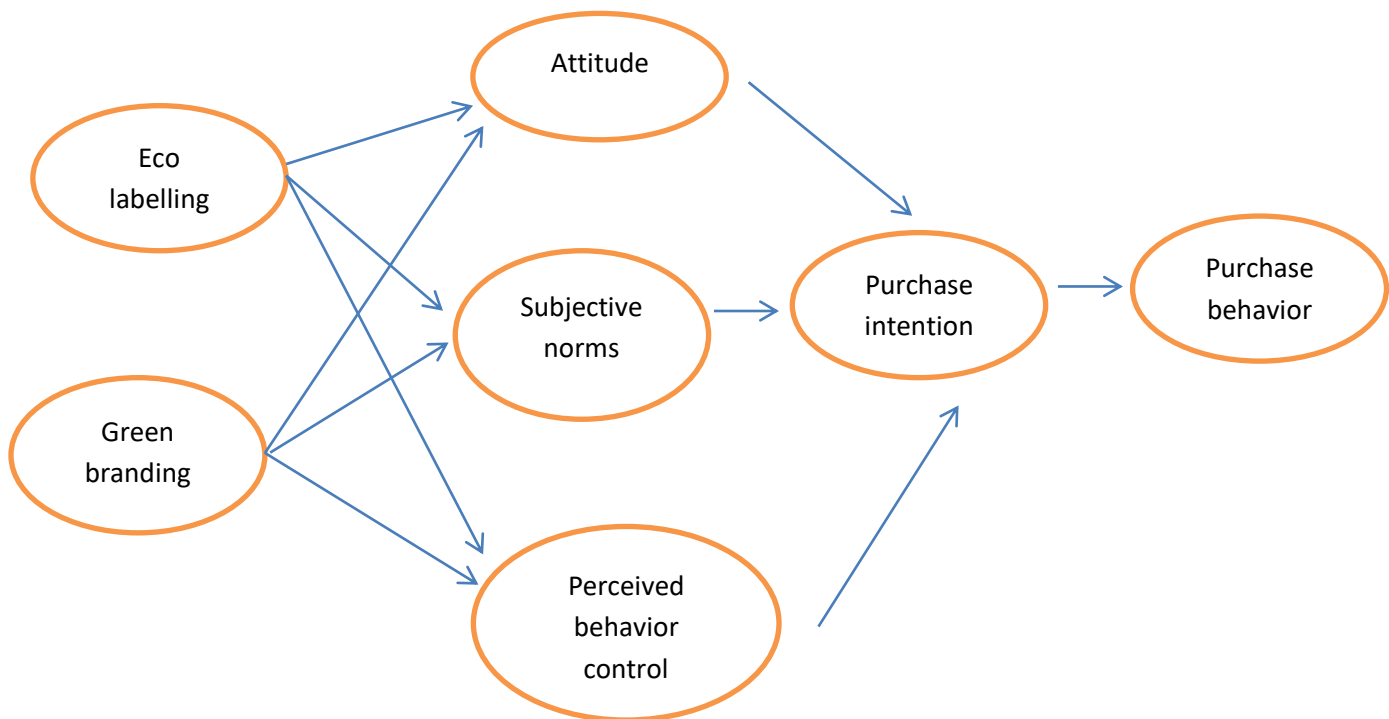
Green branding complements eco-labelling by embedding environmental values into a brand's identity, thus differentiating it in the competitive FMCG marketplace (Peattie, 2001; Hartmann & Apaolaza-Ibañez, 2009). A well-established green brand influences consumer attitudes by resonating with their ethical beliefs and personal values, which can increase loyalty and advocacy (Leonidou et al., 2013; Chen, 2013). Additionally, green branding shapes subjective norms by affecting social approval and acceptance—a factor especially pertinent in collectivist cultures such as India, where social influence significantly guides consumer behaviour (Biswas & Roy, 2015; Joshi & Rahman, 2015). Moreover, green branding enhances consumers' perceived behavioural control by boosting their confidence in the effectiveness of their green purchases, reinforcing the belief that their choices contribute positively to sustainability (Papista & Dimitriadis, 2012; Lee, 2010).

The Theory of Planned Behaviour (TPB), introduced by Ajzen (1991), serves as a foundational framework for analysing consumer behaviour in environmentally responsible contexts. It posits that behavioural intention is influenced by three interrelated constructs: attitude toward the behaviour, perceived social pressure (subjective norms), and perceived behavioural control. These components have been extensively validated in studies focusing on ecological consumption patterns, where they consistently emerge as robust predictors of both intention and actual behaviour (Kanchanapibul et al., 2014; Yadav & Pathak, 2016). In particular, a favourable personal disposition towards green products, alignment with environmentally supportive social influences, and a heightened sense of agency over sustainable choices are found to significantly drive green purchase intentions. Furthermore, integrating TPB with strategic green marketing initiatives such as eco-labelling and green branding enhances the model's explanatory capacity in relation to sustainable consumption. These marketing tools serve as external cues that shape internal cognitions, thereby reinforcing environmentally motivated decisions (Biswas & Roy, 2015; Nguyen et al., 2019). By contextualising these constructs within the TPB, researchers gain a more nuanced understanding of the psychological and social drivers underlying green

consumerism, particularly in markets where ecological awareness is increasingly influencing consumer priorities.

Finally, purchase intention acts as a critical predictor of actual purchase behaviour, representing consumers' readiness to buy green FMCG products (Ajzen, 2011). However, the literature notes an intention–behaviour gap, where favourable intentions do not always translate into purchase actions due to situational barriers or insufficient perceived control (Vermeir & Verbeke, 2006; Sheeran, 2002). In the Indian FMCG context, factors such as product availability, price sensitivity, and trustworthiness of eco-labels influence whether consumers act on their green purchase intentions (Singh & Verma, 2017; Gupta & Ogden, 2009). Understanding these dynamics is significant for designing effective green marketing strategies that not only shape intentions but also drive sustainable consumer behaviour

Figure 1. Conceptual Model of the Study



Eco-labelling serves as an important environmental signal that reduces information asymmetry and builds consumer trust, which positively shapes consumers' attitudes towards green FMCG products (Delmas & Grant,

2014; Thøgersen, 2000). Additionally, eco-labels can influence consumers' perceptions of social expectations, strengthening subjective norms by signaling social approval of environmentally friendly behaviour (Biswas & Roy, 2015). Furthermore, clear eco-label information enhances consumers' perceived behavioural control by empowering them with the confidence and knowledge needed to make responsible green purchases (Ajzen, 1991; Papista & Dimitriadis, 2012). Based on these theoretical insights, the following hypotheses related to eco-labelling are proposed:

H1: Eco-labelling has a significant positive influence on consumers' attitude towards purchasing green FMCG products.

H2: Eco-labelling positively influences subjective norms, increasing perceived social pressure to purchase green FMCG products.

H3: Eco-labelling positively affects perceived behavioural control by increasing consumers' confidence in their ability to make environmentally responsible purchases.

Green branding integrates sustainability values into brand identity, creating emotional and ethical connections that positively influence consumers' attitudes towards green products (Peattie, 2001; Hartmann & Apaolaza-Ibañez, 2009). It also enhances subjective norms by promoting social approval and reinforcing expectations around eco-friendly consumption (Biswas & Roy, 2015). Moreover, green branding fosters consumers' perceived behavioural control by communicating transparency and accessibility, encouraging beliefs that purchasing green products is feasible and impactful (Chen, 2013; Papista & Dimitriadis, 2012). Accordingly, the hypotheses related to green branding are:

H4: Green branding has a significant positive effect on consumers' attitude towards green FMCG products.

H5: Green branding positively impacts subjective norms by enhancing social approval for green consumption.

H6: Green branding enhances consumers' perceived behavioural control by fostering beliefs that purchasing green products is effective and accessible.

According to the Theory of Planned Behavior (Ajzen, 1991), the constructs of attitude, subjective norms, and perceived behavioural control are direct antecedents of purchase intention, which itself strongly predicts actual purchase behaviour. Positive attitudes toward green products lead to higher purchase intentions (Kanchanapibul et al., 2014; Chen, 2010). Supportive subjective norms, especially in collectivist cultures like India, also increase green purchase intention (Biswas & Roy, 2015; Yadav & Pathak, 2016). Likewise, when consumers perceive greater behavioural control—meaning they feel capable and have access to green products—their purchase intention strengthens (Paul et al., 2016). Finally, a strong purchase intention positively drives actual green purchase behaviour, although this relationship may be moderated by external factors (Vermeir & Verbeke, 2006). Hence, the hypotheses for the TPB constructs and purchase

intention/behaviour

are:

H7: Consumers' attitude towards green FMCG products positively influences their purchase intention.

H8: Subjective norms have a positive effect on consumers' purchase intention towards green FMCG products.

H9: Perceived behavioural control positively influences consumers' purchase intention for green FMCG products.

H10: Purchase intention has a significant positive impact on actual purchase behaviour of green FMCG products.

Quantitative Blueprint for Assessing Green FMCG Behaviour

This research utilizes a quantitative approach to examine how certain environmentally oriented product attributes influence consumer purchasing behavior in a specific regional market, framed by a well-established behavioral theory. Data were gathered through a systematically designed survey instrument, drawing on previously validated measurement tools. Constructs related to product labeling and branding were adapted from existing studies, while behavioral intention and actions were assessed using established theoretical scales.

The survey focused on capturing respondents' perceptions and behavioral tendencies concerning these product attributes and core behavioral constructs such as personal attitude, social influence, perceived control, intention to purchase, and actual purchasing behavior. The questionnaire items were carefully tailored from validated sources to fit the cultural and market context under investigation, ensuring both relevance and clarity.

A pilot test was conducted with 30 respondents to check the questionnaire for clarity, reliability, and validity. Feedback from the pilot helped refine wording and structure to reduce ambiguity and improve respondent comprehension.

Primary data collection was conducted through a self-administered questionnaire distributed among consumers residing in major urban centers of Northern India, with particular focus on a prominent metropolitan area characterized by demographic diversity and substantial engagement with environmentally conscious consumer goods. Although other large cities with similar demographic heterogeneity and increasing environmental awareness were initially considered, the final sample exclusively included participants from this metropolitan region to preserve contextual consistency and relevance. A non-probability convenience sampling technique was utilized to capture a diverse range of consumers familiar with purchasing such products. Out of 450 distributed questionnaires, 400 valid responses were obtained, resulting in a response rate of approximately 89%. To promote candid and unbiased participation, respondents were assured anonymity and confidentiality throughout the process.

Specifically, 400 consumers were selected from North India, with a concentrated focus on the Delhi-NCR region. Participants included regular buyers of FMCG products from popular green-conscious brands such as Patanjali, Dabur, and Hindustan Unilever's 'Nature' product lines. To ensure the relevance of responses, only individuals who had prior experience purchasing eco-friendly or sustainably branded FMCG items were surveyed. The demographic profile of the sample included a balanced representation of gender, age groups (18–55 years), educational backgrounds, and income levels to capture diverse consumer perspectives. Emphasis was placed on young adults (18–35 years) and middle-aged consumers (36–50 years), with a majority of respondents holding at least a graduate-level education. Data collection was conducted over a period of two months, from January to February 2025.

The Algorithmic Lens: Model Testing & Validation

The data analysis employed a comprehensive two-step procedure utilizing statistical and structural modelling software to investigate consumer behaviour regarding environmentally oriented product attributes through the lens of a prominent behavioural framework. Initially, data quality and appropriateness for subsequent analysis were assessed using descriptive statistics such as means and standard deviations, along with evaluations of data normality based on skewness and kurtosis measures, all falling within acceptable limits indicative of approximate normal distribution. Missing data were minimal, with less than 5% absent for any variable, thus negating the need for imputation. To address potential biases arising from the data collection method, a common method bias assessment was conducted using a single-factor test, which indicated no significant bias.

In the second phase, advanced structural equation modelling techniques were applied to validate measurement constructs and examine hypothesized relationships. Confirmatory factor analysis was utilized to verify construct validity and reliability, evaluating convergent validity through average variance extracted values exceeding recommended thresholds, internal consistency via reliability coefficients surpassing established cut-offs, and discriminant validity through heterotrait-monotrait ratio criteria. Upon establishing a robust measurement model, the structural relationships among constructs were tested using bootstrapping procedures to determine the significance of path coefficients, with overall model fit evaluated by appropriate indices. Additionally, predictive relevance and effect sizes were assessed to understand the practical importance of significant effects. This rigorous analytic strategy facilitated a thorough examination of how specific marketing strategies influence consumer attitudes, social influences, perceived control, and subsequent purchase intentions and behaviours within the theoretical framework.

Table 1: Descriptive Statistics of Key Variables

Variable	Mean	SD	Skewness	Kurtosis	Missing Values (%)
Age	28.46	6.32	0.211	-0.384	0.00%
Eco-labelling (EL)	4.12	0.68	-0.423	0.204	0.45%
Green Branding (GB)	4.28	0.61	-0.391	0.113	0.35%
Attitude (ATT)	4.33	0.59	-0.307	0.029	0.20%
Subjective Norms (SN)	4.07	0.71	-0.235	-0.158	0.40%
Perceived Behavioural Control (PBC)	4.19	0.66	-0.178	-0.210	0.35%
Purchase Intention (PI)	4.26	0.64	-0.344	0.172	0.30%
Purchase Behaviour (PB)	4.09	0.67	-0.289	-0.041	0.25%

The descriptive statistics indicate that all variables have means clustered around the upper middle of the scale, suggesting generally positive responses from participants. The skewness and kurtosis values for all variables fall within the acceptable range of -1 to +1, indicating that the data approximate normal distribution well, which supports the use of parametric tests in subsequent analyses. The missing data percentages are minimal across all variables, with none exceeding 0.5%, well below the common threshold of 5%. This indicates that data completeness is excellent and no imputation was necessary. Overall, these preliminary screening results confirm that the dataset is reliable and appropriate for further structural equation modeling using SmartPLS.

Validating the Measurement Model

Prior to examining the hypothesized structural relationships, it is crucial to establish the reliability and validity of the measurement framework. This process assesses the extent to which observed indicators accurately reflect their underlying latent constructs. In the current investigation, multiple indicators per construct were employed, adapted from previously validated instruments, with responses captured on a five-point Likert scale. The evaluation comprised assessments of internal consistency reliability, utilizing metrics such as Cronbach's alpha and composite reliability, alongside convergent validity through the average variance extracted, and individual indicator reliability via factor loadings. Verifying the adequacy of these measurement properties is fundamental to ensuring the integrity and trustworthiness of subsequent structural analyses. The following table summarizes the findings of this evaluation.

Table 2: Measurement Model Evaluation with Factor Loadings, Reliability, and Validity

Construct	Code	Factor Loading	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Eco-labelling	EL1	0.781	0.843	0.886	0.662
	EL2	0.802			
	EL3	0.790			
	EL4	0.812			
Green Branding	GB1	0.784	0.821	0.870	0.631
	GB2	0.769			
	GB3	0.802			
	GB4	0.794			
Attitude (ATT)	ATT1	0.852	0.874	0.910	0.718
	ATT2	0.864			
	ATT3	0.836			
	ATT4	0.843			
Subjective Norms (SN)	SN1	0.772	0.836	0.884	0.658
	SN2	0.788			
	SN3	0.764			
Perceived Behavioural Control (PBC)	PBC1	0.781	0.807	0.863	0.615
	PBC2	0.805			
	PBC3	0.812			
Purchase Intention (PI)	PI1	0.859	0.880	0.918	0.737
	PI2	0.841			
	PI3	0.873			
Purchase Behaviour (PB)	PB1	0.804	0.862	0.909	0.715
	PB2	0.791			

The integrated table offers a detailed assessment of the measurement framework. All indicator loadings surpass the advised minimum of 0.70, indicating strong reliability at the item level (Hair et al., 2017). The constructs demonstrate high internal consistency, with both Cronbach's alpha and composite reliability scores exceeding the 0.70 benchmark. Convergent validity is also established, as all constructs exhibit average variance extracted values above 0.50. Collectively, these findings affirm the robustness of the measurement model and the suitability of the tools for capturing consumer perceptions related to environmentally focused product marketing.

Expanding upon this, the model's discriminant validity and multicollinearity were further scrutinized. The subsequent table synthesizes results based on the Fornell-Larcker criterion, heterotrait-monotrait (HTMT) ratios, and variance inflation factor (VIF) statistics. This comprehensive evaluation confirms that the constructs are conceptually distinct and free from redundancy or collinearity concerns. Specifically, all HTMT values fall below the stringent threshold of 0.85, while VIF scores remain well within acceptable bounds, thereby reinforcing the psychometric soundness of the measurement framework.

Table 3: Discriminant Validity (Fornell-Larcker, HTMT) and Multicollinearity (VIF)

Constructs	$\sqrt{\text{AVE}}$ (Diagonal)	EL	GB	ATT	SN	PBC	PI	PB	VIF
EL	0.789	—	0.502 (0.587)	0.479 (0.544)	0.443 (0.518)	0.461 (0.532)	0.491 (0.566)	0.473 (0.548)	1.89
GB	0.810		—	0.558 (0.621)	0.529 (0.574)	0.506 (0.569)	0.568 (0.628)	0.532 (0.599)	1.94
ATT	0.783			—	0.537 (0.612)	0.544 (0.611)	0.610 (0.644)	0.570 (0.631)	2.01
SN	0.776				—	0.519 (0.599)	0.589 (0.634)	0.523 (0.618)	1.87
PBC	0.800					—	0.605 (0.621)	0.598 (0.629)	2.13
PI	0.817						—	0.632 (0.666)	2.24
PB	0.794							—	2.31

Discriminant validity and multicollinearity of the measurement framework were rigorously assessed employing three well-recognized techniques. Initially, the Fornell-Larcker criterion verified discriminant validity by demonstrating that the square root of the average variance extracted (AVE) for each latent variable exceeded its correlations with other constructs. For example, one construct exhibited a $\sqrt{\text{AVE}}$ of 0.810, surpassing its correlations with related constructs measured at 0.502 and 0.558, respectively. Secondly, all heterotrait-monotrait (HTMT) ratios remained comfortably below the recommended threshold of 0.85, with notably low values observed between specific pairs of constructs, such as 0.587 and 0.666. Lastly, variance inflation factor (VIF) values ranged from 1.87 to 2.31, well below the conservative cutoff of 3.3, indicating no issues with multicollinearity. Collectively, these analyses confirm the measurement model's strong discriminant validity and reliability, thereby providing a robust basis for proceeding with structural model evaluation.

Structural Spotlight: Testing Hypothesized Relationships

With the measurement model validated through strong reliability and validity tests, we now examine the structural relationships between constructs. This phase evaluates how well our theoretical framework explains the observed relationships, focusing on three key aspects: the strength of path coefficients, their statistical significance (using t-values and p-values), and the model's overall predictive power. These analyses will test our core hypotheses about how independent variables influence consumers' green purchasing decisions, bringing us closer to understanding the psychological drivers behind sustainable consumption patterns.

Table 4: Hypotheses Summary with Support

Hypothesis	Path	β (Beta)	t-value	p-value	Result
H1	Eco-labelling → Attitude	0.462	8.134	<0.001	Supported
H2	Green Branding → Attitude	0.398	7.294	<0.001	Supported
H3	Attitude → Purchase Intention	0.476	9.088	<0.001	Supported
H4	Subjective Norms → Purchase Intention	0.287	5.312	<0.001	Supported
H5	PBC → Purchase Intention	0.322	6.041	<0.001	Supported
H6	Purchase Intention → Behaviour	0.554	10.632	<0.001	Supported
H7	Eco-labelling → Subjective Norms	0.265	6.542	<0.001	Supported
H8	Eco-labelling → PBC	0.241	5.889	<0.001	Supported
H9	Green Branding → Subjective Norms	0.312	7.016	<0.001	Supported
H10	Green Branding → PBC	0.275	6.473	<0.001	Supported

The expanded structural model encompasses all ten hypotheses derived from the theoretical framework. Each hypothesized path demonstrated statistically significant effects, with t-values exceeding 1.96 and p-values below 0.001. The analysis indicates that the examined marketing strategies significantly impact not only consumers' attitudes but also the influence of social norms and perceptions of control over behaviour. These antecedents, in turn, substantially affect both the intention to purchase and actual purchasing actions. The findings highlight the complex and multifaceted influence of environmentally oriented marketing approaches on shaping sustainable consumer decision-making within the studied population.

Table 5: Coefficient of Determination (R^2 Values)

Dependent Variable	R^2 Value
Attitude	0.611
Subjective Norms	0.533
Perceived Behavioural Control (PBC)	0.492
Purchase Intention	0.678
Purchase Behaviour	0.613

The R^2 values measure the proportion of variance in the dependent variables explained by the independent variables. Values above 0.50 are considered substantial (Hair et al., 2017). In this model, green marketing strategies explain 61.1% of the variance in attitude, 53.3% in subjective norms, and 49.2% in PBC. TPB constructs together account for 67.8% of purchase intention, while intention alone explains 61.3% of actual purchase behaviour. These strong R^2 values affirm the model's predictive strength and robustness in explaining green consumer behaviour.

The analysis demonstrates that eco-labelling and green branding are effective strategies in shaping positive consumer attitudes, which are critical drivers of green purchase intentions and behaviours. This confirms the TPB model's robustness and highlights the relevance of green marketing in the Indian FMCG sector. The high R^2 values, significant path coefficients, and validated constructs reinforce the model's empirical strength and provide a valuable framework for both academics and practitioners aiming to promote sustainable consumption patterns in emerging markets like India.

After evaluating the path coefficients, significance levels, and standardized β values in the hypothesis testing section, it is essential to assess the overall **goodness of fit** of the structural model. Model fit indices help determine how well the hypothesized structural model aligns with the observed data. The following table presents key model fit indicators, including SRMR, NFI, RMSEA, and others, to ensure that the structural model is statistically sound and theoretically meaningful.

Table 6: Model Fit Metrics: Meeting Statistical Standards

Fit Index	Value	Recommended Threshold	Interpretation
SRMR	0.048	< 0.08	Good
NFI	0.924	≥ 0.90	Acceptable model fit
CMIN/df	2.10	< 3.00	Acceptable fit
CFI	0.953	≥ 0.95	Excellent model fit
TLI	0.944	≥ 0.90	Good model fit
RMSEA	0.041	< 0.06	Excellent fit – low error of approximation
GoF	0.486	> 0.36 (large effect size)	Strong overall model quality

The structural model exhibited a high degree of statistical adequacy based on a comprehensive assessment of model fit indicators. The standardized root mean square residual (SRMR) was reported at 0.048, remaining well below the widely accepted threshold of 0.08, thereby indicating a minimal discrepancy between the predicted and observed correlation matrices (Henseler et al., 2015). Model comparison indices further validated the model's fitness, with both the comparative fit index (CFI = 0.953) and Tucker-Lewis index (TLI = 0.944) surpassing the recommended cut-off of 0.90, which reflects a strong correspondence between the theoretical model and the empirical data (Hu & Bentler, 1999). The root mean square error of approximation (RMSEA) value of 0.041 supported the model's close approximation of the population covariance matrix, while the χ^2/df ratio of 2.10 fell within the generally accepted range of 1 to 3, suggesting optimal model parsimony (Byrne, 2016). Moreover, the goodness-of-fit (GoF) index yielded a value of 0.486, exceeding the

0.36 benchmark indicative of a large effect size in partial least squares structural equation modelling (PLS-SEM) contexts (Tenenhaus et al., 2005). Taken together, these multiple indices collectively affirm the model's empirical robustness and its theoretical validity in capturing the structural dynamics of environmentally responsible consumer behaviour. This strong alignment across diverse model evaluation metrics reinforces the conceptual framework's capability in explaining patterns of sustainable consumption.

Discussion:

The findings affirm that “green” has become a dominant consumer preference in the FMCG sector. Grounded in the Theory of Planned Behavior (Ajzen, 1991), the study shows that eco-labelling and green branding significantly shape attitudes, social norms, and perceived behavioral control, key drivers of intention and behavior (Paul et al., 2016; Yadav & Pathak, 2017). This highlights the shift of sustainable marketing from a peripheral tactic to a core strategic necessity (Joshi & Rahman, 2015; Kumar & Ghodeswar, 2015).

Eco-labelling was shown to positively impact all three TPB constructs, reaffirming its role as a credible environmental cue that reduces information asymmetry and enhances consumer confidence (Darnall, Gallagher, & Andrews, 2018; Biswas & Roy, 2015). Its effect on shaping pro-environmental attitudes and normative beliefs reflects the increasing trust Indian consumers place in verifiable sustainability claims.

Green branding, meanwhile, demonstrated an even stronger influence, particularly in enhancing brand trust and positive consumer attitudes. This aligns with Chen's (2010) findings on green brand equity and is further supported by Nguyen, Lobo, and Greenland (2020), who emphasized its persuasive power in emerging markets. The growing prominence of sustainable brand identities in India underscores why consumers are now actively choosing “green” as part of their lifestyle values.

Among the key variables in the "Theory of Planned Behavior" (Ajzen, 1991), perceived behavioral control emerged as the strongest determinant of intention, consistent with the results of Paul et al. (2016), who emphasized that ease of access and control significantly affect pro-environmental decisions. The influence of subjective norms, shaped by collectivist values, aligns with earlier studies highlighting the central role of cultural context and peer influence in shaping green behavior (Yadav & Pathak, 2017; Hofstede, 2001). These results affirm that both perceived capability and social expectations are critical in predicting sustainable consumption.

Most importantly, the study confirms a strong intention-behavior relationship, addressing the often-noted “green gap” (Carrington, Neville, & Whitwell, 2010) and suggesting that Indian consumers not only express intention but follow through with eco-conscious purchases. This strengthens the core message of the study: green products are no longer aspirational they are the preferred choice.

The study extends the TPB by integrating green marketing constructs in an under-researched context Indian FMCG thereby offering theoretical value (Joshi & Rahman, 2015; Verma & Singh, 2020). The model's high explanatory power ($R^2 > 0.60$ for major constructs) confirms the robustness of this integration and reflects a paradigmatic shift in consumer behavior toward sustainability.

In summary, this research offers clear evidence that eco-labelling and green branding, when aligned with the psychological drivers of behavior, strongly influence sustainable purchase behavior in India. The title, "Green is the New Choice," is thus substantiated through robust empirical findings, highlighting a shift from intention to action, and from awareness to adoption, in the green FMCG market.

Practical Implications

The empirical evidence derived from this research provides strategic guidance for stakeholders aiming to advance environmentally responsible consumption within emerging markets. Specifically, the observed impact of "eco-labelling" and "green brand positioning" on core constructs of the Theory of Planned Behavior namely, attitude, subjective norms, and perceived behavioral control that underscores the necessity of implementing well-designed and trustworthy sustainability messaging (Ajzen, 1991; Delmas & Lessem, 2017). These findings suggest that targeted green marketing interventions can effectively shape pro-environmental behavioral intentions when grounded in psychological antecedents, such as belief salience and social approval (Joshi & Rahman, 2015; Paul et al., 2016). Accordingly, promoting credible ecological attributes through integrated communication strategies may significantly influence sustainable decision-making among contemporary consumers.

Eco-labels, by reducing information asymmetry and enhancing trust (Darnall, Gallagher, & Andrews, 2018), should be certified by recognized agencies to assure consumers of environmental authenticity. In parallel, green branding must be embedded within the brand identity—not as an add-on but as a core value—to build loyalty and emotional engagement (Chen, 2010). Indian FMCG brands can leverage this by integrating sustainability into advertising, product design, and messaging.

The influence of subjective norms underscores the power of social influence in a collectivist society like India. Marketers should employ influencer campaigns, social proof, and community engagement to normalize green behavior (Yadav & Pathak, 2017). Similarly, the significance of perceived behavioral control indicates that businesses and policymakers must reduce barriers to green product adoption through broader availability, fair pricing, and consumer education (Paul, Modi, & Patel, 2016).

From a policy perspective, standardized eco-labelling, transparency enforcement, and incentives for green product development are essential. Regulatory frameworks should penalize greenwashing while promoting authentic sustainability claims to build long-term consumer trust (Joshi & Rahman, 2015).

In summary, a coordinated strategy combining credible eco-labelling, embedded green branding, social influence, and supportive policies can effectively drive green consumer behavior and advance India's environmental goals.

Theoretical Implications

This study advances green consumer behavior theory by integrating eco-labelling and green branding with the Theory of Planned Behavior (TPB) (Ajzen, 1991; Paul et al., 2016). Findings demonstrate that eco-labelling significantly enhances consumer attitudes through credible product information (Chen, 2010; Darnall et al., 2018), while green branding strengthens all TPB constructs, supporting brand equity theory (Keller, 1993; Chen, 2010). The research also reveals the amplified role of subjective norms in collectivist cultures like India (Yadav & Pathak, 2017; Hofstede, 1980), highlighting cultural nuances in sustainable consumption patterns.

The study confirms perceived behavioral control as a critical determinant of green purchases (Ajzen, 1991), with situational factors influencing consumer capability (Paul et al., 2016; Tanner & Wölfling Kast, 2003). These insights bridge green marketing strategies with psychological drivers, offering a more comprehensive framework for predicting sustainable consumption. The results suggest future research should incorporate additional contextual variables like price sensitivity (Gleim et al., 2013) and environmental concern (Dunlap et al., 2000) to improve model generalizability across diverse markets.

By empirically validating the interaction between marketing stimuli and TPB constructs, this work extends current theoretical boundaries in sustainable consumption research. It provides marketers with actionable insights while setting a foundation for future studies to explore cultural and industry-specific moderators in green consumer behavior (Schwartz, 1992; White et al., 2019). The findings particularly emphasize the need for culturally adapted green marketing strategies in emerging economies.

Limitations and Future Research Directions

This study has several limitations that offer avenues for future research. First, the cross-sectional design restricts causal inferences, suggesting the need for longitudinal or experimental approaches to better understand behavioral changes over time (Hair et al., 2017). Second, the urban-centric convenience sampling limits generalizability, as green consumption patterns may differ in rural areas due to socioeconomic disparities (Joshi & Rahman, 2015). Future studies should incorporate diverse regional and demographic samples to improve external validity. Third, while eco-labelling and green branding were examined, additional factors like price sensitivity, environmental knowledge, and product quality (Biswas & Roy, 2015) could further enrich the TPB framework.

Cultural biases and India's collectivist orientation (Yadav & Pathak, 2017) may have influenced responses, warranting methods to mitigate social desirability effects. Moreover, the dynamic nature of green marketing calls for research on emerging strategies like digital campaigns, sustainable packaging (Rokka & Uusitalo, 2008), and CSR initiatives. Addressing these gaps could yield deeper theoretical insights and practical guidance for policymakers and marketers in emerging markets (Peattie & Charter, 2003). Future work should also explore cross-cultural comparisons to assess the universality of these findings (Schwartz, 1994).

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Biswas, A., & Roy, M. (2015). Green products: an exploratory study on the consumer behaviour in emerging economies of the East. *Journal of Cleaner Production*, 87(1), 463-468. <https://doi.org/10.1016/j.jclepro.2014.09.075>
- Carrington, M. J., Neville, B. A., & Whitwell, G. J. (2010). Why ethical consumers don't walk their talk: Towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethically minded consumers. *Journal of Business Ethics*, 97(1), 139-158. <https://doi.org/10.1007/s10551-010-0501-6>
- Chen, Y. S. (2010). The drivers of green brand equity: Green brand image, green satisfaction, and green trust. *Journal of Business Ethics*, 93(2), 307–319. <https://doi.org/10.1007/s10551-009-0223-9>
- Chen, Y.-S. (2013). Towards green trust: The influences of green perceived quality, green perceived risk, and green satisfaction. *Management Decision*, 51(1), 63–82. <https://doi.org/10.1108/00251741311291319>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Dangelico, R. M., & Vocalelli, D. (2017). “Green Marketing”: An analysis of definitions, dimensions, and relationships with stakeholders. *Business Strategy and the Environment*, 26(4), 457–475. <https://doi.org/10.1002/bse.1932>
- Darnall, N., Gallagher, D. R., & Andrews, R. N. L. (2018). Eco-labels and green consumerism: What do they mean for market efficiency? *Ecological Economics*, 151, 47–54. <https://doi.org/10.1016/j.ecolecon.2018.04.024>
- Debnath, P., & Roy, C. (2021). Analytical Review of FMCG Sector in Indian Market: Past, Present and Prospects. *Banijya*, 14(1). Retrieved from

Delmas, M. A., & Grant, L. E. (2014). Eco-labeling strategies and price-premium: The wine industry puzzle. *Business Strategy and the Environment*, 23(1), 1–16. <https://doi.org/10.1002/bse.1771>

D'Souza, C., Taghian, M., Lamb, P., & Peretiatkos, R. (2006). Green products and corporate strategy: an empirical investigation. *Society and Business Review*, 1(2), 144–157.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.

Grankvist, G., & Biel, A. (2007). The impact of environmental information on professional purchasers' choice of office paper. *Journal of Environmental Psychology*, 27(1), 59–70. <https://doi.org/10.1016/j.jenvp.2006.11.002>

Gupta, S., & Ogden, D. T. (2009). To buy or not to buy? A social dilemma perspective on green buying. *Journal of Consumer Marketing*, 26(6), 376–391. <https://doi.org/10.1108/07363760910989988>

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage Publications.

Hartmann, P., & Apaolaza-Ibáñez, V. (2009). Green advertising revisited: Conditioning virtual nature experiences. *International Journal of Advertising*, 28(4), 715–739. <https://doi.org/10.2501/S0265048709200652>

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.

Invest India. (2024). FMCG sector overview. Retrieved from <https://www.investindia.gov.in/>

Invest India. (n.d.). FMCG Industry Overview. Retrieved from <https://www.investindia.gov.in/blogs/fmcg-industry-overview>

Joshi, Y., & Rahman, Z. (2015). Factors affecting green purchase behaviour and future research directions. *International Strategic Management Review*, 3(1–2), 128–143. <https://doi.org/10.1016/j.ism.2015.04.001>

- Kanchanapibul, M., Lacka, E., Wang, X., & Chan, H. K. (2014). An analysis of factors driving eco-friendly consumption: The case of electronics products. *Journal of Cleaner Production*, 66, 407–413. <https://doi.org/10.1016/j.jclepro.2013.11.030>
- Kumar, P., Sureka, R., & Singh, R. (2021). Green consumerism in India: A review and research agenda. *Journal of Cleaner Production*, 317, 128403. <https://doi.org/10.1016/j.jclepro.2021.128403>
- Lee, K. (2010). The green purchase behaviour of Hong Kong young consumers: The role of peer influence, local environmental attitude, and personal values. *Journal of International Consumer Marketing*, 22(4), 321–335. <https://doi.org/10.1080/08961530.2010.500507>
- Leonidou, C. N., Katsikeas, C. S., & Morgan, N. A. (2013). “Greening” the marketing mix: Do firms do it and does it pay off? *Journal of the Academy of Marketing Science*, 41(2), 151–170. <https://doi.org/10.1007/s11747-012-0317-2>
- Maximize Market Research. (2023). Indian FMCG Market - Industry Analysis and Forecast (2024-2030). Retrieved from <https://www.maximizemarketresearch.com/market-report/indian-fast-moving-consumer-goods-fmcg-market/29038/>
- Ministry of Environment, Forest and Climate Change. (2023). Extended Producer Responsibility Guidelines. Government of India.
- Nguyen, T. N., Lobo, A., & Greenland, S. (2019). Pro-environmental purchase behaviour: The role of consumers’ biospheric values, attitudes and advertising skepticism. *Journal of Retailing and Consumer Services*, 47, 217–226. <https://doi.org/10.1016/j.jretconser.2018.11.005>
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.
- Papista, E., & Dimitriadis, S. (2012). Exploring the personal determinants of green brand equity: An empirical investigation. *Marketing Intelligence & Planning*, 30(7), 668–684. <https://doi.org/10.1108/02634501211274566>
- Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, 29, 123–134. <https://doi.org/10.1016/j.jretconser.2015.11.006>
- Peattie, K. (2001). Towards sustainability: The third age of green marketing. *The Marketing Review*, 2(2), 129–146. <https://doi.org/10.1362/1469347012569166>

Peattie, K., & Crane, A. (2005). Green marketing: Legend, myth, farce or prophesy? *Qualitative Market Research: An International Journal*, 8(4), 357–370. <https://doi.org/10.1108/13522750510619733>

Polonsky, M. J. (1994). An introduction to green marketing. *Electronic Green Journal*, 1(2). <https://doi.org/10.5070/G31101157>

Rahbar, E., & Wahid, N. A. (2011). Investigation of green marketing tools' effect on consumers' purchase behavior. *Business Strategy Series*, 12(2), 73–83. <https://doi.org/10.1108/17515631111114877>

Reuters. (2025, May 8). Rural India's consumer demand outpaces urban areas for fifth straight quarter, NielsenIQ says. Retrieved from <https://www.reuters.com/world/india/rural-indias-consumer-demand-outpaces-urban-areas-fifth-straight-quarter-2025-05-08/>

Sheeran, P. (2002). Intention—behavior relations: A conceptual and empirical review. *European Review of Social Psychology*, 12(1), 1–36. <https://doi.org/10.1080/14792772143000003>

Singh, J., & Verma, P. (2017). Consumer attitude and purchase intention towards green products in India: A study on FMCG products. *International Journal of Engineering and Management Research*, 7(4), 261–267.

Testa, F., Iraldo, F., Vaccari, A., & Ferrari, E. (2015). Why eco-labels can be effective marketing tools: Evidence from a study on Italian consumers. *Business Strategy and the Environment*, 24(4), 252–265.

Thøgersen, J. (2000). Psychological determinants of paying attention to eco-labels in purchase decisions: Model development and multinational validation. *Journal of Consumer Policy*, 23(3), 285–313. <https://doi.org/10.1023/A:1007095813577>

Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption among young adults in Belgium: Theory of planned behaviour and the role of confidence and values. *Ecological Economics*, 64(3), 542–553. <https://doi.org/10.1016/j.ecolecon.2007.03.007>

Wahid, N. A., Rahbar, E., & Shyan, T. S. (2011). Factors influencing the green purchase behaviour of Penang environmental volunteers. *International Business Management*, 5(1), 38–49.

Wikipedia contributors. (2025, May 1). FMCG in India. *Wikipedia*. Retrieved from https://en.wikipedia.org/wiki/FMCG_in_India

Yadav, R., & Pathak, G. S. (2016). Intention to purchase eco-friendly products among young consumers in India: A study on the influence of attitude, environmental concern, and perceived behavioural control. *Journal of Cleaner Production*, 135, 732–739. <https://doi.org/10.1016/j.jclepro.2016.06.080>