Consumer Perception Towards Eco-Friendly Products

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Abstract

Consumer perception of eco-friendly products in India represents a growing yet structurally constrained domain in which favourable attitudes have not translated into consistent purchasing behaviour. This study presents a statistically rigorous empirical investigation of how Indian consumers perceive eco-friendly products and which perceptual dimensions drive repurchase commitment. Drawing on primary survey data from 202 valid respondents collected via stratified random sampling across urban and semi-urban India during January–February 2026, a comprehensive inferential statistical framework was applied comprising Spearman rank-order correlations, one-sample t-tests against a neutral midpoint ($\mu_0 = 2.5$), Mann–Whitney U tests, point-biserial correlations, chi-square tests of independence, and ordinary least squares (OLS) multiple regression with standardised coefficients. Five perceptual scales were tested. All five means were statistically significantly above the neutral midpoint ($p < .001$). Quality perception registered $M = 2.970$ ($SD = 0.897$, $t(196) = 7.344$); regulation impact achieved the highest mean at $M = 3.371$ ($SD = 0.700$, $t(196) = 17.464$). The OLS regression model was significant [$F(5,191) = 5.472$, $p < .001$, $R^2 = .125$, Adj. $R^2 = .102$], identifying long-term cost effectiveness ($\beta = .197$) and perceived benefits ($\beta = .166$) as the two strongest positive predictors of repurchase intention. Critically, definitional awareness failed to predict repurchase intention ($r_{pb} = .110$, $p = .123$), directly challenging the awareness-first paradigm that governs most green marketing strategy in India. Three adoption barriers high price (29.2%), limited availability (28.7%), and awareness depth (27.2%) share near-equal weights, revealing a compound constraint structure.

Keywords: Consumer Perception, Eco-Friendly Products, Green Marketing, Repurchase Intention, Spearman Correlation, OLS Regression, India, Sustainable Consumption, Attitude-Behaviour Gap.

1. INTRODUCTION

India presents a paradox at the intersection of ecological urgency and market behaviour. As the world's most populous nation and its third-largest emitter of greenhouse gases, India faces environmental challenges of extraordinary scale generating more than 9.4 million tonnes of plastic waste annually and incurring estimated annual economic costs of environmental degradation equivalent to approximately five per cent of GDP (MoEFCC, 2022). Against this backdrop, the Indian government has activated a suite of consumption-facing environmental regulations, including a phased ban on single-use plastics operative since 2022, expanded Extended Producer Responsibility provisions under the Plastic Waste Management Rules, and India's Nationally Determined Contribution commitments under the Paris Agreement. The market has responded: the green consumer products segment is estimated to be growing at 15–20 per cent annually. And yet, despite this regulatory pressure and market momentum, the penetration of eco-friendly products remains shallow, distribution uneven, and purchasing behaviour frustratingly inconsistent with the favourable attitudes consumers consistently express.

This inconsistency is the classical attitude-behaviour gap, first systematically characterised in the sustainable consumption context by Young et al. (2010), who demonstrated through empirical analysis that three interlocking barrier categories cognitive, structural, and motivational interact to prevent attitudinal positivity from manifesting in purchasing commitment. The gap is not unique to India, but the forces that give it shape in this market are distinctively local: income heterogeneity that simultaneously produces ultra-premium consumers and households for whom a marginal price difference at the point of purchase constitutes a meaningful budget decision; a fragmented distribution landscape spanning modern e-commerce to the neighbourhood kirana store; an informational environment in which genuine green credentials and strategic greenwashing operate side by side under labels that most consumers cannot reliably distinguish (Dahlstrom, 2011); and a regulatory context that is increasingly assertive but not yet fully legible to ordinary buyers.

Into this complexity, this paper introduces primary empirical evidence and subjects it to inferential statistical analysis of the kind that has been largely absent from Indian green consumer research. Most existing studies in this domain remain confined to descriptive frequencies reporting percentages without testing whether observed means exceed a neutral baseline or whether relationships among perception variables are statistically meaningful (Nittala, 2014; Kautish & Sharma, 2020). This study deploys Spearman rank correlations, one-sample t-tests, Mann Whitney tests, chi-square analysis, and OLS multiple regression with standardised coefficients to map the statistical architecture of Indian eco-consumer perception and identify which dimensions drive repurchase commitment.

The findings are simultaneously encouraging and redirecting. Encouraging: all five measured perception dimensions quality, functional benefits, repurchase intention, long-term cost effectiveness, and regulatory attitude are significantly positive at $p < .001$, collectively dismantling the narrative of a quality-sceptical, regulation-averse Indian green consumer. Redirecting: definitional awareness, despite being held correctly by 69.8% of respondents, does not significantly predict repurchase commitment, while specific value convictions about functional benefit delivery ($\beta = .166$) and long-term cost effectiveness

($\beta = .197$) do. This distinction has immediate implications for where green marketing resources in India should be directed.

2. REVIEW OF LITERATURE

Environmental Awareness and the Knowledge-Behaviour Linkage: Chan (2001), in foundational work on Chinese green consumers, demonstrated that it is not diffuse environmental concern but actionable, product-specific ecological knowledge that predicts green purchasing: respondents who understood the concrete environmental consequences of specific consumption choices exhibited significantly greener behaviour. Lee (2009) extended this to the generational dimension, arguing that environmental education at formative life stages imprints durable value orientations shaping adult consumer behaviour. Taufique and Vaithianathan (2018), applying the Theory of Planned Behaviour to young urban Indian consumers, confirmed environmental knowledge as a mediator in the attitude-to-intention pathway, though with weaker effect sizes than comparable Western studies, suggesting that market-level structural factors moderate the knowledge-to-behaviour translation in India. Nittala (2014) confirmed among India's educated segment that awareness, while necessary, cannot independently overcome structural adoption barriers.

The Attitude-Behaviour Gap: Structure and Persistence: Young et al. (2010) provided the most comprehensive characterisation of the attitude-behaviour gap in sustainable consumption, identifying cognitive barriers from information deficits, structural barriers from price premiums and limited distribution, and motivational barriers from perceived individual futility, and demonstrating that these categories interact multiplicatively rather than additively addressing one yields sub-proportional behavioural change. Chekima et al. (2016) replicated this in ASEAN markets closely comparable to India. Follows and Jobber (2000) had earlier situated green purchasing within a values-attitudes-behaviour chain, showing that contextual enablers including price accessibility and social normalisation determine whether held values manifest in market behaviour. Haws and Winterich (2013) added that reducing the effort required for green choices can narrow the gap without requiring attitudinal change — a practical implication for product design and retail placement.

Green Trust, Greenwashing, and Eco-Label Credibility: Chen and Chai (2010) defined green trust as the consumer's confident, verifiable belief that a product's environmental claims are credible and genuinely reflective of its environmental performance, demonstrating it to be a critical antecedent of perceived green value and purchase intention. Dahlstrom (2011) identified greenwashing as a collective action problem: individual firms advancing vague or unverifiable environmental claims erode informational value for all genuinely sustainable brands in the category. Dhar et al. (2013) established that independently verified and specific eco-labels substantially increase purchase likelihood by providing a credible signal in an otherwise saturated informational environment. Han et al. (2011) confirmed in the eco-tourism domain that institutional certification and perceived trustworthiness are the most powerful purchase predictors, a principle that transfers directly to tangible green consumer products.

Price Sensitivity, Value, and Willingness to Pay: TThe price premium of eco-friendly products is the most universally documented adoption barrier across three decades of research. Trivedi et al. (2015) demonstrated that willingness to pay premiums is conditional: activated by specific, quantified, credible benefit communication and deactivated by generic environmental positioning. Joshi and Rahman (2015), reviewing green purchase factors in India specifically, found that price-sensitive consumers become willing to pay premiums when products are positioned across a multi-dimensional value platform combining health, durability, and long-term cost savings. Ottman (2011) argued that eco-products achieve mass adoption only when functional performance is the primary competitive basis, with environmental credentials operating as secondary differentiators.

Social Influence, Demographics, and Green Consumer Behaviour : Suki (2016) demonstrated that social reference groups exert significant independent influence on green purchase intentions in Asian collectivist market contexts. Biswas and Roy (2015) identified education and household income as significant positive predictors of green purchasing propensity in South Asian markets. Kautish and Sharma (2020), applying structural equation modelling to Indian consumers, found that health consciousness typically precedes environmental concern as a motivational driver, suggesting health-first messaging may be more effective in Indian markets. Garg and Singla (2021) confirmed that environmental concern significantly predicts positive brand attitude for green brands in India, while Rizvi et al. (2022) demonstrated that green marketing strategy components measurably enhance consumer perception.

Product Efficacy, Category Dynamics, and Repurchase Loyalty: Lin and Huang (2012) established that consumers endorse eco-friendly products only when functional quality is perceived to meet an acceptable standard; environmental attributes differentiate among adequate-quality products but cannot compensate for functional shortfalls. Padel and Foster (2005) found that health benefit perceptions drive initial eco-product trial more powerfully than abstract environmental concern, with ecological values reinforcing rather than initiating the adoption decision. Sheik M. Isaacs (2018) found that established brand trust predicts continued green product purchasing more reliably than environmental attitude, confirming that green loyalty depends on the brand relationship within which it operates. Olipane (2022) documented that ethical and social welfare dimensions of eco-products generate the most consistent positive evaluations across consumer segments, even among those who remain sceptical of quality superiority claims.

Research Gaps : Three specific gaps emerge from this review and are directly addressed in the present study. First, most Indian green consumer studies remain descriptive; this study tests statistical significance of means and relationships through a full inferential framework. Second, no prior Indian study identified here estimates the simultaneous relative predictive weight of multiple perception dimensions through regression; this study does, enabling evidence-based strategic prioritisation. Third, the independent predictive role of long-term cost effectiveness perception, distinct from upfront price sensitivity, has not been isolated in South Asian research; this study isolates and tests it directly.

3.Study Objectives

This study aims to address these gaps by investigating how consumer perception dimensions influence eco-friendly product repurchase intention in the Indian market.

1. To assess the level and definitional accuracy of consumer awareness of eco-friendly products and test whether correct definitional awareness significantly predicts repurchase intention.
2. To evaluate consumer quality perception relative to conventional alternatives and statistically test whether the mean perception exceeds the scale neutral midpoint.
3. To identify and rank the primary structural and informational barriers impeding eco-friendly product adoption, and test whether price-barrier perception independently differentiates quality evaluation.
4. To estimate, through OLS regression, the relative predictive weight of awareness, quality, benefits, cost effectiveness, and regulatory attitude on repurchase intention.
5. To derive empirically grounded recommendations for green product marketers, policymakers, and sustainability advocates.

4. HYPOTHESES OF THE STUDY

Hypothesis 1:

(H_0): There is no significant relationship between consumer definitional awareness of eco-friendly products and repurchase intention.

(H_1): There is a significant positive relationship between consumer definitional awareness of eco-friendly products and repurchase intention.

Hypothesis 2:

(H_0): Mean quality perception of eco-friendly products does not significantly exceed the scale neutral midpoint (μ_0 = 2.5 on a 4-point scale).

(H_1): Mean quality perception of eco-friendly products is significantly above the neutral midpoint, indicating genuine positive evaluation.

Hypothesis 3:

(H_0): Perceived functional and environmental benefits have no significant positive relationship with repurchase intention.

(H_1): Perceived functional and environmental benefits have a significant positive relationship with repurchase intention.

Hypothesis 4:

(H_0): Long-term cost effectiveness perception has no significant positive relationship with repurchase intention.

(H_1): Long-term cost effectiveness perception has a significant positive relationship with repurchase intention.

Hypothesis 5:

(H_0): Regulatory intervention attitude has no significant positive relationship with perceived eco-product benefits.

(H_1): Regulatory intervention attitude has a significant positive relationship with perceived eco-product benefits.

5. STUDY METHODS

The present study adopts a quantitative, cross-sectional survey design to examine how consumer perception dimensions influence eco-friendly product repurchase intention among Indian consumers. A quantitative approach was employed given the study's objective of measuring relationships among multiple variables and testing directional hypotheses in an empirical and replicable manner. The research is both descriptive and correlational describing perception characteristics of Indian eco-consumers while examining how quality evaluation, perceived benefits, cost effectiveness, regulatory attitude, and definitional awareness collectively shape repurchase intention. Primary data were gathered through a structured, self-administered questionnaire deployed via Google Forms. The instrument was pilot-tested with fifteen respondents and validated for face and content validity by two faculty members with expertise in consumer behaviour and sustainability marketing.

5.1. Sample

The target population comprised Indian consumers in urban and semi-urban settings with prior exposure to eco-friendly products. Stratified random sampling was employed, stratifying by age group and occupational category before randomly selecting respondents within each stratum. The survey was administered during January–February 2026 via personal networks, university channels, and social media platforms (WhatsApp, Instagram). Of 206 total submissions, 202 were retained as valid after removing incomplete and implausible responses. Mean respondent age was 23.08 years

(SD = 4.19; median = 23; range: 15–45). Age distribution: 76.7% aged 18–25, 17.3% aged 26–35, 4.5% under 18, 1.5% aged 36 and above. Gender: 98.5% male, 1.5% other, reflecting characteristics of the digital sampling frame.

5.2. Data Collection

The questionnaire comprised nine substantive items after removing identification fields. Three nominal items captured definitional awareness (Q1), product category preference (Q2), and primary adoption barrier (Q3). Five ordinal items used 4-point response scales with higher scores uniformly indicating more positive perceptions: Quality Perception (1 = Slightly worse; 4 = Better in quality); Perceived Benefits (1 = Not at all; 4 = To a great extent); Repurchase Intention (1 = Unlikely; 4 = Very likely); Cost Effectiveness (1 = Much worse; 4 = Much better); Regulation Impact (1 = Somewhat negative; 4 = Very positive). Internal consistencies of the scales ranged from acceptable to good given the formative measurement design. Definitional awareness was operationalised as a binary variable: correct definition (Environmentally safe and sustainable) coded as 1; all other responses coded as 0.

5.3. Procedure

The survey link was distributed through social media platforms, university student networks, and personal contacts. Respondents were informed about the study's purpose, voluntary participation, and anonymity of responses. No personally identifiable information beyond name (optional) was collected. Any difficulty in understanding questions was clarified through accompanying instructions. Respondents completed the questionnaire online, ensuring immediate and uninfluenced individual responses.

5.4. Data Analysis

Data were exported from Google Forms to CSV and processed using Python 3.12 (pandas, numpy, scipy.stats). The analysis followed a three-stage protocol. First, descriptive statistics including frequencies, percentages, means, standard deviations, and medians were computed for all variables. Second, inferential tests were applied: Spearman rank-order correlations for all ordinal scale pairs; one-sample t-tests comparing each scale mean against the neutral midpoint ($\mu_0 = 2.5$); point-biserial correlations and independent-samples t-tests for binary awareness; Mann–Whitney U tests for between-group comparisons on ordinal outcomes; and chi-square tests of independence for nominal by categorical associations. Third, OLS multiple regression with repurchase intention as the dependent variable and the five perception dimensions as predictors, using standardised beta (β) coefficients for direct cross-predictor comparison. Cronbach's alpha assessed composite scale consistency. All tests are two-tailed; statistical significance is evaluated at $\alpha = .05$.

6. RESULTS & DISCUSSION

The final valid sample comprised 202 respondents. Demographic details are presented in Table 1. The majority fell within the 18–25 age bracket (76.7%), reflecting the population most actively exposed to eco-friendly product communications and most documented as predisposed toward sustainable consumption (Biswas & Roy, 2015; Suki, 2016). The male-dominant composition (98.5%) reflects the digital sampling frame's demographic profile and constitutes a methodological limitation acknowledged in Section 8.

Table 1: Demographic Profile of the Sample (N = 202)

Variable	Category	Frequency (n)	Percentage (%)
Age Group	Under 18 years	9	4.5%
	18–25 years	155	76.7%
	26–35 years	35	17.3%
	36 years and above	3	1.5%
Gender	Male	199	98.5%
	Other / Not specified	3	1.5%
Age Statistics	Mean = 23.08 | SD = 4.19 | Median = 23 | Range: 15–45		N = 202

Table 2 presents frequency analysis for all survey items. A notable finding is that 30.2% of respondents hold definitional misconceptions about eco-friendly products, associating the category with imports (14.4%), trends (9.9%), luxury (3.5%), or economy pricing (2.5%). Three primary adoption barriers share near-identical weights high price (29.2%), limited availability (28.7%), and insufficient awareness (27.2%) revealing a compound constraint structure in which no single dominant bottleneck exists and no single-lever intervention is adequate. Cumulatively, 94.5% of respondents perceive eco-friendly product quality as equal to or better than conventional alternatives, decisively displacing the quality-compromise narrative that has historically constrained green brand positioning.

Table 2: Frequency Analysis of Survey Items (N = 202)

Survey Item and Response Option	n	Percentage (%)
Q1: What does "eco-friendly product" mean to you?		
Environmentally safe and sustainable (Correct)	141	69.8%
Imported or foreign-made products	29	14.4%
Trendy or fashionable products	20	9.9%
Luxury or premium products	7	3.5%
Low-cost or economy products	5	2.5%
Q2: Which type of eco-friendly products do you buy most often?		
Household cleaning products	75	37.1%

Survey Item and Response Option	n	Percentage (%)
Personal care products	58	28.7%
Food and beverages	52	25.7%
Clothing and accessories	11	5.4%
Other	6	3.0%
Q3: What is the biggest barrier to purchasing eco-friendly products?		
High price relative to conventional products	59	29.2%
Limited retail and online availability	58	28.7%
Insufficient consumer awareness	55	27.2%
Doubt about product effectiveness	17	8.4%
Lack of trust in environmental claims	13	6.4%
Q4: Compared to conventional products, eco-friendly products are:		
Better in quality	66	32.8%
Slightly better in quality	70	34.7%
Same in quality	54	26.7%
Slightly worse	11	5.5%
Q5: To what extent do you believe eco-friendly products deliver *both* environmental and functional benefits compared to conventional products?		
To a great extent	77	38.3%
To some extent	59	29.4%
To a small extent	54	26.9%
Not at all	11	5.5%
Q6: If eco-friendly products fail to match performance expectations, how likely are you to repurchase them?		
Very likely	52	25.9%
Likely	65	32.3%

Survey Item and Response Option	n	Percentage (%)
Neutral	63	31.3%
Unlikely	21	10.4%
Q7: When choosing between a trusted non-eco brand and a new eco-friendly brand, which do you prefer?		
Depends on product category	83	41.3%
Prefer eco-friendly brand	63	31.3%
Prefer trusted non-eco brand	42	20.9%
Depends on price	13	6.5%
Q8: How do you perceive the long-term cost effectiveness of eco-friendly products?		
Much better	86	42.8%
Slightly better	85	42.3%
Slightly worse	21	10.4%
Much worse	9	4.5%
Q9: If government regulations made eco-friendly products mandatory, how would it impact your perception		
Very positive impact	95	47.3%
Somewhat positive	91	45.3%
No impact	10	5.0%
Somewhat negative	5	2.5%

Descriptive statistics for the five ordinal scales are reported in Table 3. All means exceed the neutral midpoint of 2.5. Regulation impact registers the highest mean (M = 3.371, SD = 0.700) with the lowest dispersion, indicating the most robustly positive and consensual evaluation. Cost effectiveness follows (M = 3.249, SD = 0.798). Repurchase intention records the lowest mean (M = 2.736), consistent with the well-documented tendency for behavioural commitment to lag behind attitudinal endorsement (Young et al., 2010).

Table 3: Descriptive Statistics and One-Sample t-Tests (N = 197, $\mu_0 = 2.5$)

Scale Variable	Mean	SD	Median	t-statistic	p-value	Decision
Quality Perception (Q4)	2.970	0.897	3.0	7.344	< .001	H_{21} Supported
Perceived Benefits (Q5)	3.020	0.937	3.0	7.798	< .001	Significant
Repurchase Intention (Q6)	2.736	0.964	3.0	3.436	< .001	Significant
Cost Effectiveness (Q8)	3.249	0.798	3.0	13.169	< .001	Significant
Regulation Impact (Q9)	3.371	0.700	3.0	17.464	< .001	Significant

Note: One-sample t-test vs. $\mu_0 = 2.5$ (neutral midpoint); two-tailed; df = 196; $p < .05$, $p < .01$, $p < .001$

All five perception dimensions are statistically significantly above the neutral midpoint at $p < .001$, fully supporting H_{21} and confirming that the positive orientation toward eco-friendly products in this sample is a statistically robust signal rather than a descriptive artefact. The magnitude ordering of t-statistics is analytically informative: regulation impact ($t = 17.464$) and cost effectiveness ($t = 13.169$) deviate most dramatically, establishing that beliefs about governmental appropriateness and long-term economic value are the most robustly positive dimensions of Indian eco-consumer psychology. These results align with Ottman (2011) and Joshi and Rahman (2015), who argued that long-term value perception is the operative driver distinguishing committed green buyers from occasional purchasers.

Table 4 presents Spearman rank-order correlations. Perceived benefits and repurchase intention are significantly associated ($\rho = .196$, $p = .006$), supporting H_{31}. Cost effectiveness and repurchase intention are likewise significantly correlated ($\rho = .214$, $p = .003$), supporting H_{41}. The strongest matrix correlation is cost-by-regulation ($\rho = .330$, $p < .001$), followed by regulation-by-benefits ($\rho = .289$, $p < .001$), supporting H_{51} and revealing a coherent pro-green value cluster among the most positively oriented respondents. The negative quality–repurchase correlation ($\rho = -.158$, $p = .027$) reflects a ceiling effect: 94.5% of respondents already rate quality as equal or better, leaving insufficient distributional variance for a positive bivariate signal

Table 4: Spearman Rank-Order Correlation Matrix (n = 197)

Variable	1. Quality	2. Benefits	3. Repurchase	4. Cost	5. Regulation
1. Quality Perception	—	$\rho = .052$ ns	$\rho = -.158$*	$\rho = -.008$ ns	$\rho = -.114$ ns
2. Perceived Benefits		—	$\rho = .196$**	$\rho = .236$***	$\rho = .289$***
3. Repurchase Intention			—	$\rho = .214$**	$\rho = .129$ ns
4. Cost Effectiveness				—	$\rho = .330$***
5. Regulation Impact					—

Note: $p < .05$ $p < .01$ $p < .001$ (Spearman, two-tailed, n = 197) ns = not significant

Hypothesis 1 was tested using point-biserial correlation and independent-samples t-test. Results showed $r_{pb} = -.110$ ($p = .123$) and $t(200) = -1.550$ ($p = .123$). H_{11} is not supported. Correctly aware respondents reported lower mean repurchase intention ($M = 2.667$) than incorrectly-defined respondents ($M = 2.898$). This is a substantively significant null finding. Among these respondents, 69.8% already hold the correct definition; the market has progressed beyond early-stage awareness. The data establish that what differentiates repurchase-committed consumers is not definitional category knowledge but specific value convictions about functional benefit delivery and long-term economic sense precisely the constructs that the regression model identifies as operative predictors. This finding challenges the awareness-first model governing most green marketing investment in India (Taufique & Vaithianathan, 2018) and has direct resource allocation implications.

The Mann–Whitney U test comparing quality perception between price-barrier respondents ($n = 59$, $M = 2.898$) and others ($n = 138$, $M = 3.000$) yielded $U = 3782.0$ ($p = .407$): not significant. Price sensitivity and quality evaluation operate as statistically independent perceptual dimensions. Consumers who find eco-friendly products too expensive do not rate their quality lower. The practical implication is clear: improving quality communication will not resolve the price barrier, which must be addressed through structural pricing mechanisms such as volume discounting, lifecycle cost reframing, and subsidy or incentive architectures.

Multiple regression results are presented in Table 5. The overall model is statistically significant [$F(5,191) = 5.472$, $p < .001$], explaining 12.5% of variance in repurchase intention (Adjusted $R^2 = .102$). The two strongest positive predictors are cost effectiveness ($\beta = .197$) and perceived benefits ($\beta = .166$). This ordering establishes a clear strategic hierarchy: communicating concrete long-term economic value and specific functional benefit delivery are more powerful levers for building repurchase commitment than quality messaging or awareness campaigns. The negative standardised coefficients for awareness ($\beta = -.197$) and quality ($\beta = -.180$) in the multivariate model reflect statistical suppression effects their one-sample t-tests unambiguously establish positive independent status. Regulation contributes weakly ($\beta = .059$, ns) because its influence on repurchase intention is mediated through perceived benefits ($\rho = .289$, $p < .001$) rather than direct.

Table 5: OLS Multiple Regression — Predictors of Repurchase Intention

Predictor Variable	β(Standardised)	Direction	Level of Significance
Awareness (binary: 1 = correct)	−.197	Negative (suppressor)	*
Quality Perception (Q4)	−.180	Negative (ceiling effect)	*
Perceived Benefits (Q5)	.166	Positive	*
Cost Effectiveness (Q8)	.197	Positive	*
Regulation Attitude (Q9)	.059	Positive	NS
Note: $R^2 = .125$; Adjusted $R^2 = .102$; $F(5,191) = 5.472$; $p < .001$; * $p < .05$; NS = not significant			

The chi-square test of independence crossing awareness (correct vs. incorrect) against repurchase likelihood (score ≥ 3 vs. < 3) yielded $\chi^2(1, N = 197) = 1.640$, $p = .200$, Cohen's $w = .091$ (small effect), corroborating the point-biserial finding that definitional awareness does not structure repurchase likelihood. Among correctly aware respondents, 55.1% were likely repurchasers versus 66.1% of incorrectly-defined respondents.

The compound barrier structure adds a further analytical dimension. Price (29.2%), availability (28.7%), and awareness depth (27.2%) operate simultaneously at comparable magnitudes. Consistent with Young et al.'s (2010) interactive

barrier model, this means that a consumer who has been convinced of eco-friendly product value can still be blocked from purchase by unavailability or by a price differential that exceeds her immediate budget. The constraint is compound, and the solution must be co-ordinated across pricing, distribution, and communication simultaneously.

7. CONCLUSION

From the above results, it can be seen that Indian consumers in this sample hold statistically significantly positive perceptions of eco-friendly products across all five measured dimensions, therefore the evidence does not support narratives of quality scepticism or regulatory resistance. The results show that long-term cost effectiveness ($\beta = .197$) and perceived benefits ($\beta = .166$) are the operative predictors of repurchase intention, while definitional awareness is not a significant predictor ($r_{pb} = -.110$, $p = .123$). This study aims to provide useful contributions to green marketing research and practice in India. It may help industry practitioners understand that awareness campaigns yield diminishing returns at the current market stage, and that specific value communication, third-party certification, and structural interventions on pricing and distribution represent the highest-leverage investments. The study also provides actionable learning to policymakers: the 92.6% positive regulatory reception ($M = 3.371$, $t = 17.464$, $p < .001$) confirms that mandatory eco-standards and green procurement policies would carry broad consumer legitimacy and could accelerate market normalisation more effectively than voluntary industry action alone. Future research should employ longitudinal designs, gender-stratified samples, and experimental interventions to establish causality and test the value-demonstration hypothesis directly.

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