“Influence of eco-awareness and price sensitivity on bridging the intention behavior gap in sustainable consumption”

AUTHORS	Parveen Yadav Arun Yadav Neelika Arora Vinay Kumar Sumanjeet Singh Abhinav Thakur

ARTICLE INFO	Parveen Yadav, Arun Yadav, Neelika Arora, Vinay Kumar, Sumanjeet Singh and Abhinav Thakur (2026). Influence of eco-awareness and price sensitivity on bridging the intention behavior gap in sustainable consumption. *Innovative Marketing* , *22*(2), 274-288. doi:10.21511/im.22(2).2026.19
DOI	http://dx.doi.org/10.21511/im.22(2).2026.19
RELEASED ON	Wednesday, 20 May 2026
RECEIVED ON	Wednesday, 29 October 2025
ACCEPTED ON	Tuesday, 21 April 2026

JOURNAL	"Innovative Marketing "
ISSN PRINT	1814-2427
ISSN ONLINE	1816-6326
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”

NUMBER OF REFERENCES	NUMBER OF FIGURES	NUMBER OF TABLES
69	1	10

BUSINESS PERSPECTIVES

LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine

www.businessperspectives.org

Parveen Yadav (India), **Arun Yadav** (India), **Neelika Arora** (India), **Vinay Kumar** (India), **Sumanjeet Singh** (India), **Abhinav Thakur** (India)

INFLUENCE OF ECO-AWARENESS AND PRICE SENSITIVITY ON BRIDGING THE INTENTION BEHAVIOR GAP IN SUSTAINABLE CONSUMPTION

Abstract

Growing environmental degradation and unsustainable consumption have intensified the need to understand the determinants of sustainable purchasing behavior, particularly the persistent intention-behavior gap. Using the Theory of Planned Behavior, this study aims to bridge the intention behavior gap by extending it to include eco-awareness and price sensitivity. Data were collected using a structured questionnaire administered to students and employees in higher education institutes in Northern India (Delhi NCR, Rajasthan, and Jammu & Kashmir). The responses were analyzed using partial least squares structural equation modelling. The results indicate that eco-awareness ($\beta = 0.237$, $p < 0.001$), consumer attitude ($\beta = 0.182$, $p < 0.001$), social norms ($\beta = 0.487$, $p < 0.001$), and perceived behavioral control ($\beta = 0.315$, $p < 0.001$) have significant positive effects on sustainable purchase intention. Purchase intention had a direct influence on sustainable purchase behavior ($\beta = 0.657$, $p < 0.001$), confirming its central role in behavioral execution. In contrast, price sensitivity did not have a significant direct effect on purchase behavior ($\beta = 0.012$, $p = 0.720$), although its interaction with purchase intention showed a weak but statistically significant moderating effect ($\beta = 0.076$, $p < 0.05$). These findings indicate that purchase behavior is driven primarily by social and psychological factors, while economic considerations play a limited and conditional role in the intention-behavior relationship. Marketers should design demographic specific awareness campaigns by recognizing variations in consumer behavior.

Keywords consumer attitude, purchase intention, sustainability, social norms, sustainable purchase, India

JEL Classification D12, M31, Q01

Type of the article: Research Article

Received on: 29th of October, 2025
Accepted on: 21st of April, 2026
Published on: 20th of May, 2026

Parveen Yadav, Research Scholar, School of Business Studies, Department of Marketing and Supply Chain Management, Central University of Jammu, India.

Arun Yadav, Ph.D., Assistant Professor, School of Business Studies, Department of Marketing and Supply Chain Management, Central University of Jammu, India. (Corresponding author)

Neelika Arora, Ph.D., Professor, School of Business Studies, Department of Marketing and Supply Chain Management, Central University of Jammu, India.

Vinay Kumar Ph.D., Associate Professor, School of Business Studies, Department of Marketing and Supply Chain Management, Central University of Jammu, India.

Sumanjeet Singh, Ph.D., Professor, Ramjas College, Department of Commerce, University of Delhi, India.

Abhinav Thakur, Research Scholar, School of Business Studies, Department of Marketing and Supply Chain Management, Central University of Jammu, India.

Conflict of interest statement:
Author(s) reported no conflict of interest

INTRODUCTION

Rapid population growth and rising consumption levels, particularly in developing economies, have intensified environmental degradation and placed unprecedented pressure on natural ecosystems (Maja & Ayano, 2021). Resource depletion, climate change, pollution and biodiversity loss have emerged as interconnected global challenges that are increasingly linked to patterns of unsustainable production and consumption. Marketing systems, which play a central role in shaping consumer demand, have historically reinforced these patterns by prioritizing convenience, volume and short-term value (Sheth & Parvatiyar, 2020). As a result, marketing has become both a contributor to environmental problems and a potential mechanism for promoting sustainable consumption.

In response to these challenges, sustainability has become a central concern for governments, businesses and societies (Shah & Asghar, 2024). In response, businesses across the globe are shifting from profit-driven marketing to value-based sustainable marketing, where or-

http://dx.doi.org/10.21511/im.22(2).2026.19

ganizations align consumer needs with environmental goals. The integration of sustainable strategies with business operation create product differentiation while building corporate image and fulfilling customer requirements (Flores-Hernández et al., 2020). However, the effectiveness of such initiatives ultimately depends on consumer response (Sharma, 2021). Although public awareness of environmental issues has grown substantially, sustainable consumption remains inconsistent and fragmented across markets (Corral-Verdugo et al., 2019). A recurring issue highlighted by Mathew and Spinelli (2025) is the disconnect between consumers' positive environmental attitudes and their purchase behavior (PB).

This inconsistency represents a significant scientific problem within sustainability and consumer behavior research. Research indicates that environmental awareness (Rustam et al., 2020), environmental concern (Pong & Tam, 2023) and perceived quality (Wu et al., 2021) create positive purchase intention (PI) but do not always translate into purchase actions. Moreover, the role of economic considerations particularly price sensitivity (PS) in shaping or constraining this intention-behavior relationship remains theoretically ambiguous and context-dependent (Joshi & Rahman, 2015). Furthermore, insufficient institutional support and limited consumer education have constrained sustainable purchasing in countries such as Australia, Malaysia, and Canada (Abdul et al., 2024; Thukral et al., 2022).

The lack of theoretical consensus on how psychological, social and economic factors interact to shape sustainable purchasing constitutes a critical gap in the literature. This problem is especially pronounced in emerging economies, where environmental awareness is rising (Perera & Hewege, 2018), but market structures, income levels and institutional support for sustainability vary widely. Addressing this theoretical and empirical inconsistency is essential for advancing marketing theory and designing more effective sustainability-oriented marketing strategies that can influence PB.

1. LITERATURE REVIEW AND HYPOTHESES

Research on sustainable consumer behavior has grown substantially as environmental degradation driven by human activities, consumer choices and business operations has become increasingly evident (Yu et al., 2021). Scholars across sustainability, marketing and behavioral sciences have examined how individual cognition, social influence and contextual factors shape consumers' environmentally responsible decisions (Ramani et al., 2025). Despite extensive investigation, the literature remains fragmented, particularly with respect to how PI translates into PB (Elhoushy & Jang, 2023). To address this fragmentation, prior studies can be synthesized around key psychological, social, and economic determinants of sustainable consumption.

A central theme in the literature concerns the role of eco-awareness (EA) in shaping environmentally responsible behavior. Limited public understanding of environmental issues has been identified as a major barrier to achieving sustainability goals (Zulu et al., 2022). Evidence suggests that individuals' awareness of ecological consequences can exert a stronger influence on environmental outcomes than regulatory interventions alone (Khatibi et al., 2021). Higher levels of EA have been associated with increased concern for environmental protection and a greater willingness to incur personal costs to mitigate negative environmental impacts (Narayanan & Singh, 2023). Eco-aware individuals are better able to recognize the relationship between sustainability standards, business practices and personal consumption behavior (Kherazi et al., 2024). Tools such as eco-labels further strengthen this awareness by signaling environmental quality, thereby encouraging consumers with strong ecological beliefs to prefer sustainable products (Nakaishi & Chapman, 2024; Wei et al., 2017).

Beyond awareness, consumer attitude (CA) has been widely recognized as a fundamental determinant of behavioral intention. Attitude reflects individuals' evaluative judgments toward behavior, shaped by affective, cognitive and behavioral components (Tran & Nguyen, 2022; Svenningsson et al., 2021). In marketing contexts, CA is frequently used to predict preferences for products, brands

and promotional messages (Karamchandani et al., 2021). Environmental attitudes, in particular, capture how individuals perceive their responsibility toward environmental protection (Shah & Asghar, 2024). Such attitudes tend to be deeply embedded in consumer's consciousness and have been shown to influence the adoption of eco-friendly products and energy-saving behaviors (Laheri et al., 2024; Bhutto et al., 2020). Nevertheless, favorable attitudes do not always result in corresponding PB, indicating the involvement of additional factors.

The literature further highlights the importance of social norms (SN) in shaping sustainable consumption. SN reflects perceived expectations and social pressure to engage in particular behaviors (Nogueira et al., 2023; Ajzen, 1991). Empirical research demonstrates that consumers often align their purchasing decisions with observed or expected behaviors of others, particularly in socially visible contexts (Cialdini & Jacobson, 2021). Both descriptive norms, which signal common behavior and injunctive norms, which reflect social approval, have been shown to influence environmentally responsible intentions and actions (Chen & Madni, 2023; Xu et al., 2022). These findings underscore the collective dimension of sustainable consumption, where behavior is shaped not only by personal values but also by social expectations.

Another critical determinant identified in prior research is perceived behavioral control (PBC), which refers to individuals' perceived ability to perform behavior successfully (Fawehinmi et al., 2023). PBC is influenced by access to resources, including time, money and effort, as well as by individuals' confidence in their decision-making capabilities (Adewoyin et al., 2024). Research grounded in the Theory of Planned Behavior (TPB) emphasizes that PBC can be more influential than actual control in determining PB (Ajzen, 2020). Both internal control reflecting self-confidence and external control reflecting facilitating conditions, have been shown to independently affect intention formation (Sun et al., 2023; Hagger et al., 2022; Kidwell & Jewellet, 2003). Given the complexity of purchase decisions, PBC often interacts with CA to guide consumer behavior (Agarwal et al., 2025).

Despite strong evidence supporting the role of psychological and social factors, a persistent intention-behavior gap remains a central concern in the literature. Sustainable PI does not consistently translate into PB (Shan et al., 2025; Mason et al., 2022). One explanation frequently advanced involves PS, which reflects consumers' responsiveness to price changes and willingness to pay premiums for sustainable products (Hsu et al., 2017; Zepeda & Deal, 2009). While some studies portray price as a barrier that discourages sustainable purchases, others suggest that higher prices may enhance perceived quality and value, particularly for organic and eco-friendly products (Dorce et al., 2021; Ghali-Zinoubi & Toukabri, 2019). Empirical findings therefore remain inconclusive regarding whether PS constrains or conditions sustainable PB. This ambiguity has led to the incorporation of PS as a moderating variable in extended behavioral models (Bhutto et al., 2022).

Overall, existing research provides strong support for the influence of EA, CA, SN and PBC on sustainable PI. However, substantial inconsistency persists in explaining how PI is transformed into PB, particularly in the presence of economic considerations such as PS. The fragmented treatment of these factors highlights the need for an integrated examination of psychological, social and economic influences on sustainable consumption.

In light of these gaps, the present study aims to examine the combined effects of EA, CA, SN and PBC on PI and to investigate the moderating role of PS in the relationship between PI and PB. After analyzing the relevant literature, the study presents the following hypotheses:

H1: Eco-awareness has positive impact on consumer purchase intention.

H2: Consumer attitude has positive impact on consumer purchase intention.

H3: Social norms have positive impact on consumer purchase intention.

H4: Perceived behavioral control has positive impact on consumer purchase intention.

H5: Price sensitivity positively moderates the relationship between purchase intention and purchase behavior.

http://dx.doi.org/10.21511/im.22(2).2026.19

H6: Purchase intention has positive impact on purchase behavior towards sustainable products.

2. METHODOLOGY

The study employed a quantitative, cross-sectional survey design to examine the determinants of sustainable PI and PB. The research procedure followed four sequential steps. First, a structured questionnaire was developed based on established measurement scales widely used in sustainability and consumer behavior research. Second, the pilot testing was done to ensure clarity and content validity. Third, data were collected from eligible respondents using both online and offline survey modes. Finally, the collected data were screened, coded and prepared for statistical analysis.

Primary data were collected from students and employees aged 18 years and above in higher education institutes in three regions of Northern India: Delhi NCR, Rajasthan, and Jammu & Kashmir. People within this demographic possess their own purchasing power and actively engage in market decisions, making them suitable for research on PI and PB (Ogiemwonyi et al., 2020). Previous studies on sustainability have also focused on adult consumers, highlighting that environmental attitudes and responsible consumption tend to become more consistent and quantifiable during adulthood (Biswas & Roy, 2015). These regions were selected to capture diversity in socio-economic conditions, market maturity and environmental exposure (Boermans et al., 2024). Data collection was conducted between April 2025 and June 2025. A pilot study (n = 60) was conducted to ensure clarity, reliability and validity. The questionnaire was tested by selecting a convenience sample of 60 respondents (25 from Delhi NCR, 16 from Rajasthan and 19 from Jammu & Kashmir). The variables for that the respondents were unable to answer were modified and the study instrument was reframed and reorganized. After assuring the construct validity and reliability, the full scale data was collected and initial sample consisted of 613 responses. After eliminating invalid or incomplete responses, the final sample size was 553. The sample size surpasses the minimum threshold recommended by Hair et al. (2017). Participation was voluntary and respondents were informed about the academic purpose of the study. The Institutional Human Ethics Committee of the Central University of Jammu, with the reference number CUJ/IHEC/2025/08, granted ethical approval for the study.

A structured questionnaire was designed on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), capturing constructs developed from validated constructs of existing literature studies. Questions adapted from previous sustainability research were employed to assess EA (Sahioun et al., 2023) and CA (Varah et al., 2020). Scales developed by Paul et al. (2016) were employed to assess SN, PBC, and PI. The frequency and consistency of self-reported purchases of eco-friendly items were utilized to assess PB (Abeysekera et al., 2022). Furthermore, PS was incorporated as a moderating variable and measured (Malhotra & Srivastava, 2024). Descriptive and exploratory analysis is done using SPSS while the study employs a mediated moderation analysis using structural equation modeling (Sarstedt et al., 2021). This method was selected due to its suitability for predictive analysis and complex models involving moderation effects (Sardeshmukh & Vandenberg, 2016).

The demographic profile of the respondents is presented in Table 1. Survey data highlights 35.4% of the respondents fall in the age category of 24-28 indicating large number of young adults while respondents in the age group of 22-24 years, constitutes 33.9% of the sample. The study shows that male participants were 58.4% of the total sample while female accounted for 41.6% of the 553 participants. This gender distribution of participants shows a balanced mix between male and female respondents. The educational background of respondents shows that 39.6% hold an undergraduate degree while 31.8% of participants achieved postgraduate qualifications. As per income distribution, 29.0% of the respondents fall between Rs 25,001 to Rs 50,000. The income of the 17.0% respondent range of Rs 75,001 to Rs 100,000 while 12.0% of the respondents earn between Rs 50,001 to Rs 75,000. The largest group of the respondents (42.8%) comes from Delhi NCR, followed by Jammu & Kashmir and Rajasthan each having 29.7% and 27.5% participants, respectively.

The significant representation from Delhi NCR, Rajasthan and Jammu & Kashmir indicates a well-distributed regional spread, enhancing the generalizability of the findings across varied socio-cultural contexts.

Table 1. Demographic characteristics of respondents

Characteristics	Description	Frequency	Percent
Age group	18-22	170	30.7
	22-24	187	33.9
	24-28	196	35.4
Gender	Male	323	58.4
	Female	230	41.6
Marital status	Married	310	56.0
	Unmarried	243	44.0
Educational level	Undergraduate	219	39.6
	Post-graduate	176	31.8
	Professional qualification/ Doctorate degree	99	17.9
	Other qualification	59	10.7
Monthly income level	Less than Rs 25,000	176	32.0
	Rs 25,001to Rs 50,000	160	29.0
	Rs 50,001 to Rs 75,000	66	12.0
	Rs 75,001 to Rs 100,000	94	17.0
	Rs 100,001 and above	57	10.0
State wise classification	Delhi NCR	237	42.8
	Rajasthan	152	27.5
	Jammu & Kashmir	164	29.7

3. RESULTS

EA with overall mean score of 3.143 indicates a moderate level of awareness, with a standard deviation (SD) of 1.39993 and variance of 1.960, reflecting a relatively wide spread of responses. The overall mean score for CA is 3.273 (SD = 1.43020), indicating a moderately positive intention for sustainable products and variance of 2.045 suggest a considerable spread in responses, reflecting varying degrees of attitude among consumer. The overall mean score for SN is 2.955 (SD = 1.42760), indicating a moderate level of agreement with the influence of SN. For the construct PBC the overall mean score of 3.130 suggests a moderate level of PBC among respondents, with the SD of 0.94277 and variance of 0.889 indicate relatively consistent responses around the mean. The overall mean score (Table 2) for PI is 3.318, indicating a moderate inclination toward buying sustainable product.

Table 2. Descriptive statistics

Measurement variables	Mean	Std. deviation	Variance
Eco-awareness	**3.143**	**1.39993**	**1.960**
EA1	2.845	1.70922	2.921
EA2	3.246	1.53022	2.342
EA3	3.130	1.56306	2.443
EA4	3.195	1.27327	1.621
EA5	3.297	1.36822	1.872
Consumer attitude	**3.273**	**1.43020**	**2.045**
CA1	3.324	1.45155	2.107
CA2	3.103	1.63694	2.680
CA3	3.392	1.42051	2.018
CA4	3.450	1.45144	2.107
Social norms	**2.955**	**1.42760**	**2.038**
SN1	2.714	1.59758	2.552
SN2	3.130	1.52908	2.338
SN3	2.816	1.39953	1.959
SN4	3.159	1.59255	2.536
Perceived behavioral control	**3.130**	**0.94277**	**0.889**
PBC1	3.165	1.24675	1.554
PBC2	3.159	1.14998	1.322
PBC3	3.224	1.23813	1.533
PBC4	3.268	1.21016	1.464
PBC5	2.835	1.57196	2.471
Purchase intention	**3.318**	**0.66347**	**0.440**
PI1	3.085	0.96965	0.940
PI2	3.524	0.55482	0.308
PI3	3.559	0.53558	0.287
PI4	3.105	1.01788	1.036
Purchase behavior	**3.096**	**1.07998**	**1.166**
PB1	3.087	1.32413	1.753
PB2	3.018	1.29787	1.684
PB3	3.163	1.35491	1.836
PB4	3.098	1.19079	1.418
PB5	2.808	1.29777	1.684
PB6	3.326	1.11756	1.249
PB7	3.175	1.21135	1.467
Price sensitivity	**4.142**	**0.60395**	**0.365**
PS1	4.204	0.64817	0.420
PS2	4.147	0.78382	0.614
PS3	4.188	0.64612	0.417
PS4	4.094	0.66090	0.437
PS5	4.078	0.69111	0.478

http://dx.doi.org/10.21511/im.22(2).2026.19

As shown in Table 3, the construct demonstrates strong construct reliability and validity across all constructs. Cronbach's Alpha and Composite Reliability (rho_a and rho_c) values exceed the recommended threshold of 0.70 for all constructs, indicating high internal consistency. Notably, CA (α = 0.970; CR = 0.979) and SN (α = 0.951; CR = 0.965) show excellent reliability. The Average Variance Extracted (AVE) values are above the minimum acceptable threshold of 0.50, indicating convergent validity. The AVE is for CA (0.919) and EA (0.865) indicate strong convergent validity. The VIF values, measuring multicollinearity, remain below the critical threshold of 5, indicating no multicollinearity problems. The f-square values (effect size) observed for PI (0.767) and SN (0.510) highlight the varying strengths of relationships between constructs. These results confirm that the measurement model is both reliable and valid for further structural modeling.

Table 4 presents the Heterotrait-Monotrait Ratio (HTMT) matrix, which assesses the discriminant validity of the constructs. As per Henseler et al. (2015), HTMT values under 0.85 suggest that the constructs are empirically distinct. All HTMT values met the criteria for confirming adequate discriminant validity. The highest HTMT value was 0.798 between PBC and PI, with SN and PI having a similar value of 0.796. The other construct pairs had HTMT values ranging from 0.033 to 0.645, reinforcing that the latent variables represent distinct theoretical concepts. Hence, these values confirm that each construct measures unique aspect of the theoretical framework, enhancing the robustness of the structural model.

The Fornell-Larcker criterion evaluates the discriminant validity of the measurement model. According to this criterion, the square root of the AVE values for each construct must exceed the correlation coefficients shared with other constructs. All constructs satisfy this criterion (Table 5). The diagonal value of CA at 0.959 exceeds its correlations with EA at 0.082 and PBC at 0.165 and PI at 0.430. Similarly, PBC (0.745), which exceeds its correlations with SN (0.530) and PI (0.631), is supporting discriminant validity. The high AVE value of 0.885 for PS combined with its negative correlations between constructs ensures its conceptual distinctiveness from other variables. These values indicate that each variable explains more of its own indicators than others, thus confirming the statistical reliability and theoretical distinction.

The R-squared value is an indicator of how much of the variance in the endogenous variable is accounted for by the exogenous variables

Table 3. Construct reliability and validity

Variable	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted	VIF	f-square
Consumer attitude	0.970	0.972	0.979	0.919	1.160	0.096
Eco-awareness	0.947	0.949	0.962	0.865	1.020	0.185
Perceived behavioral control	0.792	0.819	0.859	0.555	1.410	0.237
Price sensitivity	0.930	0.934	0.947	0.783	1.010	0.000
Purchase intention	0.875	0.877	0.915	0.729	1.010	0.767
Social norms	0.951	0.953	0.965	0.872	1.570	0.510
Purchase behavior	0.941	0.950	0.953	0.747	0.000	0.000

Table 4. Heterotrait-Monotrait ratio (HTMT)

Variable	CA	EA	PBC	PS	PB	PI	SN	PS x PI
CA								
EA	0.088							
PBC	0.204	0.165						
PS	0.051	0.044	0.076					
PB	0.230	0.186	0.600	0.032				
PI	0.470	0.344	0.798	0.072	0.719			
SN	0.378	0.078	0.645	0.046	0.643	0.796		
PS x PI	0.036	0.051	0.044	0.049	0.098	0.033	0.034	

Table 5. Fornell-Larcker criterion

Variable	CA	EA	PBC	PS	PB	PI	SN
CA	0.959						
EA	0.082	0.930					
PBC	0.165	0.119	0.745				
PS	–0.049	–0.038	–0.065	0.885			
PB	0.225	0.177	0.487	–0.023	0.864		
PI	0.430	0.303	0.631	–0.059	0.659	0.854	
SN	0.362	0.028	0.530	–0.040	0.616	0.727	0.934

in the structural model. For PI, the R-square was 0.703, and the adjusted R-square was 0.701, suggesting that the exogenous variables (EA, CA, SN, and PBC) explained about 70.3% of the variance in PI. This underscores a strong predictive relationship between the exogenous constructs and PI. Meanwhile, the R-square value for PB stood at 0.440, with an adjusted R-square value of 0.437, indicating that 44% of the variance in PB is accounted for by the theoretical model. The adjusted R-square values, which are slightly lower than the R-square values, take into consideration the complexity of the model and affirm the reliability of the explained variances. Table 6 results collectively highlight that the model possesses a good explanatory power, particularly for PI.

Table 6. R-square

Variable	R-square	R-square adjusted
PB	0.440	0.437
PI	0.703	0.701

The PLS predict analysis (Table 7) demonstrates model's predictive power through Q2 predict values and RMSE (Root Mean Squared Error) and MAE (Mean Absolute Error) results. According to Richter & Tudoran (2024), Q2 predict value above 0 implies that the model has predictive relevance and values above 0.35 underscores the model's excellent out-of-sample prediction capacity. The Q2 predict values for PI and PB are 0.700 and 0.401 respectively, demonstrates strong predictive ability for both constructs with PI showing high predictive strength. The RMSE and MAE values for PI amount to 0.549 and 0.422, respectively, while PB shows RMSE and MAE values of 0.777 and 0.632. The predictive accuracy of a model improves when it's RMSE and MAE values decrease. The relatively lower error metrics for PI suggest that the model performs more accurately in predicting PI than PB. These findings reinforce the model's practical utility in predicting consumer decision-making and behavioral tendencies.

Table 7. PLS predict LV summary

Variable	Q^2predict	RMSE	MAE
PB	0.401	0.777	0.632
PI	0.700	0.549	0.422

The various model fit indices, which assess the overall fit of the structural model in PLS-SEM, are presented in Table 8. The Standardized Root Mean Square Residual (SRMR) value is 0.097, above the conservative threshold of 0.08 but still within the acceptable range below 0.10, indicating an adequate model fit. The d_ULS and d_G values of 5.235 and 3.341, respectively, indicates acceptable levels of model specification errors. The Chi-square values (7,601.682 and 7,638.509) show high values which occur frequently in big data sets although Chi-square becomes less reliable when working with large sample sizes. The Normed Fit Index (NFI) values of 0.695 and 0.694 fall below the threshold of 0.90 but still indicate an acceptable comparative fit. Overall, while the model fit indices suggest room for improvement, they do not undermine the model's credibility. In PLS-SEM, emphasis is typically placed more on path coefficients, R-square and predictive relevance rather than absolute model fit.

Table 8. Model fit summary

Indicator	Saturated model	Estimated model
SRMR	0.097	0.101
d_ULS	5.235	5.735
d_G	3.341	3.364
Chi-square	7601.682	7638.509
NFI	0.695	0.694

The results of the structural equation model, path coefficients (β), t-values and p-values that explain the strength, direction and statistical significance

http://dx.doi.org/10.21511/im.22(2).2026.19

Table 9. Results of structural equation model

Hypothesis	Construct relationship	Path coefficient (β)	Standard deviation (STDEV)	t-statistics (|O/STDEV|)	p-values	Decision
H1	EA → PI	0.237	0.023	10.497	0.000	Accepted
H2	CA → PI	0.182	0.024	7.714	0.000	Accepted
H3	SN → PI	0.487	0.032	15.42	0.000	Accepted
H4	PBC → PI	0.315	0.032	9.762	0.000	Accepted
H5	PI → PB	0.657	0.025	25.803	0.000	Accepted
H6	PS x PI → PB	0.076	0.035	2.152	0.031	Accepted

of the hypothesized relationships among the constructs in the proposed framework are presented in Table 9 and Figure 1.

The result states that EA with a β = 0.237, t = 10.497 and p = 0.000, has a positive influence on PI. The high t-value and lower p-value indicate a robust relationship, affirming the hypothesis that greater EA among consumer significantly contributes to stronger PI. Similarly, CA exhibits positive association with PI, evidenced by β = 0.182, t = 7.714 and p = 0.000. This suggests that a favorable CA towards sustainable consumption influences their PI.

Furthermore, SN produces the most significant impact on PI, with β = 0.487, t = 15.420 and p = 0.000. This effect underscores the important role of society and peers in influencing the PI, especially in sustainable behavior. PBC shows a moderate impact on PI, with β = 0.315, t = 9.762 and p = 0.000, indicating consumer who feel they have better control over their buying decisions tend to develop strong PI.

Moving further in the model, PI strongly predicts PB, with the highest path coefficient in the model with β = 0.657, t = 25.803 and p = 0.000. The analy-

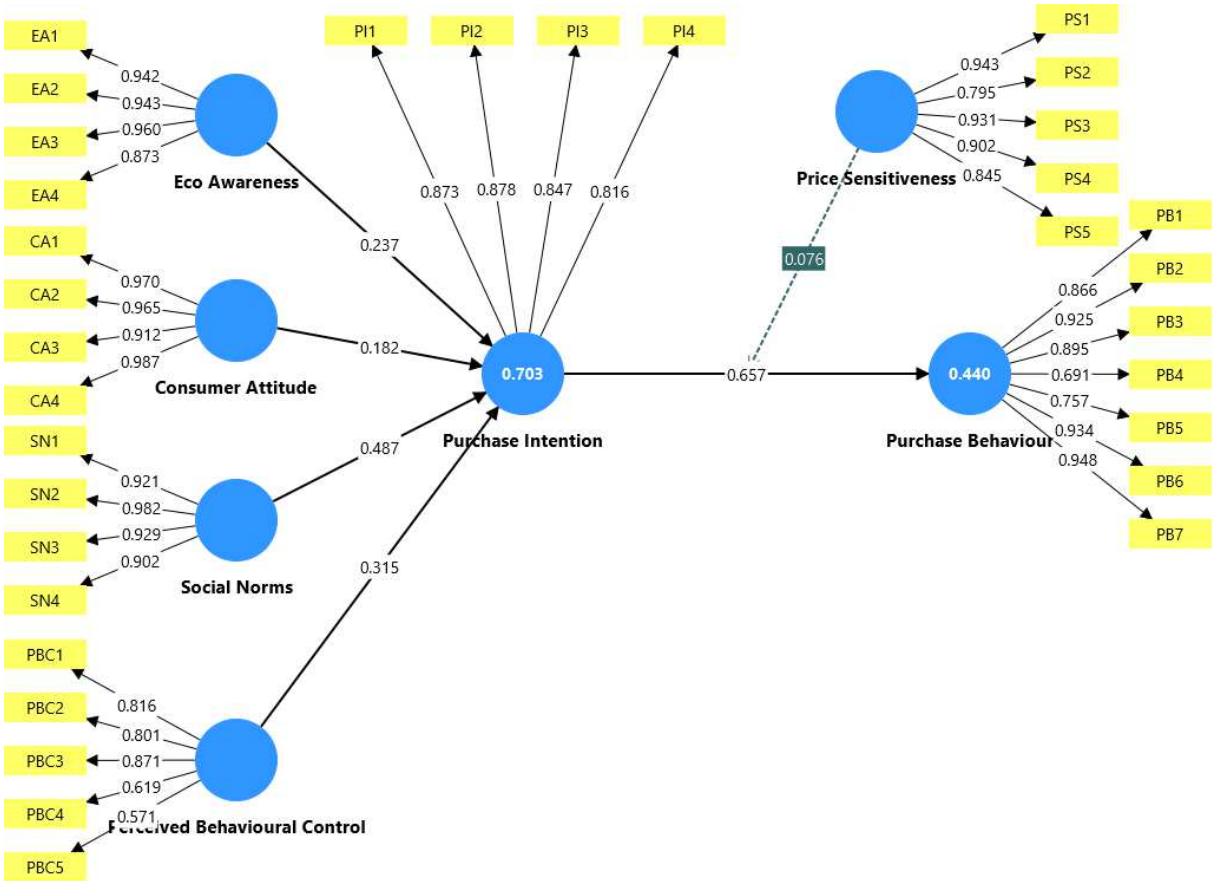

Figure 1. Structural model and path coefficient

sis supports TPB because it shows that PI directly determines PB. However, PS alone does not significantly affect PB, as highlighted by low β = 0.012, t = 0.358 and insignificant p = 0.720. This implies that PS does not independently drive or limit sustainable PB in this context.

The analysis reveals that the interaction term (PS × PI) produces a statistically significant effect on PB with β = 0.076, t = 2.152 and p = 0.031. Although the coefficient is relatively modest, the significant p-value suggests that PS influence the strength of the relationship between PI and PB. The execution of behavior depends on the level of PS when it is combined with PI.

In summary, all direct paths to PI are statistically significant, validating the respective hypotheses. The path from PI to PB is also significant, while PS do not directly influences PB. However, the moderation hypothesis involving PS and PI is supported. The research findings provide insights for academic researchers and business professionals to understand how psychological factors interact with economic elements to shape sustainable PB.

4. DISCUSSION

The positive correlation between EA and PI is indicated with β = 0.237, t = 10.497 and p = 0.000. These results align with Kim and Lee (2023) who suggested that consumer propensity to buy sustainable products increases as they become more cognizant of ecological concerns, confirming that eco-conscious consumer are more likely to choose sustainable products. CA has a statistically positive impact on PI, with β = 0.182, t = 7.714 and p = 0.000. However, the strength of the CA effect is comparatively weaker, highlighting that positive CA are necessary, but they may no longer be sufficient on their own to drive strong PI (Eunike et al., 2025). Compared with Kumar et al. (2021), who emphasized that attitude plays a crucial role in shaping PI, the present findings indicate a shift toward more socially embedded and capability-driven PB.

The results demonstrate that SN have a positive impact on PI, with highest β = 0.487, t = 15.420 and p = 0.000. This implies that consumer PI are influenced by SN and perceived expectations from peers, family or society (Nguyen & Ho, 2022). This indicates that consumers are highly responsive to perceived expectations and behaviors of others, such as family members, peers and social groups, when forming PI for sustainable products (Islam et al., 2024). The research shows that PBC strongly affects PI with β = 0.315, t = 9.762 and p = 0.000. Consumer tends to perform sustainable actions when they feel confident about their ability to do so through their available resources and personal capabilities (Mabkhot, 2024).

The strong and positive relationship between PI and PB is evidenced with β = 0.657, t = 25.803 and p = 0.000. These results are consistent with Ajzen (1991, 2020) who conceptualizes intention as the most important determinant of behavior, particularly in contexts involving planned decisions. Empirical research by Vu et al. (2021) indicated that consumer who express stronger PI will turn those intentions into sustainable actions. The results found that PS has no direct influence on PB (β = 0.012, p = 0.720). However, the week but significant moderating effect of PS (β = 0.076, p = 0.031), partially supports earlier research suggesting that economic factors act as situational barriers rather than primary determinants of PB (Dioba et al., 2024). While Joshi and Rahman (2015) show price as a dominant barrier to sustainable consumption, others argue that environmentally motivated consumers are willing to pay premium when strong intentions are present (White et al., 2019). This suggests that once PI are formed, behavioral execution becomes less price dependent, as sustainable consumption is increasingly governed by psychological and normative mechanisms rather than purely economic evaluation.

This research enhances the theoretical understanding of sustainable PB by extending and empirically validating the TPB. The results highlights that SN and PI function as primary factors determining sustainable PB, reinforcing the TPB's assertion that normative influence and behavioral intention are critical antecedents of PB. Furthermore, the mediating role of PI between EA, CA, PBC and PB demonstrates the psychological mechanism through which these variables translate into PB, extending the explanatory power of the TPB framework.

http://dx.doi.org/10.21511/im.22(2).2026.19

Additionally, the study achieves theoretical advancement with inclusion of PS as a moderating variable which revels no statistical impact on PB, suggesting that sustainability oriented consumer are less influenced by economic barriers, more by social and environmental motivations. The robustness of the measurement model ($\alpha > 0.87$; AVE > 0.55) further supports the validity of this extended model. Contextually, this research adds value to sustainability literature by providing evidences from a developing economy, explaining how psychological and normative constructs operate in shaping PB for sustainable products.

First, the substantial effects of SN ($\beta = 0.487$, $f^2 = 0.510$) and PI ($\beta = 0.657$, $f^2 = 0.767$) on PB emphasize that SN and PI are the powerful drivers of PB. Managers should implement influencer marketing, community-driven campaigns and loyalty programs, to translate PI into PB.

Second, the moderate effects of EA ($\beta = 0.237$, $f^2 = 0.185$) and PBC ($\beta = 0.315$, $f^2 = 0.237$), suggests that when consumer are aware and capable of making sustainable choices, will develop stronger PI. Business firms should use educational content and transparent product labeling and user friendly options to make sustainable choices more accessible and convenient for their customers.

Third, the smaller yet significant effect of CA ($\beta = 0.182$, $f^2 = 0.096$) on PI, suggest that positive CA toward sustainability still play a role but are not sufficient alone. Thus, marketers should use emotional appeals clubbed with tangible rewards and discounts to transform positive CA into PI.

Fourth, interestingly PS ($\beta = 0.012$, $f^2 = 0.000$) demonstrates no significant direct effect on PB, while its interaction effect with PI have positive effect ($\beta = 0.076$, $f^2 = 0.010$). This suggests that price is no longer a barrier for sustainability oriented consumer in this context. Marketers should focus less on price competition and more on value differentiation, emphasizing environmental benefits, product quality and long-term savings rather than short-term price advantages.

Finally, these findings collectively indicate that sustainable consumption can be effectively driven through a combination of social influence, empowerment and environmental awareness rather than through pricing mechanisms.

CONCLUSIONS

This research aimed to bridge the discrepancy between PI and PB by exploring the combined effects of psychological, social and economic factors within a unified behavioral framework. The analysis of results confirms that SN ($\beta = 0.487$) and PI ($\beta = 0.657$), are the strongest predictors of PB, while EA ($\beta = 0.237$) and PBC ($\beta = 0.315$) make meaningful contributions in forming favorable PI. In contrast, PS and its interaction term show minimum effects ($\beta = 0.076$). The limited impact of PS as a moderating factor indicates that economic considerations marginal affect behavior and do not significantly alter the intention behind PB. It suggesting that sustainability-focused consumers are motivated more by social and environmental motivations than by price considerations.

The model also demonstrates explanatory and predictive strength, with $R^2 = 0.703$ for PI and $R^2 = 0.440$ (adjusted $R^2 = 0.437$) for PB. The high Q^2 predict values (0.700 and 0.401) and low RMSE (0.549; 0.777) and MAE (0.422; 0.632) confirm the model's predictive relevance and robustness. These findings validate the theoretical soundness of the extended TPB model. Contextually, this study enriches the literature on sustainability and consumer behavior by offering empirical insights from a developing economy. PI can be transformed into PB when supported by SN, EA, and perceived control. The results emphasize that sustainability should be viewed not merely as an ethical obligation but as a strategic driver of behavioral change and market competitiveness in the evolving global context.

The study enhanced TPB by adding EA and PS to solve intention-behavior gap in sustainable marketing, but it has some limitations as well. Future studies should include brand reputation and perceived

product efficacy as moderating variables to bridge the intention behavior gap. By including three different regions of northern India (Delhi NCR, Rajasthan and Jammu & Kashmir) the study attempted to represent different cultures in our sample; however the generalizability of results is limited to the region included. Future research studies can examine other parts of India like southern or eastern regions. The study employed cross sectional method of data collection, so the future studies can include longitudinal research method to track the changes in PB of over the time.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The Institutional Human Ethics Committee of the Central University of Jammu reviewed the study protocol. The Committee approved the protocol and confirmed that informed consent is implied through the voluntary completion of the questionnaire by respondents. All procedures were conducted in compliance with the relevant ethical guidelines and regulations as approved by the Committee.

AUTHOR CONTRIBUTIONS

Conceptualization: Parveen Yadav, Arun Yadav, Neelika Arora.
Data curation: Arun Yadav, Abhinav Thakur, Sumanjeet Singh.
Formal analysis: Arun Yadav, Vinay Kumar, Abhinav Thakur.
Investigation: Parveen Yadav, Neelika Arora, Vinay Kumar.
Methodology: Sumanjeet Singh, Vinay Kumar, Abhinav Thakur.
Supervision: Neelika Arora, Parveen Yadav, Sumanjeet Singh.
Writing-original draft: Parveen Yadav, Arun Yadav, Abhinav Thakur.
Writing-review & editing: Neelika Arora, Vinay Kumar, Sumanjeet Singh.

REFERENCES

1. Abdul Basit, S., Gharleghi, B., Batool, K., Hassan, S. S., Jahanshahi, A. A., & Kliem, M. E. (2024). Review of enablers and barriers of sustainable business practices in SMEs. *Journal of Economy and Technology, 2,* 79-94. https://doi.org/10.1016/j.ject.2024.03.005
2. Abeysekera, I., Manalang, L., David, R., & Grace Guiao, B. (2022). Accounting for environmental awareness on green purchase intention and behavior: Evidence from the Philippines. *Sustainability, 14*(19), 12565. https://doi.org/10.3390/su141912565
3. Adewoyin, O., Wesson, J., & Vogts, D. (2024). The PBC model: Promoting positive behaviors through change-based interventions. *Cognition, Technology & Work, 26*(4), 673-708. https://doi.org/10.1007/s10111-024-00776-4
4. Agarwal, P., Kumar, D., & Katiyar, R. (2025). Antecedents of continuous purchase behavior for sustainable products: An integrated conceptual framework and review. *Journal of Consumer Behavior, 24*(4), 1685-1710. https://doi.org/10.1002/cb.2487
5. 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
6. Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies, 2*(4), 314-324. https://doi.org/10.1002/hbe2.195
7. Bhutto, M. H., Tariq, B., Azhar, S., Ahmed, K., Khuwaja, F. M., & Han, H. (2020). Predicting consumer purchase intention toward hybrid vehicles: Testing the moderating role of price sensitivity. *European Business Review, 34*(1), 62-84. https://doi.org/10.1108/ebr-10-2019-0274
8. Bhutto, M. Y., Soomro, Y. A., & Yang, H. (2022). Extending the theory of planned behavior: Predicting young consumer purchase behavior of energy-efficient appliances (Evidence from developing economy). *Sage Open, 12*(1), 62-84. https://doi.org/10.1177/21582440221078289
9. Biswas, A., & Roy, M. (2015). Green products: an exploratory study on the consumer behavior in emerging economies of the East. *Journal of Cleaner Production, 87,* 463-468. https://doi.org/10.1016/j.jclepro.2014.09.075
10. Boermans, D. D., Jagoda, A., Lemiski, D., Wegener, J., & Krzywonos, M. (2024). Environmental awareness and sustainable behavior of respondents in Germany, the Netherlands and Poland: A qualitative focus group study. *Journal of Environmental Management, 370,* 122515. https://doi.org/10.1016/j.jenvman.2024.122515

http://dx.doi.org/10.21511/im.22(2).2026.19

11. Chen, B., & Madni, G. R. (2023). Achievement of sustainable environment through effectiveness of social media in Z generation of China. *PLOS ONE, 18*(11). https://doi.org/10.1371/journal.pone.0292403

12. Cialdini, R. B., & Jacobson, R. P. (2021). Influences of social norms on climate change-related behaviors. *Current Opinion in Behavioral Sciences, 42,* 1-8. https://doi.org/10.1016/j.cobeha.2021.01.005

13. Corral-Verdugo, V., Lucas, M. Y., Tapia-Fonllem, C., & Ortiz-Valdez, A. (2019). Situational factors driving climate change mitigation behaviors: The key role of pro-environmental family. *Environment, Development and Sustainability, 22*(8), 7269-7285. https://doi.org/10.1007/s10668-019-00496-0

14. Dioba, A., Kroker, V., Dewitte, S., & Lange, F. (2024). Barriers to pro-environmental behavior change: A review of qualitative research. *Sustainability, 16*(20), 8776. https://doi.org/10.3390/su16208776

15. Dorce, L. C., da Silva, M. C., Mauad, J. R. C., de Faria Domingues, C. H., & Borges, J. A. R. (2021). Extending the theory of planned behavior to understand consumer purchase behavior for organic vegetables in Brazil: The role of perceived health benefits, perceived sustainability benefits and perceived price. *Food Quality and Preference, 91,* 104191. https://doi.org/10.1016/j.foodqual.2021.104191

16. Elhoushy, S., & Jang, S. (2023). How to maintain sustainable consumer behaviors: A systematic review and future research agenda. *International Journal of Consumer Studies, 47*(6), 2181-2211. https://doi.org/10.1111/ijcs.12905

17. Eunike, I. J., Silalahi, A. D., Phuong, D. T., & Tedjakusuma, A. P. (2025). Towards a holistic model of green consumerism by integrating ethical obligations, collective efficacy, and environmental concerns in sustainable purchase behavior. *Sustainable Futures, 9,* 100746. https://doi.org/10.1016/j.sftr.2025.100746

18. Fawehinmi, O., Yusliza, M. Y., Tanveer, M. I., & Abdullahi, M. S. (2023). Influence of green human resource management on employee green behavior: The sequential mediating effect of perceived behavioral control and attitude toward corporate environmental policy. *Corporate Social Responsibility and Environmental Management, 31*(3), 2514-2536. https://doi.org/10.1002/csr.2707

19. Flores-Hernández, J. A., Cambra-Fierro, J. J., & Vázquez-Carrasco, R. (2020). Sustainability, brand image, reputation and financial value: Manager perceptions in an emerging economy context. *Sustainable Development, 28*(4), 935-945. https://doi.org/10.1002/sd.2047

20. Ghali-Zinoubi, Z., & Toukabri, M. (2019). The antecedents of the consumer purchase intention: Sensitivity to price and involvement in organic product: Moderating role of product regional identity. *Trends in Food Science & Technology, 90,* 175-179. https://doi.org/10.1016/j.tifs.2019.02.028

21. Hagger, M. S., Cheung, M. W., Ajzen, I., & Hamilton, K. (2022). Perceived behavioral control moderating effects in the theory of planned behavior: A meta-analysis. *Health Psychology, 41*(2), 155-167. https://doi.org/10.1037/hea0001153

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

23. 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. https://doi.org/10.1007/s11747-014-0403-8

24. Hsu, C., Chang, C., & Yansritakul, C. (2017). Exploring purchase intention of green skincare products using the theory of planned behavior: Testing the moderating effects of country of origin and price sensitivity. *Journal of Retailing and Consumer Services, 34,* 145-152. https://doi.org/10.1016/j.jretconser.2016.10.006

25. Islam, J. U., Thomas, G., & Albishri, N. A. (2024). From status to sustainability: How social influence and sustainability consciousness drive green purchase intentions in luxury restaurants. *Acta Psychologica, 251,* 104595. https://doi.org/10.1016/j.actpsy.2024.104595

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

27. Karamchandani, S., Karani, A., & Jayswal, M. (2021). Linkages between advertising value perception, context awareness value, brand attitude and purchase intention of hygiene products during COVID-19: A two wave study. *Vision: The Journal of Business Perspective, 28*(5), 607-620. https://doi.org/10.1177/09722629211043954

28. Khatibi, F. S., Dedekorkut-Howes, A., Howes, M., & Torabi, E. (2021). Can public awareness, knowledge and engagement improve climate change adaptation policies? *Discover Sustainability, 2*(1), 18. https://doi.org/10.1007/s43621-021-00024-z

29. Kherazi, F. Z., Sun, D., Sohu, J. M., Junejo, I., Naveed, H. M., Khan, A., & Shaikh, S. N. (2024). The role of environmental knowledge, policies and regulations toward water resource management: A mediated-moderation of attitudes, perception, and sustainable consumption patterns. *Sustainable Development, 32*(5), 5719-5741. https://doi.org/10.1002/sd.2991

30. Kidwell, B., & Jewell, R. D. (2003). An examination of perceived behavioral control: Internal and external influences on intention. *Psychology & Marketing, 20*(7), 625-642. https://doi.org/10.1002/mar.10089

31. Kim, N., & Lee, K. (2023). Environmental consciousness, purchase intention, and actual

purchase behavior of eco-friendly products: The moderating impact of situational context. *International Journal of Environmental Research and Public Health, 20*(7), 5312. https://doi.org/10.3390/ijerph20075312

32. Kumar, A., Prakash, G., & Kumar, G. (2021). Does environmentally responsible purchase intention matter for consumers? A predictive sustainable model developed through an empirical study. *Journal of Retailing and Consumer Services, 58*. https://doi.org/10.1016/j.jretconser.2020.102270

33. Laheri, V. K., Lim, W. M., Arya, P. K., & Kumar, S. (2024). A multidimensional lens of environmental consciousness: Towards an environmentally conscious theory of planned behavior. *Journal of Consumer Marketing, 41*(3), 281-297. https://doi.org/10.1108/jcm-03-2023-5875

34. Mabkhot, H. (2024). Factors affecting millennials' green purchase behavior: Evidence from Saudi Arabia. *Heliyon, 10*(4). https://doi.org/10.1016/j.heliyon.2024.e25639

35. Maja, M. M., & Ayano, S. F. (2021). The impact of population growth on natural resources and farmers' capacity to adapt to climate change in low-income countries. *Earth Systems and Environment, 5*(2), 271-283. https://doi.org/10.1007/s41748-021-00209-6

36. Malhotra, G., & Srivastava, H. (2024). Green purchase intention in omnichannel retailing: role of environmental knowledge and price sensitivity. *Journal of Strategic Marketing, 32*(4), 467-490. https://doi.org/10.1080/0965254x.2023.2241464

37. Mason, M. C., Pauluzzo, R., & Umar, R. M. (2022). Recycling habits and environmental responses to fast-fashion consumption: Enhancing the theory of planned behavior to predict Generation Y consumers' purchase decisions. *Waste Management, 139,* 146-157. https://doi.org/10.1016/j.wasman.2021.12.012

38. Mathew, M., & Spinelli, R. (2025). Decoding sustainable drivers: A systematic literature review on sustainability-induced consumer behavior in the fast fashion industry. *Sustainable Production and Consumption, 55,* 132-145. https://doi.org/10.1016/j.spc.2025.02.011

39. Nakaishi, T., & Chapman, A. (2024). Eco-labels as a communication and policy tool: A comprehensive review of academic literature and global label initiatives. *Renewable and Sustainable Energy Reviews, 202*. https://doi.org/10.1016/j.rser.2024.114708

40. Narayanan, S., & Singh, G. A. (2023). Consumers' willingness to pay for corporate social responsibility: Theory and evidence. *International Journal of Consumer Studies, 47*(6), 2212-2244. https://doi.org/10.1111/ijcs.12910

41. Nguyen, G. N., & Ho, T. T. H. (2022). Interplay between subjective norm, emotions, and purchase intention towards foreign brands: evidence from Vietnam. *Innovative Marketing, 18*(1), 79-93. https://doi.org/10.21511/im.18(1).2022.07

42. Nogueira, M., Dias, F., & Santos, V. (2023). Sustainable mobility choices: Exploring the impact of consumers' values, attitudes, perceived behavioral control and subjective norms on the likelihood to choose sustainable mobility options. *Journal of Consumer Behavior, 22*(2), 511-528. https://doi.org/10.1002/cb.2144

43. Ogiemwonyi, O., Harun, A. B., Alam, M. N., Karim, A. M., Tabash, M. I., Hossain, M. I., ... & Ojuolape, M. A. (2020). Green product as a means of expressing green behavior: A cross-cultural empirical evidence from Malaysia and Nigeria. *Environmental Technology & Innovation, 20,* 101055. https://doi.org/10.1016/j.eti.2020.101055

44. 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

45. Perera, C., & Hewege, C. (2018). Climate change risk perceptions among green conscious young consumers: implications for green commodity marketing. *Journal of Consumer Marketing, 35*(7), 754-766. https://doi.org/10.1108/jcm-01-2018-2537

46. Pong, V., & Tam, K. (2023). Relationship between global identity and pro-environmental behavior and environmental concern: A systematic review. *Frontiers in Psychology, 14*. https://doi.org/10.3389/fpsyg.2023.1033564

47. Ramani, S. V., Lanzolla, N., Gupta, S., & Banerjee, A. (2025). Sustainable consumption with slow fashion. *International Journal of Advertising, 44*(8), 1661-1683. https://doi.org/10.1080/02650487.2025.2509460

48. Richter, N. F., & Tudoran, A. A. (2024). Elevating theoretical insight and predictive accuracy in business research: Combining PLS-SEM and selected machine learning algorithms. *Journal of Business Research, 173,* 114453. https://doi.org/10.1016/j.jbusres.2023.114453

49. Rustam, A., Wang, Y., & Zameer, H. (2020). Environmental awareness, firm sustainability exposure and green consumption behaviors. *Journal of Cleaner Production, 268*. https://doi.org/10.1016/j.jclepro.2020.122016

50. Sahioun, A., Q. Bataineh, A., A. Abu-AlSondos, I., & Haddad, H. (2023). The impact of green marketing on consumers' attitudes: A moderating role of green product awareness. *Innovative Marketing, 19*(3), 237-253. https://doi.org/10.21511/im.19(3).2023.20

51. Sardeshmukh, S. R., & Vandenberg, R. J. (2016). Integrating moderation and mediation: A structural equation modeling approach. *Organizational Research Methods, 20*(4), 721-745. https://doi.org/10.1177/1094428115621609

52. Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. In C.Homburg, M. Klarmann, and A. Vomberg (Eds.), *Handbook of market research* (pp. 587-632). Cham: Springer International Publishing.

http://dx.doi.org/10.21511/im.22(2).2026.19

https://doi.org/10.1007/978-3-319-57413-4_15

53. Shah, S. S., & Asghar, Z. (2024). Individual attitudes towards environmentally friendly choices: A comprehensive analysis of the role of legal rules, religion, and confidence in government. *Journal of Environmental Studies and Sciences, 14*(4), 629-651. https://doi.org/10.1007/s13412-024-00913-5

54. Shan, L., Xu, Y., Jiao, X., Lu, Q., & Liu, X. (2025). Research on consumers' intention-behavior gap in sustainable diets: A moderating effects model incorporating face consciousness. *Sustainable Futures, 10,* 101488. https://doi.org/10.1016/j.sftr.2025.101488

55. Sharma, A. P. (2021). Consumers' purchase behavior and green marketing: A synthesis, review and agenda. *International Journal of Consumer Studies, 45*(6), 1217-1238. https://doi.org/10.1111/ijcs.12722

56. Sheth, J. N., & Parvatiyar, A. (2020). Sustainable marketing: Market-driving, not market-driven. *Journal of Macromarketing, 41*(1), 150-165. https://doi.org/10.1177/0276146720961836

57. Sun, M., Gao, X., Jing, X., & Cheng, F. (2023). The influence of internal and external factors on the purchase intention of carbon-labeled products. *Journal of Cleaner Production, 419*. https://doi.org/10.1016/j.jclepro.2023.138272

58. Svenningsson, J., Höst, G., Hultén, M., & Hallström, J. (2021). Students' attitudes toward technology: Exploring the relationship among affective, cognitive and behavioral components of the attitude construct. *International Journal of Technology and Design Education, 32*(3), 1531-1551. https://doi.org/10.1007/s10798-021-09657-7

59. Thukral, S., Shree, D., & Singhal, S. (2022). Consumer behavior towards storage, disposal and recycling of E-wastE: Systematic review and future research prospects. *Benchmarking: An International Journal, 30*(3), 1021-1072. https://doi.org/10.1108/bij-12-2021-0774

60. Tran, V. D., & Nguyen, T. D. (2022). The impact of security, individuality, reputation, and consumer attitudes on purchase intention of online shopping: The evidence in Vietnam. *Cogent Psychology, 9*(1). https://doi.org/10.1080/23311908.2022.2035530

61. Varah, F., Mahongnao, M., Pani, B., & Khamrang, S. (2020). Exploring young consumers' intention toward green products: Applying an extended theory of planned behavior. *Environment, Development and Sustainability, 23*(6), 9181-9195. https://doi.org/10.1007/s10668-020-01018-z

62. Vu, D. M., Ha, N. T., Ngo, T. V., Pham, H. T., & Duong, C. D. (2021). Environmental corporate social responsibility initiatives and green purchase intention: An application of the extended theory of planned behavior. *Social Responsibility Journal, 18*(8), 1627-1645. https://doi.org/10.1108/srj-06-2021-0220

63. Wei, C., Chiang, C., Kou, T., & Lee, B. C. (2017). Toward sustainable livelihoods: Investigating the drivers of purchase behavior for green products. *Business Strategy and the Environment, 26*(5), 626-639. https://doi.org/10.1002/bse.1942

64. White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT consumer behaviors to be more sustainable: A literature review and guiding framework. *Journal of Marketing, 83*(3), 22-49. https://doi.org/10.1177/0022242919825649

65. Wu, X., Xiong, J., Yan, J., & Wang, Y. (2021). Perceived quality of traceability information and its effect on purchase intention towards organic food. *Journal of Marketing Management, 37*(13-14), 1267-1286. https://doi.org/10.1080/0267257x.2021.1910328

66. Xu, Y., Du, J., Khan, M. A., Jin, S., Altaf, M., Anwar, F., & Sharif, I. (2022). Effects of subjective norms and environmental mechanism on green purchase behavior: An extended model of theory of planned behavior. *Frontiers in Environmental Science, 10*. https://doi.org/10.3389/fenvs.2022.779629

67. Yu, Z., Razzaq, A., Rehman, A., Shah, A., Jameel, K., & Mor, R. S. (2021). Disruption in global supply chain and socio-economic shocks: A lesson from COVID-19 for sustainable production and consumption. *Operations Management Research, 15*(1-2), 233-248. https://doi.org/10.1007/s12063-021-00179-y

68. Zepeda, L., & Deal, D. (2009). Organic and local food consumer behavior: Alphabet theory. *International Journal of Consumer Studies, 33*(6), 697-705. https://doi.org/10.1111/j.1470-6431.2009.00814.x

69. Zulu, E., Zulu, S., Chabala, M., Musonda, I., Kavishe, N., & Chileshe, N. (2022). Challenges and advocated solutions for environmental protection legislation for building infrastructure projects in developing countries: Evidence from Zambia. *Project Leadership and Society, 3*. https://doi.org/10.1016/j.plas.2022.100056

APPENDIX A

Table A1. Summary of constructs and measurement items

Constructs	Coding	Measurement items
Eco-awareness	EA1	I am aware of sustainable products
	EA2	I know the difference between sustainable and conventional products
	EA3	I am aware of personal benefits of sustainable products
	EA4	I am aware of the environmental benefits of sustainable products
	EA5	I prefer buying sustainable products instead of conventional products
Consumer attitude	CA1	Purchasing sustainable products is a good idea
	CA2	Sustainable products are good for the environment
	CA3	I possess a desirable attitude toward sustainable products
	CA4	I feel good about myself when I use sustainable product
Subjective norms	SN1	Most people who are important to me think I should purchase sustainable products when purchasing
	SN2	Most people who are important to me would want me to purchase sustainable products when going for purchasing
	SN3	People whose opinions I value would prefer that I purchase sustainable products
	SN4	My friend's positive opinion influenced me to purchase sustainable products
Perceived behavioral control	PBC1	I believe that I have the ability to purchase sustainable products
	PBC2	If it were entirely up to me, I am confident that I would purchase sustainable products
	PBC3	I see myself as capable of purchasing sustainable products in the future
	PBC4	I have resources, time and willingness to purchase sustainable products
	PBC5	There are likely to be many opportunities for me to purchase sustainable products
Purchase intention	PI1	I will consider buying sustainable products because they are less polluting in coming times
	PI2	I will consider switching to sustainable brands for ecological reasons
	PI3	I expect to purchase sustainable product in the future because of its positive environmental contribution
	PI4	I definitely want to purchase sustainable products in near future
Price sensitivity	PS1	I am willing to pay more for sustainable products
	PS2	I cannot afford to pay more for sustainable products
	PS3	Sustainable products are too expensive
	PS4	People should buy sustainable products even though they are more expensive
	PS5	In general, purchasing sustainable products is associated with different sorts of problems, and for me, the price of sustainable products is often a problem
Purchase behavior	PB1	I know a product can be recycled
	PB2	I know a product can be reused
	PB3	I remain loyal to companies that practice sustainability
	PB4	When I learn about the negative impact a product has on the environment, I stop buying it
	PB5	In case there is an alternative, I prefer products which cause less pollution
	PB6	Choosing between two products, I always buy the one which has the minimum impact to people and environment
	PB7	I change products when they do not comply with ecological condition rules

http://dx.doi.org/10.21511/im.22(2).2026.19