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Probing Reluctance to Green Consumerism in an Emerging Economy: An Empirical Evidence

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Abstract

Purpose: The paper aims to understand how eco labels influence attitude towards green product purchases. The study progresses to analyze why attitude does not translate to actual purchase behavior even when eco labels transpire green information to customers'. This is done using the Theory of Planned Behavior (TPB)

Design/methodology/approach: The study used partial least square structural equation modeling (PLS SEM) to analyze the statistical data. The TPB was used as the root model to understand the green purchase behavior and how eco labels with product attributes influence attitude towards green products. The variables of TPB namely attitude, subjective norms and perceived behavioral control contributed to the constellation of green product behavior. The questionnaire was distributed using convenience sampling method to 241 youths (university students).

Findings: Firstly, the study successfully established the validity of TPB in the Indian context towards green products. It classifies the model on product, perception and actual level which adds to the better rendition for consumers' green behavior. Secondly, with the addition of eco labels and product attributes of green products improved the prediction power of TPB from 53.1% to 58.5%. Thirdly, eco labels and product attributes came out to be cardinal antecedents to harbor favorable attitude towards green products. The study also found the attitude was not translating to green purchase behavior and mandated further inquiry to the concern. Finally, the study vouches for gender neutrality while promoting green products.

Research implications: Firstly, the study adds to the mounting evidences towards the applicability of TPB towards green product purchase in India. Secondly, the study addresses the importance of ecol labels and product attributes towards harboring favorable attitude towards green products. Finally, unfolds the nuances for the inability to translate attitude towards green purchase behavior.

Managerial implications: Firstly, the study advances the indispensability of eco labels to promote green products. Firms can materialize on this dynamics of information dissemination through eco labels and promote sustainable attitude among consumers'. Secondly, the firms can understand the dynamics of consumer behavior and work accordingly to frame policies conducive towards translating attitude into green purchase behavior. Thirdly, the study strongly documents the need to market green products in a gender neutral manner.

Originality: The study draws novelty on two prospects. Firstly, the study uses eco labels and product attributes as antecedents towards attitude. Secondly, the study also aims to determine the actual green purchase behavior using the TPB model. Thirdly, the study investigates the moderating role of gender towards green product behavior.

Keywords: Eco-label, Product attribute, Green purchase behavior, Theory of planned behavior, PLS-SEM.

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1. Introduction

Consumer purchasing habits are changing as people become more conscious of the importance of sustainability (Forbes, 2020). Stakeholders, buyers, and retailers are under intense pressure to adopt environmentally friendly green practises, particularly in the apparel, textile, and fashion industries (Islam et al., 2020; Shamsuzzaman et al., 2021). Marketers have realised that understanding consumer behaviour for eco-friendly products can help them gain a competitive advantage through sustainable growth (Mukendi et al., 2020; Panda et al., 2020). To reap the benefits of environmental sustainability, the product must be cast in a way that minimises environmental degradation (Yang et al., 2017). Marketers must understand the significance of eco-labeling products in order to target niche markets for growing businesses (Sandvik & Stubbs, 2019).

Literature provides us evidence of a green attitude-behavior gap where favorable attitudes do not lead to actual green purchases (Joshi & Rahman, 2019; Tanner & Kast, 2003; Vermeir & Verbeke, 2008). Previous studies on green products have only considered intentions but ignored green purchase (Joshi et al, 2021: Joshi & Rahman, 2015; Yadav & Pathak, 2016) as they provide mixed results (Akehurst et al., 2012; Young et al., 2010). Therefore current study aims to answer the following research questions Firstly, the study aims to provide a direct link which would add to the body of green purchase literature. Recently, research on green consumption and purchase behavior has rapidly increased (for e.g. Cheung & To, 2019; Leonidou et al., 2010; Pahlevi & Suhrantanto, 2020; Trivedi et al, 2015). Studies have found that even after increased environmental concerns, consumers do not always frame a positive attitude for green purchase (Taufique et al., 2017). Literature has shown that environmental attitude may not fully explain eco-friendly behavior (Gent et al., 2017; Park & Lin, 2018). The customer's willingness to purchase green products remains feeble even after a felt concern (de Waal et al., 2017) and the reason may be due to a felt attempt of being taken advantage of under the garb of 'greenwashing' (Bulut et al., 2021; Kurpierz & Smith, 2020). In this context, the second purpose of the paper is to attempt to minimize such mindset regarding 'greenwash' by examining the role played by product level attributes (eco-label and product attributes) in informing and framing favorable attitude in youths pertaining to green products purchase. Thirdly, the study aims to evaluate the mediating effects of environmental attitude between product level attributes and green purchases, thereby addressing further the attitude-behavioral gap and help consumers embrace green products (Joshi et al, 2021; Yadav & Pathak, 2016). Many studies have held different views when it comes to the role of gender for pro-environmental behavior like females displaying higher intentions than male and sometimes no significant difference being witnessed (Mohai, 1992). There is lack of literature providing behavioral evidence as to why men show less inclination when compared to women towards pro-environmental issues (Desrochers et al., 2019), blurring gender based behavioral orientation regarding green purchases. On these lines, fourthly, the study aims to clear gender based behavioral duality helping green marketers understand the role of gender while purchasing green products. Fifthly, the paper tries to test the pragmatic implications of TPB in a developing country (India) and try to add to its prediction power.

Youth (15-29 years) comprises 27.5% of the population and contributes 34% to India's Gross National Income, highlighting the importance of youth (National Youth Policy, 2014). The reason for focusing on youth was due to the negligence of youth attitude in the green movement (Wray-lake et al., 2010) and the study draws importance because of the growing propensity of youth as future green consumers (Kanchanapibul, 2014).

2. Review of the Literature and Hypotheses Development

2.1 Inclusion of product attributes and eco-label

Product attributes and eco-label have become a pragmatic tool to promote green economy (Kanchanapibul et al., 2014) and green marketing mandates an urgent need to educate consumers' regarding the disastrous effects of non sustainable consumption (Esteves et al., 2017). Limited research has been conducted to understand how eco-label and product attributes influence green purchase (Minkov et al., 2018). It has been seen that lack of

information makes designing of managerial policies and strategic practices misleading (Song et al., 2019). Eco-label reduces such information asymmetries and helps gain a better understanding for selection of a green product (Prieto-sandoval et al., 2016). Although studies pertaining to effects of eco-labels have been conducted pervasively (Streletskaya et al., 2019), various other factors of eco-labels related consumption remain vague (Esteves et al., 2017).

2.1.1 Empirical evidence for including product attribute and eco-label

Product attributes are the components of a product that describes its features (Wintermeier, 2020). Product attributes are very important for framing environmental attitude to purchase green products (Ketelsen et al., 2020). Product attributes motivate consumers' green purchases (Aertsens et al., 2011) for instance a word "green" written appears to trigger green purchases (Schuhwerk & Lefkoff-Hagiu, 1995). In a study related to organic products it was found that product attributes had an impact on green purchases (Chauke and Duh, 2019). Eco-label is an informative tool in green marketing to promote green products and enrich consumers' information (Taufique et al., 2019). The effectiveness of eco-label as a marketing tool can be materialized as it draws a distinguished character of a green product and instills a favorable environmental attitude (Perez & Lonsdale, 2018; Testa et al., 2015). Eco-labels add to the favorable attitude of young generation consumers' (Cerri et al. 2018) and have a positive impact on green purchase behavior (Lehmann et al., 2020). Eco-label had an impact on environmental attitude which was mediated through product attribute and influenced green purchases (Song et al., 2019). Consumers' purchase behavior is known to be guided by eco-labels as it assists consumers' in making green purchases (Sammer & Wüstenhagen, 2006). Information in labeling is a high priority in countries like Germany and France (Herbes et al., 2020) which is apparent in promotional strategies stating eco-labeling is effective to create awareness among green products (Lim, Phang, et al., 2020). Based on the discussion, the following hypotheses were proposed:

H1: Product attribute positively impacts environmental attitude of youths for purchasing green products.

H2: Eco-label positively impacts environmental attitude of youths for purchasing green products.

H3: Product attribute positively impacts green product purchasing among youth.

H4: Eco-label positively impacts green product purchasing among youth.

2.2 Theory of planned behavior

TPB was originally propounded by Ajzen in 1985 and contained three variables namely attitude, subjective norms and perceived behavioral control to collectively predict intentions which later could be predictor of actual behavior (Ajzen, 2002).

Environmental attitude refers to a cognitive disposition by evaluation process of nature with some extent of favor or disfavor (Milfont & Duckitt, 2010) and attitude toward behavior refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in the question (Ajzen, 1991). Subjective norm refers to the belief about whether most people approve or disapprove of the behavior (Ajzen, 1991). Perceived behavioral control refers to a person's perception of the ease or difficulty of performing the behavior of interest (Ajzen, 1991). A purchase is termed as green when the consumer purchases products that are eco-friendly and recyclable (Choi & Johnson, 2019)

Environmental attitude and subjective norms positively impact green product purchase (Nam et al., 2017). Environmental attitude leads to pro-environmental behavior (Mostafa, 2007) and had a positive effect on eco-friendly products (smart home objects) adoption among French consumers (Schill et al., 2019). Environmental attitude is a major determinant in shaping green purchase (Albayrak et al., 2013). Subjective Norms plays an important role in positively affecting green behavior and this relationship has been established in multifaceted fields of studies like visiting green hotel (Verma & Chandra, 2018), organic food purchase (Yadav & Pathak, 2016a) and many more (Sheppard et al., 1988). It was found that PBC was able to predict purchase intention which is a reinforcing indicator for purchases like eco-labeled organic food (Ates, 2021). PBC and environmental attitude were found to be

influencing purchase of eco-labeled foods (e.g., Mohamed et al., 2014), which was positively translating into purchase behavior (e.g., Aitken et al., 2020).

TPB is a cognitive model used in various eco-friendly related research areas like green restaurants (Kim et al., 2013; Moon, 2021; Yarimoglu & Gunay, 2020) smart home objects (Schill et al., 2019), green product (Paul et al., 2016), green purchase behavior (Jaiswal & Kant, 2018), eco-conscious consumer behavior (Hameed et al., 2019), and sustainable green fashion industry (Saricam & Okur, 2019), to quote some, proving its tenuous applicability relating to green products. Lemma discussions, the following hypotheses were posited:

H5: Environmental attitude positively impacts green product purchasing among youths.

H6: Environmental attitude mediates the relationship between product attribute and green product purchasing among youths.

H7: Environmental attitude mediates the relationship between eco-label and green product purchasing among youths.

H8: Subjective norms positively impacts green product purchasing among youths.

H9: Perceived behavioral control positively impacts green product purchasing among youths.

2.3 Gender as a moderator

In a study using TPB among university students to measure the attitude behavior gap in green apparels, gender moderates the association between environmental knowledge and concern for environment (Dhir et al., 2021). Using TPB, in a research conducted to measure intentions of individuals to procure green residence, it was witnessed that influences differed with different gender groups (Wu et al, 2021). Many studies (for e.g. Gifford & Nilsson, 2014; Kalamas et al., 2014; Matthes et al., 2014; Milfont & Schultz, 2018; Milfont & Sibley, 2016) have found females to exhibit greater intentions to buy green products and in a meta survey of 14 countries, a significant difference in gender was found where females displayed a higher degree of green behavior (Zelenzy et al., 2000). Ecofeminism propagates the finding that women dominate men on environmental issues and exert higher pro-environmental behavior (Ramstetter & Habersack, 2020; Sakellari & Skanavis, 2013). On the contrary, men were found to be more pro-environmental than women (Chuvieco et al., 2019; Shi & Song, 2019). Gender neutrality was found in green purchases in a study conducted by Tan & Lau (2010). Guided by the discussion, the following hypotheses were proposed:

H10: Gender moderates the relationship between product attribute and green product purchasing among youths.

H11: Gender moderates the relationship between eco-label and green product purchasing among youths.

H12: Gender moderates the relationship between environmental attitude and green product purchasing among youths.

H13: Gender moderates the relationship between subjective and green product purchasing among youths.

H14: Gender moderates the relationship between perceived behavioral control and green product purchasing among youths.

Refer to figure 1 for conceptual model.

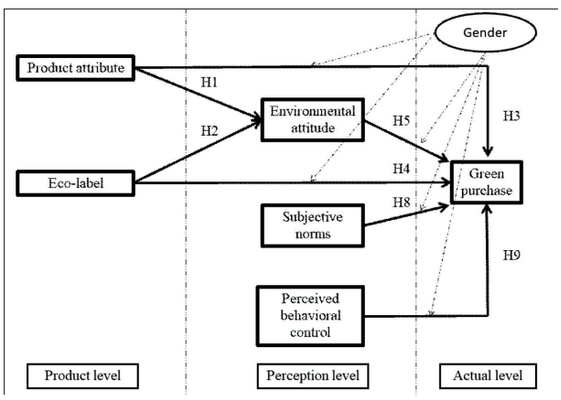

Figure 1.
Proposed conceptual model

Source: Author's compilation

Note: Product level attributes were added to the original TPB model

3. Research Methodology

3.1 Designing the questionnaire

All the constructs were adopted from relevant literature (Chen et al., 2015; Kim, 2011; Nittala, 2014; Paul et al., 2016; Praxmarer, 2011) in order to achieve the objectives and all constructs were measured using 5 points Likert's type scale.

3.2 Data collection

A pilot study was conducted on 40 responses by university students enrolled in postgraduate courses and the results provided good nomological validity. Convenience sampling approach was used for transpiration of the questionnaires as the method arrests generalized results and the study demanded results from only youth. Convenience sampling has also been used in other studies pertaining to green products (for e.g., Joshi & Srivastava, 2019; Khare, 2019; Sadiq et al., 2021; Yadav & Pathak, 2016) and as our study is also on green products, we adopted the method. Researchers like Chea & Phau (2011) and DelVecchio (2000) have vouched that a young consumers' response is reliable for conducting studies pertaining to green product purchases. The student's ages were first accessed from the university muster rolls before deciding on classifying the age intervals and found that because smallest and highest age of students enrolled were aged between 22 and 29 years respectively, we classified the age group under two intervals having a gap of four years in each. A total of 300 questionnaires were dispatched among university students enrolled in postgraduate courses. The students were informed beforehand about the objectives of the study through a demonstration lecture regarding green products. It was ensured that only those candidates should fill the questionnaire that had atleast procured a green product and 273 responses were received, which construed to a response rate of 91 percent. Stellar response rate may be due to group administered questionnaire which ensured rapid assimilation of data (Alder & Clark, 2006; Rooney & Evans, 2018). Incorrect and missing responses were deleted amounting to 241 usable responses. Using the method of Kline (2011) of having 10 cases per parameter, the minimum sample size of 220 was required for 22 items. Therefore, 241 samples fulfilled the a priori condition for statistical analysis. Also, the obtained responses were higher than the minimum required value of 200 responses (Hair et al., 1998; Kelloway, 1998).

3.3 Socio-demographic data

The classification of gender responses was 135 males and 106 females contributing to 56.01% and 43.98 % respectively. The age group of the respondents were 22-25 age group (number-108, percentage-44.81%) and 26-29 age group (number-133, percentage-55.18%). The household monthly incomes (INR) of respondents were as follows: income group of 45000-65000 (number-39, percentage-16.18), 650001-85000 (number-87, percentage-36.09) and more than 85001 (number-115, percentage-47.71).

Variable	Classification	Frequency	Percentage
Gender	Male	135	56.01
	Female	106	43.98
Age (Years)	22-25	108	44.81
	26-29	133	55.18
Household Monthly Income (INR)	45000—65000	39	16.18
	65001—85000	87	36.09
	> 85001	115	47.71

Table 1.
Socio-Demographic Data

4. Analysis

Partial least squares structural equation modeling (PLS-SEM) was used for the statistical analysis of the data as the technique is capable to counter small sample size (Agarwal and Karahanna, 2000). It is pervasively accepted for predicting novel research models (Zhu et al., 2012), not contingent on strict assumptions of normality of data distribution (Vinzi et al., 2010) and with certain riders is more preferable to covariance based sequential equation modeling (CB-SEM) (Hwang et al, 2010; Wong, 2010). Since the aim of the study was prediction, therefore, PLS-SEM was preferred (Gefen, Rigdon and Straub, 2011).

4.1 Model assessment in PLS-SEM

4.1.1 Measurement model

Internal consistency was established through Cronbach's and composite reliability which were more than 0.7 (Bagozzi & Yi, 1988; Hair et al., 2012). Convergent validity was established through values of outer loading which was more than 0.7 and AVE values above 0.5 (Bagozzi & Yi, 1988; Chin et al., 1997), refer table 2. The factors had a higher loading on parent construct which satisfied the cross loadings. Fornell and Larcker's criterion was also confirmed with values of latent variables larger than the correlation among the latent variables (Fornell & Larcker's, 1981). Finally, the heterotrait-monotrait ratio of correlations values was less than 0.85 (Henseler et al., 2015), refer table 3. Hence, discriminant validity was established.

Construct	Items	FL	Mean	S.D	Cronbach's α	CR	AVE
Attitude (ATT)	ATT1: I like the idea of purchasing green.	0.879	4.228	0.763	0.826	0.896	0.741
	ATT2: Purchasing green is a good idea.	0.848	4.373	0.816			
	ATT3: I have a favorable attitude towards purchasing green version of a product.	0.856	4.191	0.886			
Eco-Label (EL)	EL1: If possible, I would like to buy products with recycling label.	0.898	4.100	0.896	0.875	0.923	0.800
	EL2: Marketers must advertise theenvironmental aspects of their products.	0.881	4.228	0.821			
	EL3: Government must make ecolabeling mandatory.	0.904	4.278	0.893			
Green Purchase (GP)	GP1: I make special effort to buy paper and plastic products that are made from recycled materials.	0.803	3.917	0.969	0.879	0.912	0.673
	GP2: I have switched products for ecological reasons.	0.811	3.743	1.006			
	GP3: When I have a choice between two equal products, I purchase the one less harmful to other people and theenvironment.	0.810	4.062	0.964			
	GP4: I make a special effort to buy household chemicals such as detergents and cleaning solutions that are environmentally friendly.	0.832	3.859	0.971			
	GP5: I have avoided buying a product because it had potentially harmful environmental effects.	0.846	3.846	0.950			
Product Attribute (PAT)	PAT1: Eco-friendly designed product looks appealing.	0.869	3.859	0.895	0.818	0.892	0.733
	PAT2: Eco-friendly designed product looks stylish.	0.862	3.718	0.966			
	PAT3: Eco-friendly product is of good quality.	0.838	4.017	0.892			
Perceived Behavioral Control (PBC)	PBC1: I believe I have the ability to purchase green products.	0.768	3.917	0.884	0.813	0.877	0.642
	PBC2: If it were entirely up to me, I amconfident that I will purchase green products.	0.855	4.108	0.823			
	PBC3: I see myself as capable of purchasing green products in future.	0.766	4.129	0.862			
	PBC4: I have resources, time and willingness to purchase green products.	0.812	3.834	0.923			
Subjective Norms (SN)	SN1: Most people who are important to me think I should purchase green products when going for purchasing.	0.839	3.871	0.953	0.855	0.902	0.697
	SN2: Most people who are important to me would want me to purchase greenproducts when going for purchasing.	0.872	3.801	0.943			
	SN3: People whose opinions I value would prefer that I purchase green products.	0.855	3.876	0.898			
	SN4: My friend's positive opinion influences me to purchase green product.	0.770	3.817	0.874			

Table 2.
Constructs, reliability and validity

Note: FL: Factor Loadings; CR: Composite Reliability, AVE: Average Variance Extracted and AVE calculated as ∑ Squared Multiple Correlation / (∑ Squared Multiple Correlation + ∑ Standard Measurement Error).
a. All Factor Loadings > 0.7 which is favorable (Hulland, 1999)
b. All Cronbach's > 0.7 indicates indicator reliability (Hair et al., 2012; Nunnally, 1978)
c. All Composite Reliability >0.7 and indicates internal consistency (Bagozzi & Yi, 1988; Gefen et al., 2000; Hair et al., 2012)
d. All Average Variance Extracted >0.5 and indicates convergent reliability (Bagozzi and Yi, 1988; Chin et al., 1997)

4.1.2 Structural model

Common method bias (CMB) is frequent in self-administered surveys and to tackle it, statistical and process orientation solutions by Podsakoff et al. (2017) was administered. Process oriented solutions data was collected from singular source; a several sources procedure was used. Several rearrangements in the order of items were made to maintain clandestine nature of answers. The Harman's single factor test was conducted and a single factor was able to extract variance less than 50% billing the model free from CMB concerns. The variation inflation factor (VIF) was less than 5 and obviated the data from any multi-collinearity issues (Hair et al., 2021), refer table 3.

Fornell and Larcker'scriterion						
	GP	PBC	EL	ATT	PAT	SN
GP	**0.821**					
PBC	0.669	**0.801**				
EL	0.653	0.621	**0.895**			
ATT	0.627	0.666	0.716	**0.861**		
PAT	0.654	0.594	0.670	0.610	**0.856**	
SN	0.606	0.635	0.510	0.565	0.654	**0.835**
HTMT Criterion						
	GP	PBC	EL	ATT	PAT	SN
GP						
PBC	0.790					
EL	0.742	0.740				
ATT	0.735	0.816	0.843			
PAT	0.768	0.725	0.787	0.736		
SN	0.695	0.755	0.585	0.669	0.776	
Collinearity VIF inner						
	GP	PBC	EL	ATT	PAT	SN
GP						
PBC	2.364					
EL	2.682			1.816		
ATT	2.616					
PAT	2.471			1.816		
SN	2.149					
Cohen f^2						
	GP	PBC	EL	ATT	PAT	SN
GP						
PBC	0.080					
EL	0.043			0.375		
ATT	0.007					
PAT	0.045			0.067		
SN	0.023					

Table 3.
Discriminant validity, collinearity & Cohen f2

Note: a. The emboldened numbers in the diagonal represent the square root of the AVE of each construct and were greater than its correlation value both in rows and the columns, which established discriminant validity
b. HTMT values with indices below the higher threshold value of 0.9 (Gold et al., 2001, Teo et al., 2008).
c. VIF < 5.0 which obviates the data for any issues of multi-collinearity (Becker et al., 2015)
In behavioral sciences, the R2 values greater than 0.26 are considered a large effect, 0.13 as moderate effect and 0.02 as small effect (Giao et al., 2020). Based on the above, both green purchase and environmental attitude have strong effect with values of 0.604 and 0.543

respectively. The R2 of green purchase signifies that 60.4% of its total variance may be explained by product attribute, eco-label, environmental attitude, subjective norms and perceived behavioral control while R2 of environmental attitude depicts that 54.3% of its variance may be construed by both product level attributes. The t-value of path (H1: PAT'ATT) was 3.989 with p-value of 0.000 which confirmed the positive relationship between product attribute and environmental attitude. Hence, we failed to reject H1. The t-value of path (H2: EL'ATT) was 9.053 with p-value of 0.000 which confirmed the positive relationship between eco-label and environmental attitude. Hence, we failed to reject H2. The t-value of path (H3: PAT'GP) was 2.411 with p-value of 0.016 which confirmed the positive relationship between product attribute and green purchase. Hence, we failed to reject H3. The t-value of path (H4: EL'GP) was 2.353 with p-value of 0.019 which confirmed the positive relationship between eco-label and green purchase. Hence, we failed to reject H4.The t-value of path (H5: ATT'GP) was 1.13 with p-value of 0.258 which confirmed a non significant relationship between environmental attitude and green purchase. Hence, we failed to accept H5. The t-value of path (H8: SN'GP) was 2.032 with p-value of 0.042 which confirmed a positive relationship between product attribute and environmental attitude. Hence, we failed to reject H8. The t-value of path (H9: PBC'GP) was 3.969 with p-value of 0.000 which confirmed a positive relationship between perceived behavioral control and green purchase. Hence, we failed to reject H9. The -values of the corresponding hypotheses are depicted in table 4.

4.1.3 Mediation and moderation testing

The t-value of mediation path (H6: PAT'ATT'GP) was 1.045 with p-value of 0.296 which confirmed no mediation. Hence, we failed to accept H6. The t-value of mediation path (H7: EL'ATT'GP) was 1.098 with p-value of 0.272 which again confirmed no mediation. Hence, we failed to accept H7 too. The moderating effect of gender on ATT, PAT, EL, SN and PBC was tested which revealed no moderation. The relative statistical indices are depicted in table 4. Hence, we failed to reject hypotheses H10, H11, H12, H13 and H14.

Path coefficient									
(H)	Path	(O)	(M)	(SD)	T Statistics	P Values	LB	UB	Supported
H1	PAT -> ATT	0.236	0.239	0.059	3.989	0.000	0.124	0.354	Yes
H2	EL -> ATT	0.558	0.556	0.062	9.053	0.000	0.433	0.673	Yes
H3	PAT -> GP	0.210	0.203	0.087	2.411	0.016	0.030	0.367	Yes
H4	EL -> GP	0.213	0.210	0.090	2.353	0.019	0.030	0.386	Yes
H5	ATT -> GP	0.086	0.084	0.076	1.130	0.258	-0.058	0.237	No
H8	SN -> GP	0.140	0.141	0.069	2.032	0.042	0.007	0.276	Yes
H9	PBC -> GP	0.274	0.284	0.069	3.969	0.000	0.149	0.422	Yes
Mediation									
H6	PAT -> ATT -> GP	0.020	0.020	0.019	1.045	0.296	-0.014	0.064	No
H7	EL -> ATT -> GP	0.048	0.047	0.044	1.098	0.272	-0.032	0.142	No
Moderation									
	Gender -> GP	-0.037	-0.038	0.042	0.880	0.379	-0.120	0.043	No
H10	ME 1 -> GP	0.094	0.093	0.067	1.404	0.160	-0.040	0.223	No
H11	ME 2 -> GP	0.007	0.000	0.084	0.080	0.937	-0.163	0.167	No
H12	ME 3 -> GP	0.014	0.015	0.076	0.177	0.859	-0.131	0.165	No
H13	ME 4 -> GP	-0.103	-0.103	0.088	1.165	0.244	-0.266	0.073	No
H14	ME 5 -> GP	0.021	0.027	0.067	0.314	0.753	-0.106	0.161	No

Table 4.
Path coefficient, mediation and moderation

Note: (H)-Hypotheses, (O)-Original Sample mean or -coefficients, M-Sample Mean, SD-Standard Deviation, LB- Lower Bound confidence interval, UB-Upper Bound confidence interval

4.1.4 Goodness of fit, effect size and model prediction

The standardized root means square residual (SRMR) values of both the saturated and estimated model were 0.062 and 0.071 respectively which fell between 0 and 1 (Hair et al., 2019). Hence, the model is parsimonious and plausible (Henseler et al., 2016). Blindfolding was run and the Stone-Geisser's Q2 values were greater than zero concluding the model has predictive relevance (Hair et al, 2014). The Cohen f 2 values (Cohen, 1998) were examined to decipher the effect size and the values are depicted in table 3. It was seen that PBC, EL and PAT had a small effect size on GP. It was also witnessed that EL had a high effect size on ATT. The TPB model had an adjusted R2 of 0.531 which improved to 0.585 after adding PAT and EL. It has been established that R2 values that surpass 20% are considered stellar in consumer behavior studies (Rasoolimanesh et al., 2017). Hence, the addition of two constructs to the TPB had improved the prediction power of the model.

5. Discussion

The results have shown that environmental attitude could be predicted by eco-label and product attributes in their order of significance respectively. The results draw consonance with the findings of Song et al. (2019) in which eco-label impacted attitudes of young consumers'. Further, findings of Ketelsen et al. (2020) were confirmed that product attributes shaped environmental attitude. Out of the three predictor variables of TPB namely environmental attitude, subjective norms and perceived behavioral control, it was found out that environmental attitude impact on green purchase was rendered insignificant. Perceived behavioral control had a greater impact on green purchase when compared with subjective norms. The positive and significant impact of perceived behavioral control on green purchases draws similarities with findings of Aitken et al. (2020). The finding of subjective norms predicting green purchases resonates with findings of Verma & Chandra (2018).

An insignificant impact of environmental attitude on green purchase was found and environmental attitude did not catalyze as a significant mediator. Many studies have found a palpable attitudinal/green purchase gap in conscious consumers (Aagerup & Nilsson, 2016) which may have had a favorable attitude for product and services but not materialized into green purchases (Anisimova, 2016). It is evident that consumers may not buy a product even though have positive attitudes towards it (Parkinson et al., 2018). Empirical studies have demonstrated that positive attitudes do not translate into green purchase behavior (Morwitz, Steckel & Gupta, 2007). Despite positive environmental attitudes, high willingness to pay extra premiums and intentions to recycle, a few consumers engage in green purchase (Mintel, 2006).

TPB does not resonate with reality in context of green consumption behavior as individuals who express favorable attitude do not necessarily engage in environmentally sensible behavior like green purchases (ElHaffar et al., 2020). The empirical proof of which is pronounced in a research confirming 30% of UK consumers did not engage in green purchases (Young et al., 2010). Also, people who displayed a favorable attitude towards green products had a slender rate of 4-10% purchase (Hughner et al., 2007) and it is essential to narrow the attitude-behavior gap (ElHaffar et al., 2020). Moreover, studies have failed to draw a strong relationship between positive green attitude and actual purchase of green products using both TRA and TPB (Tan, 2011; Joshi & Rahman, 2015). Hence, the literature steadfastly supports the findings of insignificant impact of environmental attitude on green purchase and its failure to act as a mediator.

Gender neutrality was observed with all the independent variables and finds similarities with results of researchers (for e.g. Azila et al., 2021; Sharma & Foropon, 2019) hence did not act as a moderator in the study. Finally, the results have supported the addition of eco-label and product attribute to TPB as it increases the predictive power of the proposed model to 58.5 percent (adjusted R2=0.585) in comparison to 53.1 percent (adjusted R2=0.531).

6. Implications

The findings have highly significant implications that would help marketers, producers and manufacturers to tailor suitable strategies for eco-friendly product manufacturing. Based on the findings, eco-labeling and promotion of green product attributes shall be a focus area for green marketers. Concurrent with the studies pertaining to subjective norms, it is suggested that green marketers shall concentrate on social media green marketing which could help to strengthen the peer influences for procurement of green products. PBC had the highest impact on green purchase and the findings recommend green marketing companies to exert more on framing policies that could help consumers shape their behavior for materializing purchase of green products. Attitude did not have an impact on green purchase and neither acted as a mediator for product attribute and eco-label towards green purchase (Xu et. al, 2020), which raises a concern for green marketers. Also, when consumers' do not find access to green product, their attitude-purchase gap is widened (Nguyen, 2019). There is a huge attitude-actual purchase behavioral gap as its is seen that having a favorable attitude (Trudel & Cotte, 2009) often may not translate into sustainable actions in form of green purchases (Young et al., 2010) and this is a pronounced reason for the failure of green products promotion (Johnstone & Tan, 2015). The greatest implication to marketers is to be wary of proper dissemination of information of green products that could actually translate favorable attitude into actual purchases through change in perceptions. As attitude is not the sole variable for pro-environmental behavior (Bamberg, 2003), consistent with the study, it is suggested to green marketers to adequately ensure translation of attitude into actual green purchases through feedback and feed-forward loops, which could be possible by constant dissemination of eco-friendly information through eco-labels and product attributes. The greatest challenge before companies engaged in green product industry in the Indian sector is to translate the youth's favorable attitude into actual green purchases through a mix of green marketing strategies. Gender neutrality was observed and marketers can focus on unisexual nature of green product marketing.

7. Conclusion and Scope for Future Research

The findings have been instrumental in predicting green products purchase among the Indian youth and it was a novel attempt to include eco-label and product attribute to the TPB. The results have added to the growing body of literature of environmental attitude rendering an insignificant impact on actual green purchases and non-moderating role of gender. The study was able to improve the predictive power of TPB with addition of two new constructs.

The study had some limitations that could be addressed in future researches. Firstly, the study only focused on the youth population in India which may not have a high purchasing power and willingness to pay could be an interesting variable to ponder in further studies. Secondly, the study had bypassed purchase intentions and directly focused on actual green product purchase and may be due to less paying capacity or higher saving tendency, lead to reserved purchase behavior. Both eco-label and product attribute had a favorable impact on attitude but various factors like confusion, trust (Carrete et al., 2012), perceived quality (Gleim & Lawson, 2014, Tseng & Hung, 2013) and egoistic values (Nguyen et al., 2017) could hinder attitude translating to purchase behavior. These variables could be both limitation and avenues for future research. It would also be interesting to analyze the mediating effect of product attribute between eco-label and green purchase (Song et al., 2019). Finally, a recommended scope could be replication of model among the High Net Worth Individuals in urban conglomerates which could have interesting results and add to the literature of green purchases.

Declaration of competing Interest

The authors declare that they have no known competing interest or personal relationships that could have appeared to influence the work reported in this paper.

Informed Consent

The authors declare that the data was collected from respondents after their approval and consent.

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