Antecedents of Indian Green Consumer Behavior – A PLS-SEM Analysis Approach

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Abstract: This study aims to determine the factors affecting the Indian green purchase intention (GPI) and examine the causal relationships between the identified determinants. The SPSS software has been used for the descriptive analysis, and the two-step analysis approach of the measurement and structural model is conducted in the SmartPLS. The results imply that multiple determinants influence the Indian consumers' GPI, from the strongest to the weakest – green awareness, environmental attitude, green behavior, altruism, and interpersonal influence act as better predictors. The perceived environmental knowledge does not necessarily translate to the GPI. This study's results will facilitate the industries in identifying the future purchasing factors scenario and incorporating the equivalent in their new product offerings. It also indicates that Indian consumers are more likely to indulge in green purchases if marketers in their product promotions and advertisements illustrate the consequences of their impact on the environment and the benefits of various green activities. This study is exclusive as it is the only study that has incorporated green awareness and green behavior as mediators along with the environmental attitude in studying the GPI.

Keywords: environmental attitude, green purchase intention, Indian green consumer behavior.

INTRODUCTION

The notion of environmental sustainability and conservation has been a huge concern for the human race (Goyal, 2017). The reasons behind it are rapid growth in population, technological advancement and unsustainable consumption, which alters the consumption patterns, which in turn affected human well-being (Gruber & Schlegelmilch, 2014). It created a serious impact on marketers and consumers when environmental degradation started to affect mankind (Goyal, 2017).

Sustainability and green products have gained substantial attention and are additionally growing in significance (Gruber & Schlegelmilch, 2014), to fulfil the basic human needs and increase the sustainable consumption (Khoiruman & Haryanto, 2017). Various stakeholders are expecting the businesses to consider environmental along with social and governance aspects while taking capital investment decisions (Lunawat & Lunawat, 2022). Grunert & Juhl (1995) say that consumers by purchasing eco-friendly products, represent a

key strength in environment development efforts, and hold the ability to avoid or decrease ecological damage. Their constructive mindset toward green is not a topic of debate anymore, as 88% of consumers believe it as essential and feel that companies must put into practice the programs which protect and take care of nature and social issues (Cone, 2010). The mounting social and environmental regulatory concerns have led to an increase in the number of industries and companies considering green as the main area of strategic change (Goyal, 2017). Therefore, the phenomenon of green/sustainable consumer behaviour has been making headway as an interesting area in the marketing discipline's modern-day consumer behaviour research for both marketers and researchers (Jaiswal & Kant, 2018).

Environmental marketing has gained recognition in Asia, also leading to enhanced awareness among consumers (Uddin & Khan, 2018). India is among the rapidly rising economies is being characterized by a rise in pollution levels and natural resource depletion due to this growth (Joshi & Rahman, 2016). Moreover, companies in India and China have started observing the consumer acuity related to ecology and have begun reshaping their operations to support ecological practices (Sharma et al., 2020). Despite the fact of rising individual's environmental awareness and their eco-friendly behaviour, the demand for green commodities is not in reality found as great as expected (Lai & Cheng, 2016). Jaiswal & Kant (2018) state, that most of the consumers of India show an optimistic attitude towards green products like not animal tested, packed in recyclable containers, fairly traded, and contributing to energy conservation, but there is a gap between the attitudes and buying behaviour known as an "attitude-behaviour gap" or discrepancy. Despite Individuals' high positive reception of green principles at a theoretical level, environmental influence is very little on their buying decisions (Gruber & Schlegelmilch, 2014). It is imperative to investigate the factors contributing to this attitude-behaviour inconsistency for addressing the issue (Jaiswal & Kant, 2018). The lack of proper explanation regarding the imbalance of consumers' green purchases and additionally, the environmental damage, and the augmented stress on manufacturing eco-friendly products by companies gave undeniable motives for determining the antecedents of Indian consumers' green purchase intention (GPI) (Joshi & Rahman, 2016).

According to Ottman (2017), sustainability is the core value of every living generation on the earth but the potential impact is made by the tech-savvy generations X, Y, and Z. X generation see the ecological concerns in the educational, social and political perspectives, while gen Y quickly challenge the unauthentic marketing practices, they believe that environmental problems are caused by humans and buy twice the green products than other generations and also have experienced various green behaviour initiatives like recycling and reusing in their college life. Gen Z is the first one to be born and brought up in the green-conscious world and sustainability is a part of their everyday life. The 3Rs of sustainability- "reduce, reuse, and recycle", bio-based fibre and organic cotton clothes and uniforms, and recycled paper tops in their everyday use. Thus, studying Gen X, Y, and Z will help to analyse the overall Indian green behaviour.

Dangelico & Vocalelli (2017) in their study specified that the first age of green marketing is "Ecological", the second age is "Environmental" and the third age is called "Sustainable", so these terms are considered synonyms in the present study. Researchers have explored the determinants of sustainable buying behaviour of gen y consumers of India, but the influence of perceived environmental knowledge, interpersonal influence, and altruism, on GPI not only by the attitude but also through green awareness and green behaviour as mediators, particularly in Telangana region of India, on the gen X, Y, and Z has not been studied. Besides the current study is the first to the best of our knowledge in which attitude along with awareness and behaviour acts as a linkage between the three antecedents and the green purchase intention, thereby forming an integrated model that studies causal relationships between the various determinants of GPI.

This research work builds on the Social cognitive theory (Bandura, 1986), Homer & Kahle's (1988) cognitive hierarchy model, and the Theory of Reasoned Action (TRA) (Ajzen, 1991). The social cognitive theory explains the bilateral directional relationship between the personal and environmental variables (Bandura, 1977) like interpersonal relationships developing and motivating human beliefs and attitudes (Bandura, 1986). TRA propose that consumers' attitudes will influence certain behavioural intentions (Ajzen, 1991). The cognitive hierarchy model indicates that values like altruism influence behaviour through attitudes (Homer & Kahle's, 1988). This study extends the above-mentioned theories by incorporating additional variables like perceived environmental knowledge, green behaviour and green awareness, to study the causal relationships among them and test the holistic model in the Indian scenario.

Altruism (ALT) is explained as the condition in which an individual act on the behalf of others without any expectation of benefits (Schwartz, 1968, 1977). It is a significant determinant of ecological preservation (Granzin & Olsen, 1991). Environmental attitude (EA) is defined as the individual's ability in evaluating the condition of the environment with certain favour or disfavour (Milfont & Duckitt, 2010) and it is recognized as the predictor of pro-environmental behaviour (Uddin & Khan, 2018). Consumers who possess high altruism are more probable to have a positive attitude towards the environment (Albayrak et al., 2011).

Green awareness (GA) is the leading variable that will influence behavioural outcomes (Yi, 2019). According to Ogiemwonyi et al. (2019), Green awareness refers to the person's emotional judgements on the consequences of their impact on the environment. Ogiemwonyi et al. (2020) in his literature, states that an individual's environmental attitude is a good predictor in measuring the awareness and study of awareness and attitude evolved as the most important and foremost variables in social sciences. Green awareness influences the attitude of the consumers in making a determined choice.

According to Ogiemwonyi et al. (2020) and Akehurst et al. (2012) the terms like "Green Behaviour (GB)", "ecological conscious consumer behaviour", "environmentally supportive behaviour", "pro-environmental consumer behaviour" is often used interchangeably and explains the behavioural orientation like re-using, re-cycling, green activism participation. It is also the extent to which a consumer purchases products that are believed to have a good impact on the environment (Straughan & Roberts, 1999). The green behaviours differ and are classified into the private sphere (purchasing eco-friendly products and re-using personal household products) and the public sphere (participating in green activism) (Huddart-Kennedy et al., 2009). EA is the most relevant factor in determining pro-environmental behaviour (Uddin & Khan, 2018). If there is a more attitude toward a specific behaviour, there is a high chance to perform that behaviour and also it can be altered based on the attitude (Ajzen, 1991).

An individual who has a considerable environmental awareness will perform the green behaviour, and also who are sentient of sustainable behaviour will be self-confident to perform for that reason (Ogiemwonyi et al., 2020). The studies relating the green awareness and green behaviour found varying results like no relationship (Paço & Lavrador, 2017), feeble relationship (Otto & Kaiser, 2014), and strong relationships (Oğuz et al., 2011). Individuals who are aware of the outcomes of eco-friendly behaviour are more self-assured in behaving accordingly (Ting & Cheng, 2017) and who have considerable awareness of sustainable or climate issues will embrace sustainable behaviour.

Green purchase intention (GPI) is an individual's willingness to purchase eco-friendly products instead of non-eco-friendly products in the future (Ghazali et al., 2018). It is also the consumer's readiness for purchasing sustainable products for the sake of the environment (Jaiswal & Kant, 2018). It is also related to a person's inclination to purchase and use products with environmentally friendly features when buying considerations are

based on product-specific features (Abdul Rashid, 2009). The awareness of the consequences of their impact on the environment will predict the purchase intention for eco-friendly items (Suki et al., 2016). Consumers who avoid plastic bag usage, buy natural ingredient products, prefer bio-degradable packaging, and are against animal testing products do have a constructive intent to buy eco-friendly products (Akehurst et al., 2012).

Interpersonal influence (IPI) is the act of convincing or persuading others and it develops human beliefs and attitudes (Uddin & Khan, 2018). It also activates emotional beliefs and helps in social influence or persuasion (Bandura, 1986). Uddin & Khan (2018) state that Individuals will get information about green products from friends and family, and peer groups play a fundamental role in controlling their purchasing decision. Facts state that social groups and norms influence the consumer's attitude towards eco-friendly products. Khare (2012) states interpersonal influence is positively and significantly related to a green attitude.

The phenomenon of ecological knowledge/perceived environmental knowledge (PEK) is referred to as a person having a wide understanding of sustainable issues like energy conservation and efficiency, pollution, re-using and recycling, renewable sources of energy, and other eco-technologies, it can be classified into general environmental knowledge and behavioural or concrete knowledge (Jaiswal & Singh, 2018). It can be argued that possessing strong knowledge about the environment will encourage positive environmental attitudes as well (Ghazali et al., 2018). Hence, a greater level of behavioural knowledge can lead to the formation of a positive green attitude and their buying intention for such products (Jaiswal & Singh, 2018). PEK is associated with a green attitude and overall green behaviour (Laroche et al., 1996).

The study of socio-spatial (interpersonal influence), individual (altruism), and environmental (perceived environmental knowledge) independent variables along with attitude as the mediator in studying the green purchase intention is conducted by many researchers from countries other than India. The exploration of these variables in the Indian scenario is scant, and examining these variables by incorporating additional mediators like green awareness and green behaviour in studying green purchase intention is not conducted so far as per the researcher's knowledge. So the purpose of this research is 1) To examine the influence of altruism on GPI through environmental attitude, green awareness and green behaviour; 2) To study the effect of perceived environmental knowledge on GPI through environmental attitude, green awareness and green behaviour; 3) To investigate the impact of interpersonal influence on green purchase intention through environmental attitude, green awareness and green behaviour; and 4) To study the casual relationships among the determinants of GPI via a holistic approach based on the theory of reasoned action (TRA), social cognitive theory and cognitive hierarchy model along with the ecologically supportive behaviour to identify with individual actions based on the Straughan & Roberts's (1999) ECCB scale in the context of Gen X, Y, Z consumers from India.

METHODS

Questionnaire development:
The survey instrument was a structured questionnaire consisting of demographics and the items of study constructs. The items for PEK were adapted from Mostafa (2006); EA (Mishal et al., 2017); GA (Chen et al., 2018); GB (Roberts, 1996; Ahn et al., 2012's GPB construct and Lee, 2014's recycling participation items); IPI (Lee, 2009); GPI (Chan, 2001); ALT (Stern et al., 1993).

Figure 1 depicts the conceptual model, built on the TRA, social cognitive theory and cognitive hierarchy model incorporating the PEK, GA, and GB.
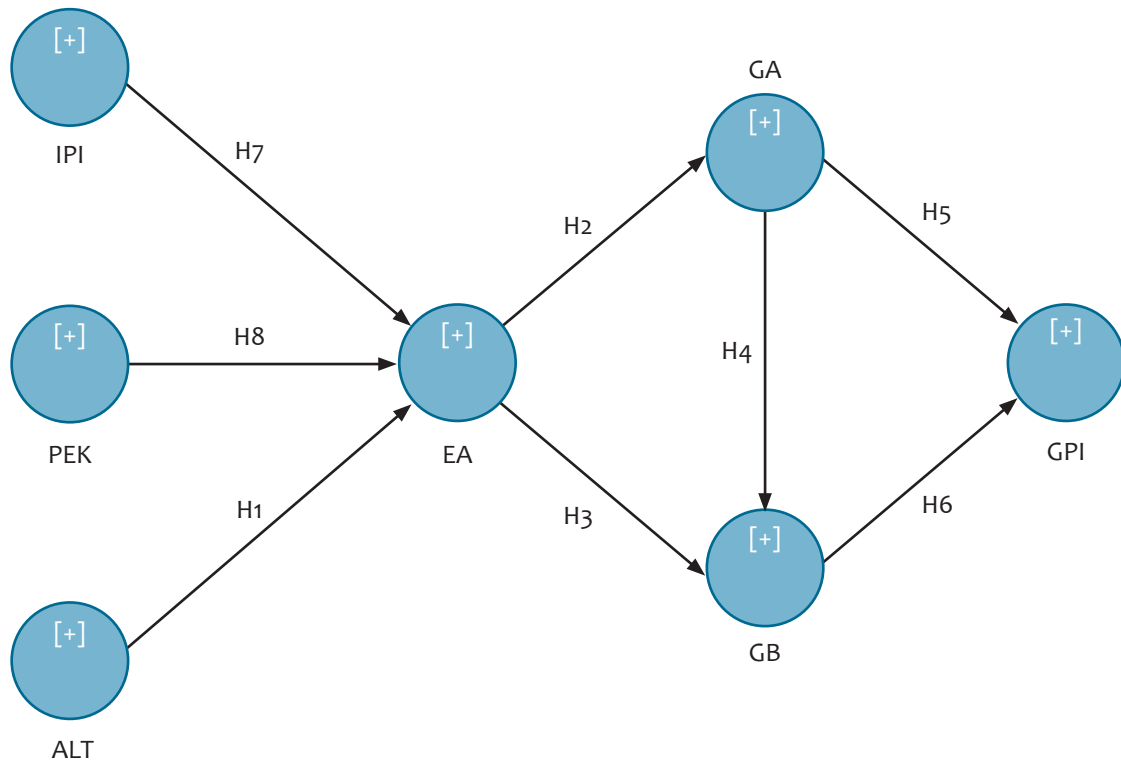
Figure 1 Conceptual Model

Sampling:

The study is exploratory and quantitative; the sampling technique used was stratified random sampling. A total of 129 questionnaires were collected from Hyderabad which is a metropolitan and smart city in the Telangana state of India. This city is chosen because of its various sustainable and green initiatives implemented in recent times like haritha haram, green India challenge, green fund, mission kakatiya, LED street lighting, smart cities mission, and swachh bharat mission. This study used stratified sampling for selecting the particular city, and potential Gen X, Y, and Z respondents were chosen randomly. These three generations were chosen to ensure that the study covers a wide range of behaviours. The data is collected online from February to April 2022.

Analysis methods:

The two-step analysis approach of the measurement and structural model is conducted in the SmartPLS. Partial least squares (PLS), a variance-based SEM technique is selected for testing the conceptual model and hypotheses.

RESULTS AND DISCUSSION

Demographic results:

The demographic profile of the study sample reveals that the majority of respondents belong to Gen Y (51.9%), and are postgraduate (51.2%), males (62%) who are mostly employed (46.5%). In terms of generations' distribution, as illustrated in Figure 2, 31.8% were Gen Z, 51.9% represent Gen Y, and 16.3% constituted Gen X.
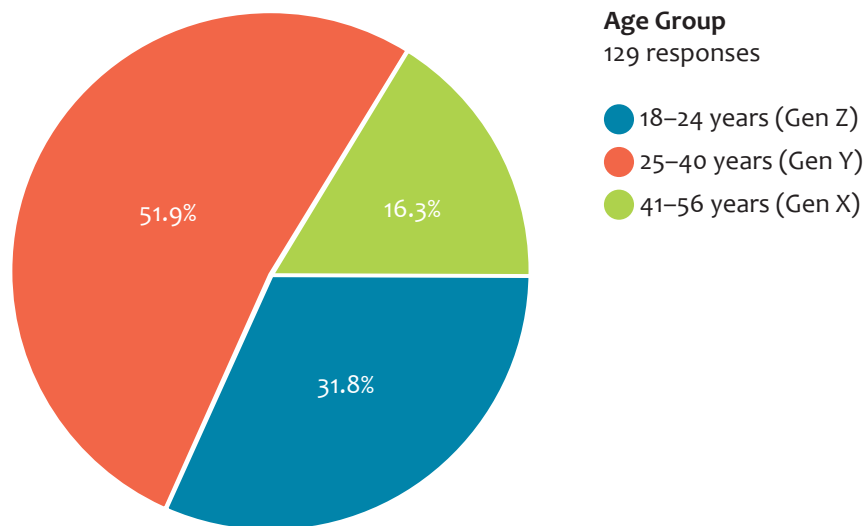
Figure 2 Age Group pie-chart

Measurement model results:

The measurement model results summary in Table 1 suggest that all the requirements were met. According to Hair et al. (2017), the composite reliabilities (CRs) and Cronbach alpha which measure the internal consistency reliability were all in the range of 0.60–0.95 for Cronbach's alpha and above 0.7 for composite reliability, indicating the internal consistency and reliability. The average variance extracted (AVE) scores were greater than 0.5 except for the GB construct. By checking the outer loadings, all the individual item loadings were greater than 0.708 or in the range of 0.4–0.7, except for the GB1, GB2, GB3, GB7, GB8, GB12, and GB14. The above-mentioned items were deleted as their removal improved the AVE and composite CR significantly. By doing so, all the outer loadings are greater than 0.4 and the AVE is also greater than 0.5 for the GB construct, ensuring the convergent validity of all the constructs.

Table 1 Measurement model results

| Latent variable | Indicators | Convergent validity | | Internal consistency reliability | | Discriminant validity | | |
		Loadings (> 0.70 & 0.4–0.7)	AVE (>0.50)	Composite Reliability (0.60–0.95)	Cronbach's Alpha (0.60–0.90)	Fornell Larcker criterion	Cross loadings	HTMT confidence interval does not include 1
ALT	ALT1	0.861	0.512	0.755	0.613	MET	MET	YES
	ALT2	0.639						
	ALT3	0.622						
EA	EA1	0.906	0.800	0.923	0.875	MET	MET	YES
	EA2	0.912						
	EA3	0.864						
GA	GA1	0.703	0.712	0.907	0.862	MET	MET	YES
	GA2	0.861						
	GA3	0.912						
	GA4	0.885						

	GB10	0.649						
	GB11	0.800						
	GB13	0.706						
GB	GB4	0.710	0.520	0.883	0.845	MET	MET	YES
	GB5	0.686						
	GB6	0.778						
	GB9	0.707						
	GPI1	0.896						
GPI	GPI2	0.914	0.811	0.928	0.885	MET	MET	YES
	GPI3	0.893						
	IPI1	0.735						
	IPI2	0.865						
IPI	IPI3	0.811	0.671	0.910	0.877	MET	MET	YES
	IPI4	0.802						
	IPI5	0.875						
	PEK1	0.752						
	PEK2	0.815						
PEK	PEK3	0.776	0.583	0.875	0.825	MET	MET	YES
	PEK4	0.706						
	PEK5	0.764						

Hair et al. (2017) state, that the discriminant validity can be calculated following the Fornell-larcker, cross-loadings and HTMT criterion. For the Fornell-larcker criterion, as shown in Table 2, all the square roots of the AVE (on the diagonals) were greater than correlations b/w constructs (on the corresponding row and column).

According to Hair et al. (2017), the HTMT ratio of the correlations are significantly different from 1 if there is no discriminant validity concern and the HTMT statistic's confidence interval did not include the value 1 for any construct combinations, suggesting that discriminant validity is achieved. Table 4 and Table 5 specify the HTMT Ratio and the confidence interval values.

For the cross-loadings, as shown in Table 3, all the indicators' outer loadings on the associated construct are greater than any of its cross-loadings (correlation) on other constructs (Hair et al., 2017).

Table 2 Fornell – Larcker Criterion

Fornell-Larcker Criterion	ALT	EA	GA	GB	GPI	IPI	PEK
ALT	0.716						
EA	0.302	0.894					
GA	0.363	0.664	0.844				
GB	0.069	0.342	0.306	0.721			
GPI	0.212	0.536	0.464	0.411	0.901		
IPI	0.047	0.362	0.301	0.621	0.525	0.819	
PEK	0.078	0.335	0.333	0.662	0.471	0.673	0.763

Table 3 Cross-loadings

Cross loadings	ALT	EA	GA	GB	GPI	IPI	PEK
ALT1	0.861	0. 312	0.287	0.008	0.201	0.013	−0.010
ALT2	0. 639	0.127	0.265	0.061	0.076	0.011	0.047
ALT3	0.622	0.125	0.258	0.154	0.146	0.118	0.245
EA1	0. 273	0.906	0.580	0.348	0.504	0.280	0.319
EA2	0. 296	0.912	0.692	0.273	0.491	0. 337	0. 265
EA3	0.236	0.864	0.495	0.301	0.441	0. 358	0. 322
GA1	0.273	0.488	0.703	0.199	0.304	0.161	0.179
GA2	0.293	0.584	0. 861	0.324	0.478	0.315	0.325
GA3	0. 346	0.613	0. 912	0.242	0.427	0.249	0.276
GA4	0.313	0.546	0. 885	0.255	0.334	0.274	0.328
GB10	0.153	0.296	0. 240	0.649	0.267	0.428	0.482
GB11	0.116	0.241	0. 226	0.800	0.299	0.544	0.478
GB13	0.068	0.161	0. 236	0.706	0.308	0.517	0.584
GB4	−0.025	0.317	0. 238	0.710	0.355	0.408	0.413
GB5	−0.064	0.254	0. 237	0.686	0.284	0.391	0.425
GB6	−0.028	0.187	0.151	0.778	0.246	0.483	0.486
GB9	0.128	0.227	0. 190	0.707	0.285	0.363	0.479
GPI1	0.155	0.474	0. 469	0.417	0.896	0.480	0.480
GPI2	0.259	0.480	0. 392	0.305	0.914	0.422	0.362
GPI3	0.170	0.497	0. 382	0.376	0.893	0.511	0.416
IPI1	0.010	0.313	0. 158	0.461	0.443	0.735	0.499
IPI2	0.107	0.339	0. 317	0.420	0.475	0.865	0.506
IPI3	0.052	0.317	0.344	0.578	0.418	0.811	0.595
IPI4	0.012	0.199	0.156	0.570	0.434	0.802	0.566
IPI5	−0.011	0.271	0.213	0.545	0.368	0.875	0.601
PEK1	0.090	0.294	0.350	0.566	0.443	0.503	0.752

Table 4 HTMT Ratio

HTMT-Ratio	ALT	EA	GA	GB	GPI	IPI	PEK
ALT							
EA	0.340						
GA	0.495	0.757					
GB	0.198	0.390	0.350				
GPI	0.259	0.608	0.520	0.463			
IPI	0.118	0.402	0.328	0.731	0.590		
PEK	0.217	0.378	0.365	0.798	0.521	0.791	

Table 5 Confidence intervals for HTMT

|	Path Coefficients	2.5%	97.5%
EA → ALT	0.340	0.171	0.534
GA → ALT	0.495	0.227	0.713
GA → EA	0.757	0.604	0.862
GB → ALT	0.198	0.098	0.232
GB → EA	0.390	0.200	0.567
GB → GA	0.350	0.194	0.506
GPI → ALT	0.259	0.108	0.437
GPI → EA	0.608	0.453	0.744
GPI → GA	0.520	0.311	0.693
GPI → GB	0.463	0.235	0.664
IPI → ALT	0.118	0.068	0.133
IPI → EA	0.402	0.226	0.570
IPI → GA	0.328	0.152	0.496
IPI → GB	0.731	0.607	0.830
IPI → GPI	0.590	0.392	0.751
PEK → ALT	0.217	0.098	0.269
PEK → EA	0.378	0.184	0.558
PEK → GA	0.365	0.167	0.531
PEK → GB	0.798	0.678	0.899
PEK → GPI	0.521	0.322	0.680
PEK → IPI	0.791	0.645	0.893

Structural model results:

The hypothesis significance is tested using the p-values (assuming the 5% significance level, the p-value must be smaller than 0.05 for concluding the relationship significant), t-statistic (when an empirical t value is greater than the critical value (1.96), the coefficient is statistically significant at a certain significant level i.e. 5% in this case) and the confidence intervals (if the estimated path coefficient's confidence interval does not include zero) (Hair et al., 2017). Figure 3 represents the model's path coefficients along with the significance represented by p-values and explanatory power (R^2).

Standardised path coefficients in Figure 3 show some remarkable results. First, the high β value for EA (β = 0.664, $p < 0.05$) in determining the GA (H2 is supported), which is contrary to the results of Ogiemwonyi et al. (2020) study conducted in Malaysia and Nigeria. Second, the high β value for GA (β = 0.374, $p < 0.05$) has a significant influence on GPI (H5 is supported), supporting the results of Suki et al. (2016) study conducted in Malaysia. In addition to these results, the direct effect of EA on GB (β = 0.249, $p < 0.05$), shows statistical significance supporting the H3, whereas GA to GB is found to be Insignificant (β = 0.141, $p > 0.05$), rejecting H4, which supports the findings of Ogiemwonyi et al. (2020). The GB to GPI relationship is found to be significant (β = 0.297, $p < 0.05$), supporting H6 and consistent with Akehurst et al. (2012) Portugal-based study. The effect of both ALT (β = 0.279, $p < 0.05$) and IPI (β = 0.253, $p < 0.05$) on the EA are significant, thus

supporting H1 and H7, this result is consistent with Uddin & Khan's (2018) study findings conducted in India. The H8 is rejected, as PEK does not attribute to the EA (β = 0.144, p > 0.05). This result is contrary to the results of Ghazali et al. (2018) study in Indonesia and Malaysia. The significance of the path coefficients along with the VIF values, beta values, and their confidence intervals are specified in Table 6.

Table 6 Hypothesis testing and structural model results summary

Hypothesis	Relationships	VIF	Path Coefficients	t - values	P values	95% confidence intervals	Significance (p<0.05)?
H1	ALT → EA	1.006	0.279	3.741	0.000	[0.089,0.391]	YES
H2	EA → GA	1.000	0.664	10.167	0.000	[0.512,0.771]	YES
H3	EA → GB	1.789	0.249	2.419	0.016	[0.036,0.439]	YES
H4	GA → GB	1.789	0.141	1.519	0.129	[-0.045,0.317]	NO
H5	GA → GPI	1.103	0.374	3.998	0.000	[0.191,0.552]	YES
H6	GB → GPI	1.103	0.297	3.241	0.001	[0.105,0.461]	YES
H7	IPI → EA	1.826	0.253	2.181	0.029	[0.034,0.489]	YES
H8	PEK → EA	1.833	0.144	1.246	0.213	[-0.106,0.345]	NO
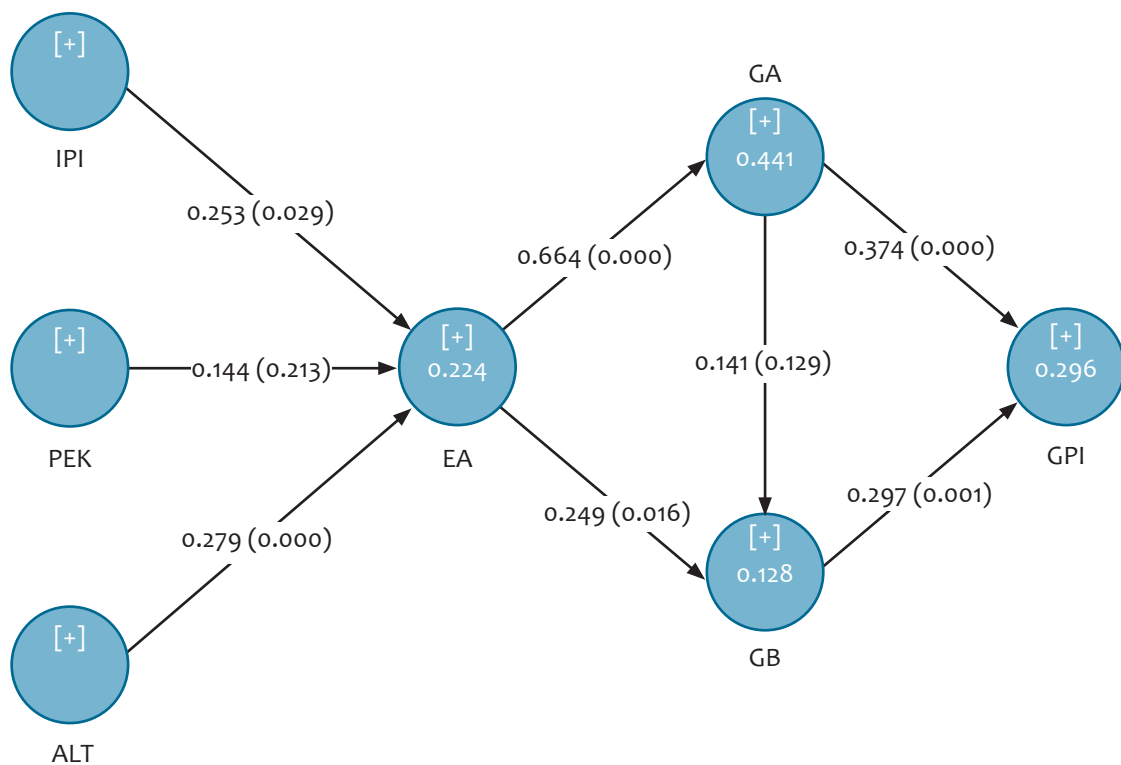
Figure 3 β values and R2

From Figure 3, the model's explanatory power (R^2) is determined. The EA, GPI, and GA were explained by 22.4%, 29.6%, and 44.1% of the variance respectively. In general, all the endogenous variables achieved the minimum explanatory power i.e., two large, one reasonable, and one weak. This classification is done as per the Cohen (1988) guidelines, where R^2 values of 0.26 are considered large, 0.13 as reasonable and 0.02 as weak

explanatory power respectively. Coming to the predictive capability of the research model, calculated by the blindfolding technique, the results from Table 7 imply that all the four endogenous variables achieved predictive relevance as their Q^2 values were greater than zero (Hair et al., 2017). Multicollinearity was evaluated by using the VIF values, being less than 5 (Hair et al., 2017). From Table 6, it is clear that there were no multicollinearity issues between the constructs as the VIF values ranged from 1.000 to 1.833. The effect size f^2 is assessed using the Cohen (1988) values of 0.02 (weak), 0.15 (reasonable/moderate), and 0.35 (large/strong) effects, correspondingly, suggesting one strong, one moderate and four weak relationship effects for this study.

Table 7 Predictive relevance

	SSO	SSE	Q2 = (1 – SSE/SSO)
ALT	387.000	387.000	
EA	387.000	327.955	0.153
GA	516.000	362.730	0. 297
GB	903.000	848.553	0. 060
GPI	387.000	301.931	0. 220
IPI	645.000	645.000	
PEK	645.000	645.000	

In Table 8, the direct, indirect and total effects were specified. The relevance of each variable for their respective endogenous constructs can be assessed in Table 8.

Table 8 Effects summary

From	To	Direct effect	Indirect effect	Total effect
ALT	EA	0.279	-	0.279
	GA	-	0.185	0.185
	GB	-	0.106	0.106
	GPI	-	0.098	0.098
EA	GA	0.664	-	0.664
	GB	0.249	0.123	0.372
	GPI	-	0.350	0.350
GA	GB	0.141	-	0.141
	GPI	0.374	0.054	0.428
GB	GPI	0.297	-	0.297
IPI	EA	0.253	-	0.253
	GA	-	0.168	0.168
	GB	-	0.096	0.096
	GPI	-	0.089	0.089
PEK	EA	0.144	-	0.144
	GA	-	0.095	0.095
	GB	-	0.055	0.055
	GPI	-	0.050	0.050

The total effects of each variable for their respective endogenous constructs along with their T statistics and P values can be assessed in Table 9.

Table 9 Total effect of study constructs

Relationships	Path Coefficients	T Statistics	P Values
ALT → EA	0.279	3.278	0.001
ALT → GA	0.185	3.100	0.002
ALT → GB	0.106	2.758	0.006
ALT → GPI	0.098	2.703	0.007
EA → GA	0.664	10.198	0.000
EA → GB	0.372	4.778	0.000
EA → GPI	0.350	4.534	0.000
GA → GB	0.141	2.196	0.028
GA → GPI	0.428	4.403	**0.000**
GB → GPI	0.297	2.997	**0.003**
IPI → EA	0.253	2.188	**0.029**
IPI → GA	0.168	2.035	0.042
IPI → GB	0.096	1.759	0.079
IPI → GPI	0.089	1.706	0.088
PEK → EA	0.144	1.246	0.213
PEK → GA	0.095	1.246	0.213
PEK → GB	0.055	1.103	0.270
PEK → GPI	0.050	1.144	0.253

CONCLUSION

The findings give practical support for a holistic model of Indian consumers' sustainable or eco-friendly behaviour, which incorporates the PEK, IPI, and ALT as independent variables along with the EA, GA, and GB as mediators in predicting GPI (objective 4). It also points out the part of the attitude component in predicting the GPI of Indian consumers. The EA acts as a direct predictor for both the GA and GB. The high β value for EA in determining the GA and the high β value for GA on GPI; the significant effect of EA on GB, along with the GB on GPI proves that EA significantly affects GPI, indirectly through the GA and GB. There was an extensive difference in the β values of the EA – GA (0.664) path, and EA – GB (0.249) relationship, suggesting that although EA translates to GPI by means of GA and GB, the translation of EA to GPI indirectly through GB is low, but indirectly via GA is more. The role of PEK in predicting the GPI (objective 2) is not significant, as the PEK does not significantly affect EA, so efforts should be taken on translating the PEK to EA. There is a significant role of ALT (objective 1) and IPI (objective 3) in predicting the GPI. So, from the path analysis results (objective 4) it is found that having ALT positively influences GPI, through (ALT → EA → GA → GPI and ALT → EA → GB → GPI). An additional finding worth noting was that having GA does not translate into the GB but translates into GPI. The results from Table 6 also show that IPI positively affects GPI through (IPI → EA → GA → GPI and IPI → EA → GB → GPI). This shows

the relevance of former ALT and latter IPI in predicting the GPI of Indian consumers. The GA directly influences GPI, and the mediation effect of GB on the GA → GPI relationship is insignificant. It can be stated that the awareness of the consequences of their impact on the environment in the minds of consumers of Telangana has a major influence on the consumers' purchase intention towards green products but not on the day-to-day eco-friendly activities. There is no role of PEK in predicting the GPI of Indian consumers. The knowledge concerning the environment does not influence the green purchase decisions comparatively with the other determinants like IPI, ALT, EA, GA, and GB. Hence it can be concluded that for Indian consumers, the ALT, IPI, EA, GA, and GB act as better predictors or determinants of their GPI. The PEK construct does not necessarily translate to the GPI (Table 9) and can be no further given more importance until there is an effort conducted to find the reasons behind it. The insignificant total effects are specified in bold and it is evident that the PEK and sometimes IPI relationship to other constructs are insignificant. Finally, the outcomes (Table 8 and Table 9) suggest that multiple determinants influence the GPI. From the strongest to the weakest, the determinants of GPI were GA, EA, GB, ALT, IPI, and PEK. The results have several implications for managers and policymakers, indicating that Indian consumers who have more GA, EA, GB, and ALT are expected to have more favourable green purchase intention. This indicates the importance of these attributes for making green decisions. Green marketers in their product promotions and advertisements should illustrate the consequences of their impact like how environmental protection is the public responsibility and how the environmental problems will affect human life; the benefits of various green activities like recycling, using energy-efficient devices, planting trees, avoid excessive packaging of products, on the society and environment. The marketers should also focus in their campaigns on letting the public know how purchasing their products will help them in accomplishing their day-to-day GB activities. The government should also continue to implement various green initiatives and motivate the public to participate in them for a better future. The findings suggest that only a few types of green activities like using low phosphate detergents, recycling the garbage, purchasing recycled, biodegradable products and also the products with less packaging, actually motivate the Indian consumers in their GPB. The managers should develop their environmental image in society and become ecologically responsible. The selfless interest and concern for the well-being of others should reflect as the primary motto of government and NGO initiatives, thus motivating the consumers in developing an environmental attitude, thereby increasing the green purchase intention. Marketers and retailers should employ strategies like targeting Gen Y male consumers and attracting them by tailoring the products to meet their needs and increase sales. The consumers' social influence will have a noteworthy role in influencing the GPI, the marketers and the policymakers should educate the consumers on how their actions influence the environmental beliefs of their social groups and the behaviour toward green decisions. For increasing the PEK of consumers and developing the environmental attitude through ecological knowledge, environmental education should be a part of the children's education curriculum and various NGOs should also organise campaigns on "going green". The EA influences GPI indirectly via GA and GB. So, there is a need to improve the ecological attitude of the public to promote the GB and GA and ultimately the GPI. The attitude can be developed by focusing on the perceived consumer effectiveness (Sun & Wang, 2020), behavioural beliefs (Yadav & Pathak, 2017) and values (Vermeir & Verbeke, 2006) of the public. The future researchers can conduct longitudinal rather than cross-sectional studies to address the dynamic nature of green consumers. Due to the budget and time constraints, the research has been conducted in only Hyderabad and only over a less sample, so potential research can be conducted in other cities of Telangana and also can cover Andhra Pradesh with a larger sample size. This research addressed the general GPI for no specific category of products; later studies can cover a wide variety of product categories. The intention to purchase green products followed by the actual purchase behaviour needs to be studied to find out whether

the consumer's intention can turn into a purchase or not. The other less explored exogenous variables must be included and their casual relationships with the GPI/GPB need to be studied. The variables studied in the other developed regions must be examined cross-culturally and the effects need to be addressed.

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