

Research Article

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An Empirical Study of the Predictors of Green Purchase Behaviour

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ABSTRACT

The world has progressed economically in leaps and bounds but sadly at the cost of our environment. Green Consumer Behaviour has become the need of the hour in recent years with the rapid degradation of the environment. This study focuses on green apparel and aims to examine if there is a relationship between i) Personal Norm and Green Purchase Behaviour, ii) Peer Influence and Green Purchase Behaviour iii) Perceived Benefits and Green Purchase Behaviour and iv) to examine if attitude mediates the relationship between Personal Norm and Green Purchase Behaviour. Value-attitude-behaviour hierarchy theory (VABH) has been used. The method used for analyses is the Structural Equation Modelling (SEM) technique using AMOS 22 software. A sample of 146 consumers was used and the convenience sampling technique was followed. The results show that there is a positive and significant relationship between i) Personal Norm and Green Purchase Behaviour, ii) Peer Influence and Green Purchase Behaviour iii) Perceived Benefits and Green Purchase Behaviour and iv) attitude mediates the relationship between Personal Norm and Green Purchase Behaviour. The findings are valuable to green apparel product manufacturers, policymakers, parents, school management and the community at large.

Introduction

In recent years, the increasing deterioration of the natural environment has attracted more consumers' attention. Concern for the safety and long-term condition of the environment has been growing worldwide (Connell, 2010). Hence, the customer attention toward sustainability in clothing has ascended extensively during the recent past period (Jacobs et al., 2018).

Green apparel which is often used as a synonym for sustainable clothing is defined as 'clothing that is designed for long lifetime use, which is produced ethically and cause little or no environmental impact and also makes use of eco-labelled or re-cycled materials' by Niinimäki (2010). Research in the context of green buying behaviour states that green consumers are willing to pay higher prices for green brands as it helps the green consumer display pro-environmental

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values. Prior studies have also reported that pro-environmental consumers are more likely to purchase green apparel (Khare & Sadachar, 2017). Harris et al. (2016) found that although green clothing has been gaining popularity, its acceptance as mainstream clothing is still lacking.

The Indian domestic textile and apparel market is estimated at US\$ 75 billion in 2020-2021 (Advisors, 2021). Also, the Indian fashion industry is projected to grow annually at the rate of 22.3% by 2023 (Agarwal, 2019). Research on green consumers in India is still at the nascent stage, and thus research on specific product categories is also limited. There has been a significant change in the Indian apparel industry due to the changing demographics and availability of global clothing brands. Due to the introduction of organic clothing line by national and global manufacturers to cater to the emerging ecologically conscious consumers, have led to its increasing popularity in India (Khare & Sadachar, 2017). Hence the market for environmentally friendly apparel is growing progressively (Khare, 2020). Also, Government and apparel manufacturers are undertaking initiatives to develop processes and technologies that reduce the negative impact on the environment. As such, apparel brands like Wills Lifestyles, Van Heusen, Benetton, Arrow and Levis have introduced an organic line of apparel using recycled fibres to produce organic clothing (Khare, 2018). The purpose of this research is to understand and study the predictors of Green Purchase Behaviour (GPB) among consumers in India.

Theoretical framework

Theory of planned behaviour (TPB)

Extensive research on green buying behaviour has commonly applied the TPB to understand the influence of various predictors and influential factors on green buying behaviour. TPB by Azjen (1985) is often referred to by most of the previous studies in an attempt to explain consumer green purchase behaviour and is a prominent theoretical approach followed. Many previous studies have applied the TPB to explore consumer attitudes, intentions and actual buying behaviour concerning green products (Joshi & Rahman, 2015). The TPB model is considered a good predictor of consumers' purchase intentions and behaviour but is based on the assumption that the individuals act rationally (Wiederhold & Martinez, 2018).

The attitude behaviour gap theory (ABG)

In the field of sustainable consumption, the inconsistency between attitudes and actual behaviour is commonly referred to as the Attitude-Behaviour Gap (Jacobs et al., 2018). Many studies that explored green purchase behaviour have reported a gap in consumers' attitudes and actual purchasing practices which is also referred to as the green attitude behaviour gap (Joshi & Rahman, 2015). In emerging sustainable markets, behavioural gaps are found to be the main obstacles to sustainable production and consumption resulting in huge unused market potential. Also, Jacobs et al. (2018) in their study, stressed the ABG and stated that although consumers' were aware of environmental problems, they were reluctant to buy green apparel. Hence, to benefit from such unused market potential and to reduce the gap, a greater understanding of ABG Theory was recommended (Jacobs et al., 2018).

The ABG also referred to as the green gap has proved to be one of the biggest challenges for the marketers, policymakers and the companies in promoting sustainable consumption (White et al., 2019). In the current study, the Attitude Behaviour Gap Theory (ABG) is referred to explicitly understand the link between attitude and behaviour.

Value-attitude-behaviour hierarchy theory (VABH)

The VABH, is one of the most popular models used over the last couple of decades in environmental behavioural studies. However, studies have reported that the role of the VABH in the context of green buying behaviour is still limited (Tan, 2011). The VABH was given by Homer and Kahle (1988). This theory aims to explain the relationships between value, attitude and behaviour. The value here refers to the persistent belief of an individual that a particular mode of behaviour is morally or personally desirable and is also considered to be steady over time (Tudoran et al., 2009). Also, such value is expected to indirectly impact behaviour through attitude. Hence, in this study, the personal norm is considered as a value and hence the VABH model is applied to the current study.

The VABH theory also allows for examining the possible green gap as previous studies have highlighted that there is a gap between consumers' attitudes towards sustainable consumption and the actual purchase behaviour in the context of sustainable consumption (Kummen & Remøy, 2021). As such, the VABH, is used as a theoretical framework in this research study to test the hypotheses developed to examine the predictors of GPB.

Literature review

Green purchase behaviour (GPB)

Green Purchase Behaviour (GPB) is defined as "The purchase of environmentally friendly products or sustainable products that are recyclable and beneficial to the environment and avoiding such products which harm the environment and society" (Chang, 2001). Green buying behaviour involves the purchase of ecologically safe products that are biodegradable, and do not use synthetic dyes and the goal is to protect the environment (Mainieri et al. (1997). Green consumers are defined as the 'individuals who avoid using products that endanger the health of others, use materials that are derived from endangered species, cause environmental waste and consume disproportionately large amounts of resource's (Peattie (2001), 2017). Niinimäki (2010) stated that self-identity and environmental values play a vital role in predicting the organic apparel purchase behaviour of green consumers.

Research in the past indicated that green behaviour does not necessarily influence green purchase behaviour (GPB) and also revealed that the social influence, past green buying behaviour, environmental norms, beliefs and green self-identity do influence purchase decisions (Mishal et al., 2017). Results of the study conducted by Joshi and Rahman (2015) highlighted that the major drivers of GPB were an individual's environmental concern, knowledge, product function and green attributes. Whereas the barriers towards the green purchase behaviour were high prices and inconvenience in purchasing the product.

Personal norm (PN)

Schwartz (1977) defined Personal Norm as “a self-expectation of specific action in a particular situation, experienced as a feeling of a moral obligation” and articulated that it is based on people’s personal values. Further, Thogerson (2006) stated that “personal norms are adhered to for internal reasons consistent with internal values, conceptions of right and wrong, good and bad”. According to Cowan and Tammy (2014), personal experiences and background have a strong impact on an individual’s purchasing choice and their consumption patterns reflect their perceived environmental impact.

A study by Khare and Sadachar (2017), stated that when moral obligation towards the environment is engrained in an individual’s personality through their habits, traits and personal values, led to ethical consumption beyond the shopping behaviour. In a study by Sharma (2021), among the factors highlighted depicting a positive influence on green purchase behaviour was personal norms. In the preceding study, moral and personal norms were found to have a significant influence on the purchase intention and the actual purchase (Joshi & Rahman, 2015). Values which are considered as the guiding principles in an individual’s life are often cited as key determinants of behaviour in research grounded on pro-environmental behaviour and thus to understand the Attitude Behaviour Gap Theory (ABG) in the context of sustainable clothing, it is vital to examine the relation of attitude to an individual’s value (Jacobs et al., 2018). Prior publications have addressed the key influence of values in sustainable consumption. Also, research on pro-environmental and pro-social behaviour as highlighted by literature from Schwartz (1992) & Schwartz (1994) either reflects collective interest (Self-transcendence) or own interest (Self-enhancement) thereby either promoting or inhibiting pro-environmental and pro-social attitudes and behaviour respectively.

The feeling of moral obligation often referred to as personal norms, may lead the people to act in a certain manner as a result of environmental concerns (Schwartz, 1977). The personal norms of pro-environmental behaviour can be activated when young consumers perceive high responsibility towards the environment (Lee, 2008). Prakash and Pathak, (2017), revealed that young consumers tend to have strong ethical motives and associate such moral values with Green Purchase behaviour.. Considering our study context, we have operationalized personal values as personal norms to comply with those pressures to perform the desired behaviour. A study by Bhattacharyya and Biswas (2021) found that personal values have a significant influence on their pro-environmental attitudes and behavioural intentions. Although values are not always fully mediated through attitudes, direct effects of values may exist on behaviour and must be taken into consideration. Hence our next hypothesis:

H₁: Personal Norm has a positive and significant impact on Green Purchase Behaviour

Peer influence (PI)

Preceding research has emphasized the role of peer influence in predicting green buying behaviour (Khare, 2020). However, the degree of peer influence varies (Khare, 2019). Past studies have not examined the role of peer influence concerning a specific green product category (Khare & Sadachar, 2017). According to Cowan and Tammy (2014), there is some societal

pressure which exists that mandates the environmentally-minded behaviour and therefore subjective norms such as peer influence has more persuasion on environmental behaviour. A study by Khare and Sadachar (2017), stated that green peer influence had no impact on the green apparel buying behaviour. Drawing from the extant research it can be concluded that peer influence would affect consumers' perception of green apparel (Khare, 2019). Some findings provided interesting insights but differed from earlier studies indicating that peer influence had no impact on organic apparel purchase behaviour and found that purchasing green apparel helped exhibit one's commitment towards the environment and seeking conformance from others was not considered essential (Khare, 2018). Anuar et al., (2020) examined the role of peer influence and found that peer influence encourages the consumers' to perform certain actions and a significant relationship exists between peer influence and green product purchase intentions and behaviour.

Earlier studies have indicated a significant level of relationship between peer influence and consumers' purchasing behaviour concerning green products (Suki & Suki, 2019). In studies on social groups, subjective or social norms were found to have a positive correlation with green purchase behaviour highlighting consumers who have high trust in other people expected them to engage in green behaviour and themselves purchased green products to express their ecological concern towards the society (Joshi & Rahman, 2015). Past studies have emphasized the role of green peer influence on green apparel buying behaviour (Khare & Sadachar, 2017). Other studies have also indicated significant findings stating that peers were able to influence and persuade others to recognise the deterioration of environmental problems (Suki & Suki, 2019). Thus, on basis of the above discussion, the second hypothesis is proposed:

H₂: Peer Influence has a positive and significant impact on Green Purchase Behaviour

Perceived benefit (PB)

Green apparel perceived benefits are defined as "consumers' perception of green apparel to its incorporating fair trade practices" (Lee et al., 2015) and green apparel perceived effectiveness is defined as "consumers' perception regarding green apparel benefits" which includes product attributes such as style, design, colour and the ecological benefits (Khare & Kautish, 2022). Research indicates that a lack of knowledge and awareness of green apparel can affect consumers' perception of benefits (Khare, 2020). Another research found that perceived benefits of green apparel influenced green apparel purchases (Lee et al., 2015). A study by Khare & Sadachar (2017), found that green products can only be successful if the consumers perceive them to be superior as compared to other conventional products.

The green purchase behaviour was found to be influenced by knowledge and perceived usefulness (Sharma, 2021). The green apparel product attributes such as price, quality, use of environmentally friendly materials and sustainable production techniques conveyed functional, emotional and psychological benefits and value (Khare, 2020). Hence it is confirmed that the green purchase behaviour of consumers gets influenced by a variety of factors. Previous studies have also shown that negative perceptions of the quality of sustainable products are likely to inhibit purchase behaviour (Jacobs et al., 2018). The benefits associated with purchasing green apparel are critical in predicting consumers' attitudes (Khare & Kautish, 2022). Research suggests

green apparel manufacturers provide product benefits related to style, appeal and quality to encourage green consumers to purchase green apparel. Also, they should focus on psychological benefits rather than focusing only on altruistic aspects (Khare & Kautish, 2022).

Preceding research stated that consumers complained that green clothing failed to cater to their expectations as it lacked individuality, style, design and fashionability. Also, Jacobs et al., (2018) posited that negative perceptions of the consumer must be addressed to improve consumer preference for green apparel. Previous research studies also found that the reason for the delay in acceptance and purchase of green apparel among consumers is low due to a lack of knowledge about the benefits and fair-trade attributes of green apparel (Khare, 2020). Another study by (Khare, 2019) found that perceived benefits of green apparel influence green apparel purchase behaviour. Hence one of the objectives of the current study is to examine the impact of Perceived Benefits (PB) of green apparel on Green Purchase Behaviour (GPB). Hence the third hypothesis is developed:

H₃: Perceived Benefits have a positive and significant impact on Green Purchase Behaviour

Attitude towards green apparels

Attitude in the context of green purchase attitude is defined as an “individual’s response and a significant factor that influences green purchase behaviour” (Peattie & Crane, 2005 is defined as “a mental and a neutral state of readiness which exerts a direct influence upon the individual’s response to all objects and situations with which it is related”. In some of the prior studies, attitudes were observed to impact consumers’ intentions to involve in ecological behaviour as people of different attitudes have a different cycle of purchasing and have drastic differences in their purchasing behaviour towards normal apparel themselves so there is no doubt there shall be differences in opinions towards green apparels (Joshi & Srivastava, 2019). According to Cowan and Tammy (2014), an attitude which contributes to beliefs plays a prominent role in decision-making. Research says that environmental attitude based on the perceived environmental problems influenced green purchase behaviour. Also, the influence of environmentally friendly values and attitudes on organic clothing purchase posited that environmental attitudes influence the consumers’ willingness to pay for organic clothing (Khare & Sadachar 2017).

Cowan and Tammy (2014), stated that more the environmentally friendly a person’s attitude and beliefs are, the more likely a person will shop for environmentally friendly apparel. The attitude behaviour theory suggests that the attitude is built through social interaction and is found to be a resultant blend of environmental consciousness, knowledge and social norms eventually leading to green purchase behaviour (Mishal et al., 2017). The rise in environmental degradation and deterioration has led to the rise in the development of environmental consciousness of consumers’ attitudes toward eco-friendly products (Yam-Tam & Chang, 1998). Based on the study conducted in the period between 2010 to 2020, it has been observed that there is a lack of research in detail about the attributes leading to the gap between the attitude and actual purchase behaviour of green consumers. A study conducted by Sharma (2021), observed that Eco-consciousness, knowledge, personal norms and past purchase experiences influenced green purchase attitude. Whereas price, belief and ambivalent behaviour negatively influenced green

purchase attitude. These Findings consider consumers' attitudes toward green products as a significant predictor of green purchase intention.

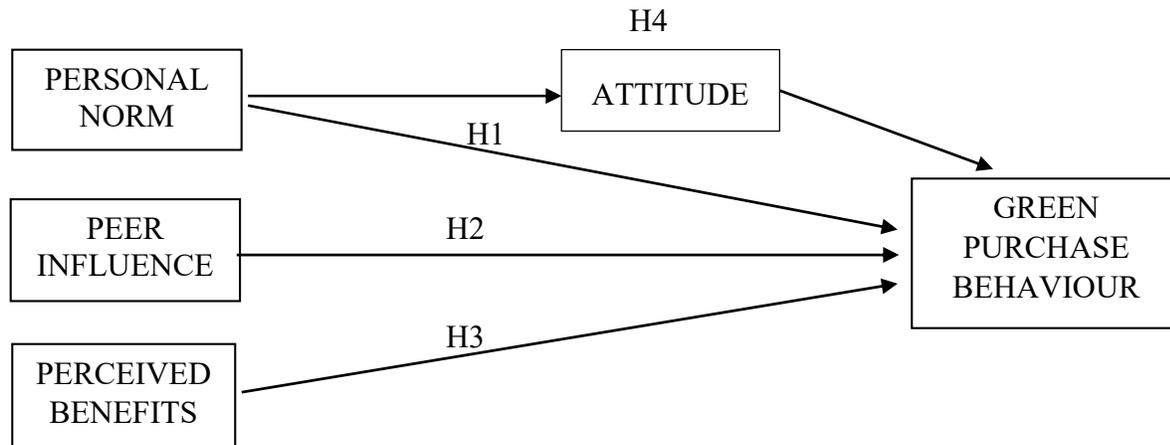
According to Sun & Wang (2019) attitude mediates between personal norms and intention to purchase. It is also observed that even if the consumers have a positive attitude toward the green products, it may not necessarily reflect in their actual purchase behaviour (Kumar & Godeshwar 2015 in Sharma, 2021). The green purchase attitude further influences green purchase intention and green trust (Sharma, 2021). In the recent past, consumer attitudes towards sustainable products and services have grown more favourable. A study by Jacobs et al., (2018), indicated that a positive attitude towards social-ecological clothing standards, biospheric and altruistic values enhance sustainable clothing purchases. Since an attitude is regarded as a key antecedent of behaviour by many studies, it, therefore, forms an integral component of other behavioural theories such as the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) and the Theory of Planned Behaviour (TPB) (Ajzen 1991). However, sustainable attitudes only partially translate into purchase behaviour and may lead to a weak or insignificant attitude behaviour relationship. Do Paco et al. (2013) emphasized the effectiveness of attitude as one of the predictors of behaviour in a sustainable clothing consumption context. Just like other behavioural models, the Value-attitude-behaviour hierarchy theory (VABH) is also constructed on the assumption that the behaviour of consumers is formed by their attitudes (Homer & Kahle, 1988). Thus research work based on such models has consistently supported this causal relationship. Despite the increasing environmental awareness and concerns, there exists a gap between the consumers' attitude and their actual purchase behaviour. Hence, the adoption of green products is still low and it is due to this inconsistency in consumers' intentions and buying behaviour (Naz et al., 2020). A study by Tan (2011) where Structural Equation Modeling (SEM) was used revealed that attitude plays a mediating role between values and behaviour and this was presented in the Value-attitude-behaviour hierarchy (VABH) model. Therefore the fourth hypothesis applies the main premise of the Value-attitude-behaviour hierarchy theory (VABH) to this context and thus our fourth hypothesis is developed:

H₄: Attitude mediates the relationship between Personal Norm and Green Purchase Behaviour

After developing the hypotheses from literature review, the following model is proposed for empirical testing. It exhibits that Personal Norm, Peer Influence and Perceived Benefits influence Green Purchase Behaviour. The model also proposes that Attitude mediates the relationship between Personal Norm and GPB.

Figure 1.

Model to test the predictors of green purchase behaviour



Methodology

Sample and procedure

Data was collected through online surveys using Google Forms. The data collection period was from February 2022 to April 2022. The unit of analysis was the resident of Goa who used or purchased green apparel. The sampling technique used is a non-probability sampling technique, namely convenience sampling, where the criteria for the respondent are someone who knows or has bought ethical or sustainable fashion products. This survey method was used due to time constraints during the survey period to obtain responses. The final total of respondents who filled out the questionnaire was 146 people. The participants consisted of demographically diverse participants. The demographic profile of the respondents showed that 74 (50.7%) respondents were male and 72 (49.3% were female out of the total 146 respondents; a majority of them (80.82%) were in the age group of 18 –30 years. We adopted a 5 point Likert style scale previously validated with reliability to collect responses from the respondents. The hypotheses were tested against the empirical data by using the Structural Equation Modelling (SEM) method.

Instrument

A structured questionnaire having six sections was used to collect the data and examine the proposed model. The items used to operationalize various constructs used in this study were picked up from existing validated scales. This study context was the survey questionnaire designed for self-reporting of the consumers' observations and experiences while purchasing green apparel. All of the scales were formulated based on a 5-point Likert scale from 'strongly disagree' - 5 to 'strongly agree' - 1. The first section contained socio-demographic details like age, occupation and gender. The second section contained 2 - items to measure the Attitude of the consumers toward green apparel (ATT) adopted from Nguyen et al. (2019). The third section comprised of 6-items to measure Personal Norm (PN) adapted from Pickett-Baker and Ozaki (2008). The fourth section contained 5-items to measure Peer Influence adapted from Khar (2018). The fifth section contained 6-items to measure Perceived Benefits (PB) from Lee et al.

(2015) and the sixth section contained 4-items to measure Green Purchase Behaviour adopted from Jog and Singhal (2020).

Table 1.

Reliability and convergent validity of each scale taken individually

Construct	Item	Factor loadings	Alpha	CR	AVE	
ATTITUDE	ATT1	Purchase of green apparel products is a smart choice.	0.924	0.781	0.61	0.33
	ATT2	The purchase of green apparel products brings many benefits.	0.696			
PERSONAL NORM	PN1	I buy products that are made or packaged in recycled materials.	0.638	0.743	0.75	0.46
	PN2	I buy products in packages that can be refilled.	0.676			
	PN3	I avoid buying products from companies that are not environmentally responsible.	0.632			
	PN4	I recycle bottles, cans, and glass.	0.549			
PEER INFLUENCE	PI2	My friends often discuss environmental issues/products with me.	0.761	0.851	0.85	0.59
	PI3	My friends often go shopping for green products with me.	0.658			
	PI4	My friends often share their experiences and knowledge about green products with me.	0.866			
	PI5	My friends, often, recommend environment-friendly products to me.	0.784			
PERCEIVED BENEFITS	PB2	I enjoy looking at store displays.	0.570	0.809	0.78	0.37
	PB3	I like to visit new fair-trade clothing stores to see what they have to offer.	0.814			
	PB4	I often browse for fair-trade clothing (green clothing) just to keep up with new products in the market.	0.677			
	PB5	People who matter to me would respect me for purchasing fair-trade clothing (green clothing).	0.630			
	PB6	I like to feel smart about my fair-trade clothing (green clothing) purchases.	0.696			
GREEN PURCHASE BEHAVIOR	GPB1	When I want to buy a product, I look at the label to see the fibre or ingredients used and also environmentally damaging things if at all it contains.	0.749	0.785	0.79	0.49
	GPB2	I prefer green products over non-green products when their product qualities are similar.	0.597			
	GPB3	I choose to buy environmentally friendly products.	0.722			
	GPB4	I buy green products even if it is more expensive than the normal regular ones.	0.712			

Note: CR- composite reliability; AVE – Average variance extracted

Data analysis, and results

After the CFA of every construct was performed and according to Hair et al. (2014) items with loadings of less than 0.5 were removed (Table 1), the measurement model (Figure 2) was developed in the direction of the proposed model (Figure 1). The validity of the measurement model was determined by the construct validity (Table 2) and measurement model fit. The model fit indices were checked and were found to be within acceptable limits displaying a good fit (CMIN/DF \leq 3.00; GFI \geq .8; AGFI \geq .8; RMR \leq .08; CFI \geq .9; TLI \geq .8; RMSEA \leq 0.08). After validating the measurement mode, the hypotheses were tested using Structural Equation Modelling (SEM). Path analysis was used to test the hypotheses on the relationships between the constructs in the model.

The measurement model includes all the constructs in the model. Convergent and discriminant validation of this model is then tested for all the constructs together. Items having shared variance with two or more constructs are removed. The results of the validation are shown in Table 2.

Table 2.

Validity of the measurement model

	CR	AVE	MSV	MaxR(H)	PB	PI	ATT	PN	GPB
PB	0.759	0.513	0.679	0.763	0.716				
PI	0.808	0.586	0.317	0.824	0.422	0.765			
ATT	0.794	0.661	0.328	0.845	0.344	0.279	0.813		
PN	0.655	0.389	0.679	0.664	0.824	0.232	0.573	0.624	
GPB	0.775	0.535	0.508	0.786	0.664	0.563	0.539	0.713	0.732

Source: The authors

Note: Diagonal value in bold indicates the square root of AVE of the construct

Values below the diagonal are correlations

From Table 2, it can be observed that the composite reliability (CR) and average variance extracted (AVE) values of the constructs PB, PI, ATT and GPB are above the minimum threshold value as specified by Hair et al. (2014). However, the CR for the construct Personal Norm (PN) is close to the threshold level of 0.7 but the AVE is much below the threshold level of 0.5. According to Fornell and Larcker (1981), Malhotra and Dash (2011) and Lam (2012), AVE is a conservative or too strong a measure of validity. Hair et al. (2014) have suggested that the discriminant validity of a construct can also be verified by comparing the model fit of five, four, three, two and one-construct models. If the model fit of the predetermined number of construct-model (five factor-model) is the best, then it proves that the discriminant validity is achieved. The model fit indices of all the models are shown in Table 3. It can be observed from Table 3 that the model fit indices of the five-factor model are the best. Hence the discriminant validity is achieved.

Table 3.*The model fit indices of all the five models*

Fit Index	CMIN/DF	GFI	AGFI	RMR	CFI	TLI
One-factor model	4.371	.739	.644	.097	.654	.591
Two-factor model	3.741	.768	.68	.102	.722	.668
Three-factor model	3.292	.797	.712	.093	.774	.722
Four-factor model	3.276	.813	.724	.096	.785	.724
Five factor model	2.010	.885	.819	.064	.910	.878

Source: Primary

Since the validity of the measurement model was found acceptable, the structural model was used to test the hypotheses.

Structural equation modelling

The computed values of the constructs were used to test the hypotheses.

Testing Hypotheses H1, H2, and H3, the statistical results and interpretation

Table 4.*Structural model path coefficients and the significance*

	Std	Estimate	S.E.	C.R.	P	
H1: PN → GPB	.342	.416	.091	4.578	***	SUPPORTED
H2: PI → GPB	.328	.310	.063	4.951	***	SUPPORTED
H3: PB → GPB	.204	.217	.083	2.623	.009	SUPPORTED

Source: primary data

Notes: *** p-value < 0.01; ** p-value < 0.05; * p-value < 0.10

From Table 4, it can be observed that all the three independent variables PN, PI, and PB have a positive and significant influence (at a 1% level of significance) on the dependent variable GPB. Thus it can be concluded that Personal Norm, Peer Influence and Perceived benefits have a positive and significant impact on Green Purchase Behaviour.

The results of the mediating analysis is shown in the Table 5. From Table 5 it can be observed that initially there is a positive and significant direct relationship between PN and GPB. Upon introduction of the mediating variable ATT, the strength of the direct relationship decreases but it is positive and significant. There is also an indirect relationship (.094) which is positive and significant (5% level of significance).

Table 5.*Structural model path coefficients and the significance for the mediating effect of attitude on the relationship between personal norm and green purchase behaviour*

	Std	Estimate	S.E.	C.R.	P
PN → GPB Direct effect without mediating variable	.532	.646	.085	7.575	***
PN → GPB Direct with mediating variable	.439	.532	.093	5.734	***
PN → GPB indirect effect with mediating variable		.094			.013

Source: primary data

Notes: *** p-value < 0.01; ** p-value < 0.05; * p-value < 0.10

Thus it can be concluded that Attitude mediates (Hayes, 2018) the relationship between Personal Norm and Green Purchase Behaviour. Therefore, H4 is supported.

Discussion

The role of the VABH in the context of green buying behaviour is still limited (Tan, 2011). The results of this study revealed that attitude mediates the relationship between PN and GPB thus confirming the VABH theory.

Researchers in the past such as Cowan & Tammy (2014); Joshi & Rahman, (2015); Jog & Singhal, (2020); Sharma (2021) found that PN showed positive influence on GPB. The current study found that PN has a positive and significant impact on GPB. *Thus, the findings of this study support the findings of earlier researchers.*

Past studies have not examined the role of peer influence with reference to a specific green product category (Khare & Sadachar, 2017). Other studies have indicated significant findings stating that peers were only able to influence and persuade others to recognize the deterioration of environmental problems (Suki & Suki, 2019). Findings of researchers in the past (Khare & Sadachar (2017); Khare (2018); Khare, (2020); Suki & Suki (2019); Anuar et al. (2020) revealed that seeking conformance from peers was not considered essential. Also the previous researchers did not study the impact of PI on GPB. The findings of this study differed from earlier studies indicating that peer influence had positive and significant impact on organic apparel purchase behavior.

Past research found that perceived benefits of green apparel influenced purchase of green apparel (Lee et al. (2015); Khare (2019); Sharma (2021)). The results confirmed that PB has a positive and a significant impact on GPB. *Thus, the findings of this study support the findings of earlier researchers.*

Previous studies have highlighted that there is a gap between consumers' attitudes towards sustainable consumption and the actual purchase behavior (Naz et al. (2020); Kummen and Remøy (2021)). Researchers in the past (Tan (2011); Cowan & Tammy (2014); Sun & Wang (2019); Sharma (2021)) have found that attitude plays a mediating role between values and behavior and this was explained by the VABH theory. The findings of this study revealed that attitude mediates the relationship between the PN and GPB. *Thus, the findings of this study support the findings of earlier researchers.*

Implications

Policymakers can develop educational measures based on the findings of this study to sensitise children in school towards green products, recycling behaviour, and protecting environmental scarce resources so as to instil values that will in the long run lead to Green Purchasing Behaviour and Green Consumption. Apparel companies may also be encouraged by the Government to take more sustainable and green initiatives by adopting green technologies to display their deeper commitment toward society and the environment and also maintain transparency about the sustainability process and efforts. Green apparel manufacturers can spread awareness and educate consumers about environment-friendly attributes and benefits of green apparel. In the Indian

context, where the youth comprises a large segment that is conscious of the latest fashion and styles, may be targeted to spread awareness about the benefits and positive impacts of sustainable clothing on the environment and to encourage the purchase of green apparel.

Limitations and future research

The generalizability of the results is one of the main limitations of the study as it was conducted in the state of Goa-India which was a limited geographical location and the perception of a country as a whole may differ. Further, the study highlights the scope for collecting responses from all the states of the country for better-generalized results. Due to the time constraint, the key focus of this study remains on the Green Purchase Behaviour and thus broadening of the topic is possible with the extension of research on other variables.

Future researchers may conduct a meta-analysis of different predictors of green purchase behaviour for a comprehensive assessment. How emotions influence green consumers' purchase behaviour can be a future research study. Also, the global disparity between the attitude and actual purchase behaviour of green consumers requires devising strategies to bridge this gap. The Value-attitude-behaviour hierarchy theory (VABH) model's application may be extended to other sustainable products and be verified as it is still limited in the context of Green Buying Behaviour (GBB). Also, the causal influences among the variables of Green Purchase Behaviour (GPB) may be explored.

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