

Factors Affecting Green Apparel Purchase Intention: Exploring the Role of Altruism

Alok Tewari*, Smriti Srivastava** and Divya Gangwar***

Abstract

The current research uses the well established framework of the theory of planned behaviour to predict young consumers' intention to purchase green apparel in Lucknow. Further, the TPB model has been extended to include the construct of altruism. Responses were collected from a sample of 227 university students using convenience sampling approach. The hypothesised relationships were tested using structural equation modelling. Findings suggest that TPB variables significantly predict green apparel purchase intention. Besides, altruism emerges as an influencer of green purchase intention as well as attitude. Implications for industry and academics have been discussed.

Keywords: Theory of Planned Behaviour, Green Apparel, Intention, Altruism

*Research Scholar, Dr. A.P.J. Abdul Kalam Technical University, Lucknow, Uttar Pradesh (India): tewarialok2@gmail.com
**Professor and Head, M.B.A. Department, BN College of Engineering and Technology, Lucknow, Uttar Pradesh (India): smritisrivastava9794@gmail.com
*** Professor and Head, M.B.A. Department, Dr. Akhilesh Das Gupta Institute of Technology & Management, New Delhi (India): divyagangwar2013@gmail.com

1. INTRODUCTION

The economic development across the globe has been accompanied by environmental degradation. Rapid industrialization has benefitted the societies but also given rise to the problem of environmental pollution. This has made environmental conservation a mainstream issue for policy makers. For businesses, this concern for environment is reflected in increasing production and consumption of green and sustainable products. Still, the market share of green products is pretty low as compared to conventional ones. The difference is even bigger in case of developing economies which are primarily the producers and exporters of green and organic products.

Recent studies in green consumption literature have focused on determining factors responsible for purchase behavior of consumers or formation of behavioral intention but most of these studies have not been product specific. A number of these studies have tried to put forth a model of consumer behaviour highlighting the motivators or barriers to green consumption (e.g. Jacobs et al., 2018; Tewari et al., 2022). Green clothing is one such product category within the domain of green products which has not been explored sufficiently, especially, when it comes to youth. Determining the factors influencing behavioral intention of young Indian consumers towards green apparel is important for two reasons – young consumers form a significant proportion of the population of India (Central Statistics Office, 2017) and clothing industry has been a major contributor of environmental pollution.

Through this study we aim to explain young consumers' green apparel purchase intention using the model of theory of planned behaviour (TPB). We also propose to modify the existing TPB framework by incorporating the construct of altruism to better explain the variation in purchase intention.

2. LITERATURE REVIEW

2.1 Theory of Planned Behavior

The theory of planned behavior (Ajzen, 1991) is a frequently used model for prediction of behavioral intention across a range of behaviors. It is an extension of the theory of reasoned action (Fishbein & Ajzen, 1975). The TPB framework suggests that attitude, Subjective Norms (SN) and Perceived

Behavioral Control (PBC) influence behavioral intention, which is considered as a direct antecedent of the behavior in question. Attitude towards the behavior is a person's favorable or unfavorable disposition towards the behavior. A favorable attitude increases the likelihood of the performance of behavior. SN refers to the influence of 'significant others', whose opinion is important for the individual in decision making. PBC refers to the perception of the individual regarding the resources required for carrying out the behavior. The greater the perception of control, the stronger the behavioral intention and the higher the chances of performance of behavior (Ajzen, 1991). The TPB has been used to predict the intention and the behavior in varied fields and has also found application in consumption behaviors. The last decade has seen extensive use of the TPB framework in predicting green purchase behavior. Paul et al. (2016) used an extended TPB framework to explain the green buying intention of Indian consumers and the model explained a significant variation in the behavioral intention. Similar results were obtained by Yadav & Pathak (2016, 2017). These studies have considered the green products in general and have advocated the use of the TPB model for different product categories. A few recent studies have used an extended or modified TPB model to predict consumers' purchase intention toward organic food (e.g. Aitken et al., 2020; Tewari et al., 2022) and reported that attitude, SN and PBC significantly impacted intention to buy organic food. Researchers have also used this model to explain intention to visit green hotels, intention to purchase energy efficient appliances, intention to purchase electric vehicles etc. and have reported favorable results, but such studies are scarce when it comes to eco-friendly or green clothing, especially in the Indian context with such a large percentage of young population. Based on this discussion we propose:

H1: Attitude will influence purchase intention for green apparel

H2: Subjective Norms will affect purchase intention towards green apparel

H3: Perceived Behavioral Control will impact purchase intention towards green apparel

2.2 Inclusion of Additional Construct in TPB

Researchers using the TPB model have called for the inclusion of context specific variables to better explain the variation in behavioral intention. Studies in the domain of green consumption have included various environmental and social constructs based on the notion that such consumption behavior is driven less by self enhancement values and more by self transcendent values. Green consumers are aware of their consumption consequences on the society and environment and therefore make a conscious effort to stay away from unsustainable lifestyle. Altruism implies helping others for the sake of others' happiness (Lee & Lee, 2007). People with altruistic mindset tend to engage in pro-environmental consumer behaviour because they feel a sense of responsibility towards protecting the environment (Schwartz, 1977). Reimers et al. (2017) reported a

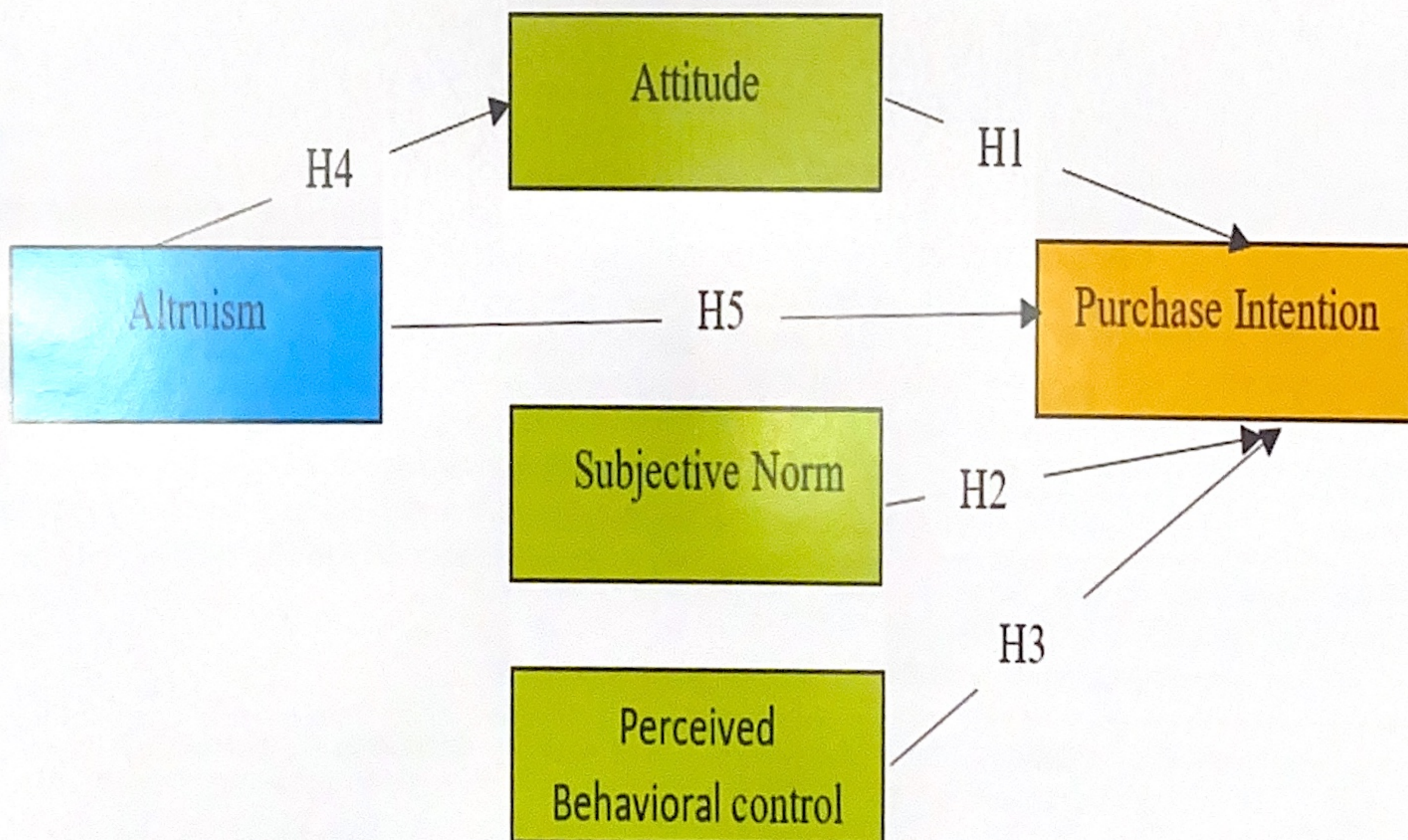
strong impact of altruism on Australian consumers' attitude towards green clothing. However, in another study, Naderi & Van Steenburg (2018) did not find a significant relationship between altruism and green behaviour of young consumers in the United States. In a recent study, Panda et al. (2020) observed a strong relationship between altruism and green purchase intention among Indian consumers. But overall, studies exploring such relationship are limited in the context of green clothing. Hence it is proposed that:

H4: Altruism will impact attitude towards green clothing

H5: Altruism will affect purchase intention for green clothing

The proposed research framework is shown in figure 1

Figure 1: The Proposed Research Framework



3. METHODOLOGY

3.1 Questionnaire Design

The questionnaire for this study was prepared by sourcing items from past studies. Attitude was operationalized using three items from Wang et al. (2013). Subjective norm was operationalized using three items from Han et al. (2010). Perceived behavioural control was measured utilizing three items from Paul et al. (2016). Purchase intention was assessed using three items from Yadav & Pathak, (2017). Altruism was operationalized using four items from Jacobs et al. (2018) and Oh & Yoon (2014). All the items were measured on a 7 point Likert scale with '1' denoting strong disagreement and '7' implying strong agreement.

3.2 Data Collection

A pilot study was conducted with 30 research scholars to check if the wordings of items are suitable in the current context.

Table 1 : Sample Demographics

Demographic Variable	Frequency	Percentage
Male	131	57.71
Female	96	42.29
Age		
17-21	119	52.42
22-26	108	47.58
Education		
Graduate	126	55.50
Post Graduate	101	44.50

Table 2 : Reliability and Validity

	CR	Alpha	AVE	altruism	subnorm	intention	attitude	pbc
altruism	0.829	0.828	0.549	0.741				
subnorm	0.837	0.832	0.634	0.197	0.797			
intention	0.881	0.877	0.712	0.527	0.448	0.844		
attitude	0.782	0.772	0.549	0.263	0.165	0.349	0.741	
pbc	0.767	0.766	0.524	0.19	0.054	0.423	0.169	0.724

Note: Diagonal values represent square root of AVE

Next, we reached out to 300 university students in Lucknow using convenience sampling approach and received 239 responses. After eliminating incomplete responses we had 227 usable responses. According to Kline (2011), there should be at least ten responses per item. Our study has 16 variables therefore a sample size of 227 is sufficient. The sample demographics are presented in table 1.

4. DATA ANALYSIS

We made use of SPSS and AMOS software for analysis of data. Skewness and Kurtosis indices were computed for checking the normality of the data. The indices were within the range suggested by Kline (2011). Next, we calculated Cronbach's alpha values to test the internal consistency of the items. All the constructs had alpha values above the recommended threshold of 0.7 (Nunnally & Bernstein, 1994).

4.1 Measurement Model

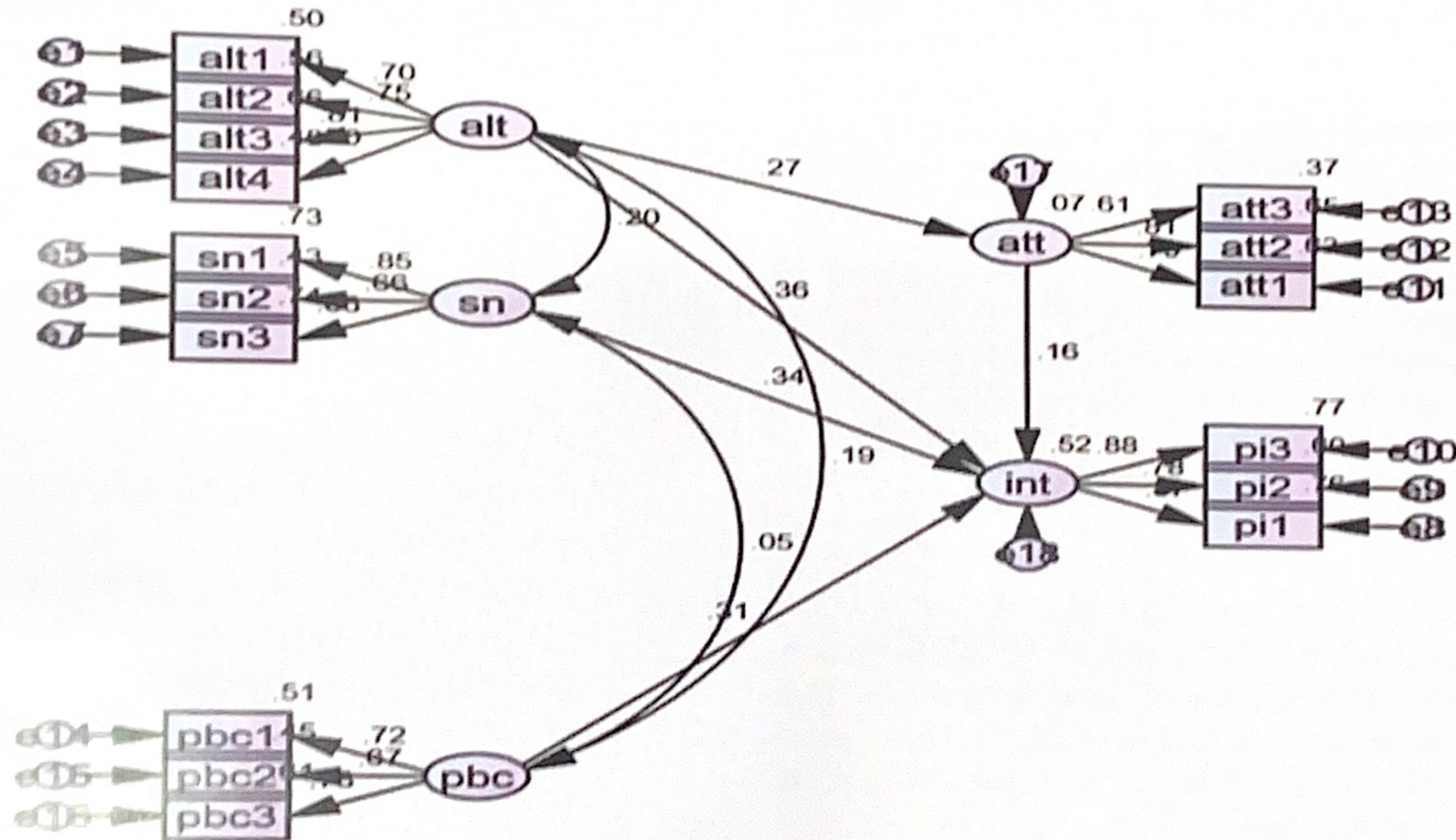
Confirmatory factor analysis for the measurement model suggested an acceptable fit: CMIN/df=1.626; GFI=0.928; CFI=0.961; SRMR=0.049; RMSEA=0.053. The reliability and validity estimates for the constructs were well above the acceptable threshold. The composite reliability indices were above 0.7 for all the sub scales. The factor loadings were found to be above 0.6 mark. Further, the AVE values were above 0.5 demonstrating good convergent validity. The discriminant validity was confirmed by comparing square root of AVE with factor correlations and the values for the former were greater than that of latter for all the constructs which satisfied the criterion suggest by Fornell & Larcker (1981). The reliability and validity estimates are given in table 2.

4.2 Structural Model

Confirmatory factor analysis was run on the structural model which provided the following fit statistics:

CMIN/df=1.637; GFI=0.927; CFI=0.960; SRMR=0.057; RMSEA=0.053. These measures suggest an acceptable model fit. The model explained 52% variation in purchase intention.

Figure 2 : Structural Model



4.3 Path Analysis

The results of path analysis suggest that all the TPB factors significantly impact behavioural intention. The effect of attitude ($\beta=0.159$, $p<0.05$), SN ($\beta=0.339$, $p<0.001$) and PBC ($\beta=0.313$, $p<0.001$) on purchase intention was statistically significant. Also, altruism significantly influenced both attitude ($\beta=0.270$, $p<0.001$) and intention ($\beta=0.362$, $p<0.001$). Thus, all the hypotheses (H1-H5) were supported.

5. DISCUSSION

This study explores the antecedents of consumers' green apparel purchase intention using the framework of theory of planned behaviour. The predictor variables of TPB, viz., attitude, SN and PBC emerge as significant influencers of behavioural intention. This is in line with the findings of past studies (Han et al., 2010; Yadav & Pathak, 2017). The results suggest that a favourable disposition towards green products helps in formation of behavioural intention. The role of

significant others, through the impact of subjective norms, is also established. This implies that young consumers, while purchasing green products, are conscious of social approval of their purchase decision. Lastly, the perception of ease or difficulty in purchasing, i.e., perceived behavioural control is also found to significantly impact behavioural intention.

The results suggest that a perception of having sufficient resources, time and money is an important factor influencing the formation of intention.

The current research also includes the construct of altruism in the original TPB model to improve its explanatory power. The results show a significant positive impact of altruism on attitude towards green apparel and intention to purchase such apparel supporting the findings of Jacobs et al. (2018). This suggests that a sense of responsibility toward the environment and society motivates consumers to opt for green apparel over conventional ones.

6. IMPLICATIONS

The present research has a few significant theoretical and practical implications. The study proves the robustness of the TPB model in explaining consumer behaviour, especially with reference to green and sustainable products. Since previous research has suggested that the TPB framework is open to modifications, this study includes the construct of altruism in the original framework in trying to predict the green apparel purchase intention. Altruism emerges as a significant antecedent of attitude and intention which calls for further research into other values and their inclusion in the TPB framework to explain related green and sustainable behaviours.

For marketing managers, it is essential to align product benefits with the attitudes and values of consumers. Young consumers, who are concerned about the well being of the society and environment, should be made to understand that they can contribute towards environment protection by consuming eco friendly apparel. Effective communication strategies should be developed to make green apparel more acceptable in the society. Companies must focus on the distribution of green apparel so as to offer more opportunities to consumers to buy them.

7. CONCLUSION AND FUTURE RESEARCH

This study was carried out with the objective of predicting consumers' intention for purchasing green apparel. We employed the well established TPB framework and also included an additional construct viz., altruism, to explain the variation in behavioural intention. The results supported the hypothesized relationships.

The study has some limitations which can be addressed in future studies. The self-reported nature of study may cause it to be affected with social desirability bias. The research is limited to educated young consumers, hence, the findings cannot be generalized. Hence, future studies should take into consideration different socio demographic sections to account for any variation in results. Future researchers should also take into consideration the actual behaviour, along with intention, to account for a possible gap between the two.

8. REFERENCES

- Aitken, R., Watkins, L., Williams, J., & Kean, A. (2020). The positive role of labelling on consumers' perceived behavioural control and intention to purchase organic food. *Journal of Cleaner Production*, 255, 120334.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Central Statistics Office (2017). Youth in India 2017. Retrieved from http://mospi.nic.in/sites/default/files/publication_reports/Youth_in_India2017.pdf. Accessed June 12, 2020.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison Wesley.
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50.
- Han, H., Hsu, L.T. J. & Sheu, C. (2010). Application of the Theory of Planned Behavior to green hotel choice: Testing the effect of environmental friendly activities. *Tourism Management*, 31(3), 325-334.
- Jacobs, K., Petersen, L., Horisch, J., & Battenfeld, D. (2018). Green thinking but thoughtless buying? An empirical extension of the value attitude-behaviour hierarchy in sustainable clothing. *Journal of Cleaner Production*, 203, 1155-1169.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York: The Guilford Press.
- Lee, J. Y., & Lee, H. S. (2007). The effect of altruism on happiness and peer attachment in adolescents. *Korean Journal of Society for Holistic Education*, 11, 15-29.
- Naderi, I., & Van Steenburg, E. (2018). Me first, then the environment: young Millennials as green consumers. *Young Consumers*, 19(3), 280-295.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory* (3rd ed.). New York: McGrawHill.

- Oh, J.-C., & Yoon, S.-J. (2014). Theory-based approach to factors affecting ethical consumption. *International Journal of Consumer Studies*, 38(3), 278-288.
- Panda, T. K., Kumar, A., Jakhar, S., Luthra, S., Garza-Reyes, J.A., Kazancoglu, I., & Nayak, S.S. (2020). Social and environmental sustainability model on consumers' altruism, green purchase intention, green brand loyalty and evangelism. *Journal of Cleaner Production*, 243, 118575.
- Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, 29, 123-134.
- Reimers, V., Magnuson, B., & Chao, F. (2017). Happiness, altruism and the Prius effect. *Journal of Fashion Marketing and Management: An International Journal*, 21(1), 115-132.
- Schwartz, S.H. (1977). Normative Influences on Altruism. *Advances in Experimental Social Psychology*, 10, 221-279.
- Tewari, A., Srivastava, S., Gangwar, D., & Verma, V. C. (2022). Young consumers' purchase intention toward organic food: exploring the role of mindfulness. *British Food Journal*, 124(1), 78-98.
- Wang, Y., Wiegerinck, V., Krikke, H., & Zhang, H. (2013). Understanding the purchase intention towards remanufactured product in closed loop supply chains. *International Journal of Physical Distribution & Logistics Management*, 43(10), 866-888.
- Yadav, R., & Pathak, G. S. (2016). Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior. *Journal of Cleaner Production*, 135, 732-739.
- Yadav, R., & Pathak, G.S. (2017). Determinants of Consumers' Green Purchase Behavior in a Developing Nation: Applying and Extending the Theory of Planned Behavior. *Ecological Economics*, 134, 114-122.