International Journal of Mechanical Engineering

# Antecedents of Buying Intention towards Green Product: A Conceptual Framework

## Rabindra Nath Behera<sup>1</sup>

<sup>1</sup>PhD Research Scholar, Department of Business Administration, Berhampur University, Bhanja Bihar, Berhampur <sup>2</sup>Assistant Professor, Department of Business Administration, Berhampur University, Bhanja Bihar, Berhampur, Odisha.

## **ABSTRACT**

The consumers in the contemporary world are more sensitive towards environment and have shown a greater preference on buying the product that has less affect to the environment. The growing consumerism towards green product has given a momentum in the emergence of green marketing and eco-logical marketing. Several research studies have suggested numerous ideas to justify the buying behavior towards green product. However, the perception of the consumer towards green product is influenced by several factors and its importance differs with the demography in most of cross-sectional studies.

The current study is an academic endeavor to understand the buying behaviour towards the green product. Moreover more research is required to explore the nexus between the consumers' attitude towards green product along with their relationship between perceived social norms and consumption effectiveness. Hence the thrust of the present study is to study the relationship of these factors in influencing buying intention with the help of literature and to represent it in the form of a conceptual framework, whose validity and reliability may be tested empirically in future studies.

Keywords: Attitude towards Green Product, Perceived Social Influence, Perceived Consumption Effectiveness and Buying Intention

#### 1. Introduction

Green marketing is one of the emerging and prominent study areas, and numerous ideas on green marketing and customer perception have been suggested by several researchers. To reduce the environmental effect of industrial operations and promote cleaner production, it is important to successfully design and manufacture environmentally friendly goods or services. The notion of selling eco-friendly green products items eventually became known as "Green Marketing." As a result, contemporary marketing trends must be evaluated and analysed on a regular basis to see how buyers' behaviour is changing, and businesses must adjust their offerings appropriately to meet the expectation of the buyers. In this juncture, marketing is crucial, since marketing is connecting with customers to improve their knowledge of environmental sustainability and educating them about the benefits of environmentally friendly products and services. Further such marketing practices may help in creating a green market for environmentally friendly products and services (Rex and Baumann, 2007).

In academics and marketing point of view sustainable development becomes one of the important studies. (Wang and Wu, 2016) as a result of the acknowledged contemporary environmental concerns. (Zhang et al., 2020) Part of its significance comes from the requirement of forming a long-term production-consumption interaction. (Aragao et al., 2020) A large number of companies, as well as governments, have taken the lead in creating alternatives to manufacturing which reduce the negative environmental consequences. This has given impetus to develop eco-friendly products and emergence of green marketing. (Costa et al., 2020; Dangelico and Pontrandolfo, 2010) Green marketing encompasses a wide variety of actions, including packaging changes, product modification, manufacturing process modifications, and advertising modifications. Green marketing focuses on meeting consumer requirements and wants while causing no or minimal environmental impact. Consumption behaviour literature refers to green items as those that are produced with using less natural resources, have a lower environmental effect, and generate less waste. (Policarpo and Aguiar, 2020)

# 2. Theoretical Background

# 2.1. Theory of Planned Behaviour (TPB)

According to the "Theory of Planned Behaviour" (TPB), customers' buying intentions may be explained by examining the factors that can affect them, based on human perceptions of the probable implications of a particular purchase. (Ajzen, 2015) According to Parkinson et al., (2018) the theory of planned behaviour is "one of the most used in the consumer behaviour field to understand which factors can influence consumer's behaviour towards sustainability." "Theory of planned behaviour" is one of the important model which guides the consumer's buying action. "The theory of planned behaviour" postulates, the buying intention is the main predictor of actual buying behaviour, and is influenced by three important independent factors like attitude towards behaviour, perceived social norms, and perceived behavioural control. The application of the "theory of planned behaviour" is very much

Copyrights @Kalahari Journals

Vol. 7 (Special Issue, Jan.-Mar. 2022)

helpful for predicting the non-volition behaviour of human being. The background of development of this model is based on the findings of some of the research studies (Sheppard, B.H.; Hartwick, J.; Warshaw, P.R., 1988) that due to circumstantial limitation, the buying intentions does not lead to actual behaviour. That motivates the Ajzen to introduce "the theory of planned behaviour" (TPB) which it is an extension of "theory of reasoned action" (TRA) by adding "perceived behavioural control" constructs upon it. The gist of the "theory of planned behaviour" is; until and unless the individuals behavioural intention is not formulated, the buying intention has lesser influence on performing an actual behaviour.

#### 2. 2. Pro-Environmental Reasoned Action (PERA) Model

Pro-Environmental Reasoned Action (PERA) model was developed by Persada, S. F.(2016) that is an extension of theory of reasoned action model (TRA). The TRA model was developed by Ajzen and Fishbein to describe the probability that a person's actions will result in a given outcome. In greater detail, two important elements, namely attitude and subjective norm, predict the intention outcome. The PERA model is an extension of TRA along with two additional factors as "perceived authority support" (PAS) and "perceived environmental concern" (PEC). These two constructs were developed by Persada, S. F.(2016) and found that both the constructs have positive influence on behavioural intention.

#### 3. Review of Earlier Studies

This section of the study gives a brief narration of various research carried out by the several researcher in the field of green marketing. The attempt of the researcher is to describe the research work in a systematic literature review (SLR) format.

Authors (Year)	Objectives of the Study	Methodology Adopted	Findings of the study	Limitations of the study
Bhatia, M., & Jain, A. (2013)	To understand the preference of consumer towards green marketing practices and towards green product	The responses were gathered using a standardised questionnaire from 106 consumers. Further their response were analysed with multiple regression	As a result of regression analysis, we could see that consumer persuading to buy and prefer green products over conventional ones was positively influenced by awareness of green products and practises, as well as the perception of the importance of marketing businesses towards green marketing.	The study's generalisation is restricted because it only looked at a small geographic area, and small sample. The study have not adopted psychographic segmentation analysis to better understand consumer green values and preferences.
Kripa, N. S., & Vinod, L. (2021)	The study aimed to analyze customer attitudes and perceptions regarding ecofriendly products and to identify the societal barrier to the adoption of environmentally friendly items	The research was carried out applying a quantitative technique of analysis. The research was carried out in Kerala, India, among social media users aged 18 to 65, and questionnaires were distributed online to 252 respondents. The data were analysed using cross tabulation and chi-square test.	The finding or the study stated that Customers are well-informed about environmentally friendly products and pleased with their use. They are aware of the negative impacts of using conventional products and the positive effects of switching to environmentally friendly alternatives.  Despite knowing about eco-friendly items, consumer don't buy green products as they perceive the green products are more costlier and high price product hence high price appears to be social barrier	The study had limitation relating to methodology, sampling procedure and demography.  There was need for more investigation into the study's many elements, including consumer environmental knowledge, which was omitted or overlooked in this work.
Anitha, M. P., & Vijai, C. (2021)	The study was to investigate the perception of the consumer towards green marketing and green product	The researcher has selected Convenient Sampling Method for data collection in Bangalore. there were a total of 520 customers who took part in the survey. To obtain the information, the researcher made use of a Google form. In order to do the analysis, descriptive statistical methods	The study found that there is a growing green marketing consciousness among customers, and consumers understand the significance of safeguarding the environment through product choice, while businesses are increasingly considering the environmental effect of their actions.  Another most important conclusion was that gender, occupation, or level of knowledge had no meaningful	The study has failed to address several dimensions to understand the consumer perception towards green product. However the study is not free from methodological and sample limitations.

Authors (Year)	Objectives of the Study	Methodology Adopted	Findings of the study	Limitations of the study
		including percentages, means, chi-square tests, and t-tests were adopted.	association with buying of green product.	
Yan, H., & Chai, H. (2021)	The aim of the study was to study the buying intention towards green service product	The study has administered a structured questionnaire to collect the response of 200 consumers. The hypothesised relationships among the constructs were studied through partial lease square (PLS) algorithm.	The results showed "environmental concern and perceived consumer effectiveness as having a substantial positive influence on personal norm and behavioural intention." The association between personal norm and customers' behavioural intentions was negatively attenuated by the perceived price as an external expense. Publicity and government policy moderated the relationship between personal norms and consumer behavioural intentions.	The study have failed to include more cross section to understand the consumer buying intention towards green product. However the study is not free from methodological and sample limitations.
Midilli, f., & tolunay, a. K. (2021)	The purpose of this study was to investigate into the impact of social influence and collective self-esteem on Turkish consumers' intentions to buy green products.	The study has collected data from 370 respondents from a structured questionnaire. The data were analysed by adopting EFA, CFA and SEM analysis	The findings of the study explored that consumers' green product purchase intentions are positively influenced by collective self-esteem and social influence, and "that the relationship between collective self-esteem and social influence on green product purchase intention is partially mediated by attitude toward green products."	The study could have taken more cross section to understand the consumer buying intention towards green product.
Swadia, B. U.(2021)	The purpose of this study was to investigate customer attitudes about green products.	The responses of these 1000 customers were analysed using ANOVA and Chi-Square methods to determine the respondents' attitudes about green products.	This research contributed to the field of green marketing and green consumption theory and practise. It made a point about the difficulties that arise from the behavioural impacts of green consumption.  Traditional individual behaviour modification approaches must be abandoned in order to achieve the needed rate of pro-environmental behaviour.	The study had limitation relating to sampling procedure and demography.
Riskos, K., et.al., (2021)	The purpose of the study was to investigate how positive attitude of the consumer influences their actual buying behaviour	The study has collected data from 571 respondents from a structured questionnaire. The data were analysed by multiple mediation model using partial least square algorithm.	The findings revealed the critical significance of eco-label authenticity in influencing attitudes toward green product buying and eco-label involvement. Furthermore, the notions of attitude toward green product purchasing and eco-label involvement were highlighted as important mediators of this model.	The robustness of the research is limited to adoption of convenience sampling procedure and focused the respondents belonged to urban area only.

# 4. Research Question

After identifying the above limitation of earlier studies, research gaps the current section of the study is a humble attempt to propose the research problem upon which the novelty of the research lies.

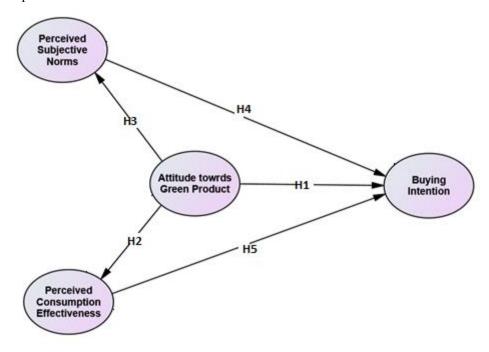
- 1. Is the attitude towards the green product significantly influences their buying intention?
- 2. Is there any significant relationship exists between the perceived social norms and buying intention in the context of green product?

- 3. Does the perceived consumption effectiveness significantly influence the buying intention towards green product?
- 4. Does the attitude towards green product influences perceived social norm?
- 5. Does the attitude towards green product influences perceived consumer effectiveness?

### 5. Conceptual Framework and Hypothesis Development

The proposed conceptual model is based on the "Theory of planned behaviour" stated by Ajzen, and "Pro-Environmental Reasoned Action" model developed by Persada, S. F.( in this model the exogenous variables are "Attitude towards green product, Perceived subjective norms, Perceived consumption effectiveness". The endogenous variable is "Buying intention". The endogenous variable is influenced by exogenous variables. Moreover, such a relation between the exogenous and endogenous variable helps to understand the buying behaviour towards green product.

Figure No:-1. The Proposed Research Model



Source: Authors own analysis

- **5.1. Buying Intention (BI)**: Buying intention towards green product refers to a consumer's willingness to buy green products for the sake of the environment, and such a consumer's willingness contains a reason to buy green product (Dagher and Itani, 2014). Intentions drive behaviour, which is a very specific action that a person will engage in when faced with a consumption situation.
- **5.2.** Attitude towards Green Product (AGP): The phenomena of attitude have long been stressed as a crucial precondition of behavioural intention. Attitudes can influence a consumer's appraisal of a product's features, enhancing or lessening individual interest and affecting overall sentiments about whether to buy it or not. To Fishbein and Ajzen (1975), "attitude as a learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object" Furthermore, this behavioural phenomena indicates what customers like and dislike in general and in context of product or service purchasing decisions. The intention to buy ecological product is significantly influenced by the attitude and the buying experience, further the buying experience is shaped by the consumer's perceived social norms and its consumption effectiveness. Hence from the above study it is evident that Attitude is a strong predictor of purchase intent, which is supported by both theoretical and empirical research. As a result, it suggests that there is a directional relationship between attitude and intention to buy green products. In light of the above discussion, the following hypotheses were proposed:
- H1: Consumer's attitude towards green product positively influences their buying intention
- H2: Consumer's attitude towards green product positively associated with their perceived consumption effectiveness
- H3: Consumer's attitude towards green product positively associated with their perceived subjective norms
- **5.3. Perceived Subjective Norms** (**PSN**): Normative beliefs are the main predictors of subjective norms (Ajzen, 2015) In most cases, the acts or responses of family, friends, advisors, or other experts play a significant role in determining consumers buying decision (Davies et al., 2002). The acceptance, advise, or recommendations of referents, on the other hand, might interfere with or modify an individual's behavioural cognitions (Arvola et al., 2008). In contrast, Paul et al. (2016) found that consumers' intentions

to make decisions to buy green product were unaffected by subjective norm. This study suggests the following hypothesis based on the the empirical findings presented above:

H4: Perceived subjective norms have positive effect on buying intention for green product

**5.4. Perceived Consumption Effectiveness (PCE):** The purchasing of green products has been connected to consumers' belief in their potential to successfully tackle environmental concerns (Samdahl and Robertson, 1989). Several academics research has identified perceived consumption effectiveness as a significant predictor of green purchase behaviour (Dagher, G.K., Itani, O., 2014). The term "perceived consumer effectiveness" refers to people's perceptions of how much their activities can help solve environmental problems (Ellen et al. 1991). According to Jaiswal, D., & Kant, R. (2018) "the phenomenon of perceived consumption effectiveness was also interpreted in terms of behavioural control and internal locus of control, and self-efficacy in the ecological consumer research" Perceived consumption effectiveness is a measure that assesses an individual's subjective evaluation of his or her ability to contribute to the solution of societal environmental problems, and it is closely linked to self-evaluation in the context of ecological issues (Kim and Choi,2005). Given the preceding discussion, this study is sincere attempt to see the effect of perceived consumption effectiveness on buying intention. The hypothesized relations among the constructs are as follows:

H5: Perceived consumption effectiveness have positive impact on buying intention for green product

## 6. Conclusion

The study has successfully indentified the key determinants of buying intention towards green product preceded by a systematic review of literature. The key determinants of buying intention towards green product are attitude towards green product, perceived subjective norms and Perceived consumption effectiveness. The relationship among these constructs were shown in the form of a conceptual framework. Moreover the proposed conceptual model is based on the "Theory of planned behaviour" stated by Ajzen, and "Pro-Environmental Reasoned Action" model developed by Persada, S. F. Based on the available literature and finding of earlier studies the present study proposes five major hypothesis. whose validity and reliability is to be tested empirically.

#### Reference

- 1. Ajzen, I. (2015). The theory of planned behaviour is alive and well, and not ready to retire: a commentary on Sniehotta, Presseau, and Araújo-Soares. *Health psychology review*, 9(2), 131-137.
- 2. Anitha, M. P., & Vijai, C. (2021) An Empirical Study on Green Products and Green Marketing.
- 3. Aragao, J.P.S., Holanda, C.L. de S., Castro, J. C de, Costa, M. F. da, (2020). Modelo de apoio `a decis ao para identificaç ao e priorizaç ao de aç oes socioambientais. Exacta 18 (4), 842–857. https://doi.org/10.5585/exactaep.v18n4.16035.
- 4. Arvola, A., Vassallo, M., Dean, M., Lampila, P., Saba, A., Lähteenmäki, L., & Shepherd, R. (2008). Predicting intentions to purchase organic food: The role of affective and moral attitudes in the Theory of Planned Behaviour. *Appetite*, *50*(2-3), 443-454.
- 5. Bhatia, M., & Jain, A. (2013). Green marketing: A study of consumer perception and preferences in India. Electronic Green Journal, 1(36).
- 6. Costa, M.F., Santos, L.L., Angelo, C.F., (2020). Corporate social and environmental responsibility: do consumers perceive it as being an organizational value? Gest ao Produç ao 27 (4), e4688. <a href="https://doi.org/10.1590/0104-530X4688-20">https://doi.org/10.1590/0104-530X4688-20</a>.
- 7. Dagher, G.K., Itani, O., (2014). Factors influencing green purchasing behaviour: empirical evidence from the Lebanese consumers. J. Consum. Behav. 13 (3), 188–195.
- 8. Dagher, G.K., Itani, O., (2014). Factors influencing green purchasing behaviour: empirical evidence from the Lebanese consumers. J. Consum. Behav. 13 (3), 188–195.
- 9. Dangelico, R.M., Pontrandolfo, P., (2010). From green product definitions and classifications to the Green Option Matrix. J. Clean. Prod. 18 (16–17), 1608–1628. <a href="https://doi.org/10.1016/j.jclepro.2010.07.007">https://doi.org/10.1016/j.jclepro.2010.07.007</a>.
- 10. Davies, P. G., Spencer, S. J., Quinn, D. M., & Gerhardstein, R. (2002). Consuming images: How television commercials that elicit stereotype threat can restrain women academically and professionally. *Personality and Social Psychology Bulletin*, 28(12), 1615-1628.
- 11. Ellen, P.S., Wiener, J.L., Cobb-Walgren, C., (1991). The role of perceived consumer effectiveness in motivating environmentally conscious behaviors. J. Public Policy Mark. 102–117.
- 12. Fishbein, M., Ajzen, I., (1975). Belief, Attitude, Intention, and Behavior: an Introduction to Theory and Research. Addison-Wesley Publishing Cmpany.
- 13. Jaiswal, D., & Kant, R. (2018). Green purchasing behaviour: A conceptual framework and empirical investigation of Indian consumers. Journal of Retailing and Consumer Services, 41, 60-69.
- 14. Kim, Y., & Choi, S. M. (2005). Antecedents of green purchase behavior: An examination of collectivism, environmental concern, and PCE. *ACR North American Advances*.
- 15. Kripa, N. S., & Vinod, L. (2021). A Study on Consumer Behavior towards Green Products and Barriers in Consumer Purchase Decision. Annals of the Romanian Society for Cell Biology, 25(6), 9588-9598.
- 16. Midilli, f., & tolunay, a. K. (2021). An exploratory study on turkish consumers' attitude and purchase intention towards green products. Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 23(1), 249-270.

- 17. Parkinson, J., Russell-Bennett, R., Previte, J., (2018). Challenging the planned behavior approach in social marketing: emotion and experience matter. Eur. J. Market. 52 (3/4), 837–865. https://doi.org/10.1108/EJM-05-2016-0309.
- 18. Paul, J., Modi, A., Patel, J., (2016). Predicting green product consumption using theory of planned behavior and reasoned action. J. Retail. Consum. Serv. 29, 123–134.
- 19. Persada, S.F. (2016) Pro Environmental Planned Behavior Model to Explore the Citizens' Participation Intention in Environmental Impact Assessment: An Evidence Case in Indonesia. Ph.D. Thesis, Industrial Management Department, National Taiwan University of Science and Technology, Taipei, Taiwan.
- 20. Policarpo, M.C., Aguiar, E.C., (2020). How self-expressive benefits relate to buying a hybrid car as a green product. J. Clean. Prod. 252, 119859. https://doi.org/10.1016/j.jclepro.2019.119859.
- 21. Rex, E., Baumann, H., (2007). Beyond ecolabels: what green marketing can learn from conventional marketing? J. Clean. Prod. 15, 567-576.
- 22. Riskos, K., Dekoulou, P., Mylonas, N., & Tsourvakas, G. (2021). Ecolabels and the Attitude–Behavior Relationship towards Green Product Purchase: A Multiple Mediation Model. Sustainability 2021, 13, 6867.
- 23. Samdahl, D. M., & Robertson, R. (1989). Social determinants of environmental concern: Specification and test of the model. *Environment and behavior*, 21(1), 57-81.
- 24. Sheppard, B. H., Hartwick, J., & Warshaw, P. R. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. Journal of consumer research, 15(3), 325-343.
- 25. Swadia, B. U.(2021) A study on consumers' behaviour towards green products. Journal of the Maharaja Sayajirao University of Baroda, 55(2),24-28.
- 26. Wang, J., Wu, L., (2016). The impact of emotions on the intention of sustainable consumption choices: evidence from a big city in an emerging country. J. Clean. Prod. 126, 325–336. <a href="https://doi.org/10.1016/j.jclepro.2016.03.119">https://doi.org/10.1016/j.jclepro.2016.03.119</a>.
- 27. Yan, H., & Chai, H. (2021). Consumers' Intentions towards Green Hotels in China: An Empirical Study Based on Extended Norm Activation Model. Sustainability, 13(4), 2165.
- 28. Zhang, Q., Zhao, Q., Zhao, X., Tang, L., (2020). On the introduction of green product to a market with environmentally conscious consumers. Comput. Ind. Eng. 139, 106190. https://doi.org/10.1016/j.cie.2019.106190.