

Drivers of Green Purchase Intentions: Green Self-Efficacy and Perceived Consumer Effectiveness

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Abstract

Purpose: This study aims to combine the literature of consumer behavior and green marketing into a new managerial framework of green motivation. In addition, the present study proposes an original framework to explore the influence of Green Self-Efficacy (GSE) on Green Buying Intentions (GPI) of consumers through the mediating role of Perceived Consumer Effectiveness (PCE). **Design/Methodology/Approach:** The current study summarizes the literature of four concepts namely green self-efficacy, perceived consumer effectiveness and green purchase intentions to develop a new framework to enhance green purchasing intentions. A questionnaire was administered to empirically verify the hypothesis and data collected from Indian consumers were analyzed using Structural Equation Model (SEM) and Hayes's Mediation Model. **Findings:** The study found the positive and significant effect of GSE on GPI through PCE. In addition, the relationship between GSE and GPI are partially mediated by PCE. The conclusions drawn in the study is useful for marketers to understand the factors that affect the purchasing intentions of the consumers and will help them improve the strategies in order to increase green sales. Indeed, green marketing is a distinct and distinguish way of positioning a product or company which can benefit the society with improved environmental conditions and healthy products. **Originality:** Although researchers have been studying the role of green motivation, particularly in the context of green purchasing behavior, it may safely asserted that the boarder dimension of GM, GSE and PCE have been remained under-researched. This study proposes an original framework to enhance GPI via GSE and PCE.

Keywords: Green Self-Efficacy, Green Purchase Intentions, Mediation Model, Perceived Consumer Effectiveness

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1. Introduction

In India, consumers are conscious about environment (Sharma & Sharma, 2013) and understanding the importance of sustainability with concern for environment. Green consumerism defines as the process of purchasing and non-purchasing decisions made by consumers, based on environmental and sustainable criteria (Moisander, 2007). The significance of green concept has been implicated by customers, investors, government & NGOs. As a result many sectors are making sustainable initiatives in their corporate goals, strategies, operations and supply chain practices to improve environmental sustainability. For the reason of environmental attention within society, many sectors are willing to expect the environmental responsibilities (Chen et al, 2006). Moreover, well informed consumers create sustainable environment through green purchases and intentions. For example, while purchasing a CFL bulb or buying jute bag over plastic bags shows "pro- environmental behavior". Pro-environmental behavior defines as conscious actions taken by an individual so as to

minimize the negative impact of human activities on the environment or to improve the environment. It implies that consumers exhibiting high level of environmental consciousness leads intention to purchase green (Sharma & Sharma, 2013; Schlegelmilch & Bohlen, 1996). As per multi-dimensional and behaviour-oriented, environmental consciousness defined as different types of pro-environmental behaviors incorporates other factors or psychological constructs that are habitually associated to them: beliefs, values, attitudes, knowledge and others (Lafuente, 2010)

The concept of environmental consciousness refers to specific psychological factors related to individuals' propensity to engage in pro-environmental behaviors (Zelezny & Schultz 2000). Environmental consciousness stimulates the intention to purchase green products (Sharma & Sharma, 2013; Kim & Choi, 2005; Schlegelmilch et al, 1999). Moreover, environmental consciousness can be improved by environmental knowledge, environmental motivations, environmental attitude and environmental values (Sharma & Kesharwani, 2014; Chan 1999; Laroche et al 2001; Eilam & Trop , 2012; Straughan et al , 1999). Where,

environmental motivation and environmental attitudes are important variables in predicting the green purchasing behavior. It has been found that consumer's self determination has a positive association with green purchasing behavior (Green-Demers, 1997). Similarly, self affects the selection and construction of an individual's environment (Bandura, 1986) and impact on his/her motivation (Bandura, 1993) and attitude (Amritage & Coner, 1999)² through self efficacy.

It has been found that PCE is one of the driving forces for pro environmental behaviour. PCE involves individual's conviction that a course of event can be occurred or stopped depending on his/her activity. Likewise to the concept of PCE, efficacy influences ones' thinking, motivation through cognitive, motivational, affective and selection processes to achieve a goal (Bandura, 1993 & 1992). It may be conjectured that self-efficacy stimulates green consumerism. Perceived Self – Efficacy is concerned with ones' judgment / knowledge of how well he/she can execute course of action to complete tasks and reach goals (Bandura, 1982). The literature suggests self-efficacy as a potential variable influencing green consumerism (Gilg et al , 2010; Kim & Choi, 2005). It implies that self-efficacy which relates to one own ability takes part in green consumption (Schwepker and Cornwell, 1991 ; Sparks and Shepherd, 1992).

The present study posits a new framework to investigate green purchasing intentions in compliance with three constructs namely green self-efficacy, green motivation and perceived consumer effectiveness by proposing six major hypotheses. Subsequently, the descriptive statistics, reliability of the measurement, factor analysis, correlation coefficients between the

constructs, discriminant validity, convergent validity and the results are done using Structural Equation Modelling (SEM). The model is analysed using Hayes's (2008) Mediation Model. In the end, the present study draws the conclusions and mentions the discussions about the findings, implications, research limitations, and possible directions for future research.

2. Self Efficacy, PCE and Green Purchasing Intentions

Perceived Consumer Effectiveness defined as “the measurement of one's belief in the result of his/her own actions” (Kinneer et al 1974). It implies that individuals own judgement (Antil, 1978) and self-evaluation (Berger & Corbin, 2001)³ about the environmental issues affect their behaviour towards the environment. It has been observed that PCE is about the customer's beliefs that his/her actions will contribute the solutions to the problems (Vermeir & Verbeke, 2006). Similarly to concept of PCE, Self Efficacy in social learning theory (Bandura, 1986) refers to the self-evaluation of course of action to complete tasks and reach goals.

In association with environmental studies Straughan & Roberts (1999) studied that PCE can positively influences the solutions to the environmental problems. Customers' beliefs play an important role in fighting environmental destruction (Sharma & Sharma, 2013) i.e. perceived consumer effectiveness is a driving force for ecologically conscious consumer behavior (Straughan & Robert, 1999). It implies that consumer's fundamental beliefs and values have an impact on environmental consciousness and

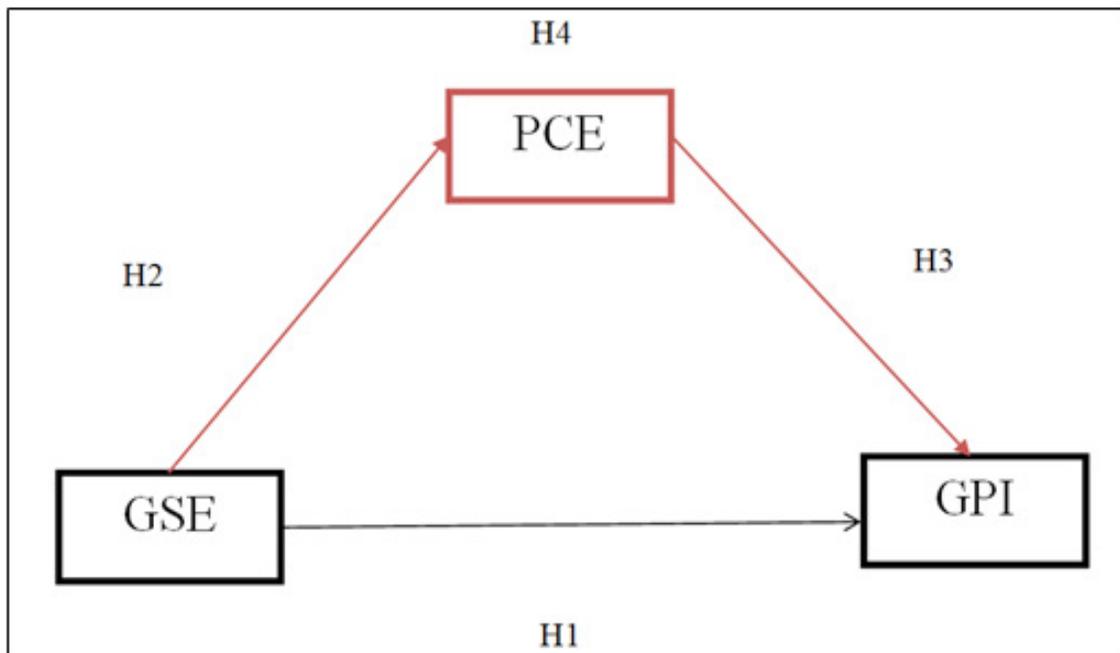


Figure 1. Research framework.

behavior (Schultz 2000). In case of self-efficacy beliefs may influence the green purchasing behavior. It may therefore conjecture that self-efficacious consumers show PCE which may influence the likelihood of showing green purchasing intentions.

Wu & Mweemba, 2010 demarcated environmental self-efficacy as the “beliefs concerning their capability to act in order to limit environmental degradation”. It implies that understanding own capacity to organize and guide the environmental course of action intends to lead positive environmental behaviour. Indeed, Taberero & Hernández, 2011 demonstrated that self-efficacy increases intrinsic motivation which further leads to pro environmental behaviour. It may therefore be conjectured that green self-efficacy has a positive association with PCE which helps in green purchasing intentions. Hence, following hypotheses have been posited in the study:

- H1: Green self-efficacy positively related to green purchase intentions
- H2: Green self-efficacy positively related to perceived consumer effectiveness
- H3: Perceived consumer effectiveness positively related to green purchase intentions
- H4: PCE has a mediation effect on GSE and GPI

3. Methodology

3.1 Data Collection and Survey Instrument

In this study we have developed the quantitative study to test the relationship among GSE, GPI and PCE. The questionnaire survey was applied to verify the hypotheses and research framework. The proposed model is shown in Figure 1. The questionnaires were

mailed, floated on the internet through social media and data were collected personally also. The sample size 157 respondents were considered from Delhi and NCR. 39% of the respondents were in the age group of 18 – 27 years and 28% in 28-35 years. 29% in 36- 40 years and rest belong to age group between 41 – 46 years. Gender wise distribution of the sample showed that 48% were females and 52% were males. 35% respondents were graduates and rest were PG or above.

To study the impact of GSE on green purchasing intentions data were collected in respect of three variables: GPI, PCE and GSE. A questionnaire was administered for the purpose.

3.2 Data Analysis

The present study examines the direct and indirect effect among three variables namely Green self-efficacy (GSE), Perceived Consumer Effectiveness (PCE) and Green Purchasing Intentions (GPI).

The regression coefficients are superimposed in Figure 2 in statistical diagram of the model where $a = 0.574$, $b = 0.577$, $c' = 0.270$. In terms of regression equation I & II, the following express the estimated PCE (M), GSE (X) and GPI (Y),

In the present study the indirect effect is quantified as the relationship between GSE and Perceived Consumer Effectiveness (PCE) with coefficient (a). The relationship between Perceived Consumer Effectiveness (PCE) and Green Purchasing Intentions (GPI) is shown with coefficient (b). The coefficient (c') shows the intention to purchase green, influenced by GSE among consumer.

Table 1 shows summarized mediation model coefficients examining the outcome as green purchasing intentions (GPI) among customers having GSE. Present study also attempts

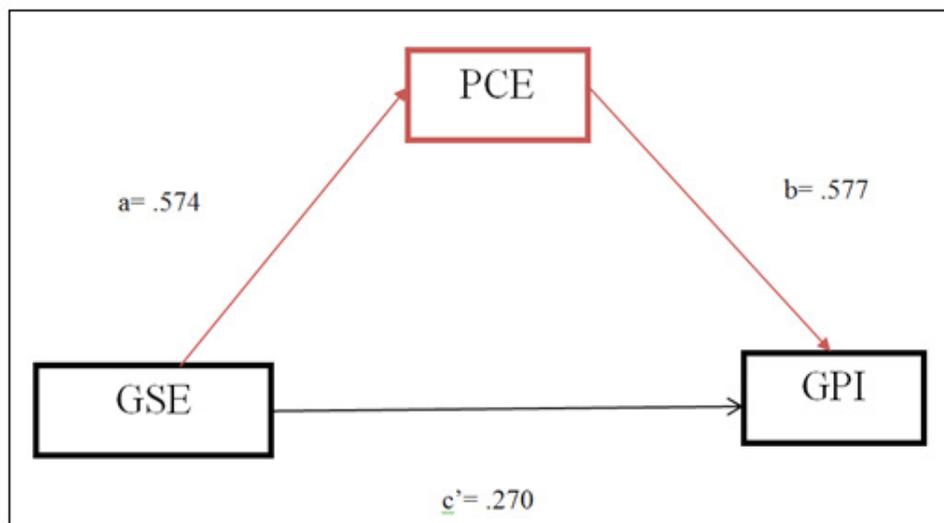


Figure 2. Statistical Diagram of Mediation model for GSE on GPI.

Table 1. Model Coefficients for the GSE Study

Antecedent	PCE (Model 1)			Consequent		
	Coeff.	SE	p	Coeff.	SE	p
GSE	0.5745	0.0444	0.000	0.270	0.075	0.000
PCE	-	-	-	0.577	0.059	0.000
Constant	2.371	0.2305	0.000	0.679	0.276	0.015
		R2 =	0.5239		R2 =	0.6899
	F (1,152) =	19.29	p=0.000	F (2,151) =	31.75	p=0.000

to explore the meditating impact of Perceived Consumer Effectiveness (PCE) on green purchasing intentions. In model 1 GSE is significant to PCE as $P < 0.05$. It has been observed that self-efficacy comes from inner consciousness and beliefs of individual (Bandura, 1982). It implies that self-efficacy awakes the mind and reinterprets the purpose of self life and transforms it through positive way. Hence, in the present study we postulated that self-efficacious consumers may take positive action oriented towards the environment. This has been affirmed in our study that self-efficacy influences individual's beliefs towards providing a positive solution for environmental problem.

Model 2 shows that there is a significant relationship among PCE & GPI. It implies that consumer who believes that his/her actions will result positive solution towards environment, will show green approach in their purchase. Moreover, it has been observed that there is significant relationship between GSE and GPI. It infers that consumers' self-efficacy has a positive association with green purchasing intentions. The current study affirmed that consumers will be environmental efficacious while considering a product, self-motivation may drive consumers' green consumption decision. The self-evaluation aspect of consumers develops mindfulness among them (Bandura, 1986b) and this bring purposefulness towards society and environment. Substantial increase in R^2 of model 2 (0.6899) compare to R^2 of model 1 (0.5239) shows, prima facie, greater relevance of model 2 relatively than model 1. It implies: one, model 2 has a better model specification compare to model 1. Two, possibility of GPI is higher in presence of PCE. Three, PCE has mediation effect on GSE and GPI with coefficient 0.1533. In this paper it has been observed that effect of GPI among customers operates through GSE and it will be more effective in presence of PCE. The finding of Table 2 implies that GPI will be higher when consumers' beliefs will lead to their conscious action to minimize negative impact on environment if they are efficacious.

Table 2. Indirect effect of PCE on GSE and GPI

	Effect	Boot SE	BootLLCI	BootULCI
PCE	0.1553	0.057	0.0663	0.2926

As per Table 2 we can examine the indirect effect between the two coefficients namely GSE on Green Purchasing Behavior (GPI) through Perceived Consumer Effectiveness (PCE): ab i.e. 0.1599. It implies that mediation effect lies in the present study which states that GPI will be more powerful in presence of PCE. It may therefore be conjectured that consumers will show higher green purchase, environmental consciousness and rejection of products/ practices damaging the society in presence of PCE of consumers with self-efficacy instead of direct relationship between GSE and GPI. The finding of Table 2 implies that conviction of model 2 is higher with GSE leading PCE and simultaneously resulting into GPI among customers.

4. Conclusion

The past studies were not conclusive on the determination of green purchasing behaviour through GSE and how the role of self-efficacy has an effect on action orientation of consumers. Hence, this study provides an approach to design the process of green purchasing behavior through green self-efficacy. This study develops a research framework of PCE influencing GPI through consumer's efficacy. The empirical study shows that GSE is positively related to PCE. In addition, it has been observed that green purchasing intention is partially mediated by PCE. All proposed hypothesis in the present study are supported.

The present study shows the four perspectives of green purchasing intentions. First, this study combines the concepts of green marketing and GSE to develop a research framework of green purchasing intentions. Second, when consumers are asked to make choice between product attributes and product with greener attributes, they selected their desire to be green. Respondents reported that while making any purchase they consider the ethical issues and respect everyone including our ecosystem. Third, there is positive relationship between GSE and green purchasing behavior which is mediated by PCE. Fourth, this paper extends the research of consumer buying behavior by analyzing the impact of GSE in the field green marketing.

It has been observed that environmental consciousness among consumers is persuading by motivation and attitude of

efficacious consumers. We have studied the influence of self-efficaciousness of consumers through potential determinants namely environmental motivation and environmental attitude on green consumerism. It has been observed that self-efficacy influences the consumers' motivation and attitude which leads to green consumerism among green consumers. Self-efficacy defines consumer's ability to performance a task by motivating and constructing his/her attitude towards green purchasing intentions. It helps in consumer's decision making to purchase green products for sustainable environment. The past literatures have found that positive PCE among efficacious consumers stimulates the green consumption (Sharma & Sharma, 2013; Straughan & Roberts, 1999).

5. Limitation and Future Scope

This study concentrates only on the purchase experience of green products of consumers not specifying any particular product group. Future research can focus on the different and particular product group to compare the results of this study. Second, this study is based on sample size confined to Delhi and NCR. There is a need to examine the subject over a sample extending to other states of the country. Third, only few variables have been examined to study green purchasing intentions. There is a need to investigate other variables also apart from seeking revalidation of the finding of this study. Forth, factors and dynamics of perceived consumer effectiveness, self-efficacy and green purchasing behavior changes over period of time. Hence for future researchers should considerate longitudinal study.

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