

## Predicting Ecologically Conscious Consumer Behavior: The Role of Norms in Consumer Purchase Intention

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### Abstract

*The problems caused by environmental damages show severe effects on human health. Consumers are now more concerned about purchasing environmentally friendly products in order to protect the environment. Environmentally conscious managers are more likely to contribute towards managing of goods and services that are environmentally friendly. In this study we study the environmental inclination of supply chain managers. This study investigates the factors contributing to ecologically conscious consumer behavior (ECCI) of supply chain managers in building more sustainable supply chains in a developing country perspective. A research model is developed stating that subjective norms, personal norms, and ECCI are responsible in influencing ecologically conscious consumer behavior (ECCB) of employee while doing domestic purchase. We also hypothesize that the product price moderates the relationship between ECCI and ECCB. In order to test this model, four hypotheses are formulated. Results from a survey of 195 Pakistani managers confirms our model.*

**Keywords:** *Supply chain managers; environmentally conscious consumer intention; environmentally conscious consumer behavior; subjective norms; personal norms*

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### 1. Introduction

Financial gain and business expansion drives the economy towards economic development. Organizations strive for more business development which lead them higher profits which

ultimately enhances their market share. In order to achieve their goals, organizations engage themselves in activities that might be suitable for their business environment but they sometime intentionally or unintentionally neglect and forget that they have some major liability on environment (Yuan et al., 2016). This negligence from organizations causes many severe problems that are seen to be lethal, if not in near future but surely in long term. These type of organizations that neglect their environmental responsibilities ranges from sole proprietor to huge multinationals. The economic development impose some liabilities on environment (Yuan et al., 2016) . The problems caused by environmental damages show severe effects on human health (Yadav & Pathak, 2016). This liability and responsibility is recognized by mature organizations so they take initiatives to make their businesses sustainable (Yuan et al., 2016). With the passage of time the consumption patterns among consumers have changed and so does their demands and buying patterns. Consumers are now more concerned to purchase environmental friendly products in order to protect their environment. The consumers are more ecology conscious (Yadav & Pathak, 2016).

In the context of developed countries the pro-environmental behavior has been studied widely but in the case of developing countries few studies have been undertaken. A behavior is said to be a pro-environmental behavior when a consumer adopts such activities that minimize environmental footprints (Onel, 2017). Pro-environmental behavior is also called environmentally sensitive or environmentally friendly behavior and is adopted by individual to restrain from activities that damage environment (Onel & Mukherjee, 2016). The growing economies are scarce in the ecology conscious consumer behavior making them the best platforms for studying the impact of factors that stimulate consumers to adopt pro-environmental behavior (Taufique & Vaithianathan, 2018). Densely populated areas are more likely to engage in ecology conscious behaviors because they have more opportunities and more chance to adopt such activities (Taufique & Vaithianathan, 2018).

Consumer behavior has been a point of concern for many researchers. Some researchers studied consumer behavior in the light of organic food (Yazdanpanah & Forouzani, 2015), and green cosmetics (Liobikienė et al., 2017). Few researchers studied the factors like functional value, social value and conditional value influence on green energy consumers towards buying (Sangroya & Nayak, 2017). (Khan and Mohsin (2017) studied green consumer behavior through emotional value of consumers. Undesired human behavior has been studied in Chinese undergraduates (Chen et al., 2017).

Previous studies also focused on the intention of consumer. Prakash and Pathak (2017) studied the intention of young Indian consumer on ecofriendly packaged products in the light of theory of planned behavior. The consumer intention has been studied in the context

of reverse exchange of products (Yuan et al., 2016). (Wang et al., 2018) looked at intention through the perceived fairness. Purchase intention has been studied through the subjective norms, attitudes and perceived behavioral control (Yadav & Pathak, 2016). Prakash and Pathak (2017) studied intention through attitudes, environmental concerns, personal norms, and willingness to pay. Green purchase intention has been studied through word of mouth and with the moderator green concerns (Zhang et al., 2018) The green consumer behavior is examined through the product price (Chekima et al., 2016) and demographics like age, gender (Vicente-Molina et al., 2018) and education (Chekima, Wafa et al., 2016). Subjective norms have been studied as they positively impact the pro-environmental behavior. The significant relation of perceived consumer effectiveness has been seen on ECCB, whereas weaker link is shown with behavioral intentions (Taufique & Vaithianathan, 2018). External entities like government, and other stakeholders pressurize consumer to engage in ecologically conscious consumer behavior (He et al., 2018). Personal norms have a more positive influence on ecologically conscious consumer behaviors than social norms because they both differ with each other. Personal norms show more conscious behavior than social norms because society drives a human towards right or wrong. Personal norms are one's own sense of responsibility, own values and beliefs (Taufique & Vaithianathan, 2018).

Previous studies suggested that there is a need to include personal values and norms to study the effect of consumer behavior under the lens of theory of planned behavior (Taufique & Vaithianathan, 2018). They conceptualize attitude on overall environment which can be replicated by making it specific on a particular factor. In the light of the Theory of Planned Behavior (TPB) framework more constructs can be added to study the pro-environmental behavior. Earlier studies lack to investigate actual behavior when a consumer is doing any consumption pattern (Taufique & Vaithianathan, 2018). Change in behavior can have a positive impact on the environment. (Casaló & Escario, 2018) Consciousness about environmental protection and knowledge are deemed significant while making decisions about green products (Yadav & Pathak, 2016).

Past studies were limited to measuring the consumer intention and not the actual behavior; therefore there is a room to study the next step that is actual behavior rather than just studying the intention of consumer (Yadav & Pathak, 2016). Only subjective knowledge has been taken to study the pro-environmental behavior rather than both subjective and objective knowledge. Mostly studies were conducted on young age people so there is also a need to diversify the population (Yadav & Pathak, 2016). The people with high income are more concerned towards their environment and they show good positive behavior towards it as compared to people with low wages (Chen et al., 2017). Sometimes people do not engage themselves in the pro-environmental behavior because of their low income (Liobikienė et al.,

2017). (Cantor et al., 2012) recommended to study employee behavior while doing purchase. Past studies showed that women are more likely to stick on value (Moslehpour et al., 2014) and are more conscious about the environmental friendly behavior than men (Vicente-Molina et al., 2018).

This research is undertaken to study the effect of a person's own perception, norms and the social pressure on his behavior towards environment while buying a green product. The purpose of this research is to study the effects of different drivers and the intentions of consumer towards the environment during purchase of green product. Studies have suggested that there is a need to consider the actual product rather than its attributes (like packaging) that influence consumer pro-environmental behavior (Prakash & Pathak, 2017). This is very important to study the gap between the intention and actual behavior because consumers often pretend to be engaged in pro-environmental behavior but the reality is something else (Yuan et al., 2016). In the light of TPB it is important to note the amalgamation or union of attitude and behavior (Wesselink et al., 2017)

As TPB is applied domestically, but the studies also show that it can be applied on workplace and on the job (Biel & Thøgersen, 2007). Previously Onel (2017) did comparison of both dimension that are private green behavior and domestic green behavior. The main difference between the two is the level of autonomy or freedom given to employees. Individuals feel free to act green or eco-friendly manner when they are off the job. They have choice whether they act ecologically conscious or not, and if they do then up to which extent. Individuals are bound to follow organization rules and traditional policies of their firm so they did not act pro-environmentally. Recently a study had been conducted that explains employee's on and off the job behavior and showed that employee's own personal beliefs and thoughts are highly influenced by the behavior they show privately. Further studies (Thøgersen & Ölander, 2002) revealed that strong private green behavior ended in stronger workplace intention which ultimately results in higher eco-friendly behavior. On the grounds of (Ajzen, 1991) this is summarized the daily environmental conscious activities results in positive employee behavior activities Past study (Hair Jr) suggested to examine activities that could be similar in nature on and off the job like purchasing.

Employees may perceive themselves as a completely different person at their workplace than domestic and they are like wearing a mask all the time in their organization. They just do what their supervisors want for them and take such decision accordingly because they are not allowed to express the true feelings they have about their organizations. Yuriev et al. (2018) suggest that the actions of our friends and family, our buying and other green activities might spill over to workplace and influence employee actual green behavior. This

research supports this possibility and indicates that employee private behavior may influence his green intentions and eventually affect his behavior. This research seeks response to the following research questions.

*RQ1: What factors influence consumer involvement in ECCB?*

## **2. Literature Review**

### **2.1. Subjective Norms and Ecologically Conscious Consumer Intention**

Subjective norms identified as the perceived social influences on a consumer to perform or not to perform an environmental concern behavior (Ajzen, 1991). A lot of previous studies (Biswas & Roy, 2015; Lorek & Fuchs, 2013; Wang et al., 2014; Zhao et al., 2014) stated that social pressure motivates consumers to involve in showing ecological concerns or purchasing green products which is basically the result of encouragement of consumer's behavioral intentions. According to Onel (2017) positive subjective norms show positive green behavior if there have higher behavioral intentions. Extracted from TPB, subjective norms had been widely used in previous researches (Liobikienė et al., 2017; Onel, 2017; Paul et al., 2016) and showed positive significant relationship with consumer's subjective norms and the environmental conscious behavior. Consumers with positive subjective norms towards green behavior than green intention tend to be positive (Paul et al., 2016). Other than the context of consumer behavior, subjective norms are seen to act positively on intention also in marketing context (Paul et al., 2016). Therefore, the hypothesis is formulated as:

H1: Subjective norms have a positive influence on ECCI.

### **2.2. Personal Norms and Ecologically Conscious Consumer Intention**

The previous study (Prakash & Pathak, 2017) showed that personal norms and intention towards green purchase are positively correlated so, personal norms encourage the consumers consumption pattern that further motivates green behavior. Studies identify personal norms as successful predictors of various environmental intentions (Biel & Thøgersen, 2007). Personal norms allow a person to feel more environmental conscious than before, though they act willingly to act in same way. The personal norms make a person develop his personal intention in their mind to show willingness up to some extent (Onel, 2017). In another study (Thøgersen & Ölander, 2002) results showed that personal norms show positive influence on purchasing intentions of organic wine. In this context this study

suggested that personal norms have a positive influence on consumer's behavioral intentions which later predict actual behavior to purchase some product.

H2: Personal norms have a positive impact on ECCI.

### **2.3. Ecologically Conscious Consumer Intention and Ecologically Conscious Consumer Behavior**

Prakash and Pathak (2017) predicted that intention of an individual to perform a specific certain behavior is operationalized as its willingness to purchase eco-friendly product. Intention to perform some behavior is proved to be a successful direct predictor of actual behavior that is being showed or performed by an individual(Ajzen, 1991). There is more possibility of showing a related behavior more explicitly when there is a considerable accuracy in the intention of an individual. The relation of intention and behavior in other issues like organic food(Yazdanpanah & Forouzani, 2015), eco-friendly packaged products(Prakash & Pathak, 2017), green cosmetics(Liobikienė & Bernatoniene, 2017), dairy products(Vermeir & Verbeke, 2008), beverages (Van Birgelen et al., 2009). In this view the hypothesis stated as

H3: Ecology conscious consumer intention (ECCI) shows a positive impact on ECCB.

### **2.4. Moderating Role of Product Price Between ECCI and ECCB**

There is a gap in intention and the actual doing of a certain behavior of an individual and this gap is related to the factor of high price of green products. Therefore price factor is the major constraint consumer face while purchasing green product(Liobikienė et al., 2017). The additional cost of the green factor in product makes it more expensive for consumers to buy conveniently. Previously Chekima et al. (2016) used product price as moderator and studied the impact of various personal and social level factors on intention and suggested to take it as a moderator to predict intention behavior gap.

H4: Product price shows a moderating role between ECCI and ECCB.

### 3. Methodology

#### 3.1. Methods

We used survey methodology to collect data for the research. We used self-administered survey questionnaires as the tool of survey. The study was undertaken to understand behavior of professionals and personnel working in manufacturing industry of a developing country like Pakistan so intended population consists of all manufacturing firms operating in Pakistan.

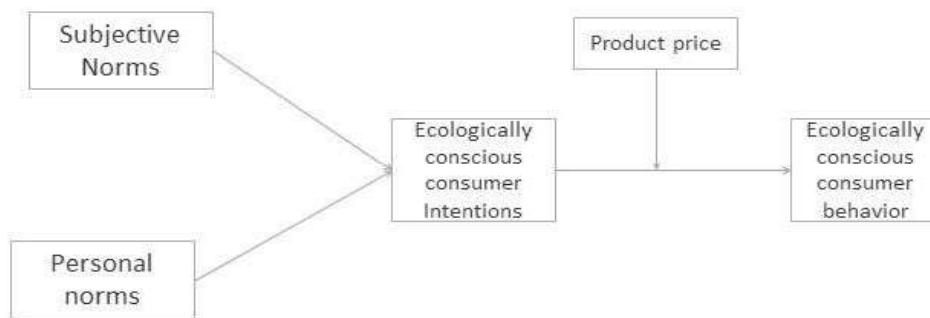


Figure 1: Research model

For sampling, first a sampling frame was developed by using Pakistan Stock Exchange and other local online business directories. A list of different industries was created that includes fast moving consumer goods (FMCG), pharmaceutical, food, textile, footwear, engineering and other firms involved in some kind of manufacturing.

Table 1: Industries represented in sample

Industry	Frequency	Percentage
Food & Beverages	67	33%
Chemical	66	34%
Textile	67	33%
Total	200	100

The unit of analysis was consumers (employees) working in supply chain department. We used both a web-based survey and a print version of the survey to collect the desired data. We tried to achieve the required sample size with random means however only 45 responses were received through these activities, after on average two reminders. Due to small sample-size, it was decided to use snow ball sampling and got the survey form distributed in supply



chain groups of few companies total of 250 responses were sent through print version form to firms and as a result 160 responses were received through this method.

There were no significant outliers. Non-response bias was tested by comparing t-test statistics for early and late responses. Late responders can be taken as a substitute of non-responders (Armstrong & Overton, 1977). No significant differences were found. Therefore, it was concluded that the data were free from non-response bias. After initial data screening 200 completed responses were finalized for the analysis. To accurately predict, the presence or absence of an effect, sample size plays an important role. A sample size of 200 at 1% significance level in moderate effect size produces a statistical power of 0.992 (Hair, Black, Babin, & Anderson, 2014), hence our sample size was deemed sufficient.

Table 2: Respondent Profile

Department	Frequency	Percent
Logistics	100	51
Procurement	45	21.5
Production	31	15.5
Total	200	100
Employment Status		
Top Management	29	14.5
Middle Management	171	85.5

### 3.2. Common Method Bias

The presence of common method bias is because of the similarity in methods used in measurement which creates biasness in validity and reliability imprecise estimation of link between variables of the study (Podsakoff et al., 2003). The suggestions and guidelines explained by Conway and Lance 2010, Podsakoff and Organ, (1986), and Podsakoff et al., (2003) were used in this study. The anonymity of the survey respondents were highly ensured. In order to remove any ambiguity, the survey instrument was further filtered by pilot survey and expert advice. Common method bias was tested through a common latent factor, the common variance distributed among all observed variables is captured by common latent factor. The standardized regression weights of unconstrained model were compared with regressing weights of constrained model. The results showed that model has a significant shared variance which lead to retain the common latent factor in the model.



## 4. Results

Before testing hypotheses, we tested for the assumptions of normality, linearity, multicollinearity, and heteroskedasticity. After testing the assumptions, following the guidelines of Anderson and Gerbing, (1988) we followed a two stage process for data analysis. Firstly a measurement model was examined through confirmatory factor analysis (CFA). Then the structural model was analyzed for the test of hypotheses. Both steps were performed on IBM SPSS AMOS.

We performed CFA to establish the validity of the measurement model. The results of CFA are provided in Table 3. We used guidelines provided by Fornell and Larcker (1981) for the assessment of convergent and discriminant validity. The average variance extracted (AVE) of all constructs were higher than the 0.5 threshold indicating suitable convergent validity. We tested internal consistency through Cronbach Alpha. Results indicated that the values of Cronbach Alpha are above the threshold value of 0.7 (Table 3) indicating suitable level of reliability.

Table 3: Measurement model validation-Reliability and Convergent validity

Indicators (Cronbach's $\alpha$ , Average variance extracted )	Standardized Coefficients
<i>Personal Norms</i> ( $\alpha = 0.70, AVE=0.501$ )	
PN1	0.74
PN2	0.73
PN4	0.69
<i>Subjective Norms</i> ( $\alpha = 0.70$ , $AVE = 0.546$ )	
SN2	0.72
SN3	0.89
SN4	0.87
SN5	0.79
SN7	0.98
<i>Product Price</i> ( $\alpha = 0.81$ $AVE = 0.681$ )	
PP1	0.80
PP2	0.80
PP3	0.73
PP4	0.91
PP5	0.88
<i>ECCI</i> ( $\alpha = 0.763$ , $AVE = 0.562$ )	
ECCI1	0.63
ECCI2	0.93
ECCI3	0.64

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*ECCB* ( $\alpha = 0.936$ , AVE = 0.549)

ECCB1	0.61
ECCB2	0.98
ECCB3	0.52
ECCB4	0.71
ECCB5	0.52
ECCB6	0.79
ECCB7	0.79
ECCB8	0.84
ECCB9	0.84
ECCB11	0.56
ECCB12	0.81

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Model Fit:  $\chi^2/df=1.771$ , CFI = 0.93, and RMSEA < 0.05

In order to test the discriminant validity, the square roots of AVE of each construct of was construct was compared with its bi-variate correlations with all other construct. In each case the square roots of AVE of each construct was higher than its bi-variate correlations providing the evidence for discriminant validity. Bi-variate correlations with square-roots of AVEs are provided in Table 4 along with the means and standard deviations of the constructs.

Table 4: Discriminant Validity

	Mean	SD	ECCI	ECCB	SN	PP	PN
	3.54	0.72	0.750				
ECCB	3.22	0.73	0.120	0.741			
	3.59	0.77	0.295	0.014	0.739		
	2.45	0.68	0.057	0.057	0.066	0.825	
	2.94	0.80	0.163	0.291	0.072	0.057	0.660

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After the assessment of the measurement model we tested the hypothesized model. Model fit was found to be adequate ( $\chi^2/df=2.258$ , CFI = 0.911, GFI = 0.985 and RMSEA = 0.05). The results of structural model are given in figure below, path coefficients with solid lines are indicating significant relationships ( $p < 0.01$ ), while the ones with dotted lines indicated insignificant relationships.

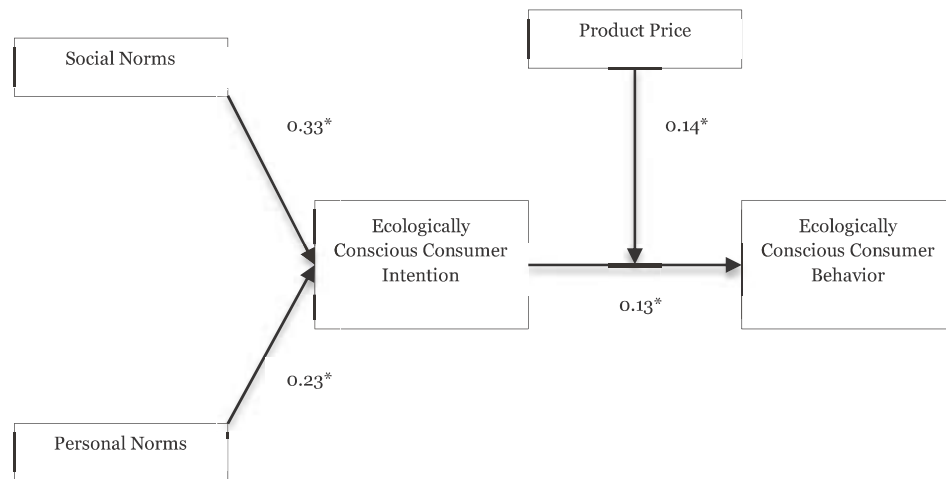


Figure 2: Hypotheses Results

## 5. Discussion

This study aimed to identify the determinants of ecology conscious consumer behavior through consumer intention in the developing country where people usually do not show same behavior as they intended. This study also increase knowledge towards the behavior of people when product price is involved in purchasing any product. In this study the effect of subjective norms and personal norms has been studied on consumer behavior followed by consumer intention by analyzing product price as a moderating variable.

As a whole this study presented the issue of translating consumer intention into consumer behavior when people do purchase of high or low priced product. The subjective and personal norms worked in background of consumer which reflects in their behavior afterwards. Past studies were limited to study intentions and not the actual behavior. This study take product price as moderating variable between consumer intention and consumer behavior which has not been keenly analyzed before. Moreover the past studies considered other factors such as environmental concerns, attitude, willingness to pay and other as antecedents of consumer intention but this study identify norms as antecedents for consumer intention to buy product.

This study explains the significance of psychological factors that motivates consumers when they got engage in ecology conscious purchasing behavior. We discuss the results of the study in the following sections.

*Subjective norms have a positive influence on ECCB:*

The very first hypothesis in the present study was that the subjective norms positively impacts ecologically conscious behavior (ECCB). The hypothesis is supported in this study. Data analysis showed positive relationship between subjective norms and ECCB. Data analysis indicate a positive relationship between an individual's subjective norms and consumer intentions. The possible reason of positive relationship could be that an individual integrate and communicate with their family, friends, supervisors, colleagues and business units' members on daily basis and as according to Ajzen, (1991) subjective norms are a perceived social pressure to perform or not to perform the behavior in question. Individuals may have to show green behavior in pressure of these related bodies even if they don't want to. Unlikely Cialdini and Trost (1998) adding personal norms did not consider subjective norms as weaker predictor on consumer intention . The result is same as the previous study (Dagher and Itani (2012); Paul et al., 2016) which indicated that social influence significantly impact on purchase behaviors of individual.

*Personal Norms positively impacts ECCI:*

Data analysis showed the positive relation between personal norms and ecologically conscious consumer intention. The result findings highlights that higher the consumer's self-expectations concerned with the environment, higher it will be the intention of consumer to purchase more environmental friendly product. It indicates that higher level of personal norms translates the intention into behavior by prioritizing the ecological concerns. Results showed that along with subjective norms, personal norms predict consumer intention in a more good and sophisticated way as they are one's own values and actual beliefs.

Consumers own environmental awareness and have a strong sense of responsibility for ecology protection. The results shows that personal norms have a strong impact on intention of consumer. This reflects that consumers have high motivation for ethical concerns and high morality for environmental protection. The positive relationship between personal norms and ECCI indicates that individuals seek for more personal satisfaction and moral responsibility for environment which effects their purchase intention. Past studies (Onel, 2017; Prakash & Pathak, 2017; Yuan et al., 2016) favors the relationship. Results suggests that individuals showing high green purchase behavior follows more environmentally engage lifestyle and have more green consumption pattern in them.

*Ecology conscious consumer intention (ECCI) shows a positive impact on ECCB.*

Thirdly the effect of consumer intention (ECCI) on ecologically conscious consumer behavior (ECCB) was tested. Data analysis was proved positively significant. Past studies (Ajzen, 1991; Cialdini & Trost, 1998; Dagher & Itani, 2012) favors the relation. Previous studies suggested that ecology conscious consumer intention is a very vital determinant in describing actual ecology conscious consumer behavior. Unlikely, in the past literature there were studies that reported a significant gap between green intention and green consumer behavior (Carrington et al., 2014). This is one of the initial attempts that study the role of personal norms in addition to individual's other personal and social factors incorporating the lens of green purchase behavior.

*Product price shows a moderating role between ECCI and ECCB.*

Last hypothesis stated that product price negatively moderates the relationship between intention and behavior. This hypothesis was accepted in this study. The result showed that people who consider price more in purchase decisions seldom buy green products. Price considered as a barrier to green purchase behavior. This reflects that when product price is high people tend to purchase green product quiet less and when product is priced low then they are more inclined to purchase that product. So low price promote green purchase behavior than high priced products. This relation was supported in the past by (Liobikienė et al., 2017). A very few studies study product price as a moderating variable in green buying behavior and proved that price is main barrier for buying any green product. (Chekima et al., 2016). Supply chains should got greener while lowering cost of that product simultaneously.

### **5.1. Theoretical Implications**

From theoretical perspective, present study is among few initial attempts that studied the intention behavior gap with a moderating variable, product price along with personal and subjective norms as factors influencing on consumer intention. This study also identifies the importance of personal norms in addition to subjective norms to predict intention towards a particular behavior. If an individual possess low level of personal norms they could act as a personal barrier towards ecofriendly behavior. So identifying the level of personal norms and mitigating those barriers is of great importance. A very few researches study moderating effect of product price with intention (Chekima et al., 2016) or directly with the behavior (Liobikienė et al., 2017), but this study is among few pioneers that connects consumer intention with their behavior linked with product price.

This study also identify another predictor of employee behavior. By examining the role subjective and personal norms this research echoes previous studies (Liobikienė et al., 2017;

Onel, 2017; Paul et al., 2016; Prakash & Pathak, 2017; Wesselink et al., 2017) to highlight some factors of employee environmentally conscious behavior are rooted in employee's perception of their employer's socially and environmentally responsible policies to create a more sustainable green supply chain.

The current research also demonstrates that ecologically conscious consumer behavior plays an important role in prediction of organizational eco-friendly behavior. In this regard, employee workplace pro-environmental behavior may be a trigger for moral reasoning regarding what should be done for the sake of natural environment. Moreover this research experimentally authenticates that overall relationships among all variables proved to be enriching the illustrations of theory of planned behavior in the prediction of green purchase. This model fills the unseen gap of information between academics/researcher and manufacturers. Thus the understanding of green purchase and the value of personal and subjective norms, gives a very useful insight to researchers and contribute a lot immensely in the body of knowledge. Finally this research contributes to the existing literature by answering calls to advance the empirical investigation of personal and social factors associated with supply chain employees. The current research also suggests the usefulness of associating framework to improve understanding of why and how employees engage with environmental problems in their personal lives which ultimately reflects in their workplace. In this regard the framework of personal and social factors have been coupled to gain insights and understanding of how employee green intentions intervene in employee green behavior.

## **5.2. Managerial Implications**

The present study not only brings knowledge about theory but also gives important insights about managers and policy makers in supply chains and other related areas. Supply chain employees need to have a green mindset so they can engage in a green purchasing and take more ecofriendly decisions for their firms. Practitioners and policy makers can promote individual's intention to purchase eco-friendly products by triggering their personal and subjective norms. This research suggests that by triggering personal norms and subjective norms in green purchasing rather than controlling ecologically conscious consumer behavior directly, can enhance ecofriendly behavior.

Supply chain employees have ignored that their own personal intention is crucial to their organization in decision making, which ultimately depicts their loyalty with firm. If they know and consider their norms in the first place then they might feel more engaged and loyal in the decision of their firms. This study suggests that if employees are introduced by

environmental policies and goals in their job description then it will help them to consider green behavior in their personal lives and in the organizational decisions as well. This research helps professionals who are working throughout supply chains to implement their green thinking and intentions like supplier, distributor, inventory control professionals, warehousing managers, production activity controller, and retailer to think green in their respective areas.

Top management must realize their role and importance towards enhancement of employee pro environmental behavior and ultimately strengthen green supply chains as their exemplary behavior could play a vital role in increasing employee green intentions. This study suggests that employees should be given freedom to show green behavior on their workplace so that they consider it in their decisions which might be useful for wellbeing of organization. If organization communicate with their employees in a good way then they can identify barriers that hinders in their way of showing green concern with environment. Personal level barriers should be identified and method to cope up with these barriers must be analyzed. If the personal level barriers identified by senior managers then they can arrange such type of activities that engage their employees to show ecologically conscious consumer behavior also on workplace. This will give them freedom to speak on their workplace. This will enhance their personal norms and then they consider and share their own personal beliefs in organizations actions and decisions.

As the level for ecological concerns vary from individual to individual so if they rewarded with some bonus or any benefit then it might encourage them to show green initiative. Perceived benefits from participation in green behavior must be highlighted Motivation towards eco responsibility must be enhanced. Managers must note that what acts as a driver for engagement of employee green behavior may act as a drover for disengagement for other employees, therefore recognizing the position of each employee on that spectrum of engagement and resolving their obstacles is extremely necessary for organizations in successful adoption of green supply chain management. Organizations can acknowledge, develop and enhance their employee's pro environmental behavior by developing policies, facilitating employees as much as possible to show environmentally conscious behavior.

Organizational leaders are ideally placed to act as a role model for their employees because of their status, power and position in the organization (Brown et al., 2005).By showing a consistent pattern of ecology conscious behavior, supervisors can signal their employees that showing green behavior will be highly valued in workplace. In this scenario, employees will learn that enacting such behavior will lead to high appreciation and hence their motivation and behavioral intentions of such behavior will be strengthened.



### 5.3. Limitations and Future Research

As any other study this research is not without limitations. First consumer's personal norms, that are sensitive to change, needed to be understood. This shows that consumer's perception before green purchase may have change so there is a need to study post purchase behavior of consumer. Secondly this study only focuses on personal and social factors so there is a need to identify other factors like attitude, environmental concern, perceived behavioral control to identify intention behavior gap more effectively. Moreover this study is conducted on general green purchase behavior so in future same type of study could be replicated with the specific product attributes like product packaging. Other than product price, educational level, experience could be taken as moderating variables.

Future research in this area can study employee behavior on and off the job for some specific or similar activities done privately and in workplace like electricity consumption, purchasing. Such studies in other countries should be conducted in future and results should be cross verified to establish better generalize-ability. Due to time and budget constraints, current study used cross-sectional data. Researchers argue that causal relationships should be tested through time series data to get better insights (Bryman, 2012; Walliman, 2005).

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