Proposed Theoretical Framework for Predicting Green Purchase Intention of Consumers: An Extended Theory of Planned Behaviour

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ABSTRACT

The best predictor of human behaviour is People’s intentions to act in certain way. Intention plays a major role in predicting green purchase behavior because purchase intention strongly increases the likelihood of decision to buy the green product. The purpose of this paper is to present a theoretical framework for predicting green purchase intention of consumers by extending the theory of planned behaviour.

The work presented here is based on extensive review of literature from research paper published in good impact factor journals and other reputed databases. The review of literatures ranges from its evolution of concept of green marketing to recent developments as adding additional constructs so as to improve predictive power of consumers’ green purchase intention.

The outcome of extensive literature review in the area of green purchase behavior of consumers with widely-used theory of planned behavior, it developed theoretical framework which explain logical relationship among various antecedents like green awareness, perceived value, green trust, and willingness to pay premium price. Its empirical testing with Structural Equation Modeling (SEM) with the help of AMOS statistical software can be future scope of the research.

Keywords: Green Purchase Intention, Theory of Planned Behaviour, Green Awareness, Perceived Value, Green Trust, Willingness to Pay Premium.

I. INTRODUCTION

We all have witnessed an imbalance in natural environment due to advancement of technology and human activities. According to Professor, Stephen Hawking, human species will have to populate a new planet within 100 years if it is to survive. He added that climate change, epidemics, and population growth are responsible for the same. All humans rely on environment and natural resources for satisfaction of their basic needs which in turn helps in survival of their lives on the earth. People on the earth have greatest impact on the environment the way they make use of it and how they managed dispose of waste. Climate change is also posing risks to human population health and well-being and thus is emerging as a serious concern worldwide. Altogether has significantly affected to people, animals, plants, and other parts of natural world.

As the ultimate outcomes, the natural destructions such as air, water, and land pollution, ozone layer diminishing, and deforestation could not be avoided. Products, services and the processes used to manufacture them consume energy, utilize non-renewable and renewable materials, and generate emissions.

Various environmental movements have emerged since then, aiming to save the environment from degradation. Entrepreneurs with strong environmental concerns started their business based on environmentally conscious principles (Quarter, 2000); and consumers became aware of their power in influencing business’s environmental policy (Crane, 2000). McDougally (1993) argues that environmental destruction is principally caused by over-consumption, making green consumption the key to sustainable development (Goldblatt, 2005; Peattie, 1992). To reduce the destruction caused by consumerism, Kates (2000) proposed the 3R principle: reduce, reuse, and recycle.
Consumers' consciousness on the environment and their demand for the environment friendly products, will bound marketers to make environment friendly products (Ghosh, 2010). As a result, green movement and environmental protection practices have found place among businesses and markets (Kassaye, 2001). Environmental awareness has increased drastically on a global basis as a result of the emergence of green marketing, consciousness on the decay of the environment is now become a global problem (Kumar, 2011).

Green marketing, also known as sustainable marketing and environmental marketing involve designing, promoting, pricing and distributing products and services according to the customers’ want and need, with minimal detrimental impact on the natural environment (Grant, 2008; Jain and Kaur, 2004; Kangis, 1992).

Marketing scholars have used the term green marketing interchangeably as social marketing, ecological marketing or environmental marketing. Green or Environmental Marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment (Polonsky, 1994).

One way to look at these efforts is, that the companies have attempted to respond to the growing environmental concern of consumers by introducing a variety of environment friendly products or mostly known as “green products” or “ecological products” (Kangun et al., 1991).

The term “green products” is defined as “products that will not pollute the earth or deplete natural resources, and [that] can be recycled or conserved” (Shamdasani et al., 1993).

To promote Green Products, marketers must focus on consumer preferences and decision-making processes (Cherrier et al., 2011). Nevertheless, marketers have not succeeded at selling Green Products, due to environmentally concerned consumers’ fluctuating preference for these products (Ha and Janda, 2012) despite remarkable growth rate in these consumers (Schlegelmilch et al., 1996). To tackle this issue, Barber (2010) recommended that scholars investigate consumers’ adoptability of sustainable practices, attitudes, and purchase intentions for Green Products.

Environmental issues in consumers’ mind have influence on consumers’ attitudes and attitudes have effects on consumers’ purchase intention of products (Singh et al., 2011,). Ramayah, Lee and Mohammed (2010) asserted that green purchase intention is a significant factor which serves as a proxy to actual purchase. Studies on the Theory of Planned Behaviour (TPB) construct showed that intention plays a major role in predicting green purchase behaviour because purchase intention strongly increases the likelihood of decision to buy the product (Chen, 2010). Thus, the present study attempts to analyze consumers’ green buying intention.

II. NEED AND SIGNIFICANCE OF THE STUDY

The lack of research examining consumers’ environmental consciousness while buying products from the country perspective has been identified as major research gap in the area of green marketing. The research carried out in other countries used theory of planned behaviour (TPB) model or its extended version with one or two antecedences to understand consumers’ green buying intentions. While detailed previous literature study found that green awareness, perceived value, green trust, willingness to pay premium price, behavioural belief, normative belief, and control belief are the major antecedents of TPB model to understand the consumers’ intention for buying green products but none of the studies carried out with integrating effect of all these variables on determining green buying intention which will be explore by this research. Thus, by developing theoretical framework for predicting green purchase intention would be valuable contribution to the existing body of knowledge in the area of green marketing.

III. RESEARCH OBJECTIVES

The objective of this study is to understand the consumers green buying intentions. To be more specific, following are research objectives of the study:
To investigate the applicability of the Theory of Planned Behaviour in predicting the attitude of consumer’s on their intention towards purchasing green products.

To identifies the direct determinants of green purchase intention, and aims at identifying the extent to which green awareness, perceived value, green trust, and willingness to pay premium price effects on the green purchase intention.

IV. METHODOLOGY

With stated aims, this paper adopts systematic review the concept of green purchase intention. Analysis processes further emphases on categorization of existing literature in different aspect of green purchase intention. The work is based on mixture paper published from 1971 to recently in the year 2015 as well. The work presented in this paper is based on conceptualized and empirical papers published in Scopus indexed, reputed national and international journal, research articles, global surveys on keywords like theory of reasoned action (TRA), theory of planned behaviour (TPB), green awareness, perceived value, green trust, willingness to pay price, green products, and green purchase intention.

V. LITERATURE REVIEW

The Theory of Reasoned Action (TRA), first developed in the late 1960s by Martin Fishbein and revised and expanded by Fishbein and Icek Azjen in the decades that followed, is a theory that focuses on a person's intention to behave a certain way. An intention is a plan or a likelihood that someone will behave in a particular way in specific situations — whether or not they actually do so.

The Theory of Reasoned Action states that behaviour is a function of behavioural intentions that are, in turn, a function of attitudes and subjective norms. That is, attitudes about performing behaviour would predict behavioural intentions to enact the behaviour, which would in turn predict behaviour. In addition, one may also take into account how others perceive one’s actions; subjective norms about how to behave were also included as a predictor of behavioural intentions (figure 1). Behavioural intention was then were identified as the best predictor of behaviour (Fishbein & Ajzen, 1975).

In this model, attitudes toward the behaviour were defined as an aggregate of readily accessible or salient beliefs about the likely outcomes of performing the target behaviour, whereas subjective norms were defined as the perceived social pressure to perform or not perform the target behaviour, and behavioural intentions were defined as the perceived likelihood of performing the target behaviour.

However, one factor that may limit the translation of intentions to behaviour is one’s ability to enact the desired behaviour. As such, the Theory of Planned Behaviour (TPB) updated the Theory of Reasoned Action (TRA) to include a component of perceived behavioural control, which specifies one’s perceived ability to enact the target behaviour.

In fact, perceived behavioural control was added to the model to extend its applicability beyond purely volitional behaviours. Prior to this addition, the model was relatively unsuccessful at predicting behaviours that were not mainly under volitional
control. Thus, the Theory of Planned Behaviour proposed that the primary determinants of behaviour are an individual’s behavioural intention and perceived behavioural control.

**Theory Of Planned Behaviour (TPB)** The theory of planned behaviour is an extension of the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) made necessary by the original model’s limitations in dealing with behaviours over which people have incomplete volitional control. The theory of planned behaviour is an extension of the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) made necessary by the original model’s limitations in dealing with behaviours over which people have incomplete volitional control.

The TPB model posits that intention to perform a given behaviour is the immediate antecedent of that behaviour (Ajzen 2002b). In their Theory of Planned Behaviour (TPB), Ajzen and Fishbein (1980) defined behavioural intention as one’s willingness to perform a specific behaviour, and proposed it to be the main predictor of actual behaviour. Behavioural intention is influenced by attitude, subjective norm, and perceived behaviour control (PBC) (Figure 2). Generally, the more favourable the attitude and subjective norm, and the greater the PBC, the stronger should be the individual’s intention to perform a particular behaviour (Ajzen 2002b).

![Figure 2: Theory of planned behaviour (TPB), Icek Ajzen, 1991](image)

**Intention**

Purchase intention means a consumer prefers to buy a product or service because he/she finds that he/she needs a particular product or service. The final decision on accepting a product to buy or rejecting it depends on consumers’ intention (Keller, 2001). In other words, it is an individual’s conscious plan to make an effort to purchase a brand. Intention refers to willingness or readiness to engage in behaviour under consideration (Han and Kim, 2010), (Ajzen, 1985).

Behavioural intention is a predictor of future behaviour Ajzen (1991). Several studies examined that intention is the immediate antecedent to actual behaviour (Ajzen & Fishbein, 1980), (Ajzen, 1991 & Ajzen, 2002b). The Theory of Planned behaviour (TPB) is useful in predicting intention of consumer in different context of study. The TPB Model has been validated in Several studies investigating green purchase intentions (Chen and Tung, 2014; Zhou et al., 2013; Chen and Peng, 2012; Han et al., 2011; Barber et al., 2010; Han et al., 2009; Mostafa, 2007; Tarkiainen and Sundqvist, 2005).

**Green purchase intention** is a central element in ascertaining real or actual buying behaviour of an individual (Ajzen, 1999). Intention plays a major role in predicting green purchase behaviour because purchase intention strongly increases the likelihood of decision to buy the product (Chen, 2010).
Early history of social psychology has given importance to attitude in understanding human behaviour. A person's favourable or unfavourable evaluation of an object, beliefs represents the information he/she has about the object (Fishbein & Ajzen, 1975). In similarly attitude is defined as learned tendencies when responding to an object in a consistently favourable or unfavourable manner (Schlenker, 1978; Fishbein & Ajzen, 1975).

The attitude acts as an important antecedent to the behavioural intention which is described as the degree of favourable or unfavourable evaluation of the behaviour under study (Ajzen, 1991). Positive attitude towards a particular behaviour strengthens the intention to perform that behaviour (Ajzen, 1991).

A favourable attitude towards a product which is environmentally sustainable adds to sustainable consumption behaviour as pointed out in several studies (Chan, 2001; Verbeke & Viaene, 1999; Vermeir, & Verbeke, 2004). It can be applied to the studies related to understanding how attitude can influence consumers’ green buying behaviour.

**H1:** Consumers' attitude toward the green products significantly influences their intention to purchase green products.

**Subjective Norms**

Subjective norms refer to “the person’s perception that most people who are important to him think he should or should not perform the behaviour in question” (Fishbein & Ajzen, 1975). In similar way Ajzen (1991) defines subjective norms construct as “the perceived social pressure to perform or not to perform the behaviour”.

The TRA is related to voluntary behaviour and posits that an individual’s behaviour is determined by behavioural intentions that are driven by an individual’s attitude toward the behaviour and subjective norm influencing the performance of the behaviour (Ajzen & Fishbein, 2004).

Subjective norms are perceived to affect purchase intention independently (Robinson & Smith, 2002). Hence, attitudes and subjective norms are suggested to exert their effects upon behaviour through intentions (Ajzen 1991). It is therefore expected that they will more likely adopt the group behaviour such as purchase of green products (Kumar, 2012).

**H2:** Subjective Norms significantly influences the consumer's intention to purchase green products.

**Perceived Behavioural Control (PBC)**

Perceived behavioural control (PBC) is the individual perception of possible difficulties that they can encountered with while performing a specific behaviour (Ajzen, 1991). Perceived behavioural control is defined as the level of confidence an individual has about their ability to perform the behaviour based on how easy or difficult they perceive its performance as it relates to hindrances or facilitators (Ajzen, 1991; Ajzen, Brown & Carvajal, 2004).

The TP can be distinguished from the TRA because of the addition of the PBC construct, which as stated earlier refers to people’s perception of the ease or difficulty in performing a specific behaviour (Ajzen, 1991). Ajzen (1991) also mentioned that the perceived behavioural control and the behavioural intention in conjunction may help in directly ascertaining a particular behaviour. Many studies have shown that PBC is positively linked with intention in various research contexts, such as recycling (Taylor J. Paul et al. and Todd, 1995), conservation (Albayrak et al., 2013), green hotels (Han et al., 2010; Chen and Tung, 2014; Chang et al., 2014), organic foods (Thøgersen, 2007; Tarkiainen and Sundqvist, 2005), and green products in general (Moser, 2015).

**H3:** PBC significantly influences the consumers' green purchase intention.

**Inclusion of Additional Constructs In The TPB**

Although the TPB is based on the assumption that behavioural intention is determined by three factors, namely; attitude, subjective norms and PBC, previous researches have mentioned that there are few domain specific factors which are not the
in various domains to improve the predictive power of the framework. Further, it was also suggested that TPB framework can be deepened and broadened by adding new constructs or altering the path of the variables in it (Ajzen, 1991). On the basis of supporting evidence from the literature, the study attempts to include two additional constructs in TPB in the case of green products i.e. environment concern and environmental knowledge.

Theoretical and Empirical Support for Including Green Awareness

Awareness can be defined as concern about and well-informed interest in a particular situation or development. Awareness means to have the information about something. Green awareness (GAN) means to have the familiarity about the effects of a product on environment. When the people evaluate a product and its features and benefits in the context of environment, it is called Green Awareness. GAN is most important part in green purchase intention (Maha and Ahmad, 2012). It is also proved in many others researches that previous knowledge and awareness about a green product generate intention of customer to purchase green.

H4: Green awareness significantly influences the consumers’ green purchase intention.

Theoretical and Empirical Support for Including Perceived Value

Green perceived value (GPV) means the total benefits, features and performance of a Green product in the mind of customer. Zeithmal (1988) defined perceived value as ‘an overall assessment of the utility of the product based on the perception of what is received and what is given’. Generally, green products are costlier than their alternative and consumers are not going to compromise on excellent functionality of traditional product (Chen and Chang, 2012). Perceived green value is positively associated with purchase intention of green and environmentally friendly products (Rizwan et al., 2013; Chen and Chang, 2012; Chen et al., 2012). Chiu et al. (2014) studied the environmentally responsible behavior in ecotourism and found that perceived value positively influence the environmentally responsible behavior.

H5: Perceived Value significantly influences the consumers’ green purchase intention.

Theoretical and Empirical Support for Including Green Trust

Trust means expectation held by one party that the word, promise, or statement of another party could be relied on (Rotter, 1971). There are three main causes of trust, believes on honesty, goodwill and aptitude. Trust is level of the self-assurance that another party would perform as expected (Hart and Saunders, 1997). Many authors in the past acknowledged that green trust is a strong determinant of purchase intention (Rizwan, Hassan & Javeed, 2013; Terenggang, Supri & Utami, 2013; Porpratana, Lockard & Ngamkroechjoti, 2013; Chen & Chang, 2012) These authors came up with a positive outcome which implied that significant relationship existed between trust and green purchase intention even though their studies were from different background.

H6: Green trust significantly influences the consumers’ green purchase intention.

Theoretical and Empirical Support for Including Willingness to Pay Premium Price

Price is always considered as one of the most important factors that determines the consumer decision process. Understanding the consumers' willingness to pay premium for socially responsible products is important for the organizations as price is the most important barriers to green consumption (Gleim et al., 2013) and willingness to pay premium prices for green products may be considered as pro-environmental behavior (Ajzen, 1991). A positive association has been found between the environmental concern and willingness to pay for green products in few studies such as eco-labeled appliances and furniture (Shen, 2008), environmentally friendly food products (Moon and Balasubramanian, 2002) and green hotels (Kang et al., 2012) which further influence the consumer's intention to buy green products.

H7: Willingness to Pay Premium Price significantly influences the consumers’ green purchase intention.

Relationship between Behavioural Belief and Attitude
Azjen (2005) explained every behavioural belief is associated with outcome of the belief and this type of result assessment regulates the optimistic or pessimistic attitudes towards the behaviour. These behavioural believe and outcome evaluation is the creators of positive attitude towards positive intention and behaviour. Whereas negative beliefs and outcome evaluations are creators of negative attitudes towards the behaviour that makes negative intentions and behaviour (Ajzen, 2005, Ajzen & Fishbein, 1980). In other words, If a person has positive belief for a behaviour then she/he would have positive attitude toward the behaviour and perform the behaviour. Reverse is negative attitudes towards the behaviour and not intend to perform the behaviour.

**H0:** The behavioural belief of the consumer regarding green buying is positively related to the Attitude.

**Relationship between Normative Belief and Subjective Norms**

Ajzen (1991) defined subjective norms refers to the individual’s perceptions of social pressure in performing or not performing a given behaviour and is determined by normative beliefs.

The TPB defines subjective norms as the social pressure taken into considered before performance of a specific behaviour. Such pressure is usually exerted by a social group with strong social ties (Ajzen & Fishbein, 1975). Subjective norms are influenced by normative belief (Ajzen, 2002).

Thus, the present study posits the following relationships:

**H0:** The normative beliefs of the consumer regarding green buying are positively related to the subjective norms.

**Relationship between Control Belief and Perceived Behavioural Control**

Ajzen (1991) declared that PBC comprises control strength and control belief. Control belief is one’s self-assessment of one’s ability to complete a specific behaviour. In the context of social cognition theory, Bandura (1977) suggested that control ability is one’s capability to control specific performance, and self-efficacy is one’s belief in one’s ability to successfully perform the behaviour. Thus, PBC is influenced by control beliefs (Ajzen, 2002).

Therefore, the present study formulated the following hypotheses:

**H0:** The control beliefs of the consumer regarding green buying are positively related to behavioural control.

Based on the above discussion a theoretical model (see, Figure 3) is proposed.
VI. CONCLUSION AND FUTURE SCOPE OF STUDY

This study concludes that the consumers’ green purchase intention is theoretically influenced by Attitude – customers attitude towards environment friendly or green products, Subjective Norms – perceived social pressure perform or not to perform the behaviour of buying green products, and Perceived Behavioural Control – Individual’s perception of their ability to buy green products. Literature defines the relationship of Attitude in turn significantly influenced by behavioural belief of the consumer. Subjective Norm in turn affected by normative belief. Control Belief also influences significantly perceived behavioural control of consumers. Also, literature supports that Green Awareness, Perceived Value, Green Trust, and Willingness to Pay Premium Price among consumers significantly influences their intention to purchase green products.

Present Study identify the theoretical framework for predicting consumers green purchase intention by adding additional constructs like Green Awareness, Perceived Value, Green Trust, Willingness to Pay Premium Price, Behavioural belief, Normative belief, and Control belief, which helps in predicting consumers green buying intention is based on only literature review and theoretical study. Its empirical study by using Structural Equation Modeling (SEM) with the help of AMOS statistical software can accurately measure the relationship among variable and constructs of the study can be future scope of the research. This study can measure the green purchase intention is significantly influenced by which additional construct can be helpful in designing holistic marketing strategies for the product can be considered as future direction for the study.


Kumar, B. (2012). Theory of planned behaviour approach to understand the purchasing behaviour for environmentally sustainable products.


