

# A Comparative Theoretical Analysis of the Theory of Planned Behaviour and Value-Belief-Norm Theory in Predicting Green Buying Behaviour

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**Abstract:** *This paper provides an insight on Theory of Planned Behaviour and Value Belief Norm theory in reference to green buying. The Theory of Planned Behaviour considers attitude, subjective norm and perceived behaviour control as the key determinants of purchase intention, while Value belief theory highlights that moral and normative belief is affected by personal and environmental beliefs. This paper critically evaluates both the theories for its strength, concepts and limitation in predicting green behaviour. The comparative framework shall put light on how both theories and different in predicting consumer green behaviour and that integration of both the theories might provide a new and holistic approach in determining sustainable consumption through green behaviour..*

**Keywords:** Green Buying, Theory of Planned Behaviour, Value- Belief Norm Theory, Sustainable consumption, Consumer Behaviour

## I. INTRODUCTION

21<sup>st</sup> century has brought innovation, new efficient production techniques, in-numerous opportunities but at a cost of environment deterioration. As concern over various climate degradation increases, consumers have started shifting to eco-friendly and organic products that increases scope to study green buying behaviour of such consumers. Green buying behaviour is commonly referred to a conscious decision of buying products that leave less carbon prints and are eco-friendly in consumption. This behaviour is influenced by various social, moral and behavioural factors.

In determining sustainable consumption and behaviour of such consumers, Theory of Planned Behaviour (TPB) (Ajzen, 1991) and Value Belief Norm Theory (VBN) (Stern P. C., 2000) have been found to be the most influential. TPB posits that behavioural intention is the most immediate predictor of action, and is shaped by an individual's attitude toward the behaviour, perceived social pressure (subjective norms), and perceived behavioural control (Ajzen, 1991). On the other hand, the VBN theory emphasizes moral and normative dimensions, suggesting that behaviour is driven by a chain of psychological processes beginning with personal values, followed by ecological worldviews, awareness of consequences, ascription of responsibility, and ultimately, personal norms (Stern P. C., 2000) (Stern P. C., 1999).

Both the theory works on predicting green buying purchasing but they belong to different roots of belief. TPB is rational and cognitive in nature whereas VBN considers moral and meticulous review and consideration. This branching raises question as which is a superior theory to study the complexity of green behaviour (Kanchanapibul, Lacka, Wang, & Chan, 2013).

This paper aims to provide a theoretical analysis by comparing TPB and VBN in predicting green behaviour. It visits core beliefs, applications, assumptions and implication on determining green

## Objective of the Study

- To examine and elaborate Theory of Planned behaviour (TPB) and Theory of Value-Norm Belief.
- To compare and analyse TPB and VBN in context of green buying behaviour.
- To provide conceptual insights for future empirical studies, research, policy making and decision.



## II. THEORETICAL BACKGROUND

### 2.1 The Theory of Planned Behaviour(TPB)

The Theory of Planned Behaviour is proposed by (Ajzen, 1991) is commonly and widely used behavioural theory to study and measure green purchase behaviour of consumers. The theory explains itself with three core factors: Attitude, Subjective Norm and Perceived Behavioural Control. These factors lead to purchase intention which ultimately leads to buying behaviour.

Attitude-accessible belief about consequences of behaviour. (eg. Buying green products would be beneficial for the environment. This belief shall increase the preferable attitude to purchase it.)

Subjective Norm- individuals belief of how specific individual or group approve or disapprove of his behaviour.(eg.Society, family, peer, peer pressure for using green products shall influence and increase the intention to buy)

Perceived Behavioural Control- ease or difficulty in pursuing a certain behaviour based on available resources, past experiences and capabilities. (eg.If green products are expensive or are not easily available for consumption, even a strong intention to purchase will not convert into action.

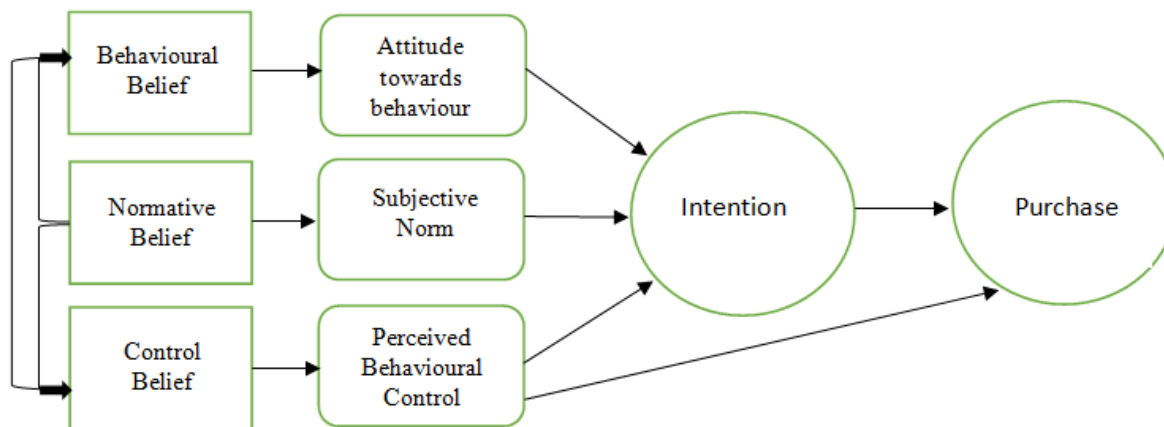


Figure 1 Theory of Planned Behavior (Icek Ajzen, 1991)

TPB has been broadly used in determining and studying green behaviour. Various studies have confirmed positive attitude towards eco-friendly products, beliefs of peer and family(Joshia & Rahmanb, 2015). Similarly,(Paul, Modi, & Patel, 2016)found that attitude and PBC showed significant influential contrast in affecting green purchase while subjective norm was found less predicting, suggesting variation based on societal structure.

Despite of its wide applicability and accuracy, it has been widely criticized for only concentrating cognitive and rational belief. It ignores the moral dimensions that often drive sustainable consumption(Kaiser, Hübner, & Bogner, 2005). TPB focuses more on intentional behaviour rather than spontaneous and value driven. To overcome such limitation, many researchers have extended the theory by adding various variables such as past behaviour, environmental concern, moral behaviour and willingness to pay. This has led to development of more intricate frameworks in sustainability context.

### 2.2 Value Belief Norm Theory(VBN)

The theory of Value Belief Norm formulated by (Stern P. C., 1999) further developed into a proper theory (Stern P. C., 2000) provides a more psychologically driven theory for understanding significant environmental behaviour. Unlike Theory of Planned Behaviour (Ajzen, 1991), this theory is more based on moral beliefand foundation that involves psychological driven action that drives into purchase action.

The theory is built on six main variables that follows a chain.





Figure 2 Flow of Theory VBN

Values: It plays foundation role for individuals who hold values for surrounding, for others and personal. Existence of such values may drive certain behaviour resulting into beliefs. For instance, individual who has environmental value will show concern over ecosystem and nature resulting into behaviour conserving it.

Beliefs : This construct is measured by NEP scale that captures view for environment. Awareness and responsibility towards it result in moral obligation.

Personal Norms: When an individual feels morally obligated towards the behaviour, it results into pro environmental behaviour even though there is an absence of social pressure and perceived behavioural control.

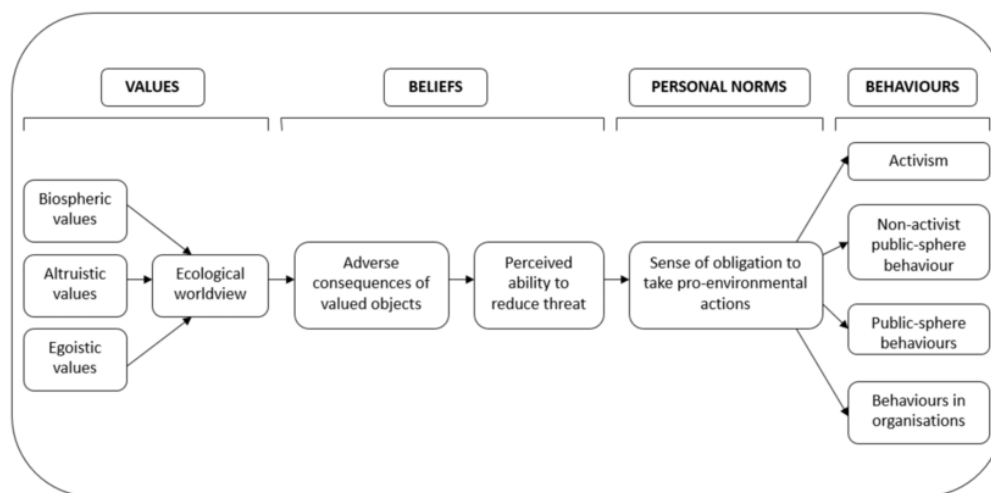


Figure 3 Theory of Value Norm Belief (Morrissey, 2016)

Using VBN theory in the context of green buying, it efficiently explains why an individual engages in buying less convenient and costlier products. For instances, an individual is buying an eco-friendly product which is costlier than conventional ones to satisfy his moral obligation towards the environment for which TPB would not align but very well aligns with VBN.

### III. COMPARISON OF TPB AND VBN IN GREEN BUYING

Both TPB and VBN are prominent theories in determining green buying behaviour of an individual. However, they have different roots of understanding and core beliefs. TPB is a rational theory and takes into account position of social presence of the individual, whereas VBN is more focussed on deeply rooted belief that drives the action of green buying. Numerous studies have analysed both the theories, core base, correlation and its application to various segments of demographic profiles. (Kanchanapibul, Lacka, Wang, & Chan, 2013) was of a thought that TPB was more likely to be relevant as the intention of the individual largely depends on the cost benefit trade when purchasing green product. On the other hand, (Stern P. C., 2000) argued that non-monetary ideologies such as sense of support to environment was more relevant and significant.

Comparison of the TPB and VBN models shows that, both in terms of the variance explained and the different comparison indices, the TPB model has more predictive power to explain Willingness to Pay for conservation, as already reported by (Kaiser, Hübner, & Bogner, 2005) for a different environmental context. This means that, to explain



Willingness to Pay, it is better to consider altitudinal factors such as self-interest based and rational choice-based deliberation (TPB), than values and moral norms (VBN).

TPB shine when consumers are making purchase decision based on family, peer, social influence and convenience. Where as VBN shines when the purchase behaviour is more value driven. Hence it is evident that TPB captures external drivers where as VBN understands internal motivations.

**Table 1 Comparison of TPB and VBN**

Aspect	Theory of Planned Behaviour	Theory of Value Belief Norm
Origin	(Ajzen, 1991)	(Stern P. C., 2000)
Core Construct	Attitude Subjective Norms Perceived Behavioral Control	Value Environmental Beliefs Personals Norms
Type of motivation	Rational, Intention based	Moral based
Applicability in Green Buying	Easy application on intentional and planned behaviour	Behaviour driven by ethical and moral ideas.
Strengths	Projecting various context	Prominence to values and moral obligation.
Limitation	Supresses moral dimension and internal feel.	Reduced implication on routine and low involvement.

#### **IV. DISCUSSION AND IMPLICATION**

Both TPB and VBN have been widely applied theory however, there is limited research where contrast and comparison of both the theory is done under a single framework. Existing studies have used either theory hence, there are fragments in understanding the context of green buying behaviour. Both The Theory of Planned Behavior (TPB) and the Value-Belief-Norm (VBN) Theory have anchored the study of environmentally friendly consumer behaviors. Bound within the context of a given environment, particular behavior, and psychological elements present, one of the theories is selected over the other.

As described, it is clear why TPB is useful to explain deliberate, planned actions which fall within an individual's capability of control. With respect to attitudes, social norms and control, the intention to act will always be present (Ajzen, 1991). This allows to approach personal contexts such as purchasing sustainable products or using energy saving appliances, especially when consumers encounter a choice context or need to make functional decisions (Paul, Modi, & Patel, 2016). In contrast, endorsing environment-friendly policies, signing petitions, or partaking in ecological movements are more examples of actions driven by altruism to which VBN can be applied (Stern P. C., 2000) (Stern P. C., 1999). Such behaviors are not the products of an analytical decision-making process, but rather a value one's beliefs about the environment, a moral obligation, and ethics. Take, for instance, individuals with strong biospheric values who purposefully decide to boycott certain brands due to their lack of sustainability, regardless of how affordable or accessible they are.

Significant to note, different researchers have argued that both TPB and VBN address different sides of the same coin, yet complement each other in human decision-making. As an example, (Kaiser, Hübner, & Bogner, 2005) added personal norms (from VBN) into the TPB model has greatly increased its ability to account for conservation behavior. In Harland et al. (1999), the authors argued that adding personal norms into TPB increased the validity of understanding household environmental choices. Such models excel in scenarios where the green purchasing behavior is affected by both practical thinking and ethical aspects. For example, (Harland, Staats, & Wilke, 1999) added elements of moral obligation and responsibility under the VBN framework are incorporated into a TPB-based framework to study pro-environmental decisions in hospitality, they tend to predict better.



The decision of whether to utilize TPB or VBN must incorporate the underlying drivers of behavior in specific contexts, as outlined previously. TPB is effective in predicting outcomes in situations where planning and structuring is paramount. Respective VBN is appropriate when significant moral aspects and personal values become vital. Nonetheless, rational motives along with ethical reasoning tend to blend, meaning these approaches offer considerable opportunities for further research in green consumer behavior.

Context / Behavior Type	Preferable Theory	Rationale
Habitual or routine behaviors (e.g., using cloth bags)	TPB	These actions are influenced more by intentions, routines, and a sense of control than by ethical principles.
High-effort decision-making (e.g., buying a green car)	TPB	Planned buying behaviors where attitude, subjective norm, and control impact rational decision-making.
Emotionally or morally charged decisions (e.g., supporting environmental NGOs)	VBN	VBN is better when personal values and moral obligations drive behavior, when there is absence of personal benefit.
Low-control situations (e.g., low access to green options)	TPB	Itexposition for perceived behavioral control, making it suitable when external constraints affect choice.
Activism and value-driven actions (e.g., voting for eco-friendly policies, campaigning)	VBN	VBN focuses on selfless values and personal norms that prompt public-sphere environmental behavior.
Mixed influences (e.g., green food consumption for health and ethics)	Hybrid / Integrated model	When both rational aim and moral duty play a role, integrating TPB and VBN offers a better projecting understanding.

Table 2 Theory and its applicability

## V. CONCLUSION

While each theory has its strengths, they also come with distinct shortcomings. The Theory of Planned Behavior (TPB) overlooks the role moral norms and environmental identity play, whereas the Value-Belief-Norm (VBN) framework does not address the lack of focus on behavioral control and habitual behavior. The focus on conceptual frameworks in this case supports the claim that the rationale behind eco-friendly purchasing behavior embraces both reasoning and moral frameworks mediated by complex interplay of intentions, control, values, and responsibilities.

This paper bridges the two theories, deepening our understanding of sustainable consumer behavior and laying the foundation for models that integrate both moral and cognitive perspectives. Further research should focus on hybrid approaches, empirically testing both theories' limitations, and looking at their relevance across different consumer segments and product categories.

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