

# Investigating the consumers' intention on buying green products

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**Abstract:** This paper aims to explore the formation mechanism of consumers' purchase intention of green products, and the deep-seated reasons that hinder green products, especially why the consumption trend of green products is low in eastern culture. The theory of this paper is planned behavior, and the method is systematic review with qualitative and quantitative analysis. 1) We find that consumers' attitudes significantly effect on the intention to purchase green products. 2) Mediating effects illustrates that attitudes of consumers have strong influence on the subjective norms. 3) Results are stable under various evaluations.

**Keywords:** Green Products; Consumer Intention; Perceived Behavior Control

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## 1. Introduction

Environment issues are hot topics, more attention is devoted to green marketing. However, due to various criteria, consumers in various countries may have various perception towards the consumption of green products. Hence, we need to find out factors influencing consumers choose green products and the difference among countries.

This paper investigates the likelihood of consumers buying green products by applying the theory of planned behavior as well as three important factors that may influence the intention of purchasing green products in the theory of planned behavior. The contributions are: Firstly, green/organic products studies often utilize traditional narrative literature review. Hence, when the number of research papers is large and the results are inconsistent, the objectivity and accuracy of the final conclusions are easily questioned. With both quantitative and qualitative analysis, systematic review integrates statistical technology in strict accordance with certain procedures based on the collection of literature materials to seek general conclusions.

## 2. Related Work

### 2.1 Green marketing

Environmental problems have become a challenge to the global society, such as pollution and depleting natural resources. Dunlap (1991) posits that law makers, media and society have begun to concentrate attention on the environmental issues and Hence green marketing has become a global marketing hot topic.

### 2.2 planned behaviour

The theory of planned behaviour is proposed by Ajzen (1985). Accordingly, if the attitude of people is evaluated positive, and they believe they should behave within the expectation of other people (subjective norm), this result in a higher intention of purchase. Such a relationship between attitudes and subjective norms to behavioural intention has been evidenced and confirmed in many studies.

Environmental attitude is defined in Rashid et al (2009) as a disposition educated to consistently react to the manner in relation to the environment. Accordingly, some empirical evidence shows that environmental attitude is significantly positively related to purchase behavior of environmental products.

Subjective norms is defined as some socially conscious and validated values of a certain behaviour. Social influence is considered by Lee (2008) as one of the most persistent determinants of consumers' behavior.

## 3. Research Methodology

### 3.1 Philosophical stance

There are three philosophical stances in a research, positivism, interpretivism and critical theory. A more scientific perspective can be taken to observe social behavior, although some researchers posit that positivism and science are not synonyms. Hence positivists tend to generate theories using deductive methods with empirical evidence.

### 3.2 Justification

Journal papers will be located through the e-journal web site of the library. Then, the journal papers with quantitative methods will be examined in detail to find out how the three antecedents would impact the purchase intention. As positivism was chosen for the present research, the statistical findings will be compared in the present research in order to find the answer to the research question.

### 3.3 Prisma

In order to search out the literatures related to green products to the greatest extent, this study uses the key words of "organic products / organic food/ green products/ sustainable products etc.". Besides, all the literature this paper selects must utilize the theory of planned behavior (PBT). We get a total of 43 articles. The sample size of literature varies from 200 to 3004.

## 4. Data Analysis

### 4.1 Descriptive analysis

Table 1 shows all 16 studies involve how attitudes, subjective norms, performed behavioral control influence intention of consumers. But only 14 of 16 pay attention to the mediating effects.

**Table 1. Descriptive statistical analysis**

Variables	Number of studies	Average sample size	Total sample size	Correlation coefficient			
				Min	Max	#negative	#positive
AT-INT	16	557.9	8927	0.125	0.78	16	0
SN-INT	16	557.9	8927	0.05	0.64	16	0
PBC-INT	16	557.9	8927	0.02	0.45	16	0
AT-SN	14	562	7868	-0.01	0.76	1	13
AT-PBC	14	562	7868	-0.18	0.67	1	13
SN-PBC	14	562	7868	0.08	0.46	14	0

### 4.2 Main results

Multiple single effect values can be combined to get the total mean effect value of each factor. Through the total mean value, we can judge the strength of the total effect between the independent variable and the dependent variable. Table 2 shows the how the attitudes, subjective norms, perceived behavioral control influence the intention to purchase green products. According to the correlation coefficient, attitudes, subjective norms have relatively strong effect on the intention to purchase green products. However, the perceived behavioral controls have weak effect on the intention to purchase green products.

**Table 2. Summary results of correlation coefficient.**

Dependent variable	Independent variable	Number of studies	Medium effect (0.30≤R≤0.49)	Strong effect (R>=0.5)	Value and significance	
					Value	P
INT	AT	16	3/16	12/16	0.65	0.00
INT	SN	16	4/16	8/16	0.49	0.00
INT	PBC	16	11/16	0/16	0.36	0.00
SN	AT	14	4/14	7/14	0.39	0.00
PBC	AT	14	7/14	1/14	0.44	0.00
PBC	SN	14	7/14	0	0.27	0.00

### 4.3 Sensitivity analysis

Sensitivity analysis can detect abnormal samples in the literature. If the total effect amount changes greatly, the removed samples may be abnormal. From table 3, when the minimum or maximum samples are deleted, these factors are still significantly greater than 0. Hence, deleting any extreme study will not significantly affect the value, the analysis results are relatively stable.

**Table 3. Sensitivity test results**

Dependent variable	Independent variable	Number of studies	Mean Value	Remove extreme sample	
				Min	Max
INT	AT	16	0.65	0.46	0.56
INT	SN	16	0.49	0.43	0.45
INT	PBC	16	0.36	0.29	0.32
SN	AT	14	0.39	0.36	0.39
PBC	AT	14	0.44	0.25	0.39
PBC	SN	14	0.27	0.23	0.24

## 4.4 Heterogeneity tests

Heterogeneity test is also an main part of management studies. We analyze the heterogeneity of culture background, developing or developed countries, gender, age and education. According to the characteristics of samples, we use cultural background to conduct subsample analysis on the relationship of six groups of variables. The results are shown in table 4.

**Table 4. Heterogeneous test.**

Variables	Western	Eastern	Difference
AT-INT	0.67	0.38	0.29
SN-INT	0.56	0.20	0.36
PBC-INT	0.38	0.29	0.09
AT-SN	0.43	0.28	0.15
AT-PBC	0.47	0.30	0.17
SN-PBC	0.26	0.32	-0.06

## 5. Discussion

### 5.1 The influence of Consumers' attitude

The formation of consumer trust tendency is a relatively long-term and recessive process. However, it has the characteristics of stability and persistence, which makes consumers show certain rules and adaptability in the response to purchase decisions.

### 5.2 The influence of consumers' subjective norms

Subjective norms and social pressure have significant impact on the intention of consumers' intention to purchase green products. Hence, when carrying out advertising activities, enterprises highlight the expectation of the results of green consumption.

### 5.3 Cross-countries comparative analysis.

Subsample analysis shows that the correlation of attitudes and intention to purchase green products is higher in western countries than in eastern countries. Compared with Western consumers, eastern consumers belong to the culture of collectivism, male society, high uncertainty avoidance and long-term orientation.

## 6. Conclusion

This paper analyzes how the consumers' attitude, perceived behavior control, subjective norms influence the intention to purchase green products. The factors that have a significant impact on willingness to purchase green products, in order of impact: attitudes>subjective norms> perceived behavior control. Besides, attitudes and subjective norms seems to have relatively little influence on the intention to purchase green products in eastern developing countries, male, single and unmarried subs-ample.

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