



2528-9705



AN INVESTIGATION INTO THE INFLUENTIAL FACTORS OF INTENTION TO BUY GREEN PRODUCTS AMONG YOUNG CONSUMERS

Adeleh SAMIEI ZAFARGHANDI^{1*}, Kambiz HOSSEINKHAN TEHRANI²

¹ Ph.D. Student, Department of Business Management, Tehran Branch, Islamic Azad University, Tehran, Iran,

² Ph.D., Department of Business Management, University of Tehran, Tehran, Iran.

***Corresponding Author**

E_mail: Adelehsamiei@gmail.com

ABSTRACT

The purpose of the current study is to investigate the influential factors of intention to buy green products among young consumers. The model of the current study was established based on the independent variables including the consumers' conscious behavior, the perceived effectiveness by the consumers, environmental concern, the green perceived value, the green perceived risk, and the dependent variables including the green shopping intentions. This research was an applied-descriptive study in which, like survey studies, the questionnaire was used to collect data. Using random sampling, 400 students of Islamic Azad University, Science Research branch of Tehran were selected to participate in the study. Data analysis of the current study was done through using SPSS and LISREL. The result of the study showed that the consumers' conscious behavior, the perceived effectiveness, and the perceived value had significant effect on the consumers' intention to buy green products. However, the effect of the green perceived risk and the environmental concern on the consumers' intention to buy green products was not supported.

Keywords: Green Marketing, Consumers' Conscious Behavior, The Perceived Effectiveness, Environmental Concern, The Green Perceived Value, The Green Perceived Risk, Intention to Buy.

INTRODUCTION

The environmental pollutions which are the consequences of human products are warned by the active organizations to be a threat for the human life. At the same time, consumers' concerns about environmental responses that are also aligned with environmental laws have pushed a growing number of companies to design and create environmentally friendly programs. (Hokey and William, 2001). Therefore, companies should significantly reduce their negative environmental impacts in the production, distribution, supply of raw materials and energy consumption (Grant, 2008). However, some of the industries conducted some measures and steps to reduce the effects of environmental pollutions on the environment. One of these measures is green marketing or environmentally friendly which mean to develop environmental activities of marketing by using the social and environmental roles of the companies; which lead to sustainable development. From 1980s, marketing based on social and environmental consideration has been developed drastically. Phrases such as “the environment decade” or “earth decade” are tight to 1990s. During these decades, there were many attentions paid to the social and environmental consideration in the decision made by the consumers. Moreover, in the recent decades, the world has witnessed the news of activities done by environmental

protection groups. These activities are focused on sustaining the environments and the effect of them on the attitudes and behaviors of the consumers.

One of the responsibilities of the management is to protect the environment to create a positive mental image of the company in the mind of the consumers and, moreover, it is an element of success for a perceived company. Being responsible regarding the environmental issues not only help the companies to remain in the competitive context but also increase the consumer loyalty of the company (D'Souza et al, .2006). The social concern about the environmental issue lead to a new generation of consumers who are concerned about the environmental issues in their purchase decisions. The international studies indicated that the environmental concerns of the consumers lead them to change the products they buy, gradually, and reflect upon their decisions (Papadopoulos et al., 2010). Some evidence even shows that the consumers like to pay more for the products which obey the environmental standards. The vice-president of Iran Environmental Protection Agency states that according to the International Bank, the damages of air pollution was about 8 billion dollars in 2006 which it can reach 16 billion dollars in 2016. The social concern about the environmental issues lead to the emergent of a new trend in decision making to buy products. According to statistics realized by Environmental Protection Agency about 60 non-governmental green organizations exist in Tehran; however, there is no academic research on the consumers' behavior in this regard; knowing the fact that it is one of the main purposes of the academic research abroad. On top of this, by joining Iran to International trading, obeying the standard will be much more important. Furthermore, to examine the attitudes of people about environmental concerns, and to understand their behavior in this respect, it will be very important to conduct such studies (Chan, Ricky Y. K, 2001). Given the importance of environmental concerns for the consumers, it is important to investigate the influential factors on the intentions of the consumers to buy green products. That said, the purpose of this study is to investigate the effect of value, effectiveness and perceived risk from the part of the consumers to their intention of buying green products.

THE THEORETICAL CONCEPTIONS AND THE RESEARCH HYPOTHESES

Green Marketing Concepts

Green making is a social process through which individuals and groups exchange their products and their values to supply the demands Through an ethical approach that minimizes negative environmental impacts (Rex and Baumann, 2007). The green marketing is a managerial process whose responsibility is to identify, predict and satisfy the consumers and society needs through a sustainable profit (Paco and Raposo, 2009). The purpose of green marketing is to include environmental concern in the marketing endeavors. The environmental concerns are not, most often than not, include in all of the company's activities. Most of the companies use the traditional measuring instruments (profit, ROI, market share) to evaluate the success of green innovations. While in recent years some companies due to being philanthropically follow green procedures, very few of them consider it as a strategic opportunity.

- *Intention to buy Green Products*

According to Ajzen, an intention is the leading factor in a process. They defined intention of a behavior as a determined way to establish mental image with regard to something (Ajzen, 1985). According to Lambert intention of a behavior is defined as a mental image reflecting the decision of an individual to do something. Consequently, knowing the intentions of the consumers can



help the marketers to communicate with them in a better manner. Oftentimes, the intention to buy is used in a determined period of time to obtain the purchasing probability (Eric et al, 2001). According to De et al, the voluntary indexes can be more effective than behavioral indexes to achieve the decision of the consumer since it is possible that the consumers are obliged to buy something (De et al., 2010). In his behavioral model, Ajzen believes that the intention to do something has motivational effects. Consequently, the behavioral intention can be considered as the closest predictor of the behavior. The green shopping means to add environmental aspects to the standards such as the price and efficacy when buying something. The final purpose of green shopping is to reduce environmental effects and increase the profit (Ajzen, 1985).

The Perceived Behavioral Control

The Perceived Behavioral Control is all about the severity or leniency of doing a behavior and the extent to which somebody can control it (Lee, 2010). This variable reflects the perceived internal and external limitations in the theory of planned behavior. The understanding of the factors can act as a facilitative or deliberative motives which are known as controlling belief (Kim, 2002). The factors include internal controlling (information, skills, and individual capabilities), and external controlling factors (opportunities, resources, and facilities). In other words, if an individual obtains the opportunities and facilities, he/she should be able to conduct a behavior successfully. The perceived behavioral control can, directly or indirectly, be effective in doing an activity. Based on what has been said, the following hypotheses are made:

Hypothesis 1. The consumer conscious behavior has effect on the intention of buying green products among the consumers.

Hypothesis 2. The perceived green value has effect on the intention of buying green products among the consumers.

the perceived green risk

The perceived risk and probable danger is all about the unreliability about the place of buying something; somewhere that the individuals consider that buying something will be wrong. The perceived security is in relationship to the threats which can be due to conditions, situations, events related to financial problems or the network resource issues, disclosure and modification of the data, deprivation of service, fraud, waste and misuse of the resources. So, the following hypotheses are considered:

Hypothesis 3. The perceived green risk has effect on the intention of buying green products among the consumers.

Perceived consuming effectiveness

Besides the responsibility of the companies regarding the environmental concerns, the new research opens up new directions in this regard including the role of individuals and their consuming. This concept should not be ignored since 30% to 40% of the environmental issues are directly or indirectly associated with it. Based on the research conducted in the US, 64% of the respondents stated that they thought with buying environmentally friendly products they could help to the environment; however, 17% of the respondents did not trust it. The investigations have shown that the consumers' attitudes and their responses to their surrounding is a combination of their beliefs, the individual's ability to solve the problem among other



psychological factors which are tested in the previous studies (Yeonshin, 2011). The perceived consuming effectiveness (PCE) has the highest explanatory feature. From the perspective of Antil, a person's judgment about PCE is due to his/her behaviors and is regarded as the evaluation of the person by him/herself (Beger and Corbin, 1992). According to Ellen et al. PCE of the environmental concerns is different from the attitudes or concerns and has the horse share of predicting the environmental conscious behaviors such as buying green products (Ellen et al, 1991). Consequently:

Hypothesis 4. *The perceived consuming effectiveness has effect on the intention of buying green products among the consumers.*

Mental norms

Based on the Fishbon and Ajzen's (1975) theory, the mental norms are created based on the social pressures which are perceived by the person and establish a determined behavior. On the word, mental norms mean that whether the behaviors of reputed people are determined one way for an individual or not; it means that the social pressures or others' beliefs determine whether that person do the behavior or not (Ajzen, 1985). So, the mental norms are dependent to the consciousness of an individual of the beliefs of the person he/she likes. In this way, the mental model, as determining factor in identification of individuals' intention, measures the effects of others in this regard. If the norm is that the individuals should do a specific behavior, so there will be more probability that an individual do that specific behavior. Consequently, the following hypothesis can be made:

Hypothesis 5. *The environmental concern has effect on the intention of buying green products among the consumers.*

The following conceptual model can be used for the illustration of the hypothesis in this study:

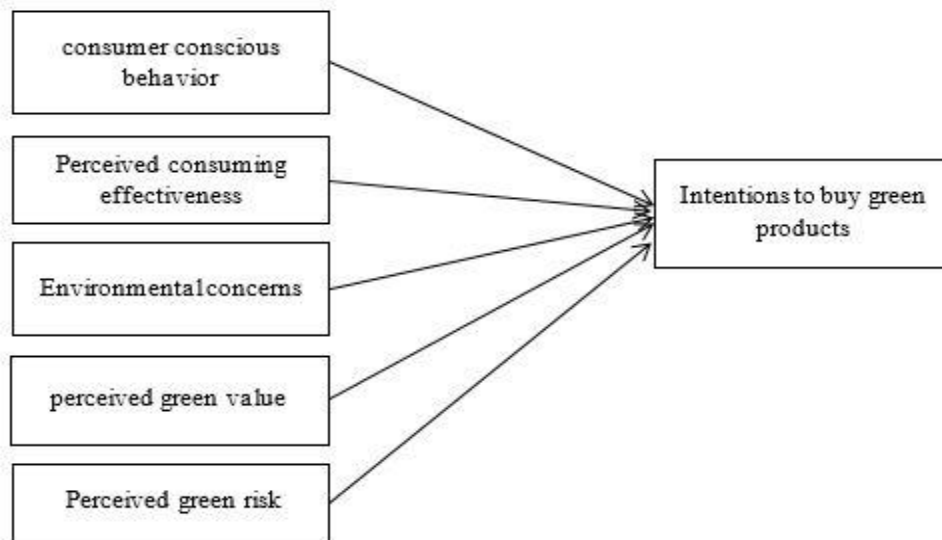


Figure 1. The conceptual model of the current research (Yoshen Chen and Ching-Hsun, 2012; Gary Acharast, 2012; Pouh Kit ting, 2011)

METHODOLOGY

In this study, random stratified sampling was used to select the participants out of 24171 individuals and based on Cochran formula 400 questionnaire were distributed among the students. So, based on Cochran formula in the Islamic Azad University, Science Research Branch 379 students were selected. By adding 10% to this number, it will be 416; so 416 questionnaires were distributed. After collecting the questionnaires, it was revealed that 400 of them can be accepted for data analysis procedures. To be assure about the face validity of the questionnaire, the university experts were asked to raise their opinions about it. For the matter of content validity, CVR was used. In the current study 12 raters rated the content and the CVR was the acceptable 0.56. Cronbach alpha was used to consider the reliability. The Cronbach alpha, the number of related to each variable questions are shown in Table 1. Since the Cronbach alpha is more than 0.7, the test has an acceptable reliability.

Table 1. Reliability test by using Cronbach alpha

Variables	NO. Questions	Questions	Cronbach alpha
consumer conscious behavior	28	1-28	0.850
Perceived green value	5	29-33	0.714
Perceived green risk	4	34-38	0.795
Perceived consuming effectiveness	5	39-42	0.714
Environmental concerns	10	43-52	0.733
Intentions to buy green	5	53-57	0.757
Total	57		0.866



RESULTS

We, first, examine the descriptive statistics of the variables. Then, by using the descriptive statistics of the questionnaire we analyze the variables; showing them in Table to examine these characteristics, the following hypotheses were formulated:

Hypothesis 6. The gender has effect on the on the intention of buying green products among the consumers.

Hypothesis 7. The marital status has effect on the intention of buying green products among the consumers.

Hypothesis 8. The job status has effect on the intention of buying green products among the consumers.

Hypothesis 9. The type of the job has effect on the intention of buying green products among the consumers.

Hypothesis 10. Age has effect on the intention of buying green products among the consumers.

Hypothesis 11. Education degree has effect on the intention of buying green products among the consumers.

Table 2. the demographic characteristics

Demographic characteristics		F	Percent
Gender	Female	165	41.2
	Male	235	58.8
Marital statue	Single	339	84.8
	Married	61	15.2
Job status	employed	144	25.6

	Not employed	36	64
Type of the job	Governmental	38	9.5
	Non-governmental	362	90.5
Age	Under 25	288	72
	26-35	93	23.2
	36-45	8	2
	46-55	9	2.2
	Above 55	2	0.5
Education degree	BA	276	69
	MA	107	26.8
	PhD	17	4.2

The main Model

The path analysis was used through LISREL software to examine the statically significance of the factors. It is worth mentioning that before testing the hypotheses, the fitness of the model should be assured. In this study, confirmatory factor analysis through path analysis was used to examine the factors. This analysis was done through using structural equation modeling in the LISREL software. Before examining the models, one should be assured about the fitness of the measuring model. To do so, the statistics of X^2 and other indexes regarding the fitness of the model should be examined. The model with the following features is appropriate. X^2 to df should be less than 3 and the smaller the better. RMSEA which is close to 0.05 and less than 0.08 (neer to zero), will have higher fitness. Moreover, the p-value should be less than 0.05. If the mentioned criteria will be not obtained, the model need to be modified and then the hypotheses and questions be examined with the modified model.

Model approval

As can be seen, based on the aforementioned criteria, the model has got appropriate fitness. As can be seen, Chi square to df is less than 3. RMSEA is 0.054 and less than 0.08 and the indexes of GFI – AGFI – NFI– IFI – CFI are all close to 0.09. now, the effect of independent variable on dependent variable is investigated by using t-value.

Table 3. Fitness examination

Indexes	Observed
Chi square	3265.72
df	1517
X^2/df	2.15
RMSEA	0.054
GFI	0.88
AGFI	0.86
NFI	0.86
IFI	0.92
CFI	0.92

Testing the hypotheses

After examining and approving the model, the hypotheses and the research model were investigated. In this section, the hypotheses of each question are tested which are summarized in Table 4.

Table 4. the summary of the results of hypotheses testing

NO.	Hypothesis	Result
1	Effect of conscious behavior and intention to buy green	Supported
2	Effects of perceived green value and intention to buy green	Supported
3	Effects of perceived green risk and intention to buy green	Rejected
4	Effects of perceived effectiveness and intention to buy green	Supported
5	Effects environmental concerns and intention to buy green	Rejected
6	Effects of gender and intention to buy green	Rejected
7	Effects of marital status and intention to buy green	Approved
8	Effects of job status and intention to buy green	Rejected
9	Effects of type of the job and intention to buy green	Supported
10	Effects of age and intention to buy green	Rejected
11	Effects of education degree and intention to buy green	Supported

DISCUSSION AND CONCLUSION

Many of the trading organizations state that they obey the strategies of the environmentally friendly followers as a way to green marketing. This approach will provide opportunities, while at first it may be with high charges, in lone term it will be cost effective. Moreover, the marketers believe that by producing environmentally friendly products they can allocate higher price to their products. In terms of distribution, it should be noted that obtaining the distributors' support will be important for green marketing. Moreover, the earth is the planet we live on and it is highly crucial for each and every people to pay their utmost attention to protect the environment; as like the other countries whose laws are very rigid in this regard Iran should legislate the same laws to protect the environment. Given that, doing research on the attitudes of the consumers about green marketing has got important role in the world. That said, in the current study we investigated the influential factors on the intention to buy green products. As such, the factors like consumer's consciousness, the perceived consuming effectiveness, the perceived green value had effects on the intention to buy green products. Consequently, it is suggested that the companies encourage their consumers to buy green products; to achieve competitive advantages; moreover, the companies need to make their consumers aware about the green products. Moreover, to increase the perceived consuming effectiveness of, marketers are encouraged to work with appropriate activities to affirm the role of each individual on the environment through purchasing behavior and to strengthen this mentality in the consumer, which each consumer can take in the direction solving environmental issues. On top of this, the marketers should increase the perceived value of the consumers about the behavior of purchasing green. It can be done through marketing and advertising programs which are very important for the environment. Furthermore, the demographic features were investigated regarding the purpose of the study in which the people who were married, had governmental job, and PhD degree were the most concern about buying green products. Consequently, the marketers should focus on those people who are single, have non-governmental job, and their education degree is lower than PhD, and used instructional commercial programs to increase the awareness of the consumers.



References

- Ajzen, I. (1985). From intentions to action: a theory of planned behavior. In J. Huh, and J. Beckman (Eds.), Will; performance; control (psychology); motivation (psychology) (pp. 11-39).
- Berger, I.E., and Corbin, R.M. (1991). Perceived Consumer Effectiveness and Faith in Others as Moderators of Environmentally Responsible Behaviors, *Journal of Public Policy and Marketing*, 11(2), 79-89.
- Chan, Ricky Y.K (2001). Determinants of Chinese Consumers Green Purchase Behavior, *Psychology and Marketing* 18(4), 389-413.
- De, C., Patrick de, P., Maggie, G. (2010). Relationship Quality and Purchase Intention and Behavior: The Moderating Impact of Relationship Strength, *Journal of Business and Psychology*, 25(1), 87-98.
- D'souza, C., Taghian, M., Lamb, P. (2006). An Empirical Study on the Influence of Environment Labels on Consumers, *An International Journal of Corporate Communications*. 11(2), 162-173.
- Ellen, P. S., Wiener, J. L. and Cobb-Walgren, C. (1991). The role of perceived consumer effectiveness in motivating environmentally conscious behaviors. of *Public Policy and Marketing* 10(2), 102-117.
- Eric g, L., Nancy lunne, H., Shannon m, B. (2001). The impact of job satisfaction on turnover intent: A test of a structural measurement model using a national sample of worker.
- Fishbein, M., abd Ajzen, I. (1975). Belief, attitudes, intention and behavior: An introduction to theory and research, Reading, MA: Addison-Wesley.
- Gary, A., Carolina A., Helena Martins G. (2012). Re-examining green purchase behavior and the green consumer profile: new evidences, *Management Decision*, 50(5), 972 - 988.
- Grant, J. (2008). Green marketing, *Journal of Strategic Direction*, 24(6), 25-27.
- Hokey, M., William P. (2001). Green purchasing practices of us firms. *International journal of operations and production management*, 21(9), 1222-1238.
- Kim, Y. (2002). The impact of personal value structures on consumer pro-environmental attitudes, behaviors and consumerism: A cross-cultural study. Doctoral Dissertation, College of Communication Arts and Sciences, Michigan State University.
- Lee, K. (2009), Gender differences in Hong Kong adolescent consumers' green purchasing behavior, *Journal of Consumer Marketing*, 26(2), 87-96.
- Paçoand, P. (2009). "Green" segmentation: an application to the Portuguese consumer market, *Marketing Intelligence and Planning*, 27(3), 364-379.
- Papadopoulos, I., Karagouni, G., Trigkas, M., and Evanthia, P. (2010). Green marketing, *EuroMed Journal of Business*, 5(2), 166-190.



- Phuah, K T. (2011). Consumers' Intention to Purchase Green Foods in Malaysia, International Conference on Innovation, Management and Service. Decision, 50(3).
- Rex, E., and Baumann, H. (2007). What green marketing can learn from conventional marketing, Journal of Cleaner Production in Sustainable Production and Consumption: Making the Connection, 15(6), 567-576.
- Yeonshin, K. (2011). Understanding Green Purchase: The Influence of Collectivism, Personal Values and Environmental Attitudes, and the Moderating Effect of Perceived Consumer Effectiveness, Seoul Journal Of Business 17(1): 65-92.
- Yu-Shan Chen Yu and Ching-Hsun C. (2012). Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust, Management Decision, 50(3), 502 – 520.

