<u>Case Report</u>

The effect of green marketing mix on purchase decision-making styles of customers

Golrokh Azimi[1]and Mohammad Shabani[2]

[1]Department of financial management, sanandaj branch,
Islamic Azad University, sanandajiran
[2]Department of financial management, sanandaj branch,
Islamic Azad University, sanandajiran

ABSTRACT

The purpose of this study is to investigate the effect of green marketing mix on purchase decision-making styles of customers in appliance stores in Sanandaj. In this study, a standard questionnaire was used to collect the data of independent variable and assess the dependent variable. The present study is applied in terms of purpose and is also descriptive-survey in terms of data collection. The customers of appliance stores in Sanandaj were studied as the statistical population of this study. This population included 350 consumers of these stores that were studied by convenience random sampling. To analyze the statistical data, different methods of descriptive-inferential statistics including mean, standard deviation, correlation coefficients and regression were used. Accordingly, the obtained results show that green marketing mix, green product, green price, green promotion and green distribution affect purchase decision-making styles . Green distribution with a coefficient of 0/429, green promotion with a coefficient of 0/366, green price with a coefficient of 0/310 and green product with a coefficient of 0/305 are at the first to fourth places of marketing in relation to purchase decision-making styles.

Keywords: green marketing mix, decision-making styles, appliance stores, Sanandaj

1.INTRODUCTION

One of the important issues in the study and identification of consumer behavior is the process of purchase decision. Most of the organizations which study the purchase behavior of consumers attempt to gain information about what consumers buy and also the reason, number, type and place of their purchase. However, unlike the type, number and place of purchase, it is not an easy task to find information about the reasons of consumer or buyer's purchase behavior, because the answer to this question is in the mind of consumer or buyer. In general, purchase is an activity that is performed by consumer with desire and has the value to experience the process of decision-making and its effect on consumer. Purchase is a way to obtain the necessary goods or services. On the other hand, the process of purchase decision-making by consumers is becoming a complex phenomenon. Most big producers and sellers provide an extensive collection of goods for consumers and also these sellers design their stores in such a way to encourage consumers to spend more money. More stimuli cause more excitement inconsumers to observe and buy. (Delkhah et al 1393)

The process of purchase decision making is affected by various factors such as: cultural-social and team factors, psychological and personal factor, situational factors and factors related to marketing mix.Spores and Kendall (1986) in their model put a big emphasis on the values and mental features of consumer in decision making

style and defined 8 mental features or consumer styles. (Rusta et al 1388). These 8 different styles are:

- Perfectionist and sensitive to high quality (demands high quality)
- Brand-oriented and sensitive to brand (demands the quality of price and quality)
- Fashion-oriented (stylish) and sensitive to new things
- Hedonist and demands to buy for fun and entertainment
- Sensitive to price (demands the quality of received quality value against the paid money)
- Reactive and careless
- Confused with lots of options
- Practice-oriented and loyal to a brand

Today, marketing on the basis of social and environmental considerations is one of the most important activities of companies. Green marketing is one of the areas of marketing that has allocated much discussion to itself in the Press. Green marketing is also known as environment marketing or social marketing. It is a kind of social marketing attitude and approach that strengthens and maintains ethical, social, human, and environmental values in all processes, tools, marketing and selling behaviors for durability and stability in business and market. (Safari et al 1393)According to the literature and also the lack of a study on the importance of green marketing mixes in different purchase decision making styles the buyers of appliance in Sanandaj, this study aims to answer this main question: to what extent the amount of green marketing and its mixes are important in different purchase decision making styles of customers in appliance stores of Sanandaj?

2.Theoretical foundations and background

Green product: green product has the following ability of use, assembly, and re-production;the materials that can be recycled were used in its production. It has efficiency in terms of pollution than other goods. In general, it is a product that causes less environmental damages and losses. (Amir Shahi et al 1392)

Green promotion: Banerji defined green promotion as an advertising that has at least one of these criteria: 1. expresses the relationship between a product and service with environment explicitly or implicitly. 2. promotes a kind of green life. 3. expresses the environmental sense of duty of the company.Green price: consumer satisfaction is directly influenced by price perception and indirectly by fair price/. (Cao 2011)Green distribution: distribution increases the environmental effects of products and for this reason is always examined to satisfy and meet environmental demands. Natural environment due to local and global environment problems in recent years has become a challenging subject for trade organizations.Purchase decision making styles: Spores and Kendall defined the decision making style of consumer as: it is a mental attitude that explains the orientation of consumer toward selection. Also, they suggested consumers to select a purchase personality that is relatively stable and can be predicted by similar methods like psychologists that look at personality at its most extensive mode. (Jazni et al 1389)

Delkhah et al 1393 conducted a study entitled the study and identification of purchase decision making styles of customers in chain stores. The study results showed that 5 styles of decision making as: perfectionist, hedonist, practice oriented, confused in lots of options and sensitive to price among the customers of Etka department stores can be recognized and the decision making styles of sensitive to price, fashion oriented and reactive cannot be recognized among them. Also, the decision making styles of sensitive to price has the highest priority and the decision making style of confused has the lowest priority.
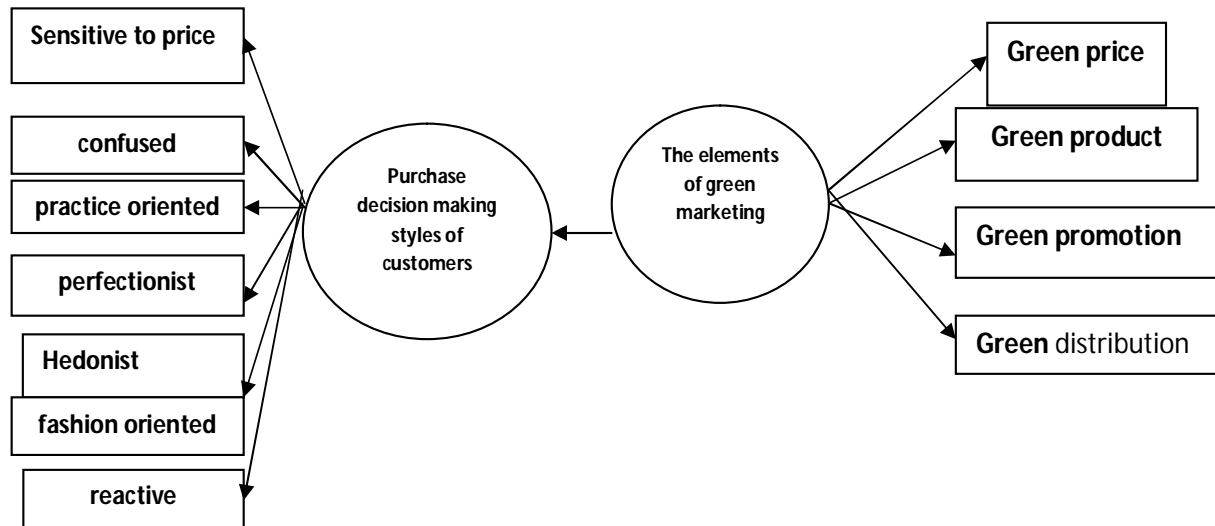
Safari et al 1393 conducted a study entitled the effect of the elements of green marketing mix on customer loyalty toward company's brand. The results of studying the research hypotheses show that the elements of green marketing mix affect the dimensions of customer loyalty to the

company's brand and the effectiveness model of fitting the elements of green marketing mix has a suitable fitting according to the fitting indicators of structural equations. Amir Shahi et al 1392 conducted a study entitled the study of the effect of green marketing tools on consumer behavior. The study results showed that these tools affect the behavior of different consumer groups, advertising and the environmental brand and the effect of each one on different consumer groups, except the awareness of environmental brand is different with the increase of these three tools increases their behavior.According to the study results, environmental brand is the most effective tool of green marketing on the behavior of consumers.

2.1.Main hypothesis

In different purchase decision making styles, the buyers of appliance in Sanandaj, the importance of green product mix has a significant difference.
In different purchase decision making styles, the buyers of appliance in Sanandaj, the importance of green price mix has a significant difference.
In different purchase decision making styles, the buyers of appliance in Sanandaj, the importance of green promotion mix has a significant difference.
In different purchase decision making styles, the buyers of appliance in Sanandaj, the importance of green distribution mix has a significant difference.

2.2. Conceptual model

Source: dimensions and styles of consumer decision making (Spoles and Kendall 1986)

3.Research methodology

This study is applied in terms of purpose and is correlation in terms of method. It is also descriptive in terms of data collection method (research plan) and described the features of the sample and then generalized them to the statistical population. There are several groups of descriptive studies and this study is survey.
A survey study describes, predicts and analyzes the relationship between variables and according to the time of data collection, it is of cross sectional studies. In this study, the questionnaire

method will be used. In fact, this study collects data to describe the current conditions and test the hypotheses to answer the research questions. An unlimited number of customers in appliance stores of Sanandaj were studied as the statistical population.
Convenience sampling method was used for sampling. Sometimes, it is difficult and even impossible to select sample randomly or non-randomly. In such conditions, the researcher uses convenience sampling. Statistical sample in this study is a part of statistical population. Sampling

method is convenience random method. Questionnaires were distributed among the people in appliance stores of Sanandaj. Since the statistical population of this study, the consumers in appliance stores of Sanandaj, is unlimited thus in this study Cochran formula (unlimited population) was used for sampling.

According to the above sampling formula, the number of samples is 384 consumers in appliance stores of Sanandaj. But, the sample size was increased 20% for the removal of the effects of incomplete and lost questionnaires. Accordingly, 461 questionnaires were distributed among the population and 356 questionnaires were returned.

Finally, 350 questionnaires were considered suitable for statistical analysis.

3.1.The reliability of the questionnaire

In this study, Cranach alpha coefficient was used for pre-test in order to obtain reliability for green marketing mix questionnaire and purchase decision making styles of customers. So those, before the final performance, 30 subjects of the research sample were selected randomly. Then, the questionnaires were given to them and by using the obtained data and SPSS 20 software, reliability was calculated through Cranach alpha method that shows the internal stability and consistency of the questionnaire.

Table 1. The amount of Cranach alpha for green marketing mix questionnaire

Total coefficient	Cronbach alpha	Number of questions	Variable	row
0/915	0/837	6	Green product	1
	0/851	3	Green price	2
	0/799	6	Green promotion	3
	0/807	4	Green distribution	4

Table 2. The amount of Cranach alpha for purchase decision making styles questionnaire

Cranach alpha	Number of questions	concept
0/886	10	purchase decision making styles

According to the above table, in this questionnaire, the amount of alpha is more than 0/7 for purchase decision making styles that shows the high reliability of the questionnaire.

4.Data analysis

For data analysis, the statistical software of SPSS was used. Kolmogrov-Smirnov test was used to determine the normality or non-normality of data and finally, Pearson correlation coefficient was used to accept or reject the hypotheses.

4.1.The study of the normality of data by using Kolmogrov-Sminirnov test (k-s)

To use the statistical techniques, first the normal or non-normal distribution of the collected data should be determined. In the case of the normal distribution of the collected data, parametric tests can be used to test the hypotheses and in the case of non-normal distribution of the collected data, non-parametric tests can be used. For this purpose, in this stage the results of Kolmogrov-Smirnov test about each one of the independent and dependent variables are examined and according to the obtained results appropriate tests are selected to study the accuracy of research hypotheses.

H0: The data of variable I have normal distribution

H1: The data of variable I do not have normal distribution

According to the results of the following table, if the significance level is more than the error rate, the null hypothesis will be concluded and if the significance level is less than the error rate hypothesis 1 will be concluded.

Table 3. The results of testing the normality of independent variables

Green distribution	Green promotion	Green price	Green product	
□□	□□	□□	□□	N
□$_1$□$_1$	□□□□	□$_1$□□□	□□□□□	mean
□□□□$_1$	□□□□□	□□□□	□□□$_1$	Standard deviation
□□□	□□□	$_{11}$□$_1$	$_1$□□	statisticsZ
□□	□□□	□□□	□$_1$□	Significance level
0/05	0/05	0/05	0/05	Error rate
H_0	H_0	H_0	H_0	Confirmation of hypothesis
normal	normal	normal	normal	conclusion

Table 4. The results of testing the normality of dependent variables

Purchase decision making styles	
□□	N
□□□□□	Mean
□□□□□	Standard deviation
$_{11}$□□	statisticsZ
$_1$□□	Significance level
0/05	Error rate
H_0	Confirmation of hypothesis
normal	conclusion

According to the results of the above table, since the significance level for all factors is more than the error rate 0/05, thus these variables have normal distribution and parametric tests are used to test the hypotheses.

4.2. Testing the research hypotheses
Main hypothesis: Green marketing mix affects purchase decision-making styles.

Table 5. The results of Pearson correlation coefficient test

Green marketing mix		
0/384	Pearson correlation	Purchase decision-making styles
0/000	Sig	
350	N	
$p < 01$[1]		

According to the results of the above table, since the significance level is less than the significance level 0/01, hypothesis H0 is rejected and hypothesis H1 (research hypothesis) as the relationship between purchase decision making styles and green marketing mix is accepted. As can be seen, there is a direct and significant relationship between purchase decision making styles and green marketing mix at 99% level and its correlation coefficient is equal to 0/350.

Sub-hypotheses

First hypothesis: Green product affects purchase decision-making styles.

Table 6. The results of Pearson correlation coefficient between purchase decision-making styles and green product

green product		
0/305	Pearson correlation	Purchase decision-making styles
0/000	Sig	
350	N	
p < **01/0 (source: research data)		

According to the results of the above table, since the significance level is less than the significance level 0/01, hypothesis H0 is rejected and hypothesis H1 (research hypothesis) as the relationship between purchase decision making styles and green product is accepted. As can be seen, there is a direct and significant relationship between purchase decision making styles and green product at 99% level and its correlation coefficient is equal to 0/305.

Second hypothesis: Green price affects purchase decision-making styles.

Table 7. The results of Pearson correlation coefficient between purchase decision-making styles and green price

green price		
0/310	Pearson correlation	purchase decision-making styles
0/000	Sig	
350	N	
p < **01/0		

According to the results of the above table, since the significance level is less than the significance level 0/01, hypothesis H0 is rejected and hypothesis H1 (research hypothesis) as the relationship between purchase decision making styles and green price is accepted. As can be seen, there is a direct and significant relationship between purchase decision making styles and green price at 99% level and its correlation coefficient is equal to 0/310.

Third hypothesis: Green promotion affects purchase decision-making styles.

Table 8. The results of Pearson correlation coefficient between purchase decision-making styles and green promotion

green promotion		
0/366	Pearson correlation	purchase decision-making styles
0/000	Sig	
350	N	
p < **01/0		

According to the results of the above table, since the significance level is less than the significance level 0/01, hypothesis H0 is rejected and hypothesis H1 (research hypothesis) as the relationship between purchase decision making styles and green promotion is accepted. As can be seen, there is a direct and significant relationship between purchase decision making styles and green promotion at 99% level and its correlation coefficient is equal to 0/366.

Fourth hypothesis: Green distribution affects purchase decision-making styles.

Table 9. The results of Pearson correlation coefficient between purchase decision-making styles and green distribution

green distribution		
0/429	Pearson correlation	purchase decision-making styles
0/000	Sig	
350	N	
$p <^{**}01/0$		

According to the results of the above table, since the significance level is less than the significance level 0/01, hypothesis H0 is rejected and hypothesis H1 (research hypothesis) as the relationship between purchase decision making styles and green distribution is accepted. As can be seen, there is a direct and significant relationship between purchase decision making styles and green distribution at 99% level and its correlation coefficient is equal to 0/429.

5.Research suggestions
- The more use of TV advertising and the promotion of green product
- Efforts to use and recycle products and inform in this field
- Advertising and informing about the distribution of products
- The promotion of quality and efforts to increase the lifetime of products
- The use of ISO 14000 guidelines and other environmental ISO(s).
- Non-stop efforts to reduce the price of products and promote their quality
- The use of modern scientific achievements align with green distribution for the supply of green product
- Performing necessary studies in the field of green marketing and its benefits for the suppliers of green goods and services.
- The use of all efforts, modern facilities and technologies for appropriate design, production, pricing, promotion and distribution.

- The identification of the target market and the appropriate use of green marketing mix to attract the target market.
- Paying attention to environment and creating green marketing department and designing the structure and mobilization of resources and appropriate facilities for it.

6.Suggestions for future studies
- The study of other effective factors on customers' decision making styles.
- Performing a study with this title among the consumers of other goods,
- Testing this model among different sex groups and comparing the results.
- The study of the relationship between green marketing and attitudes of the consumers and customers of industrial and non-industrial goods and comparing them according to the results.

REFERENCES
Persian references
1. Amirshahi M, Yazdani H, AlipourE, (1392). The effect of green marketing tools on consumer behavior. Journal of Modern Marketing Research, third year, Number4
2. Jazni N, AzimiSh, AsgarHalvayiA (1389). purchase decision making styles of customers based on the Sproles and Kendall model., Business Management Perspective, Volume 9, Number 3
3. Haghighi M, Khalil M, (1390). The study of the status of green marketing in consumer

purchasing behavior. organizational culture management, Volume 9, Number 2

4. Delkhah J, Amooyi I, VahidMoghadam A, (1393). To identify the customer purchase decision making styles in chain stores (case study: the customers of Etka department stores in Tehran). Journal of Modern Marketing Research, fourth year, Number 2

5. Ranayi KordshuliH, Yari BuzanjaniA, (1391). The effect of the green marketing mix on green purchase decisions of consumers (Case Study: the Consumers of Pegah dairy products company in the city of Shiraz). Journal of Modern Marketing Research, 2ⁿᵈ year, Number 1

6. Ramezanian MR, Esmail Pour R, Tondkar H, (1389). The effect of green marketing mix on the purchase decision making process of customers. (Case Study: theconsumers of CFL in Rasht). Journal of Business Management, Volume 2, Number 5.

7. Ramezanian M, Esmail Pour R, Tondkar S, (1389). The effect of green marketing mix elements on the purchase behavior of the consumers of CFL in Rasht . Journal of Business Management, Number 5

8. Rusta A, Venus D, Ebrahimi A, (1388). Marketing management: Samt, Tehran.

9. Safari A, Rashidpour A, Hussein Zadeh S, (1393). The effect of green marketing mix elements on brand loyalty of customers (Case study: Naghshe Jahansugar company). Journal of Modern Marketing Research, 4ᵗʰ year, Number 2

10. KotlerPh, Armstrong G, . (2009). Marketing principles. Translated by Ali Parsayian, Tehran: Adbestan. first edition

11. Nakhaee A, Kheyri B, (1391). The effect of selected factors on purchase intention of green products. Journal of Marketing Management, number 15

12. Elahi M, Yaghubi R, (1390). The introduction of green marketing tools and their impact on the purchase behavior of consumers. Journal of

the studies of improvement and change management, 21ˢᵗ year, Number 6

Latin references

13. Bae, Sungwon. (2004). Shopping pattern Differences of Physically Active Korean and American University Consumers for Athletic Apparel.phD dissertation, Department of Sport Management, Recreation Management and Physical Education, Florida State University.

14. Belch, George. (2011). Advertising and promotion. New York: McGraw Hill.

15. Cao, X. (2011). Does It Pay to Be Green? An Integrated View of Environmental Marketing with Evidence from the Forest Products Industry in China. A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

16. D'souza Clare, Taghian Mehdi, Lamb Peter. (2006). An Empirical Study on the Influence of Environment Labels on Consumers. An International Journal of Corporate Communications. Vol.11, No. 2, pp.162-173.

17. Grant, J. (2008). Green marketing, Strategic direction , 24 (6), pp: 25-27.

18. Han, H., Hsu, L. T. J, Lee, J. S. &Sheu, C. (2011). Are lodging customers ready to go green? An examination of attitudes, demographics, and eco-friendly intentions. International Journal of Hospitality Management, 30, pp. 345–355.

19. Kamaruddin, A. R., &Mokhlis, S. (2003). Consumer Socialization, Social Structural Factors and Decision-making Style: A Case Study of Adolescents in Malaysia. International Journal of Consumer Studies. Vol. 27. No. 2, PP. 145-156.

20. Kennedy, John F. (2008). MERCURY Cleanup for Broken CFLs, Environmental Health Perspectives, 116(9).

21. KotabMassaki and KristianHelsen . (2004),Global Marketing Management, John Wiley &Sons Inc , P:144,157.

22. Lee, Kaman. (2009). Opportunities for green marketing: young consumers. Marketing

intelligence & planning, Vol. 26 , No.6, pp 573-586.

23. Leo, C., Bennett, R., and, Härtel, C. (2005). Cross-Cultural Differences in Consumer Decision Making Styles", Cross Cultural Management Journal, 12, (3) pp.32-51.

24. Peatti Ken. (2001). Environmental Marketing Management. Pitman Publishing.

25. Polonsky Michael Jay and Rosenberger III Philip. (2001), Reevaluating Green Marketing: a Strategic approach Journal of Business /September October.

26. R\ahbar, E and Abdul Wahid, N. (2011). Investigation of green marketing tools'effect on consumers' purchase behavior. BUSINESS STRATEGY SERIES, Vol. 12 No. 2 , pp. 73-83.

27. Solomon, Michael R. (2011). Consumer Behavior. 9th ed. Boston, Mass; London: Pearson.

28. Soonthensmai, Vuttichat. (2001). Predicting Intention and Behavior to Purchase Environmentally Sound or Green Products Among Thai Consumers: An Application of the Theory of Reasoned Action. The Wayne Huizenga Graduate School of Business and Entrepreneurship, Nova Southeastern University, DBA, pp. 1-264.

29. Suplico, L. T. (2009), Impact of green marketing on the students purchase decision, Journal of International Business Research, 8 (2), PP: 71-81.

30. Thomas O'Guinn, Chris Allen and Richard J. Semenik. (2008). Advertising and Integrated Brand Promotion. Cincinnati, Ohio: South-Western.