

THE EFFECT OF ENVIRONMENTAL VARIABLES ON THE GREEN PURCHASING BEHAVIOR OF IRANIAN YOUTH (COMPARISON OF TWO GROUPS OF GIRLS AND BOYS)

Mohammad Hossein Pooraskari*¹, Marjan Parvaresh Mohseni², Eslam Shahriary³

1. Master of Business Administration-Marketing, Shahid Bahonar University 2. Master of Business Administration-Marketing, Alzahra University,

3. Master of Business Administration-Marketing, Shahid Bahonar University Corresponding Author email: Mohammad.63313@gmail.com

ABSTRACT: Over time consumers become more aware of environmental issues and appeal in their purchase behavior and consumption. No doubt that this change in behavior is the result of some effective factors and is done during different stages and is different in via sections and groups. Out of this the study aimed to understand gender differences in environmental concerns, understanding the effectiveness of environmental behavior, effects by peers, understanding the seriousness of environmental issues, understanding the environmental responsibility, environmental attitudes and also green purchase behavior of Iranian consumers was carried out. Data of this study was collected by using a questionnaire and among the students of Kerman University. The results of mean equality tests between girls and boys showed no significant difference between the mean of the two communities to environmental variables. Also regression test results indicate that among the environmental variables, environmental concern predict the significance of green purchasing behavior of Iranian girls and in opposite understanding the effectiveness of environmental behavior is a significance predictor for green purchasing behavior of Iranian boys. In the end, according to the results obtained, managerial implications and suggestions for managers and other researchers are given.

Keywords: green marketing, green consumers, green shopping behavior, environmental variables

INTRODUCTION

Over the past few decades, the world has witnessed significant growth in the number of news and actions taken by pro-environment groups with the focus on the issue of environmental degradation [1]. Studies show that consumers also show their concerns about the environment in different ways on their buying behavior [2]. Recently consumer of green (green consumer protection point of view) also has emerged in the Asian region [3] and consumer's awareness of environmental issues is increasingly on the rise [4]. Economic growth in Asia also led to a rise of consumers with greater financial resources, compared with previous generations tended to pay more for their purchases [5]. Therefore, determination and predicting the factors affecting the buying behavior of the

consumers is rising important [6,7]. Indeed, the youth group with the potential to create a great citizenship in the community to support the efficient gathering devoted to the environment [8]. Previous studies have found that young people in the aging generation are more ready to accept new ideas and innovative [9]. Consumers interested in the environment are one of the most important parts of the market that marketers should pay attention to it [10]. Environmental interests is one of the personality traits that shown up with trends towards reduction in environmental issues, supporting the government's investment in environmental protection, voluntary participation in environmental activities, and giving priority to policies Environmental [11]. So this study attempts to reveal the Iranian market potential for green products to domestic and international

green marketers by examining the gender differences in the green shopping behavior of Iranian consumers.

The environmental beliefs and attitudes

There are several Environmental (Green) variables that can be used to predict or perception of consumer behavior models [13.12]. Despite the large support of the claim that attitudes and values predict behavior, there is evidence that environmental attitudes are suitable predictive for green purchasing behavior [14]. Tikaet all (2000), in their Western model found that women have a more positive attitude about the environment than men[15]. Zelzenyet all (2000) suggested other evidence that women have stronger environmental attitudes than men [16]. So the first hypothesis is as follows:

First hypothesis: Iranian girl consumers have higher environmental attitudes compared with boys.

Environmental concern

Environmental concerns can be defined as an attitude toward the environmental consequences. Environmental concern effects on the environment friendly behavior. Bang et all (2000), in their study found that people who are more concerned about the environment compared to others, are more willing to spend money on renewable energy (17).However, studies show that women are more concerned about environmental issues than men [18]. Thus the second hypothesis is formulated as follows:

Second hypothesis: Iranian girl consumers are more environmentally concerned compared with boys.

Understanding the effectiveness of environmental behavior

Understanding the effectiveness of environmental behavior states, those that take environmental behavior, in turn, believe that their efforts will lead to positive changes [14]. The results show that people who are concerned about the environment, when they feel that their individual actions can be useful in resolving environmental issues, show their more actively behavior [19]. In this study, it is assumed that:

Third Hypothesis: Iranian girl consumers have more understanding of the effectiveness of environmental behavior than boys.

Understanding the seriousness of environmental problems

Some researchers have assessed listeners about understanding the effects of mass media on the seriousness of the environmental hazards. Moser and Yoozel (2003), claim that the mass media news about pollution levels effect the audience's understanding on the seriousness of the contamination issues [20]. Few studies have examined the effect of gender differences on the perception of the seriousness of environmental issues. A study in the field of environmental risk perception suggests that women have more perceived vulnerability than men of global warming and the loss of resources [21]. According to the literature, it is assumed that:

Fourth hypothesis: Iranian girl consumers understand the seriousness of environmental issues more compared with boys.

Peers affect (fellow's effect)

Peer effect points to the impact of social environment on the green shopping behavior of consumers [1]. Chen Yu and Siok (2002) found that conformity is an important stimulus to buy certain clothing among adolescents and young people [22] Previous studies have shown that compared to men, women give more importance to equality, coordination and communication [23].Also it is found that women are more affected under the pressure of coordination with the community than men [22]. The fifth research hypothesis arises as follows:

Fifth hypothesis: Iranian girl consumers have more affected of their friends than boys in their green purchasing behavior.

Perceived environmental responsibility

Recent reports suggest that people over the past decade have earned more environmental knowledge and awareness about environmental issues. Thus their conception of individual responsibility in environmental protection is negligible[24]. Zelzenyet all(2000), in his review found that women compared to men perceived

more personal responsibility for the environment[16]. In this study, it is assumed that:

Sixth hypothesis: Iranian girl consumers have a higher environmental responsibility than boys.

Green shopping behavior

Green shopping behavior refers to the types of goods that:

- Are beneficial. be nevolent for the environment.
- Are Renewable. Storable.
- Are responsible. sensitive to ecological concerns [18].

In literature there is no specific knowledge about the effects of gender on green purchasing behavior of consumers, particularly Iranian young people. Based on available Western literature to women compared with men are significantly more involved in environmental behavior especially green consumption [25.26], it is assumed that: Seventh hypothesis: Iranian girls

consumers compared to boys exhibit more green purchase behavior.

RESEARCH METHODOLOGY

Since the purpose of this study was to investigate the effect of gender on green purchasing behavior of Iranian consumers, and add to applied knowledge in this field, in terms of the applicative purpose, and in terms of data collection, is descriptive and correlational. Data for this study collected from the University of Kerman students through questionnaires. Indicators of this questionnaire were brought in Table 1, along with the calculated reliability using Cronbach's alpha coefficient. From the total of 500 questionnaires distributed, 413 questionnaires (224 individuals, equivalent of 54.2% of boys and 189 individuals, equivalent of 45.8 %of girls) were returned and usable.

Table 1. reliability of the variables used in the questionnaire

Variables	Green purchasing behavior	Environmental attitudes	Understanding the effectiveness of environmental behavior	Understanding the Environmental responsibility	Environmental concerns	Understanding the seriousness of environmental issues	The effect of peers
Reliability coefficient	0.84	0.85	0.73	0.75	0.75	0.77	0.89

FINDINGS

t-test results (Table 2) show that compared to girls, boys score higher on environmental attitudes, environmental concerns and green buying behavior. But it is clear with the obtained coefficients that the claims cannot be generalized to the whole society. On the other

hand, girls have exhibited higher perceived environmental responsibility, understanding the effectiveness of environmental behavior, peers effect and understanding the seriousness of environmental issues. But coefficients evidence that these differences are not statistically significant and the results cannot be generalized to the whole society.

Table 2. Results of tests of mean equality between girls and boys

	t- test						Leven Test			
	95% confidence interval for mean difference		mean		mean difference	Sig.	df	t	Sig.	f
	Upper limit	Lower limit	male	female						
Environmental attitudes	0.27	-0.16	6.07	6.02	0.05	0.630	399	0.482	0.951	0.004
Environmental concerns	0.37	-0.18	5	4.9	0.1	0.488	401	-0.695	0.148	2.1
Understanding the seriousness of environmental issues	0.022	-0.27	6.4	6.0	-0.1	0.095	401	-0.673	0.088	2.9
Perceived environmental responsibility	0.13	-0.33	5.1	5.2	-0.1	0.406	358	-0.832	0.373	0.80
The effect of peers	0.17	-0.41	3.7	3.8	-0.1	0.415	404	-0.816	0.114	2.50
Understanding the effectiveness of environmental behavior	0.06	-0.36	5.2	5.4	-0.2	0.155	406	-0.426	0.798	0.065
Green shopping behavior	0.43	-0.12	4.6	4.4	0.2	0.279	405	1.083	0.509	0.437

Pearson's correlation coefficient was used to assess the relationship between environmental variables and green purchase behavior (Table 3). In regression analysis of the boys, the model contains six variables, was significant in general (Sig = 0.000, R² = 0.22). As Table 4 shows that understanding the effectiveness of environmental behavior is a significant predictor for Iranian boys' green purchasing behavior but the effect of peer variables, environmental responsibility, environmental attitude, and environmental concerns and understanding the seriousness of environmental issues are not relevant variables to predict purchasing behavior of Iranian boys' green

purchasing behavior. In the case of girls, the model contains six variables, in general, was significant in general (Sig = 0.000, R² = 0.23). The findings of the girls (Table 5) indicates that the variable understanding the seriousness of environmental issues, environmental attitudes, understanding the effectiveness of environmental behavior, environmental responsibility and peer effects are not suitable predictive for green shopping behavior of girls. However, environmental concerns, with beta coefficient 0.35, is a significant predictor for the green buying behavior of Iranian girls.

Table 3: Results of the Pearson correlation coefficient

Variable	girls		boys	
	Sig	Correlation coefficient value	Sig	Correlation coefficient value
Understanding the effectiveness of environmental behavior	0.040	0.15*	0.000	0.37**
Environmental attitudes	0.181	0.10	0.003	0.20**
Environmental concerns	0.000	0.41**	0.000	0.28**
Understanding the seriousness of environmental issues	0.089	0.13	0.000	0.28**
The effect of peers	0.000	0.31**	0.010	0.17*
Environmental responsibility	0.018	0.18*	0.017	0.16*

** significant at 0.01
* significant at 0.05

Table 4. The results of multiple regressions for boys

Variable	Sig	T	beta
The effectiveness of environmental behavior	0.000	4.113	0.296
Environmental attitudes	0.225	1.217	0.098
Environmental concerns	0.072	1.807	0.152
Understanding the seriousness of environmental issues	0.196	1.298	0.099
The effect of peers	0.434	0.784	0.065
Understanding the Environmental responsibility	0.988	0.015	0.001

*relevant variable :green purchasing behavior -0.22=R² -number :224

Table 5. The results of multiple regression for girls

Variable	Sig	T	beta
The effectiveness of environmental behavior	0.000	3.643	0.352
Environmental attitudes	0.277	1.091	0.096
Environmental concerns	0.611	0.510	0.044
Understanding the seriousness of environmental issues	0.172	-1.372	-0.115
The effect of peers	0.102	1.644	0.155
Understanding the Environmental responsibility	0.318	1.003	0.092

*relevant variable :green purchasing behavior -.23=0R² -number :189

DISCUSSION AND CONCLUSION

This study aimed to understand gender differences in environmental concerns, understanding the effectiveness of environmental behavior, effect by peers, and understanding the seriousness of environmental issues, environmental responsibility, environmental attitudes and green shopping behavior of consumers. On track to achieve the main objective of the study, a questionnaire was used to collect data, and analyzing of the collected data and testing of hypotheses, using t-tests and multiple regression analysis were performed. The first assumption of the research was that Iranian girl consumers have higher environmental attitudes than boys. In the literature, the environmental attitude generally as a position of knowledge about the value and importance of environmental protection is mentioned. Tikaet all (2000) found in their Western model that women have a more positive attitude about the environment than men [23]. Zelzeny and its colleagues (2000) created other evidence suggests that women have stronger environmental attitudes than men [26]. In the first hypothesis, the results of this study don't confirm previous researches. The results show that the Iranian boys have higher environmental attitudes than girls. But this difference is not statistically significant. The second hypothesis suggests that Iranian girl consumers have higher environmental concerns compared with boys. Environmental concerns can be defined as an attitude towards environmental consequences. Bang and colleagues (2000) found in their study that people who concern more about the environment, to respect other people, tend to cost for renewable energy [2]. Available studies show that women are more concerned than men about environmental issues [21]. Our findings show that, first, girls compared to boys concern less about environmental issues, but this difference is not significant. Second environmental concerns among other environmental variables, as the only predictor of green purchasing behavior of Iranian girls, while for boys, is not a good predictor. The third assumption was that Iranian girl consumers have a higher understanding of environmental behavior effectiveness compared to boys. Results showed that people who are concerned about the environment show more active behavior when they feel that their

individual actions in the resolution of environmental issues, is helpful [19]. The results of this study don't indicate the of higher environmental behavior understanding of girls compared to boys. On the other hand with respect to the results of multiple regressions analysis can say that understanding the environmental effectiveness is a good variable to predict the behavior of the Green buying behavior of Iranian boys. The fourth assumption was that, Iranian girl consumers understand the seriousness of environmental issues more than boys. A study on the perception of environmental risks suggests that women have more perceived vulnerability of global warming and the loss of resources than men [4]. The study results show that Iranian girl consumers understand the seriousness of environmental higher than boys. Also it was observed that understanding the seriousness of environmental issues is not a relevant variable to predict the green purchasing behavior of boys and girls. The fifth assumption stating that Iranian girl consumers were more likely affected by their friends than boys in their green shopping behavior. Few studies have examined the effect of gender on effectiveness of people from around in green purchase decision. Earlier studies have shown that compared to men, women give more importance to equality, the coordination and communication [26] and women under the coordination press are more effectible of congregation [6]. This study suggests that Iranian girls are not affected by their friends in their green purchasing behavior than boys. The sixth assumption is that Iranian girl consumers understand environmental responsibility better than boys (2000). Zelzenyet all (2000) in his review found that women compared to men have more perceived personal responsibility for the environment [26]. The results of this study suggest that Iranian girls compared to boys have higher perceived personal responsibility towards the environment. Finally, the last assumption was that Iranian girl consumers show their green purchase behavior more than boys. Unlike available Western literature women compared with men significantly more involved in environmental behavior, especially green consumption [17], the results show that the Iranian boys show higher green purchasing behavior than girls, but not have the claim generalized to the whole society. In general, the results showed that the

environmental variables describe green consumers and their treats better among other variables while the psychological variable is ineffective. In other words, according to research findings can be said of environmental concerns, understanding the effectiveness of environmental behavior, effect by peers; understanding the seriousness of environmental issues, environmental responsibility, environmental attitudes and green buying behavior of boys and girls are at one level.

REFERENCES

- Bang, H., Ellinger, A.E., Hadjimarcou, J and Traichal, P.A.(2000).Consumer concern, knowledge, belief, and attitude toward renewable energy: an application of the reasoned action theory, *Psychology and Marketing*, Vol.17.No.1, pp.6-26.
- Bord, R.I and O'Connor, R.E.(1997).The gender gap in environmental attitudes: the case of perceived vulnerability to risk, *Social Science Quarterly*, Vol.78 No.4, pp.830-40.
- Chan , R.Y.K.(2001)."Determinants of Chinese consumers' green purchase behavior", *Psychology & Marketing*, Vol.18 No.4, pp.389-413.
- Chen, Y.-S.(2010)."The Drivers of Green Brand Equity: Green Brand Image, Green Satisfaction, and Green Trust", *Journal of Business Ethics*, 93, pp.307-319
- Chen-Yu, J.H.andSeock, Y.K.(2002)."Adolescents' clothing purchase motivations, information sources, and store selection criteria: a comparison of male.female and impulse. nonimpulse shoppers", *Family and Consumer Sciences Research Journal*, Vol.31 No.1, pp.50-77.
- Coad, A., Haan, P., and Woersdorfer, J. (2008).Consumer support for environmental policies: an application to purchases of green cars, *Jena Economic Research Papers 2008- 035*.
- Finisterra do Paço, A.M., And Raposo, M.L.B.(2008)."Determining the characteristics to profile the "green" consumer: an exploratory approach", *Int Rev Public Nonprofit Mark* 5 .(2008).pp.129-140.
- Fujii, S.(2006)." Environmental Concern, Attitude Toward Frugality, and Ease of Behavior as Determinants of Pro-Environmental Behavior Intentions", *Journal of Environmental Psychology*,26(4), pp.262-68.
- Guber, D.L.(2003)."The Grassroots of a Green Revolution: Polling America on the Environment", Cambridge, MA,The MIT Press.
- Gura'u, C.andRanchhod, A.(2005)."International green marketing: a comparative study of British and Romanian firms", *International Marketing Review*, Vol.22 No.5, pp.547-61
- Harris, P.G.(2006)."Environmental perspectives and behavior in China: synopsis and bibliography", *Environment and Behavior*, Vol.38 No.1, pp.5-21
- Hussein Hassan Habibi,R.(2010), GM, «phenomenon of the third millennium", *Journal of Technology and the development of package in industry*, (59).
- Lai, O.K.(2000)."Greening of Hong Kong? Forms of manifestation of environmental movements", *The Dynamics of Social Movement in Hong Kong*, Hong Kong University Press, Hong Kong, pp.259-96.
- Lee, K.(2008).Opportunities for green marketing: young consumers, *Marketing Intelligence & Planning*, 26, pp.573-586.
- Li, J.J. and Su, C (2007). How face influences consumption: a comparative study of American and Chinese consumers, *International Journal of Market Research*, Vol.49 No.2, pp.237-56.
- Maineri, T., Barnett, E., Valdero, T., Unipan, J.and Oskamp, S.(1997).Green buying: the influence of environmental concern on consumer buying, *Journal of Social Psychology*, Vol.137 No.2, pp.189-204.
- Mendleson, N., and Polonsky, M.J.(1995). Using strategic alliances to develop credible green marketing, *Journal of Consumer Marketing* 12, pp.4-18.
- Moisander, J.(2007).Motivational complexity of green consumerism, *International Journal of Consumer Studies*, 31(4), pp.404- 416.
- Moser, G.andUzzell, D.(2003)."Environmental psychology", *Handbook of Psychology*, Vol.5 Personality and Social Psychology, John Wiley & Sons, Inc., Hoboken, NJ, pp.419-446.
- Mostafa, M.M. (2007). Gender differences in Egyptian consumers' green purchase behavior: the effects of environmental knowledge, concern and attitude, *International Journal of Consumer Studies*, Vol.31 No.3, pp.220-9.
- Ottman, J.A., Stafford, E.R.and Hartman, C.L. (2006).Avoiding green marketing myopia: ways to improve consumer appeal for environmentally preferable products, *Environment*, Vol.48 No.5, pp.22-36.
- Taleghani Mohammad, Rahmati Yalda (2009), "Thinking Green Marketing: Concepts and implications", *Journal of Engineering Market Issues*.
- Tikka, P., Kuitunen, M.andTynys, S. (2000).Effects of educational background on students' attitudes, activity levels, and knowledge concerning the environment, *Journal of Environmental Education*, Vol.31 No.1, pp.12-19.
- Wergin, R.E.(2009)."The frugal and the environmentally conference: Who are they, what do they do, and how do you influence them".
- Xiao, C. and Mc Cright, A.M.(2007)."Environmental concern and socio-demographic variables: a study of statistical models", *Journal of Environmental Education*,Vol.38 No.1, pp.3-14.
- Zelezny, L., Chua, P. and Alrich, C.(2000).Elaborating on gender differences in environmentalism, *Journal of Social Issues*, Vol.56 No.3, pp.443-57.