Providing a Model in the Context of Tendency to Pay for Green Products with an Emphasis on Attitudinal Components

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Abstract: The present research was conducted with the aim of providing a model in the context of tendency to pay for green products with an emphasis on attitudinal components in 2014. The research method was practical in terms of objectives and descriptive-survey based in terms of data collection. Data collection was based on a researcher-based questionnaire taken from the researches. Moreover, the questionnaire consisted of 28 questions. Data was collected from 384 of potential customers of household energy efficient light bulbs in chain stores and other existing markets in Tehran. Using Cronbach's Alpha Method, the reliability of the questionnaire was >0.7 for all the dimensions of the questionnaire which indicated appropriate reliability of the research tool. Moreover, structure validity was utilized in order to investigate validity which the result indicated the appropriate validity of the research tool (AVE>0.5). The obtained data were analyzed using Structural Equation Modelling (SEM) and Smart PLS Software and the final model was presented. The results demonstrated proper fit of the conceptual model based on significant and acceptable values of path coefficients, factor loadings and explained variance. In addition, the results indicated that attitudinal components (importance of protection and difficulty of environmental protection, level of companies' accountability and severity of environmental problems), green perceived value and green trust had an impact on tendency to pay for green products at 99% confidence level.

Key words: Attitude, green perceived value, tendency to pay for green products, SEM, Tehran

INTRODUCTION

In the recent years, according to the consumption of resources and energy crisis and environmental pollution, Iran needs to develop and promote the marketing of products which are more compatible with the environment. According to the estimation of the Word bank, damages caused by air pollution in Iran was about 8 billion dollars in 2006 and it will reach 16 billion dollars in 2016 if the current trends continue. Hence, Iranian society's concern for the environment has led to the emergence of a new type of consumers who pay special attention to the environment in their shopping. In addition, the importance of environmental standards will be more specific by Iran's joining to the World Trade Organization (Mohammadian and Khataie, 2011).

Finding a stable and fair way to manufacture, consume and live is the major challenge of human in the new century. In the meantime, consumers' concerns about responding to the environment which are in line with environmental laws has put a growing number of companies under pressure in order to design and implement environmentally friendly programs. Hence, companies should considerably decrease their negative environmental effects in production, distribution, supply of raw materials and energy consumption otherwise customers will be pushed back due to uncompromising terms and demands. Therefore, providing detailed information about the environmental credibility of the products for customers is the best strategy for marketing. In this regard, companies should attract the opinions of the customers through informing them about measures performed on green activities. For instance, Mc. Donald Company informed the consumers about its green activities by advertising the consequences of measures have been performed in order to reduce the amount of dissipation (Peattie, 2001). On the other hand, since the environmental problems that people face with is increasing day by day their environmental awareness should be improved. This is because customers need to be aware of their purchasing and lack of information could interfere with the use of green standards and specifications at the time of making a buying. In fact this

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information is the key aspect of green products and this is also clear that companies should not express the environmental benefits of the products until the validity of such claims is proven because negative consequences might be emerging. Therefore, it can be expressed that marketing strategies should support green products in order to deal with environmental problems that some companies create by manufacturing their products and this comes from comprehensive notification. Eventually, it can be expressed that people and customers will be attracted to pay for green products when their awareness of green products is increased (Chamorro *et al.*, 2009).

Since, the resources of such companies and organizations are limited and consumers' demands are unlimited it is important to the marketers to consume the resources efficiently and without failing to achieve organizational goals. Green marketing is a marketing strategy that helps the marketers with achieving the goals. This type of marketing supports the environment through creating recognizable environmental benefits based on what the customer expects and provides tendencies to buy and consume green and eco-friendly products among consumers (Kim and Choi, 2005). Such tendencies are in relation to a variety of factors including individuals' attitude, level of susceptibility to environmental issues, norms and social responsibility and the perceived value of the products and their impacts on the buying behavior.

A hierarchy of values, attitudes, intentions and behavior has been used as a conceptual framework in many researches which have been done in the field of environmentalism or responding to the environment. The variable which has been frequently used in order to respond to the environment was "concern for the environment". Researchers in the field of environmental attitudes and beliefs have studied factors such as attitudes towards air pollution, positive attitudes towards a conscious way of living towards the environment and the level of knowledge about the environment as the cognitive component of environmental attitudes and have considered it as one of the most important variables in determining consumer behavior in relation to purchasing and consuming environmentally friendly. On the other hand, attitudes are based on values. Values are more stable and more subjective than attitudes and they even act as standards which attitudes are based on them. Values are able to affect behaviors but since cognitive values are highly subjective they affect behaviors through attitudes and indirectly. On the other hand when a value is taught (acquired), it will be as a part of one's value system and this system can conduct

individuals' behavior. Therefore, values also have an impact on responsive behaviors friendly to the environment and green behavior (Khorshidi *et al.*, 2009).

Subjects related to green marketing and green purchasing such as "relationship of consumers' attitude towards being green", "green marketing mix and its impacts on consumer's green purchasing", "relationship between psychological factors, social factors and behavior of green consumers" and "impact of value variables on tendency to buy products that meet the environment" have been studied in previous researches in Iran. Moreover, a model was presented by Manafi in which the influence of consumers' perception on green purchasing behavior in Iran was investigated. Based on the presented conceptual model, three factors of consumers' environmental knowledge, demographic characteristics and psychological characteristics of consumers were considered as understanding factors of green consumers. According to Khorshidi *et al.* (2009), the impact of value variables on tendency to buy environment-friendly products were studied. Investigated value variables in this research consisted of diversity, conservatism and self-orientation values which the researchers investigated the impact of these factors on environmental consequences and individual outcomes and studied the influence of the obtained results on tendency to buy environment-friendly products. The required data in this research was obtained from the answers of beverage products consumers who bought them from the Branches of Refah chain stores in Tehran.

Therefore, according to the importance of the mentioned subject and lack of conducted researches in the field of green marketing to tendency to pay for green products in Iran, the present investigation is aimed to conduct a comprehensive study on the research background and the views of the researchers and researchers who have been working in the field of green products marketing in addition to present, explain and assess a model in the context of factors affecting tendency to pay for green products with an emphasis on attitudinal components in order to meet the future needs of the green manufacturers. According to what has been mentioned and review of the views of domestic and foreign scholars, factors affecting the tendency to pay for green products are initially presented in the form of a set of attitudinal components, perceived value and green trust. In addition, a set of questions are raised for each of the indices which all the questions

Table 1: The results of the investigation conducted on factors affecting tendency to green payment

Variables	Dimension	Items	References
Attitude	Importance of environmental protection	Recycling reduces environmental pollution	McCarty and Shrum (2001),
		Recycling is vital and important to preserve natural resources	Roberts (1996), Laroche *et al.*
		Recycling prevents development and expansion of waste centers	(2001), Chen and Chang
		Recycling saves energy sources	(2012) and Chen *et al.* (2012)
		Recycling creates a healthy, safe and relaxing environment for fellowmen	
	Difficulties of environmental protection	Separation of recyclable wastes from other wastes is a demanding job	
		Take care of recyclable wastes for their use is a demanding job	
		Attempts to control environmental pollution is a demanding job more than it's worth	
	Severity of difficulties of environmental protection	People should not worry about saving in a country where there's plenty of electrical energy	
		People should not worry in a country that pollution does not spread easily	
		In a country where there is plenty of water, people should not worry about dripping water from old pipes	
		In a country where forests are abundant and widespread there is no need to recycle paper	
	Level of companies' accountability	Recycled products companies are responsible for the environment	
		Recyclable packaging products companies, concern about the environment	
		Recyclable products companies act in a manner that it is cost-effective for customers to buy their products	
Green perceived value	Product's good value	Environmental benefits arising from the use of	Laroche *et al.* (2001) and
	To meet the expectations of the consumers	energy efficient light bulbs are valuable for me	Chen *et al.* (2012)
		Energy efficient light bulbs provide my expectations about the environment	
	More protective effect of the product than other goods against the environment	I buy energy efficient light bulbs because of this that their producers are more concerned about the environment than other manufacturers	
	Environment-friendly of the product	I use energy efficient light bulbs because of their environmental benefits	
	Products' advantages than other goods	I use energy efficient light bulbs because they have more advantages than ordinary light bulbs	
Green trust	Environmental reputation of the product	The benefits of energy efficient light bulbs in environmental protection are approved by the society	Chen (2010), Chen and Chang (2012)
	Environmental performance of the product	The performance of energy efficient light bulbs in environmental protection is acceptable	
	Environmental claim of the product	I feel that the claims of energy efficient light bulbs on environmental protection are honest and true	
	Environmental importance of the product in accordance with expectations	Environmental concerns of energy efficient light bulbs will meet your expectations	
	Commitment of the product to protect the environment	Performance of energy efficient light bulbs is according to their promise to protect the environment	
	Tendency to pay for green products	I will definitely buy an energy saving light bulb if I decided to buy a light bulb	Chen (2010), Chen and Chang (2012),
		I am eager to buy this product because it has environmental concerns	Laroche *et al.* (2001)
		Generally, I am glad to buy this product because it is environmentally friendly	

contain key concepts, criteria and indices. The results of the researches on the mentioned components addressed in the present investigation are listed in Table 1.

According to the theoretical foundations of the research about the factors affecting tendency to pay for green products, hypotheses based on the conceptual model of the research (Fig. 1) are presented as follows.

Main hypothesis 1: Attitudinal factors have positive impacts on green perceived value:

- H_1: importance of environmental protection has positive impact on green perceived value
- H_2: difficulties of environmental protection has positive impact on green perceived value
- H_3: level of companies' accountability has negative impact on green perceived value
- H_4: severity of difficulties of environmental protection has positive impact on green perceived value

Main hypothesis 2: Green perceived value has positive impacts on green products payments.
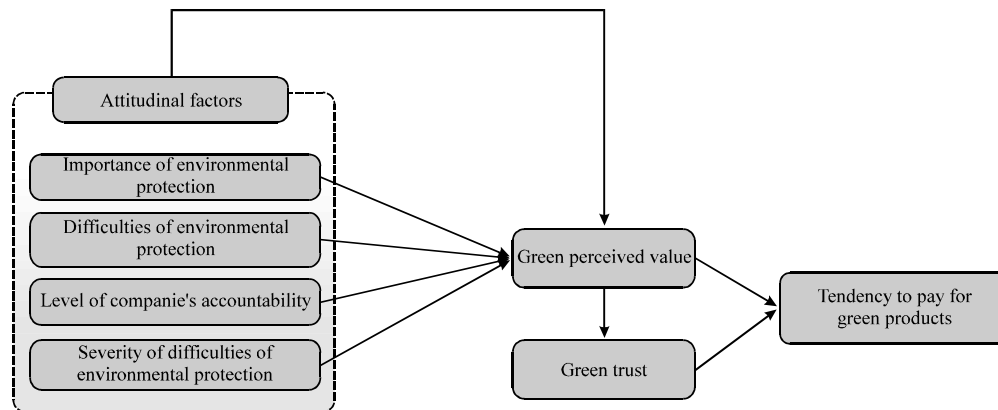
Fig. 1: Conceptual framework of the research

Main hypothesis 3: Green perceived value has positive impacts on green trust.

Main hypothesis 4: Green trust has positive impacts on tendency to pay for green products.

MATERIALS AND METHODS

Since, a questionnaire was used in the present research in order to obtain the data related to the factors affecting tendency to pay for green products with an emphasis on attitudinal components it was a practical research with a developmental nature and quantitative and attitudinal. In addition, it was a field study in terms of dimensions and it was definite in terms of research's certainty and definiteness of variables and the relationships between them (means existence of hypotheses). Moreover, according to the subject, the nature of the research was descriptive and of correlational type and descriptive and inferential statistical methods were used at various stages of the research. The population consisted of potential customers of household energy efficient light bulbs in chain stores and other existing markets in Tehran. Using Morgan table and Cochran formula, a sample size of 384 persons was calculated using available sampling method.

Data collection was based on a researcher-based questionnaire taken from the researches by McCarty and Shrum (2001), Roberts (1996), Laroche *et al.* (2001), Tsen *et al.* (2006), Chen (2010) and Chen *et al.* (2012). This questionnaire consisted of 28 items which designed based on a five-point Likert scale (1 = very low, 2 = low, 3 = somewhat, 4 = high and 5 = very high). The dimensions of the questionnaires included attitudinal factors (item number 1-15) including the importance of environmental protection (1-5), difficulties of

Table 2: Investigation of the constructs' divergent validity

Constructs	Cronbach's alpha	CR	AVE
Importance of protection	0.719	0.787	0.544
Difficulty of protection	0.761	0.869	0.670
Perceived value	0.763	0.828	0.581
Company's accountability	0.735	0.723	0.698
Social norms	0.766	0.842	0.625
Severity of problems	0.735	0.823	0.631
Attitude	0.869	0.900	0.548
Trust	0.872	0.909	0.636
Tendency to pay	0.794	0.872	0.702

environmental protection (6-8), severity of difficulties of environmental protection (9-12), level of companies' accountability (13-15), green perceived value (16-20), green trust (21-25) and eventually, tendency to pay for green products (26-28) which are mentioned in Table 1.

Content validity was used in the present research in order to determine the validity of the questionnaire which the questionnaire was approved by the related supervisors and professionals and necessary corrections were carried out. Of course, it should be mentioned that the validity and reliability of the questionnaire are confirmed with respect to the previous researches. Smart PLS Software and Structural Equation Modelling (SEM) were used either in order to determine the construct validity. Construct validity is divided into divergent validity and convergent validity. Average Variance Extracted (AVE) was used in order to investigate the divergent validity which the results related to the criterion for the research variables are mentioned in Table 2.

Moreover, Table 2 shows reliability and validity indices including Average Variance Extracted (AVE) for validity and Composite Reliability (CR) and Cronbach's alpha for reliability. Fornell and Larcker proposed AVE criterion in order to calculate the convergent validity. The indices have appropriate validity if the AVE is 0.5 at least. It means that a latent variable is able to explain more than half of its indices' variance (observed variables) on average. Since, the AVE indices were >0.5 for all the

research variables, the convergent validity of the model's constructs is approved. Composite Reliability (CR) and Cronbach's alpha assess the reliability of the measurement tool (Hulland, 1999).

The process of analysis of covariance structures (Structural Equation Modelling) was utilized in the stage of analysis and interpretation of data. In fact, after presenting the model, obtaining the estimation of free parameters was observed from a set of data. Iterative methods such as Maximum Likelihood (ML) or Generalized Least Square (GLS) are used in order to estimate the model. Methods of estimation procedures are as follows. An Implied Covariance Matrix (ICM) is built in each iteration and it is compared with the covariance matrix of the observed data. This comparison leads to the generation of a Residual Matrix (RM) and this iteration continues until the RM is minimized. Calculation or parameter estimation is possible with a maximum of 250 iterations. If the number of iterations is >250, the calculation of the parameter estimated is stopped. The presented conceptual model which was formulated based on the theoretical foundation was analyzed through Structural Equation Modelling.

RESULTS AND DISCUSSION

Numbers or coefficients are divided into two categories in the output of Smart PLS Software. The first category is measurement equations which are the

relationship between latent variables (circle) and observed variables (rectangle). These equations are called factor loadings. The second category is structural equations which are the relationship between latent variables and latent variables and are used for hypothesis testing. These coefficients are called path coefficients. Factor loadings and path coefficients can be estimated according to the model in the mode of coefficient estimation. The index of the maximum factor loading has the maximum contribution in the measurement of the variable and vice versa.

In addition, in order to investigate the mediating hypothesis of the research, the mediating variable of "trust" was added to the model in order to specify the extent of impact of "green trust" on the impact of attitudinal components on tendency to pay for green products.

Figure 2 indicates the conceptual model of the research in the mode of standard coefficient estimation (it should be mentioned that all the three items related to the companies' accountability are scored reversely).

According to the standard coefficients in Fig. 2, it can be expressed that "importance of environmental protection" had the maximum impact on "green perceived value" because it had the highest path coefficient (0.500) and the second rank was for "level of companies' accountability". Investigation of the research sub-hypotheses in the mode of standard estimation is shown in Fig. 3.
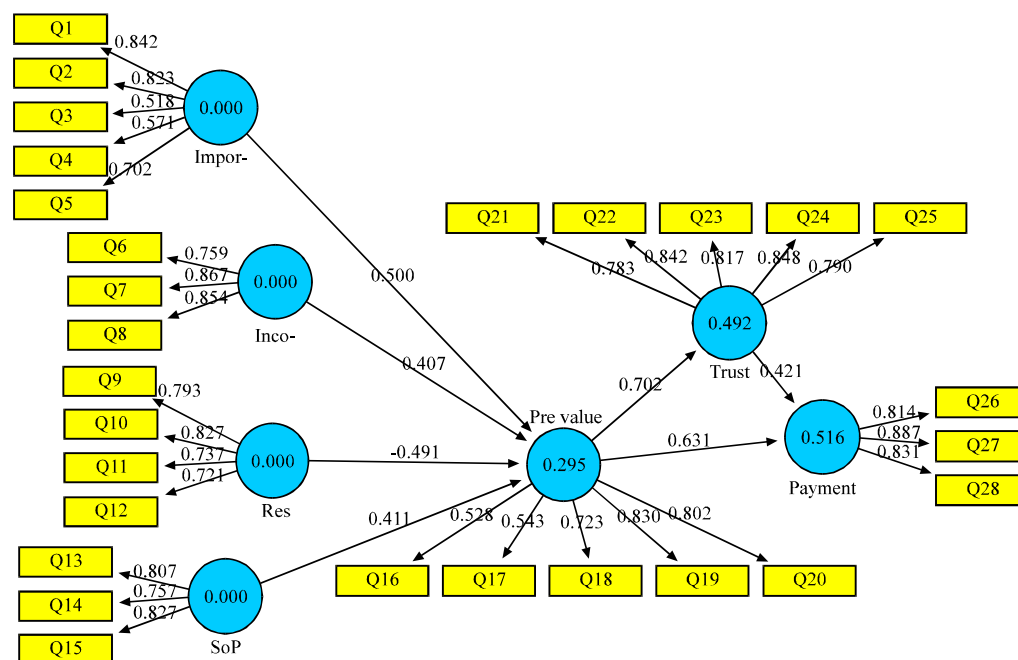

Fig. 2: Conceptual model of the research in the mode of standard coefficient estimation
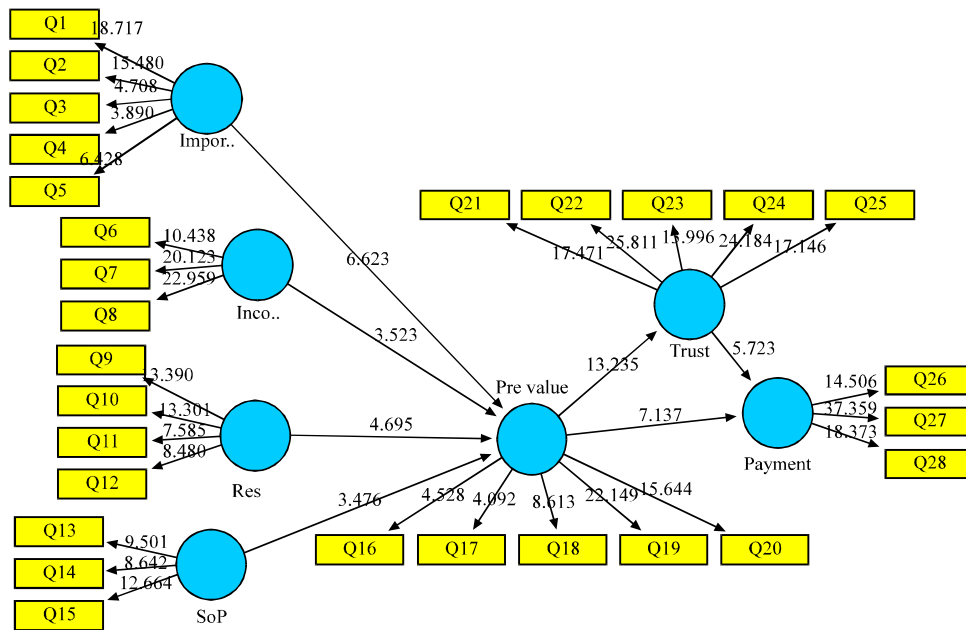
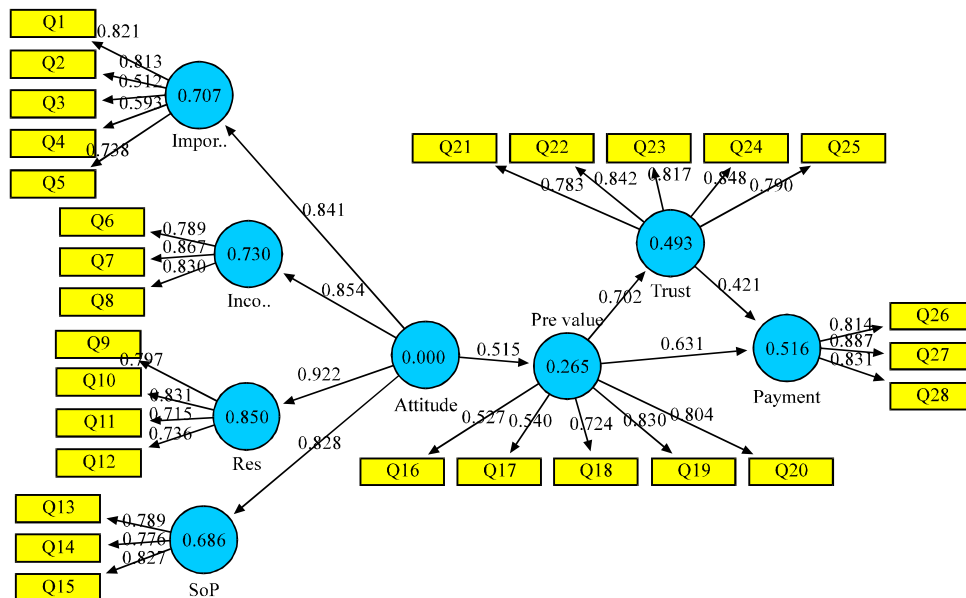Fig. 3: Significant coefficients of the hypotheses in the model

Fig. 4: Standard coefficients estimation model for the research sub-hypotheses

This mode shows the research models in the mode of significant coefficients (t-value). This model in fact tests all the measurement equations (factor loadings) and structural equations (path coefficients) using t-statistics. According to the model, path coefficient and factor loading are significant at 95% confidence level if the t-statistic is out of the range of (-1.96, +1.96) and if the value is within the range then factor loading or path coefficient is not significant. Moreover, path coefficient and factor loading are significant at 99% confidence level while the t-statistic is out of the range of (-2.58, +2.58). All the research hypotheses are significant at 99% confidence level according to the results.

The implementation of the model is presented in Fig. 4 in order to investigate the main research hypotheses with the mediating role of "green trust" in the mode of standard estimation.
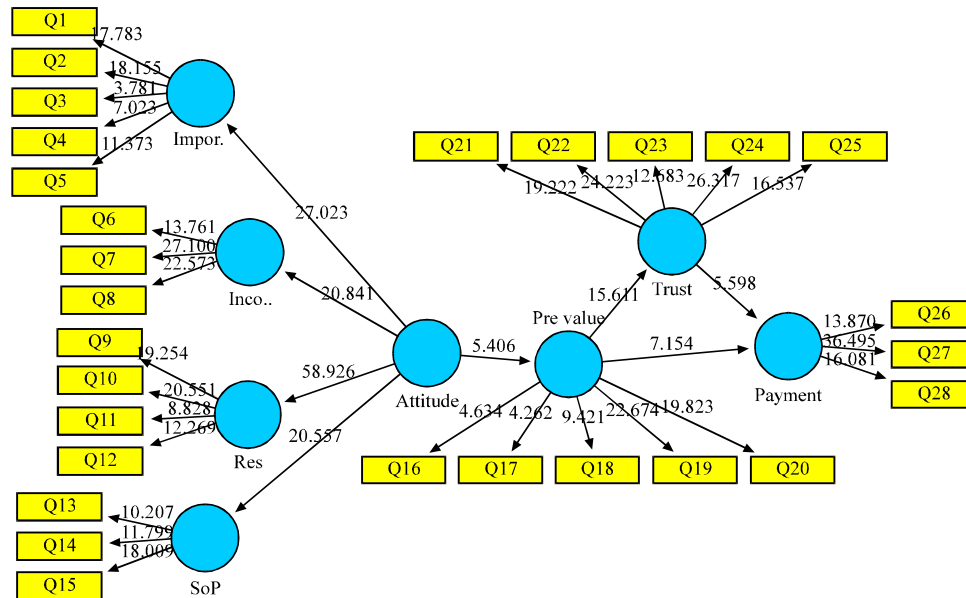
Fig. 5: Significant coefficients of the research sub-hypotheses in the model

Table 3: Direct effect, t-statistic and result of the research hypotheses

Research hypotheses	Path coefficient	t-statistic	Result
Main hypotheses 1: Attitudinal factors have positive impacts on green perceived value	0.515	5.40**	Approved
1-1: Importance of environmental protection has positive impact on green perceived value	0.500	6.62**	Approved
1-2: Difficulties of environmental protection have positive impact on green perceived value	0.407	3.52**	Approved
1-3: Level of companies' accountability has negative impact on green perceived value	-0.491	4.69**	Approved
1-4: Severity of difficulties of environmental protection has positive impact on green perceived value	0.411	3.47**	Approved
Main hypothesis 2: Green perceived value has positive impacts on green products payments	0.631	7.15**	Approved
Main hypothesis 3: Green perceived value has positive impacts on green trust	0.702	15.61**	Approved
Main hypothesis 4: Green trust has positive impacts on tendency to pay for green products	0.421	5.59**	Approved

**Significant at 99% confidence level

It can be expressed according to the standard coefficient that the magnitude of impact of green perceived value on trust was 0.702. Moreover, the impact of green perceived value on tendency to pay for green products was 63% directly and 29% (70×42%) indirectly. The total impact was 92% (63+29%).

According to the results obtained from t-test, all the factor loadings were significant at 99% confidence level and had a significant role in the measurement of their constructs (Fig. 5).

Answering to the research hypotheses based on the Structural Equation Modeling (SEM): Other types of relationships between latent variables in Structural Equation Modeling are a direct effect. Direct effect, in fact is one of the components of structural equation models and shows a directional relationship between two variables (Table 3). The results indicated that all the research hypotheses were significant and approved at 99% confidence level.

CONCLUSION

Increase in environmental issues such as energy crisis, loss and degradation of natural resources and increase in waste resulting from urbanization and industrial development nowadays have led to more consideration on what to buy on behalf of the consumers. Many of the consumers may pay more for products with environmental standards in order to protect the environment. Green marketing concepts have been widely regarded by organizations which shows strategic effort of organizations to offer environmentally friendly products to customers. Moreover, marketers are trying to add the costs associated with the environment with the purchasing decision process. In return, "green consume" is people's endeavor in protecting themselves and their environment through purchasing decisions and indicates the consumers' attention and concern for the environment as a social responsibility and not a legal requirement. Therefore, it can be expressed that marketing strategy

should be such that support the green products in order to deal with some companies' environmental problems and customers should understand green products' value and this can be achieved through providing information. Eventually, it can be said that people will tend to buy and pay for green products through growing public awareness towards green products and attention to environmental issues. In this regard, the present research was aimed to present a developed model with an approach to green consumers in Iran in order to respond to future demands of green manufacturer. According to the research results, the interpretation and explanation related to the research hypotheses are mentioned in the following.

Hypotheses of the impacts of attitudinal components on green perceived value: The obtained results from data analysis demonstrated that the hypothesis and its subordinate hypotheses were approved. Attitudinal components including "importance of environmental protection", "difficulties of environmental protection" and "severity of difficulties of environmental protection" had positive impact on "green perceived value" but "level of companies' accountability" had negative impact on "green perceived value". Any decision made by the consumers encompasses his attitude to a large extent. On other words, the attitudinal factor of "importance of environmental protection" increases the green perceived value for the customer which leads to more tendency to consume green products than other products. Therefore, consumers' attitude towards the fact that environmental protection is difficult and exited regulations and rules and social norms improve this attitude leads to increase in the product's value to the customer and his tendency to pay for green products.

Since, investigations on the importance of environmental protection is of today's society concerns and encompasses one's concerns about the environment and long-term protection demands comprehensive planning and participation of all community sections, individual attitudes towards environmental protection and duties of citizens will unconsciously lead to consumption and purchase of green products. Of course, the role of fear of the threats posed by environmental problems should not be neglected. Level of companies' accountability is another attitudinal factor. Obviously, the culture in which environmental protection is the responsibility of the government or corporations the consumers are forced to forget about environmental protection and wait for the actions of the governments and companies. Such an attitude has impact on consumers' willingness to pay more for environmentally friendly products. Hence, lack of companies' accountability in the context provides less tendency to pay for such products.

Individuals' perception of environmental problems and difficulties is another attitudinal factor which leads to increase in green perceived value and the customers' tendency to pay for green products. In other words, possible environmental problems which may occur in future and affect people's life, make the consumers pay more for green products according to the potential threats. Eventually, it seems reasonable that individuals' attitude plays an important and vital role in green perceived value and makes the consumers pay for green products which this component has the second rank in influencing the green perceived value. Finally, the research findings are in line with other investigations such as Chen *et al.* (2012), Chen and Chang (2012), Laroche *et al.* (2001), Patterson and Spreng (1997), Roberts (996) and McCarty and Shrum (2001). The following suggestions are proposed in this field:

- It is required to increase advertising in newspapers, specialized journals, street signs, radio, television and Iranian Internet web sites and to use Internet based marketing in the field of green products and their advantages
- Managers in companies producing green products should look for methods which identify individuals' attitudes towards the environment appropriately and develop the products' features which decrease the related negative impacts because goods' characteristics plays an important role in attracting customers and this should be focused by the companies
- Environmental advantages of green products should be specified precisely and appropriate information should be given to the consumers through related conferences, hence they would understand the fact that the goods are manufactured suit the environmental needs of the society
- It is proposed to make the people familiar with their individual and social responsibility through providing educational brochures

Hypothesis of the impacts of green perceived value on tendency to pay for green products: The research findings indicated the positive impact of green perceived value on paying for green products. Since, the topic of "perceived value" encompasses the criteria of good value of goods, meeting the consumers' expectations, greater protective effect against environmental goods compared to other goods, being environmentally friendly of goods and goods' advantages other products for the environment, it is obvious that every single one of the mentioned factors has a positive impact on paying for green

products. Meeting the customers and consumers' expectation by the green products make the consumers consider them as life necessities and make them eager to pay for these products. When the customers compare green products with other similar ones they find out that these products have more advantages and they will pay more for them. On the other hand, issues such as greater protective effect against environmental goods compared to other goods and being environmentally friendly of goods are of motivational items that have impact on the decisions of the customers and make them interested in paying for green products. Moreover, the results are in line with the findings by Laroche *et al.* (2001). The following suggestions are proposed in this regard:

- Companies' should provide appropriate information for the customers through holding meetings and printing advertising booklets about the value and desirability of green products
- To emphasize the advantages of green products by printing them on their packages in order to increase the customers' tendency in the case of the green products' higher price than other similar products

Hypothesis of the impacts of green perceived value on green trust: The findings confirmed the positive impact of green perceived value on green trust. Since, the dimensions of green trust consisted of environmental reputation of the product, environmental performance of the product, environmental claim of the product, environmental importance of the product in accordance with expectations and commitment of the product to protect the environment, every single one of the mentioned dimensions could be influenced by the dimensions of green perceived value. More environmental protection of the products than other similar products and proving their advantages could lead to environmental reputation and environmental performance of the products and being environmentally friendly and the products advantages than other similar products could play an important role in environmental importance of the products in accordance with expectations and commitment of the product to protect the environment and these could eventually lead to positive impact of green perceived value on green trust and provide the requirements for green improvements which finally these findings are in line with the results of other researches such as Chen and Chang (2012) and Chen (2010). The following suggestions are proposed in this regard:

- The perceived value of green products should be considered through using tools such as "voice of the customer" or "consumer Suggestion Box". Therefore, the consumers' green trust will be attracted through understanding the fact that companies producing green products put a high value on their opinions
- The consequences of lack of paying attention to the environment and green products should be emphasized in television and in fact, a credit and identity should be given to green products in order to provide the necessary groundwork for acquiring the reputation of the products

Hypothesis of the impacts of green trust on paying for green products: The findings confirmed the positive impact of green trust on paying for green products. Undoubtedly, a product with desired environmental performance and reputation attracts the consumers in terms of marketing and psychology to use the product. On the other hand if the customers find out that the product has a commitment to environmental protection they would be more eager to pay for the product. Moreover, the research results are in line with other investigations such as Chen and Chang (2012), Chen (2010) and Laroche *et al.* (2001). The following suggestions are proposed in this regard:

- The characteristics of the green products should be given to the customers transparently and without any confusion in order to make them decide with better confidence and freely about the use of green products
- It is proposed to follow-up related complains about the products to decrease probable conflictions in order to attract the consumers' trust on green products and maintain their tendency to pay for the products
- Companies should take specific measures in relation with the control of cost features and if the prices rise, they should explain clearly about the reasons through the communications media in order to lead them to decide to buy the green products by attracting their trust
- Complains are not related to one customer but a single customer may inform 10 of his relatives about the problem and every single one of them might spread negative news on the green product. It is obvious that each company must promptly respond appropriately to the consumers' complain of the green products

REFERENCES

Chamorro, A., S. Rubio and F.J. Miranda, 2009. Characteristics of research on green marketing. Bus. Strategy Environ., 18: 223-239.

Chen, H.S., C.Y. Chen, H.K. Chen and T. Hsieh, 2012. A study of relationships among green consumption attitude, perceived risk, perceived value toward hydrogen-electric motorcycle purchase intention. AASRI. Procedia, 2: 163-168.

Chen, Y.S. and C.H. Chang, 2012. Enhance green purchase intentions: The roles of green perceived value, green perceived risk and green trust. Manage. Decis., 50: 502-520.

Chen, Y.S., 2010. The drivers of green brand equity: Green brand image, green satisfaction and green trust. J. Bus. Ethics, 93: 307-319.

Hulland, J., 1999. Use of Partial Least Squares (PLS) in strategic management research: A review of four recent studies. Strat. Manage. J., 20: 195-204.

Khorshidi, G.H., A. Banoo'I and H.S. Hampa, 2009. Study of the impact of value variables on tendency to buy products responsive to the nature. Manage. Perspect., 31: 81-98.

Kim, Y. and S.M. Choi, 2005. Antecedents of green purchase behavior: An examination of collectivism, environmental concern and PCE. Adv. Consum. Res., 32: 592-599.

Laroche, M., J. Bergeron and G. Barbaro-Forleo, 2001. Targeting consumers who are willing to pay more for environmentally friendly products. J. Consum. Market., 18: 503-520.

McCarty, J.A. and L.J. Shrum, 2001. The influence of individualism, collectivism, and locus of control on environmental beliefs and behavior. J. Public Policy Marketing, 20: 93-104.

Mohammadian, M. and A. Khataie, 2011. Relationship between psychological factors, social factors and green consumer behavior. Bus. Manage., 3: 143-160.

Patterson, P.G. and R.A. Spreng, 1997. Modelling the relationship between perceived value, satisfaction and repurchase intentions in a business-to-business, services context: An empirical examination. Int. J. Serv. Ind. Manage., 8: 414-434.

Peattie, K., 2001. Towards sustainability: The third age of green marketing. Marketing Rev., 2: 129-146.

Roberts, J.A., 1996. Green consumers in the 1990s: Profile and implications for advertising. J. Bus. Res., 36: 217-231.

Tsen, C.H., G. Phang, H. Hasan and M.R. Buncha, 2006. Going green: A study of consumers willingness to pay for green products in Kota Kinabalu. Int. J. Bus. Soc., 7: 40-54.