THE HALAL PRODUCT ACCEPTANCE MODEL FOR THE RELIGIOUS SOCIETY

Nazahah Abd. Rahim and Sutina Junos Universiti Teknologi MARA, Malaysia

ABSTRACT

The purpose of this paper is to examine the determinants of consumers' halal product acceptance within a Muslim population, a previously unexplored aspect of consumer behavior, to develop and propose a halal product acceptance model for the religious society. Since the objective function of a Muslim consumer differs from that of other consumers, it aims to establish an integrated framework to understand the influential factors involved in the product acceptance process by consumers in this society. In doing so, the Theory of Planned Behavior (TPB) which is part of the proposed framework, with the help of additional factors, religion and habit are used to shed light on how religious consumers form their intention to accept halal products such as halal food. Attitude towards accepting halal products, the influence of significant others, the perceived control over buying halal products, rulings of the religion and consumer's own habit predict the intention to accept halal products among Muslims. By addressing the traits that predict product acceptance, marketers can stimulate consumers to seek out new halal products and this in turn stimulates product innovation and diffusion. The paper also offers directions for future research in which the results of this paper will also be beneficial to restaurants owners for instance by offering an insight into the intentions of consumers to choose halal products.

Keywords: Product, Product acceptance, Halal, Religion, Muslim, Islam

INTRODUCTION

"Your practice of faith will not be correct unless your actions are correct", (Hadith). This quote may consider as a basic Islamic rule that controls many of Muslims' behaviors. The Islamic concepts and rules that emphasize on the *Quran* and *Hadith* are the main source of their action and intention to different behaviors including the Muslims' behaviors towards accepting *halal* products. There are more than one billion Muslims living in various parts of the world hence the Muslims population exceeds 80 percent of the total population in countries like Indonesia, Brunei, Pakistan and Turkey. Muslims in some countries such as Malaysia and Nigeria, make up over half the total population. And while Muslims may be a minority in other countries such as in India, Philippines, UK and South Africa they are still millions in number.

Halal product

Many Islamic rulings obeyed by Muslims have become habits as it is being practiced everyday in life since young. This can also be considered as one of the factors that can influence product acceptance. The most significant example is the consumption of *halal* food. It is estimated that 70% of Muslims worldwide adhere to *halal* food standards and that the Global *Halal* Market is currently a USD 580 billion (as at 2007) industry a year. The total spending power of Muslims in the US was estimated at \$12 billion in 1999 and the potential market size as expressed in terms of the Muslim population is substantial (Bonne *et al.*, 2007). The Canadian International Markets Bureau reported an international *halal* food trade of \$150 billion a year. Now, with Muslim population at a staggering figure of 1.8 billion, and amounting to a USD2.1 trillion (as at year 2008) industry, the global *halal* market is definitely an important market not to be taken for granted.

Furthermore, for the Muslims, there is a need to carry out their transactions in accordance with the rules and principles of Islam because the vector of commodities which a non-Muslim consumer may be able to choose from is quite different from that of a Muslim consumer, even if all elements of goods and services were available (Metwally, 1997). This is because Islam prohibits Muslims from consuming certain commodities or indulging in some activities. For example, Muslims are forbidden to consume alcohol, eat pig meat or gamble. The Quran also states:

"O ye who believe alcoholic and games of chance and idols and divining arrows are only an infamy of Satan's handiwork, leave it aside in order that ye may succeed" (5:93).

Implication of halal product

The consumers' intentions to seek out and try something new are influenced by motivation and determined by their attitude and perceptions (Ajzen and Fishbein, 1980). Therefore, to impel consumers to seek products, marketers should focus first on the motivational factors driving the product acceptance process. Unfortunately, no previous research has investigated these motivational factors. This paper attempts to fill this gap by taking an approach by modeling consumer intention that will predict the actual consumer behavior.

Nevertheless the main objective of this paper is to investigate Muslim consumer behavior towards *halal* products and the antecedent factors predicting *halal* product acceptance model. The second objective may consists of finding the relations between these antecedent factors and the intention to accept *halal* product. As mentioned earlier, the Muslim society has been the target case of study and the paper is organized as follows. A brief background and introduction of the product acceptance behavior and the growing phenomenon of the *halal* product were given in the beginning section. Research problem statement and research questions are described in the following part of this section. Section two reviews literatures on consumer behaviors in accepting products and widely used theoretical models describing these behaviors. The proposed model is given in section three, whilst the final section contains the concluding remarks.

There is no specific theory that can be considered as a universal theory of product acceptance because every society has its own criteria according to its culture and religion. Sheik and Thomas (1994), posit that the religious groups to which people belong will determine food practices according to their religion. For Muslims, there are many factors that may affect the customers' acceptance of the product such as the Islamic laws, the influence of loved ones, customers' own personal choice and maybe the product itself. Individuals with lower self-identification as a Muslim will rely more on individual factors like personal attitude and personal moral norm (Bonne *et al.*, 2007).

From the comparison of Theory of Planned Behavior (TPB) model, Triandis Model and Theory of Reasoned Action (TRA), it is found that the important factors that may be considered in this paper are attitude, subjective norms, behavioral control, Islamic laws and habits. However, the objective of this research is to determine important antecedents of *halal* product acceptance model for the religious society and to explore them. Research questions are posed to obtain the relevant information required to fulfill the objectives. The proposed questions to be answered in this research are as follows:

- What are the antecedents factors predicting halal product acceptance model for the religious society?
- What are the relations between these factors and intention to accept halal product?

These questions are answered in this paper by examining previous studies thoroughly. It is answered by reviewing most widely used theories in understanding consumer behaviors. Then, one of the theories is selected and additional variables are added to improve the predictive power of the proposed model.

REVIEW OF LITERATURE

Abraham Maslow has explained in his theory of human motivation, "Man seeks first the bare necessities. Only after he has obtained the bare necessities does he get to comforts and luxuries." One of the bare necessities is food as food is considered as a necessity for human being as without food humans might not survive. For the religious society, adhering to the rulings of their religion is also considered as a necessity. Accepting products such as food products need to be strictly based on the right rulings of the religion. Bonne et al. (2007) posits that the impact of religion on food consumption depends on the religion itself and on the extent to which individuals interpret and follow the teachings of their religion. Most religions forbid certain foods for example pork in Judaism and Islam, or pork and beef in Hinduism and Buddhism, except for Christianity has no food taboos (Sack, 2001). The consumption of animal products and more specifically meat and meat products is most strictly regulated in cases where religious considerations prevail (Shatenstein and Ghadirian, 1997). One of those religions with food prohibitions is Islam. It is a religion governed by rules

and customs built on five pillars, with every Muslim has to observe *shahadah* or witnessing, *salat* or prayer, *zakah* or charity, *sawm* or fasting and *hajj* or pilgrimage. In addition to these, Muslims have to follow a set of dietary prescriptions intended to advance their well being. The *halal* dietary laws determine which foods are "lawful" or permitted. Not only food, there are other products governed under the prescription of *halal* standard such as cosmetics products (non-alcohol), accessories like shoes and handbags (non-pig skin lining) and Islamic banking (interest-free). These laws are found in the *Quran* and *Sunnah*, the practice of the Prophet Muhammad, as recorded in the books of *Hadith*. On the other hand, *halal* is an Arabic word meaning lawful or that what is permitted and allowed by the lawgiver (Allah), whereas *haram* means unlawful or prohibited (Regenstein *et al.*, 2003). Although religions may impose strict laws, the amount of people following them varies considerably. Hussein (2004) states that 75 percent of Muslims in the US follow the dietary rules in contrast with only 16 percent of Jews. Factors explaining differences in adherence to religious dietary prescription pertain among others to social structures for example origin, immigration and generation differences (Hussaini, 2004; Bonne *et al.*, 2007; Sheikh and Thomas, 1994)

THEORETICAL REVIEW

Several theoretical models have been proposed for human behavior study in recent years that have been used in IT adoption, Marketing and E-commerce. Theory of Reasoned Action (TRA) (Figure I), Theory of Planned Behavior (TPB) (Figure II), Technology Acceptance Model (TAM) and Triandis Model (Figure III) are the most widely used theories. In this research TRA, TPB and Triandis Model are reviewed to understand the *halal* product acceptance behavior of the religious society.

Theory of Reasoned Action

TRA proposed that the determinant of a person's behavior is his intention to either perform or not to perform the specific behavior. TRA specified two conceptually independent factors; attitude and subjective norm that are interacting together and each weighting for its relative importance, will determine intention. Attitude towards the behavior is a factor which considers the degree to which a person has about positively or negatively evaluating a specific behavior. Attitude is determined by behavioral beliefs and evaluation of behavioral outcomes. So, a person who strongly believes that positive outcomes will result from operating a particular behavior will have positive attitudes towards the behavior and vice versa. For a religious person, who strongly believe that performing a certain behavior, buying or accepting a certain product will result in positive reward from *Allah*, the person will have a positive attitude towards the behavior. The second factor is subjective norm, is determined by the person's normative beliefs, if certain important and influential individuals approve or disapprove particular behavior and the person's motivation to comply with the approvals of the important individuals (Safavi, 2007).

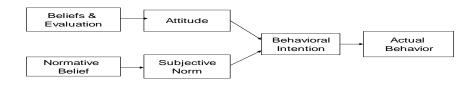


Figure I. Theory of Reasoned Action (TRA)

Theory of Planned Behavior

The TPB is an extension of the Theory of Reasoned Action (TRA) made necessary by the original model's limitations in dealing with behaviors over which people have incomplete volitional control (Ajzen, 1991). The central factor in the TPB is the individual's intentions to perform a given behavior. The TPB links

behavioral intentions with attitudes, subjective norms and perceived behavioral control. In the earlier studies, TRA and its extension TPB (Ajzen, 1991), have been found to be very useful in predicting a wide range of behavior (Sheppard *et al.*, 1988). The TPB postulates three conceptually independent determinants of behavioral intention; attitude, subjective norm and perceived behavioral control. An attitude is the psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor (Eagly and Chaiken, 1995). Subjective norm assesses the social pressure on individuals to perform or not to perform certain behavior. Perceived behavioral control is described as perceptions of the extent to which the behavior is considered to be controllable. It assesses the degree to which people perceive that they actually have control over enacting the behavior of interest (Liou and Contento, 2001).

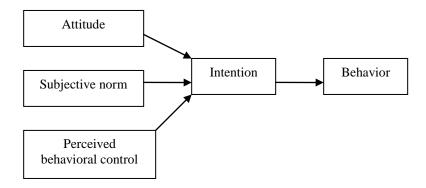


Figure II. Theory of Planned Behavior (TPB) model (Ajzen, 1985, 1991)

Triandis Model

Similar to TRA and TPB, Triandis Model (Triandis, 1980) assumes an attitude-intention-behavior relationship. Triandis model however includes a number of relevant variables. The model takes into account the important constructs such as habit, social factors and facilitating conditions. It postulates that the probability of performing an act is a function of (1) habits, (2) intention to perform the act, and (3) facilitating conditions. The intentions of performing a particular behavior are a function of the perceived consequences, social factors and affect (Chang & Cheung, 2001). Facilitating conditions refer to the necessary resources and supports to perform a behavior for example time, money, expertise and hardware.



Figure III. Schematic of the Triandis model (Chang and Cheng, 2001)

Triandis model has been widely adopted in the studies of social and health behavior and consumer behavior. The model has also been applied to technology adoption researches. Consistent with the TRA that intention is a function of the subjective norm, the modified model assumes that social factors (including social norms and perceptions of the "significant others' have positive impact on affect (Chang & Cheung, 2001).

Proposed model

TPB model provides the theoretical foundation for this research. Figure IV presents the proposed framework of the *Halal* Product Acceptance Model (HPAM) for the religious society. The Theory of Planned Behavior (TPB) by Ajzen (1985, 1991) is the model that is used in this paper to explain influential variables of religious consumers' *halal* product acceptance. According to the TPB, intention to perform a behavior is influenced by three dimensions: attitude, subjective norm and perceived behavioral control. A person's attitude towards a behavior represents evaluation of the behavior and its outcomes. The subjective norms concern the extent to which the importance of other people's opinion and perception that will lead to approval or disapproval of the behavior. Perceived behavioral control refers to the ease or difficulty of performing the behavior (Ajzen, 1985, 1991). As an example, *halal* meat consumption within a Muslim population using the TPB is applied in the framework. A positive personal attitude towards the consumption of *halal* meat, the influence of peers and the perceived control over consuming *halal* meat predict the intention to eat *halal* meat among Muslims, thus will determine the product acceptance behavior.

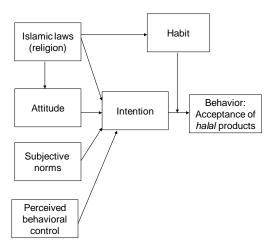


Figure IV. The proposed Halal Product Acceptance Model

TPB also allows for additional variables, in this case, Islamic laws and habit are added as other factors that are likely to influence religious consumers to accept or not to accept products. Each construct of the proposed model will be further elaborated and their relation with religious consumer intentions to accept products will be justified.

Attitude

In many societies, religion plays one of the most influential roles shaping behavior including food choice and other product acceptance behaviors. Ample evidence has been provided that religion can influence consumer attitude and behavior in general (Delener, 1994; Pettinger *et al.*, 2004), and food purchasing decisions and eating habits in particular (Shatenstein and Ghadirin, 1997). Attitude towards the behavior refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question (Ajzen, 1991). According to Ajzen (1991) the more favorable the attitude with respect to a behavior, the stronger is the individual's intention to perform the behavior under consideration. So, in other words it means the stronger the attitude to accept the product, the stronger the intention will be thus this will show in the acceptance behavior and vice versa.

Subjective norms

Subjective norms refer to the perceived social pressure to perform or not to perform the behavior. Chang (1998) suggested that individual's favorableness or unfavorableness towards behavior is affected by how those of importance to her or him think of the behavior in question. In the context of Islam, the religious society adheres to the practice of their beloved prophet, the Prophet Muhammad whom embraced and displayed an excellent behavior to the followers. As a result, the influence of the Prophet will have a positive effect on subjective norms thus affecting the intention to behave accordingly. Subjective norm deals with consumers' motivation to perform the behavior, which is constructed to incorporate the expectations of the approval or disapproval of others important to him or her for example, loved ones (Chen, 2008). For the religious society in Islam, the Prophet who was the khalifah on earth acted as a role model to the people embracing the religion. Whatever the religious people do, it is based on Quran and Sunnah containing the practice of their beloved Prophet Muhammad himself. For instance, during fasting month in Ramadhan, breaking fast with dates is something being followed by the members of the religious society because this was practiced by the Prophet and thus proves the result. This is supported by Chang (1998) where the path from subjective norms to intention towards behavior was significant. Chang (1998) also posits that the link could be explained with social environment's influence on an individual's formation. Therefore, it is proposed that if consumers believe that those people important to him think products such as halal products are acceptable, then they will have higher intentions of accepting such products. On the contrary, if consumers believe that those people important to them think products are unacceptable, then they will have lower intentions of accepting such products. As a result, the influence of significant others will have a positive effect on subjective norms thus affecting the intention to behave accordingly.

Perceived behavioral control

Perceived behavioral control is of greater interest than actual control since it refers to people's perception of the ease or difficulty of performing the behavior of interest (Verbeke and Vackier, 2005). The link between perceived behavioral control and behavior suggest that consumers are more likely to engage in behaviors they feel to have control over and are prevented from carrying out behaviors over which they feel to have no control. Besides that, Muslim's intention to accept halal product is also determined by the control they feel to have over such behavior. With this finding it can be proposed that perceived behavioral control positively influence intention towards accepting products by the religious society. Consumers who consider themselves to be more or less Muslims are sometimes primarily guided by the important factors attached to halal product such as whether it is easy or difficult to buy or get the product and the ease or difficulty to consume the product. Therefore, there is a link between perceived behavioral control and behavior that will affect the intention of the religious society's product acceptance decisions, which is more likely to engage in behaviors they feel to have control over and are prevented from carrying out behaviors over which they feel to have no control. For the religious society, accepting halal products is something that is within their control. They can choose whether to consume or not to consume such products and this will eventually determine their intention.

Habit

Apart from TPB, habit is an additional variable that will be investigated in determining the motivation behind the *halal* product acceptance among religious consumers. This additional habit factor will improve the predictive power of the proposed model. In addition, Conner and Armitae (1998) suggest incorporating habit measures as predictors of behavior in the TPB. Several studies using TPB to food related behavior have successfully included habit as an independent predictor of intentions (Verbeke *et al.*, 2004; Honkanen *et al.*, 2005). Habit is developed by doing an action enough times that the neurons in the brain create a pathway that enable them to move quickly from a trigger point for example eating *halal* food, watching TV and smoking. Habitual behaviors can take days or years to develop, depending on the complexity of the habit, and how often they are performed. However, evidence is showing that once neurons have created the pathway it stays remarkably fixed and therefore difficult to break. This may show clearly that the habit of doing or accepting such a product reflecting Islamic rule is an important agenda as once it is exhibited, it will stay fixed. The religious society is taught with the importance of consuming *halal* product hence this will stay in their mind and body forever once it is practiced constantly. Consequently, for some people, the

acceptance or consumption of products is considered as a habit because they are used to it. This is because habit is a behavior that has become automatic and is beyond an individual's awareness. For Muslims, accepting *halal* products is a must in which it has become a habit embedded since young which reflects their obligation to their religion.

Moreover, Bergeaud-Blacker and Bonne (2006) have described how eating *halal* is part of a Muslim or Islamic identity. This implies that accepting products such as eating *halal* meat can be considered as a norm or a habit for some Muslims because this is their identity. Consequently, such behavior will have a positive impact on the intention to accept products by the religious society hence affecting the actual behavior of accepting products. It can be expected that involvement of religious society is activated because the *halal* products for example *halal* meat is perceived as being instrumental in meeting important needs, goals and values being a Muslim, hence embraced as their habits, something they are used to. In addition, there are findings discovered by previous researchers that some Muslims do not consider *halal* meat consumption an automated process as indicated by their relative low score on the habit item. Hence, this will influence the attitude to perform or not to perform the behavior.

Islamic laws (religion)

Apart from habit, Islamic laws which constitute the teachings of the religion itself is another variable that will be added and explored in developing the halal product acceptance model for the religious society. Religion can be considered as very important indicator in any decision making processes where it is the foundation that leads to a person behaving lawfully and ethically. For example, Sheikh and Thomas (1994) in a study commented that all Muslims follow the Quran which lays down a number of rules concerning food. For instance, it is mandatory for all Muslims to abstain from alcohol. However, most Muslims have been taught with Islamic teachings since they were young. The elements of religion have been instilled for long and eventually it has become a norm or a habit in their daily lives. For example, Islam only permits the consumption of any animal which has been slaughtered the right way and it has been a norm in a Muslim life to eat such food. Automatically, Muslims will behave accordingly to those rulings. In addition, the application of Islamic principles in Muslim societies is likely to have far reaching effects on various aspects. The behaviors of various types of people in this society who claim to be applying Islamic principles seem to lean on "niat" or intention in doing something. Positive intention denotes positive behavior and vice versa, therefore it is suggested in the proposed model that intention will also determine the behavior. Other than that, religion also plays a role in determining someone's attitude towards something as by obeying to the rulings of their religion it will instill the right attitude in doing things. For the religious society, halal products are perceived as being instrumental in meeting goals and values being a Muslim, thus positive attitude is created towards acceptance of such products.

CONCLUSION

This paper aims to establish an integrated framework to understand the product acceptance by consumers in the religious society. In doing so, the TPB which is part of the proposed framework, with the help of additional factors, religion and habit are used to shed light on how religious consumers form their intention to accept *halal* products such as *halal* food. This is because the objective function of a Muslim consumer differs from that of other consumers. A Muslim consumer does not achieve satisfaction from mere consumption of *halal* product but his or her behavior pivots around the achievements of God's satisfaction. For a true Muslim must believe in the Quranic words,

"O My Lord! Grant me that I may do right acceptable unto Thee and be gracious to me in my issue. Truly have I turned to Thee and truly do I bow (to Thee) in Islam" (46:15).

It is not merely because of Muslims' obligations to obey Islamic rules and regulation, but it is also their habit which has been embedded for long, their attitude, significant others and perceived behavioral control that influence their behavior towards acceptance of *halal* products. Highly religious individuals will be influenced by their religiousness in their sensitivity to approve or disapprove products and this situation influence acceptance of products. In summary, it can be concluded that the religious consumers' intentions to seek out, accept and try *halal* products can be influenced by their intention and determined by their attitude,

perceptions of habit, their significant others, perceived behavioral control and their religious consciousness. Therefore, to impel consumers to seek *halal* products, marketers should focus first on the motivational factors driving the product acceptance process. Thus, this paper attempts to fill this gap by taking an approach by modeling consumer intention that can predict the actual consumer behavior of the religious society.

REFERENCES

- Ajzen, I. (1985), "From intention to action: a theory of planned behavior", in Kuhl, J. and Beckman, J. (Eds), *Action Control: From Cognition to Behavior*, Springer, New York, NY.
- Ajzen, I. (1991), "The theory of planned behavior", Organizational Behavior and Human Decision Processes, Vol. 50, pp. 179-211.
- Bailey, A. A. (2006), "Retail employee theft: a theory of planned behavior perspective", *International Journal of Retail & Distribution Management*, Vol. 34 No.11, pp.802-816.
- Bonne, K., Vermeir, I., Bergeaud-Blackler, F. and Verbeke. W. (2007), "Determinants of *halal* meat consumption in France", *British Food Journal*, Vol. 109 No. 5, pp/ 367-386.
- Chen, M.F. (2008), "An integrated research framework to understand consumer attitudes and purchase intentions toward genetically modified foods", *British Food Journal*, Vol. 110 No. 6, pp. 559-579.
- Chang, M.K. (1998), "Predicting unethical behavior: a comparison of the theory of reasoned action and the theory of planned behavior", *Journal of Business Ethics*, Vol. 17 No. 16, pp. 1825-1833.
- Chang, M.K. and Cheung W. (2001), Determinants of the Intention to use Internet/www at work: a confirmatory study, *Information and Management*, Vol. 39, pp. 1-14.
- Dusuki. A. W. and Abdullah, N. I. (2007), Why do Malaysian customers patronize Islamic banks?, *International Journal of Bank Marketing*, Vol. 25 No. 3, pp. 142-160.
- Eagly, A. H. and Chaiken, S. (1995), "Attitude strength, attitude structure and resistance to change", in Bonne, K., Vermeir, I., Bergeaud-Blackler, F. and Verbeke. W., *Determinants of halal meat consumption in France, British Food Journal*, Vol. 109 No. 5, pp/ 367-386.
- Fishbein, M. and Ajzen, J. (1975), *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*, Addison-Wesley, Reading, MA.
- Gibbs, P., Ilkan, M. and Pouloukas, S. (2007), "The ethics of marketing in Muslim and Christian communities: Insights for global marketing", *Equal Opportunities International*, Vol. 36 No. 7, pp. 678-692.
- Hair, J., Money, A., Page, M. and Samouel, P. (2007), *Research Methods for Business*, John Wiley & Sons, West Sussex, England.
- Honkanen, P., Olsen, S. O. and Verplanken, B. (2005), "Intention to consume seafood-the importance of habit" *Appetite*, Vol. 45, pp. 161-168.
- Hussaini, M.M. (2004), "Halal Haram lists. Why they do not work", available at www.soundvision.com/info/halalhealthy/halal/list.asp (accessed 23 October 2008).
- Jamal, A. (2003), "Marketing in a multicultural world: The interplay of marketing, ethnicity and consumption", *European Journal of Marketing*, Vol. 37 No. 11/12, pp. 1599-1620.
- Liou, D. and Conteno, L.R. (2001), "Usefulness of psychosocial theory variables in explaining fat-related dietary behavior in Chinese Americans: association with degree of acculturation", *Journal of Nutrition Education*, Vol. 33 No. 3, pp. 209-227.
- Metwally, M. M. (1997), "Economic consequences of applying principles in Muslim societies", *International Journal of Social Economics*, Vol. 24 No. 7/8/9, pp. 941-957.
- Prendergast, G. and Tsang, A.S.L. (2008), "Antecedents of the intention to seek samples", European Journal of Marketing, Vol42 No. 11.12, pp. 1162-1169.
- Regenstein, J.M, Chaudry, M.M. and Regenstein, C.E. (2003), 'The kosher and *halal* food laws', Comprehensive Reviews in Food Science and Food Safety, Vol. 2, No. 3, pp. 111-127.
- Sack, D. (2001), "Whitebread Protestants, Food and Religion in American Culture" in Bonne, K., Vermeir, I,. Bergeaud-Blackler, F. and Verbeke. W., *Determinants of halal meat consumption in France, British Food Journal*, Vol. 109 No. 5, pp/ 367-386.
- Safavi, M.A. (2007), "Predicting important factors of customer behavior on online shopping in Iran", pp. 1-91.

- Shatenstein, B. and Ghadirin, P. (1997), "Influence on diet, health behaviors and their outcome in select ethnocultural and religious groups", *Nutrition*, Vol. 14 No. 2, pp. 223-230.
- Sheikh, N. and Thomas, J. (1994), "Factors influencing food choice among ethnic minority adolescents", *Nutrition and Food Science*, No. 4, pp. 18-22.
- Sheppard, B.H., Hartwick, J. and Warshaw, P.R. (1988), "The theory of reasoned action: a meta-analysis of past research with recommendations for modifications and future research", *Journal of Consumer Research*, Vol. 11 No. 3, pp. 325-343.
- Sidani, Y.M. (2008), "Ibn Khaldun of North Africa: an AD 1377 theory of leadership", *Journal of Management History*, Vol. 14 No. 1, pp/ 73-86.
- Tarkiainen A. and Sundqvist, S. (2005), "Subjective norms, attitudes and intentions of Finnish consumers in buying organic food," *British Food Journal*, Vol. 107 No. 11, pp. 808-822.
- Triandis, C.H. (1980), "Beliefs, Attitudes and Values" Lincoln, NE: University Nebraska Press, pp. 159-295, "Values, Attitudes and Interpersonal Behavior", in Nebraska Symposium on Motivation, 1979.
- Verbeke, W. and Vackier, I. (2005), "Individual determinants of fish consumption: application of the theory of planned behavior", *Appetite*, Vol. 44, pp. 67-82.