

An Investigation of Influencing Factors on Attitude toward Online Shopping among Iranian Consumers

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ABSTRACT

Scope of the attitude toward online shopping is too broad and a coherent model for understanding factors affecting on attitude toward online shopping of consumer in e-commerce field is lacking. Numerous factors affect attitude and many of them are unknown and have not been explored adequately. One of the objectives of this study was to cover shortcoming of previous studies that didn't examine some main factors that influence on attitude toward online shopping. In this study impact of perceived risks, infrastructural variables and return policy on attitude toward online shopping and attitude on online shopping behavior as the hypotheses of study will be examined. This study could be categorized in applied researches from purpose perspective and descriptive-survey from aspect of nature and method (type of correlation). Respondents to the questionnaire were Iranian consumers of online stores which randomly selected.

The result of this study show that financial risks and non-delivery risk negatively affected attitude toward online shopping. Furthermore, attitude toward online shopping has positive effect on online shopping behavior of consumers.

KEYWORDS: Online shopping, Shopping behavior, Consumer attitudes, Perceived risks, B2C e-commerce.

INTRODUCTION

In the business to consumer (B2C) e-commerce cycle activity, consumers use Internet for many reasons and purposes such as: Searching for product features, prices or reviews, selecting products and services through Internet, placing the order, making payments, or any other means which is then followed by delivery of the required products through Internet, or other means and last is sales service through Internet or other mean (Sinha, 2010). Over the past few decades, the Internet has developed into a vast global market place for the exchange of goods and services. In many developed countries, the Internet has been adopted as an important medium, offering a wide assortment of products with 24 hour availability and wide area coverage. In some other countries, such as Iran, however business-to-consumer electronic commerce has been much below than anticipated proportion of total retail business due to its certain limitations (Sylke, Belanger, and Comunale, 2002). Also, E-commerce has become an irreplaceable marketing channel in business transactions. Online stores and services are important sales channels in B2C transactions. Studying attitude toward online shopping and online shopping behavior of consumers has been one of the most important research agendas in e-commerce during the past decade (Chen, 2009). The research of online consumer behavior has been conducted in multiple disciplines including information systems, marketing, management science, psychology and social psychology, etc. (Hoffman and Novak, 1996; Koufaris, 2002; Gefen *et al.*, 2003; Pavlou, 2003, 2006; Cheung *et al.*, 2005; Zhou *et al.*, 2007).

Online shopping behavior (also called online buying behavior and Internet shopping/buying behavior) refers to the process of purchasing products or services via the Internet. The process consists of five steps similar to those associated with traditional shopping behavior (Liang and Lai, 2000). In the typical online shopping process, when potential consumers recognize a need for some merchandise or service, they go to the Internet and search for need-related information. However, rather than searching actively, at times potential consumers are attracted by information about products or services associated with the felt need. They then evaluate alternatives and choose the one that best fits their criteria for meeting the felt need. Finally, a transaction is conducted and post-sales services provided. Online shopping attitude refers to consumers' psychological state in terms of making purchases on the Internet (Li and Zhang, 2002).

Although many studies examined various factors affecting on attitude toward online shopping independently, most of them isolated a few major factors, usually between three and six factors (Chen, 2009). The drawback of ignoring some factors is that the compound effects resulted from the interactions among the

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factors included in the research and those not included are often ignored and missing, which thus leads to the findings to be lack of generalizability.

This study attempts to develop such a research to study the effects of several major factors which are identified by prior studies on attitude toward online shopping. The research questions are thus stated as followed.

1.) How do perceived Risks (Financial risks, product risk, convenience risk and non-delivery risk) impact attitude toward online shopping?

2.) How do infrastructural variables and easy and convenient return policy impact attitude toward online shopping?

3.) How does the attitude impact online consumer behavior?

The finding of this research offer a more comprehensive understanding of attitude toward online by identifying the compound effects of various external behavioral beliefs, attitude, intentions and perceived risks, etc. Specifically, the findings provides in-depth insight into what factors drive online consumers most, how they work and what are their implications for consumers and e-commerce vendors. The findings also further confirm some previous research results and help clarify and explain the inconsistent conclusions from prior studies in the area. In general, this study enriches our knowledge of attitude toward online shopping and online shopping behavior from the behavioral perspective.

To meet the objectives of the research, first, we begin with a review of the literature on online shopping, attitude and factors affecting consumers' shopping behavior. This is followed by an outline of the methodological approach and the results of the study are reported. Finally, the conclusion and managerial implications are discussed.

2. LITERATURE REVIEW

2.1. Online shopping and online stores

Compared to physical stores, online stores have many advantages: They are convenient and time saving and no more traveling and waiting in lines is needed. They are open in all time and they are accessible anytime and anywhere. These stores provide consumers with free and rich information about products and services. They also have some online tools to help consumers compare and make purchase decisions among various products and services. Hoffman and Novak (1996) indicated that interactivity is the key distinguishing feature between marketing communication on the Internet and traditional mass media. Today online consumers have more control and bargaining power than consumers of physical stores because the Internet offers more interactivities between consumers and product/service providers as well as greater availability of information about products and services. Geissler and Zinkhan (1998) claimed that the Internet shifted the balance of power in favor of consumers as it became very easy for them to make shopping comparisons and evaluate alternatives without being pressured by salespeople. Online stores reduce transaction costs and have advantage for both consumers and vendors.

However, online stores also have disadvantages compare to brick-and-mortar stores. In online stores customers can't have any sense about the product they see in the internet (seeing, touching, tasting, smelling, and hearing) as they search for and purchase products. In online stores, consumers may develop low trust and perceive elevated risk highly because of the lack of face-to-face communication. Although this difficulty can be reduced by using certain software tools such as the online recommendation agent (Häubl and Murray, 2003; Xiao and Benbasat, 2007) and the online negotiation agent (Huang and Sycara, 2002; Huang and Lin, 2007).

2.2. Perceived risks

Perceived risk refers to the nature and amount of risk perceived by a consumer in contemplating a particular purchase decision (Cox and Rich, 1964). Before purchasing a product, a consumer considers the various risks associated with the purchase. The different types of risks are referred to as perceived or anticipated risks. Research suggests that consumers generally prefer to use electronic commerce for purchasing products that do not require physical inspection (Peterson *et al.*, 1997). The higher the perceived experience risk, the consumer may shift to brick-and-mortar retailer for the purchase of the product. Whereas, the lower the perceived risk, the higher the propensity for online shopping (Tan, 1999). Risks perceived or real, exist due to technology failure (e.g., breaches in the system) or human error (e.g., data entry mistakes). The most frequently cited risks associated with online shopping include financial risk (e.g., is my credit card information safe?), product risk (e.g., is the product the same quality as viewed on the screen?), convenience (e.g., Will I understand how to order and return the merchandise?), and non-delivery risk (e.g., What if the product is not delivered?). The level of uncertainty surrounding the online purchasing process influences consumers' perceptions regarding the perceived risks (Bhatnagar *et al.*, 2000).

2.3. Attitude

Since the mid-1970s, the study of consumer's attitudes has been associated with consumer purchasing behavior research. According to the model of attitude change and behavior (e.g., Fishbein and Ajzen, 1975),

consumer attitudes are affected by intention. When this intention is applied to online shopping behavior, the research can examine the outcome of the purchase transaction. Attitude is a multi-dimensional construct. One such dimension is the acceptance of the Internet as a shopping channel (Jahng, Jain, and Ramamurthy, 2001). Previous research has revealed attitude towards online shopping is a significant predictor of making online purchases (Yang *et al.*, 2007) and purchasing behavior (George, 2004; Yang *et al.*, 2007).

3. Background of Research

Baybars and Ustundagli (2011) in their study "Attitudes toward online shopping from the aspects of personal characteristics and shopping motivation through a developing concept: private shopping" determined whether consumers' need for uniqueness and innovativeness as a personal trait and price discount orientation affect consumer attitude toward private shopping and their purchase decision or not. Research results revealed that need for uniqueness and innovativeness affect positive attitude towards private shopping positively. However price discount orientation is foremost factor that both effect attitude positively and also directly explain shopping behavior.

Barnes and Gua (2011) in a study "Purchase behavior in virtual worlds: An empirical investigation in Second Life" developed and tested a conceptual model of purchase behavior in virtual worlds using a combination of existing and new constructs. They examined a kind of shopping behavior that consumers spend noticeable amount of money for shopping from internet. Factors of their model were external motivators like perceived value, instinct motivators like perceived happiness, social factors and consumers' habits. The result of study indicated that one's habits, external and instinct motivators have great effect on shaping online shopping behavior of them.

Hernández *et al.* (2011) in a study "Age, gender and income: Do they really moderate online shopping behavior?" Analyzed whether individuals' socioeconomic characteristics -age, gender and income - influence their online shopping behavior. The individuals analyzed are experienced e-shoppers i.e. individuals who often make purchases on the internet. The results of their research show that socioeconomic variables moderate neither the influence of previous use of the internet nor the perceptions of e-commerce; in short, they do not condition the behavior of the experienced e-shopper.

Chen (2009) in his dissertation entitled "Online consumer behavior: an empirical study based on theory of planned behavior" extends theory of planned behavior (TPB) by including ten important antecedents as external beliefs to online consumer behavior. The results of data analysis confirm perceived ease of use (PEOU) and trust are essential antecedents in determining online consumer behavior through behavioral attitude and perceived behavioral control. The findings also indicate that cost reduction helps the consumer create positive attitude toward purchase. Further, the findings show the effects of two constructs of flow –concentration and telepresence, on consumers' attitude. Concentration is positively related to attitude toward purchase, but telepresence likely decreases attitude due to the consumers' possible nervousness or concern about uncertainty in the online environment.

Patricia Sorce, Victor Perotti and Stanley Widrick (2005) in their study "Attitude and age differences in online buying" examined the shopping and buying behavior of younger and older online shoppers as mediated by their attitudes toward internet shopping. The results show that, while older online shoppers search for significantly fewer products than their younger counterparts, they actually purchase as much as younger consumers. Attitudinal factors explained more variance in online searching behavior. Age explained more variance in purchasing behavior if the consumer had first searched for the product online.

Shwu-Ing Wu (2003) in a study entitled "The relationship between consumer characteristics and attitude toward online shopping" examined internet user concerns and perceptions of online shopping. The attitude of online user toward online shopping was measured using Fishbein model the relative factors influencing user attitudes toward online shopping and the relationship between the attitude and the influence factors were explored. The results showed that the Fishbein model can effectively measure consumer attitudes and the examined consumer characteristics were important influence factors on consumer attitudes and online shopping decisions.

Khalifa and Limayem (2003) in a research entitled "Drivers of internet shopping" applied well-established behavioral theories to explain Internet consumer behavior. Then, they conducted a longitudinal survey study to identify key factors influencing purchasing on the Web and to examine their relative importance. The results indicate that the intentions of Internet consumers are significantly affected by the perceived consequences of online shopping, the consumers' attitude towards it, and social influence.

Kim and Park (2003) in a study "Identifying key factors affecting consumer purchase behavior in an online shopping context" investigated the relationship between various characteristics of online shopping and consumer purchase behavior. Result of the online survey with 602 Korean customers of online bookstores indicate that information quality, user interface quality and security perceptions affect information satisfaction and relational benefit that in turn, are significant related to each consumers' site commitment and actual purchase behavior.

4. Conceptual model

The model that used for this article was developed to examine the attitude toward online shopping and online shopping behaviors of Iranian consumers as is shown below. This model examines (1) the relationship between perceived risks, return policy, service, infrastructural variables and attitudes towards online shopping and (2) the attitude toward online shopping and online shopping behavior.

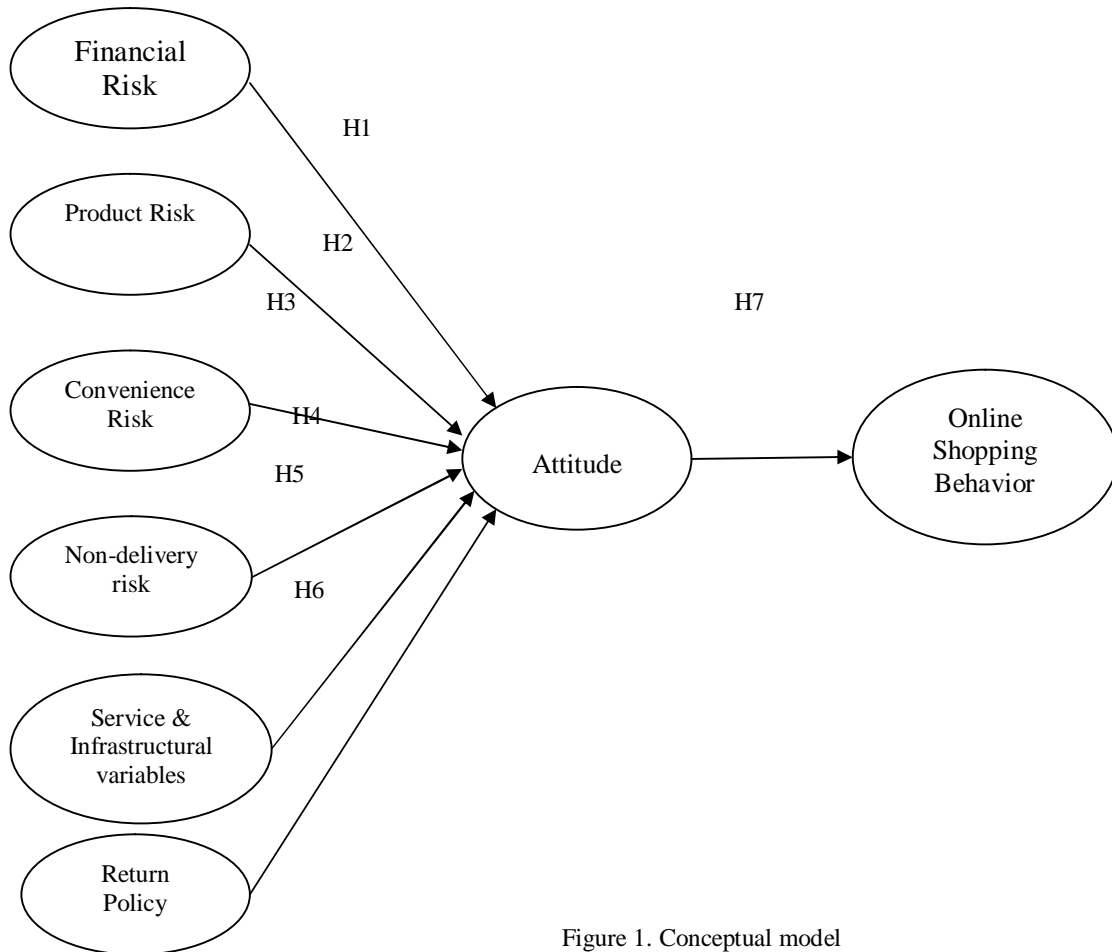


Figure 1. Conceptual model

5. METHODOLOGY

5.1. Overview

The purpose of this study was to analyze factors affecting attitude toward online shopping and effect of attitude on online shopping behavior of consumers in Iran. This goal has been followed by examining the effect of perceived risks, service and infrastructural variables and return policy on attitude toward online shopping and attitude toward online shopping on shopping behavior as the hypotheses of the study.

Independent variables in this study are as follows:

- Financial risks
- Product risks
- Convenience risk
- Non-delivery risk
- Infrastructural variables
- Return policy
- Attitude

Dependent variables are:

- Attitude
- Online shopping behavior

For testing hypotheses of the study regression analysis was used. Using this method requires some prerequisites that are:

1. There should not be correlation between errors, means errors should be independent
2. Errors should have normal distribution

In order to check independence between errors, Durbin-Watson test was used. The DW value should be between 1.5 and 2.5 to reject correlation between errors. For all hypothesis of this study two above conditions were tested and for all of hypotheses they were satisfied. By the way, for all hypotheses, Durbin-Watson value was between 1.5 and 2.5 means errors are independent.

5.2. *Sampling and measurement*

To test the main hypothesis of this research, we conducted a questionnaire. This questionnaire that adopted and combined from many similar researches, used to collect required data in order to support or reject hypotheses (See Table 1.). The questionnaires dispersed among 5 big online stores of Iran, randomly. This questionnaire assessed all variables of conceptual model via 51 questions. The reliability of questions was tested by Cronbach's alpha and result showed that all of them were above 0.7 offering good reliability of the questionnaire which was conducted by investigating previous researches and experts' suggestions. All questions were rated on a seven-point Likert scale from "strongly disagree" (1) to "strongly agree" (7). At first, an online store was randomly selected and 30 questionnaires were sent for the consumers that had shopping from that online store. By analyzing the data achieved by these consumers, standard deviation of society identified by using Cochran's formula for unlimited society, the formula turned 120 as the quantity of sample.

Table 1. Adoption of questions details

| Section no. | Question no. | Variable | Source |
|-------------|--------------|---------------------------|--|
| Section 1 | 1 to 17 | Online shopping behavior | Forsythe et al. (2006), Karayanni (2003) Swinyard & Smith (2003) Liang & Huang (1998) |
| Section 2 | 1 to 3 | Financial Risk | Swinyard & Smith (2003) Forsythe et al. (2006) |
| Section 2 | 4 to 6 | Product Risk | Swinyard & Smith (2003) Forsythe et al. (2006) |
| | 7 to 12 | Convince Risk | Swinyard & Smith (2003) Forsythe et al. (2006) |
| | 13 and 14 | Non-delivery Risk | Forsythe et al. (2006) |
| | 15 to 17 | Return Policy | Lewis (2006) |
| | 18 to 20 | Infrastructural Variables | Lewis (2006) |
| Section 3 | 1 and 2 | Attitude | George (2004) |

5.3. *Data collection*

400 electronic questionnaires were sent randomly among consumers of 5 big online stores in Iran by email. There were two main groups among these consumers: who purchase and who do not purchase. We sent questionnaire for both groups. Finally 107 questionnaires were usable for analyzing. Respondents were 44.9% female and 55.1% male (see Table 2.). Also, this study was done from February, 2012 to June, 2012.

Table 2. Demographic profile of participants (n=107)

| Variable | Frequency | Percentage |
|---|-----------|------------|
| <i>Age</i> | | |
| Less than 21 | 2 | 1.9 |
| 21-29 | 70 | 65.4 |
| 30-39 | 31 | 29 |
| 40 and above | 4 | 3.7 |
| <i>Gender</i> | | |
| Men | 59 | 55.1 |
| Women | 48 | 44.9 |
| <i>Education</i> | | |
| Lower than high school diploma | 7 | 7 |
| High school diploma and Associates degree | 13 | 12 |
| Bachelor's degree | 32 | 30 |
| Master's degree or higher | 55 | 51 |

6. **Data Analysis and Results**

In order to test the study's hypotheses a series of multiple regressions were used to analyze the relationships between the predictors (independent variables) and the dependent variables. The hypotheses and results are as follows:

Hypothesis 1: the risk of losing money and financial details will have negative effect on attitude toward online shopping.

Hypothesis 2: The product risk will have negative effect on attitude towards online shopping.

Hypothesis 3: Having a friendly website and good service to better help the customers for shopping, will have positive influence on attitude towards shopping online

Hypothesis 4: Fear of non-delivery of order will have negative influence on attitude towards shopping online. Among perceived risks, effects of financial risks and non-delivery risk on attitude were significant at the 0.05 level. Thus, *H1* and *H4* are fully supported (See Table 2. And 5.). But *H2* and *H3* were not significant at the 0.05 level and are not supported. (See Table 3. and 4.).

Table 2. Regressions of determinants of attitude toward online shopping (2 items, $\alpha = 0.720$)

| Predictor | items | α | B | t-value | p-value |
|----------------|-------|----------|--------|---------|---------|
| Financial Risk | 3 | 0.882 | -0.181 | -2.128 | 0.036** |

Notes: ** Denotes significance at the 0.05 level

Table 3. Regressions of determinants of attitude toward online shopping (2 items, $\alpha = 0.720$)

| Predictor | items | α | B | t-value | p-value |
|--------------|-------|----------|--------|---------|---------|
| Product Risk | 3 | 0.819 | -0.080 | -0.734 | 0.465** |

Notes: ** Denotes significance at the 0.05 level

Table 4. Regressions of determinants of attitude toward online shopping (2 items, $\alpha = 0.720$)

| Predictor | items | α | B | t-value | p-value |
|------------------|-------|----------|--------|---------|---------|
| Convenience Risk | 6 | 0.795 | -0.148 | -1.287 | 0.201** |

Notes: ** Denotes significance at the 0.05 level

Table 5. Regressions of determinants of attitude toward online shopping (2 items, $\alpha = 0.720$)

| Predictor | items | α | B | t-value | p-value |
|-------------------|-------|----------|--------|---------|---------|
| Non-delivery Risk | 2 | 0.719 | -0.227 | -2.546 | 0.012** |

Notes: ** Denotes significance at the 0.05 level

Hypothesis 5: After sales service, cyber laws and low shipping fees or free delivery will have positive influence on attitude towards online shopping.

Hypothesis 6: Convenient product return policy will have positive effect on attitude towards shopping online. Effect of infrastructural variables and return policy on attitude were not significant at the 0.05 level and are not supported, so *H5* and *H6* are rejected (See Table 6. And 7.).

Table 6. Regressions of determinants of attitude toward online shopping (2 items, $\alpha = 0.720$)

| Predictor | items | α | B | t-value | p-value |
|---------------|-------|----------|--------|---------|---------|
| Return Policy | 3 | 0.897 | -0.140 | -1.563 | 0.121** |

Notes: ** Denotes significance at the 0.05 level

Table 7. Regressions of determinants of attitude toward online shopping (2 items, $\alpha = 0.720$)

| Predictor | items | α | B | t-value | p-value |
|---------------------------|-------|----------|--------|---------|---------|
| Infrastructural variables | 3 | 0.765 | -0.072 | -0.557 | 0.565** |

Notes: ** Denotes significance at the 0.05 level

Hypothesis 7: Attitude of consumers towards online shopping significantly affects their online shopping behavior.

Effect of attitude toward online shopping on online shopping behavior was significant at the 0.05 level. Thus, *H7* is fully supported (see Table 8.).

Table 8. Regressions of determinants of online shopping behavior (17 items, $\alpha = 0.867$)

| Predictor | items | α | B | t-value | p-value |
|-----------|-------|----------|-------|---------|---------|
| Attitude | 2 | 0.720 | 0.215 | 3.620 | 0.000** |

Notes: ** Denotes significance at the 0.05 level

7. DISCUSSION

The results showed that *H1* and *H4* are significantly supported. Thus, fear of losing money and financial details has negative effect on attitude toward online shopping. Also the Fear of non-delivery of order will have negative influence on attitude towards shopping online. That is the higher the risk of losing money and probability of disclosing credit card information, the lower attitude toward online shopping. This finding is compatible with findings of the Forsythe and Shi (2003) and Biswas and Biswas (2004). In these studies, financial risk is an important factor for not shopping online. Also the higher the probability of non-delivery of order, the lower attitude toward online shopping. It depicts that the non-delivery risk is a significant factor for affecting attitude and hence behavior towards shopping online. People do not tend to shop online because they

are not sure whether the ordered merchandise will be delivered or not and lack of seriousness and efforts towards building trust by the retailers makes it a significant reason.

Results of testing the hypotheses *H2* and *H3* indicated that effect of product risks and convenience risk on attitude toward online shopping is not significant. Our findings are consistent with the findings from the previous study from Sinha (2010). This is also in contrast to the findings of the extant studies (e.g. Forsythe and Shi, 2003; Biswas and Biswas, 2004) where product and convenience risk are an important significant risk factor for not shopping online, and the possible reason of insignificance in Iranian context appears to be the indifference and unwillingness of shoppers towards online medium.

Results of testing the hypotheses *H5* and *H6* indicated that infrastructural variables and return policy were not significant at the 0.05 level and are not supported. That is, the regression results with after sales service, cyber laws and shipping fees as independent variable and attitude toward online shopping as dependent variable does not show significant influence of these service and infrastructural factors on consumers' attitude towards online shopping and regression results on return policy doesn't shows significant influence on attitude towards online shopping.

Supporting the hypothesis *H7* indicated that attitude of consumers towards online shopping significantly affected their online shopping behavior. Thus when a consumer has a significant attitude toward online shopping, this will have effect on his/her shopping behavior.

8. Managerial Implications

Based on the results and findings, this study identifies the following implications. First, based on the results and findings of this study, retail companies should start taking measures to eliminate risk factor and build trust in this form of retail. The retail managers should sway consumers through different platforms like social networking sites, ads, promotions, online only discounts etc. to let people cross the threshold and start buying because Iranian consumers are still comfortable with brick and mortar format as they appreciate friendly approach of salesman and social element of shopping, which has been found as important element in shopping (Tauber, 1972). In addition, they need to make website user- friendly and less intriguing. It should encourage online consumers to spend time exploring the site and comparing prices online, provide detail product information and member discounts. The results also suggest that after-sales operations like, dispute settling and delivery, should be carried out promptly and quickly so that consumer would build faith in the system. During the process of purchasing, online agents can help customers and simplify the purchasing procedure to give a feeling of friendliness of salesman or demonstrate how to purchase with clear text, images or examples.

Second, because of perceived lack of secured transaction, retailers should introduce a mechanism that would improve safety and privacy to motivate people to buy online. Customers should not be worry about losing their financial details and their credit card information. Using SSL protocol for payment pages will secure the web page from divulge of credit card information.

Third, the impact of subjective norms on online shopping behavior proposes that online retailers should use word-of-mouth marketing to for getting their website known to consumers. This method could be one of the most effective method among other tools and methods of advertising.

Finally, based on the study's results that consumers were worried and unsure about delivery of their orders, online retailers should provide the insurance for shoppers that they ordered items and make sure that the products will definitely be delivered to them. They can achieve this goal by providing certain certificate from authorities and governmental organizations that allow them to sell goods from internet and assure customers that this online retailer is rendering the job legally, so customers will buy from them with more confident and will not be worry about the delivery of their orders anymore.

Every research has limitations. Limitations of this study are:

1. As we discussed before, there are many factors affecting on online shopping behavior. But in this study because of time constraints we didn't examined all factors influencing on online shopping behavior.
2. Because of using questionnaire as data gathering tools, the respondents may not answer the questions exactly according to what they think and behave.
3. In this research because of time and cost constraints we examined factors affecting on attitude toward online shopping and online shopping behavior of consumers in Iran. It is obvious that in other countries people have different characteristics and behaviors. Then result of this study may have lack of generalizability to other countries.
4. Statistical society of this study was online stores selling electronic goods. So development of statistical society to other stores with different products and services decrease the limitation of study.
5. The methodology of this study for analyzing the data may not be able to fully assess the online shopping behavior of consumers based on discussed variables.

For future study's authors suggest that:

1. In this research only four factors have been tested on online shopping behavior. Researchers can examine other factors affecting on online shopping behavior with extensive researches.

2. By extending this study to other countries we can reach to better results and understanding about online shopping behavior of people.
3. We used only 5 online stores for our statistical society. By assessing better sites like Amazon.com we can reach to better and more reliable society for research.
4. Including cultural factors in model, could show better dimension of online shoppers.

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