Factors Affecting E-shopping Intention to Reduce Shopping Trip: Tehran, Iran

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Abstract

In recent years, online shopping has benefited great importance and popularity across the world. The purpose of this study is to identify factors affecting consumers online shopping intention. A paper-based survey questionnaire was distributed among the residents of Tehran and ultimately 355 questionnaires were used for modeling. The results of the structural equation modeling revealed that factors such as trust, positive attitudes towards online shopping, traffic restrictions, consumer resources could have their own positive effects on individuals online shopping intention; in contrast, perceived risk, sense of place, and positive attitudes towards in-store shopping could bring about negative impacts on such orientations. The effects of some socio-demographic variables and product-related ones were also further discussed. The findings of this study could be used for online stores in order to attract more consumers as well as for transport system planners in order to reduce demands for shopping trips and thus control traffic.

Keywords: online shopping intention, e-shopping, e-commerce, shopping trip, SEM.

1. Introduction

Over the past years, electronic commerce (e-commerce) market has been of considerable economic prosperity across the world due to the rapid development and progress of large Internet companies such as Amazon, Alibaba, etc. Improving and implementing effective changes in the domain of online payment methods, growth of smart phones and electronic devices, increased number of various applications, and development of infrastructure for better access to the Internet have also provided a platform for having stronger intentions in individuals to purchase online. Although online shopping (e-shopping) in Iran has not yet found its important place, it can be expected that modifying consumers behavior and attracting them to this modern shopping mode can prevent further commutes

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and trips (sometimes for search and experience of goods and sometimes for their purchase) especially during traffic peak hours. According to figures and statistics released by the Central Bank of Iran, e-shopping has increased in 2016 by 34% compared to that in 2015 and it has been also promoted by 25% in 2015 compared to the value in 2014. In 2016, approximately 80% of online purchases had been performed by residents in Tehran Province. Subsequently, individuals residing in Khorasan Razavi Province, Guilan Province, and Isfahan Province with 2.7%, 2.1%, and 1.7% had the highest rates of e-shopping. Despite the significant rising trend in e-shopping, the use of this shopping mode is still less popular compared to traditional one (in-store shopping).

E-shopping can be considered as a suitable alternative for shopping trips (especially during peak-hour traffic congestion) and even prevent further trips to search, experience, compare and buy goods. Moreover, investigating consumers attitudes can be an important step to attract them to e-shopping. In this study, the most important psychological factors as well as attitudes affecting consumers online shopping intention were investigated in order to understand whether e-shopping could appropriately modify buyers traditional behavior or not.

2. Review of previous research and hypotheses

In this section, some hypotheses addressed in this study were introduced based on previous research and then a number of relevant literature in this domain were reviewed.

2.1. Research Hypotheses

Perceived Risk

Perceived risk is known as one of the main concepts in the study of customer behavior. Researchers have often defined this concept as understanding of uncertainty by a shopper and fulfillment of reverse results of online purchase of a product or use of online services [1]. Previous research studies have similarly considered perceived risk as a key component of e-shopping intention [2]. From consumers perspectives, perceived risks in e-commerce are larger than those in traditional stores [3]. Therefore, the following hypothesis arises:

- Hypothesis 1: Perceived risk has a significantly negative effect on online shopping intention.

Trust

Trust is assumed as an essential element in establishing communications and social interactions. Most researchers have accepted consumer trust as the foundation to succeed in e-commerce and lack of trust has been consequently taken into account as one of the major barriers to growth and development [4, 5, 6]. Building trust in online stores can also encourage customers to purchase goods or use services online, even if sellers may be unknown; but lack of trust can have a negative impact on e-shopping. Given the findings of previous studies in this domain, the following hypothesis is proposed:

- Hypothesis 2: Trust has a significantly positive effect on online shopping intention.

Consumer Resources

Engel et al. (1995) [7] considered consumer resources as individual factors indicating differences between customers. Such individual factors are also recognized as characteristics and traits that may have an effect on customer behavior [8]. As well, e-shopping necessitates that individuals have creativity and computer skills and even access computer and internet [9]. In addition, increased number of trained computer buyers has been consistent with the dramatic rise in e-shopping [10]. According to these studies, the following hypothesis is addressed:

- Hypothesis 3: consumer resources have a significantly positive effect on online shopping intention.

Positive Attitudes towards E-Shopping

Purchase convenience is correlated with intentions to shopping from home such as e-shopping [11, 12]. In this respect, Darian (1987) [12] confirmed that e-shopping convenience features; such as reduced time of purchase, flexibility in purchase time (purchases at any time), and lowered physical efforts to do the shopping had caused people tend to practice e-shopping mode. Therefore, positive attitudes towards e-shopping can make individuals choose this shopping mode. Accordingly, the following hypothesis is proposed:

- Hypothesis 4: Positive attitudes towards e-shopping have a significantly positive effect on online shopping intention.

Positive Attitudes towards In-Store Shopping

Having positive attitudes towards in-store shopping can make customers less likely to do e-shopping. Touching and experiencing items closely, checking product quality, receiving items instantly, having a chance to haggle for discounts, and exchanging items comfortably can be considered as the main features of in-store shopping. Thus, the following hypothesis arises:

- Hypothesis 5: Positive attitudes towards in-store shopping have a significantly negative effect on online shopping intention.

Subjective Norms

Subjective norms as the predictor of behavioral intention as well as the effect of social pressure can make an individual figure out to demonstrate a certain behavior or not. This factor can be weighted by the amount of individuals motivation to meet expectations [13]. Media, advertising, recommendations by family, friends, and others can also influence the selection of purchasing modes. For this variable, the following hypothesis is presented:

- Hypothesis 6: Subjective norms have a significantly positive effect on online shopping intention.

Personal Innovativeness of Information Technology (PIIT)

PIIT is defined as the degree that an individual uses new ideas in the domain of information technology much faster than other members in a system or a society [14, 15]. According to Agarwal and Prasad (1998) [16], PIIT can be illustrated as a users inclination to test or experiment information technologies. Hwang (2009) [17] has also stated that e-shopping is a new and innovative practice that is possibly employed by innovators. Therefore, the following hypothesis is proposed:

- Hypothesis 7: PIIT has a significantly positive effect on online shopping intention.

Traffic Restrictions

Traffic restrictions can include congestion charge zone, even/odd road rationing policy, lack of parking spaces, as well as sudden rise in fuel prices in recent years. These factors can make people have different views concerning e-shopping. It seems that enforcing these traffic restrictions will make customers more inclined towards e-shopping. In this case, the following hypothesis is suggested:

- Hypothesis 8: Traffic restrictions have a significantly positive effect on online shopping intention.

Sense of Place

Sense of place can not only lead to a feeling of comfort and convenience in an environment but also support cultural concepts respected by people and sociocultural relationships in a society within a given location and even result in recalling past experiences and seeking for an identity by an individual [18]. Sense of place can influence customer behavior to choose a shopping mode. Moreover, people who pay attention to area (size), beauty, and accessibility of stores are less likely to purchase products via the Internet. Accordingly, the following hypothesis is addressed:

- Hypothesis 9: Sense of place has a significantly negative effect on online shopping intention.

2.2. Previous Research

Numerous studies have been conducted on the effect of e-shopping on shopping trips, which can be usually reduced to four modes: substitution, complementarity, modification, and neutrality [19, 20]. In this domain, substitution means that e-shopping has been replaced by in-store buying and thus it has relieved the amount of shopping trips by individuals. Complementarity mode means e-shopping can lead to increased demands for physical trips by consumers. In this respect, modification refers to the point that e-shopping cannot prevent individuals demands for physical trips but some dimensions (e.g. trip time) can be influenced. As well, neutrality indicates that e-shopping has no effect on shopping trips. The purpose of this study is to investigate factors influencing online shopping intention in the city of Tehran in order to reduce demands for additional trips (create a substitution relationship) in the future through adopting right policies in this domain, thereby reducing air pollution, fuel consumption, and waste of time. So far, numerous studies have been conducted on factors affecting online shopping intention (including ease of use, perceived enjoyment, perceived usefulness, perceived risk, security information, PIIT, etc.). Some examples of these research studies were reviewed as follows [21, 22, 23, 24].

According to Donthu and Garcia (1999) [25], online shoppers are looking for convenience and variety and they also experience new technologies much more than in-store buyers. Jarvenpaa et al. (2000) [26] also considered reputation of online stores and perceived trust as factors influencing e-shopping behaviors. Nine factors affecting e-shopping behavior were also examined by Velido et al. (2000) [23]; among them, perceived risk was highlighted as one of the main factors that had a negative impact on online shopping intention. Moreover, Siu and Cheng (2001) [27] assumed economic advantages as the most important factors for online shoppers (use of discounts). According to Farag (2006) [28], decision to choose mode of purchasing goods could depend not only on their categories and prices but also on individuals motivation (enjoyment-based or business motivations). Hernndez et al. (2010) [29] concluded that perceived ease of use had little effect on those who wanted to try e-shopping for the first time. They also reported in another study in 2011 that variables such as age, gender, and income had no significant impact on experienced e-shopper behaviors [30]. Similarly, in the research by Kee and Wan (2004) [31], it was found that gender and levels of education in customer could significantly influence their attitudes towards e-shopping. Pan et al. (2010) [24] also reported that among socio-demographic characteristics, subjective norms, and self-perception variables, perceived usefulness was the most important factor affecting online shopping intention in individuals. Moreover, the findings of the study by Perez-Hernandez and Sanchez-Manga (2011) [32] revealed that access to the Internet at home could increase online shopping intention in consumers by 14%. In a comparative study between consumers in Spain and Japan in terms of frequency of e-shopping, San Martin et al. (2009) [33] ultimately did not achieve significant differences; however, perceived risk in Spain was at higher rates due to less experience of users concerning e-commerce technologies. Besides, Dijst et al. (2008) [34] showed that people with high experiences in the domain

of the Internet were more inclined to do e-shopping. As well, using credit cards could have a positive effect on online shopping intention.

Keisidou et al. (2011) [35] examined individuals attitudes and their impact on e-shopping for various products. Schmid and Axhausen (2018) [36] also investigated the choice between in-store shopping and e-shopping in terms of search and experiencing electronic household appliances and groceries. Likewise, Crocco et al. (2013) [37] concluded that some e-shopping features such as variety of products, access to more comprehensive information, use of discounts, and price comparisons could lead to an increase in e-shopping. According to Clemes et al. (2014) [38]; website features, convenience, product variety, as well as consumer resources could have a positive impact on online purchase intention; in contract, perceived risk, service quality, and subjective norms could have a negative impact on choosing this buying mode. Hasbollah et al. (2016) [39] also investigated the effect of some variables such as website usability, attitudes, and subjective norms on e-shopping intention. The main factors affecting e-shopping introduced by Jadhav and Khanna (2016) [40] were product availability, low prices of goods, services intended for products, easy comparison of goods and prices, as well as attitudes towards time and its importance. Besides, Ghouri et al. (2017) [41] reported that e-shopping experience, perceived trust, and impulse purchase intentions had a positive impact on consumers online shopping intention.

At the end of this section, it should be noted that perceived ease of use, perceived usefulness, trust, and subjective norms were introduced in some studies as significant variables that had a positive effect on individuals online purchase intention [42, 43, 44, 45, 46]. In the following sections, data collection procedure, descriptive statistics, and the model employed in this study as well as the research modeling were explained. Finally, the study results and the findings of the modeling were further discussed.

3. Research Methodology

3.1. Data Collection

This study was conducted to collect the required data on residents living in the city of Tehran with no limitations on age groups, gender, income, specific social classes, or levels of education; however, the possibility to participate in the survey was provided for all of them in this city. Data collection was performed in May-June 2018. It was initially started at the International Book Fair and then in parks, universities, and public places using random sampling method and via in-person interviews. It should be noted that, the survey was conducted in several time periods (morning, afternoon and evening) and in different parts of Tehran (north, south, east, west and center). It is worth mentioning that in order to use structural equation modeling (SEM), the minimum statistical population was recommended by 200 individuals [47]. In this study, the information obtained from a total number of 355 questionnaires was employed for initial analyses as well as some descriptive statistics using SPSS Statistics (Version 23). In the process of developing the questionnaire, three general parts were considered; the first part was related to information about goods and shopping modes, the second part was associated with consumers attitudes towards choosing shopping modes (five-point Likert-type, from 1=totally disagree to 5=totally agree) and the final part was about socio-demographic characteristics of respondents.

3.2. Data Analysis

In Table 1, all the information about socio-demographic characteristics of respondents as well as the number of e-shoppers and in-store ones are separately provided. As can be seen, among the 355 respondents, 33.5% of them (119 individuals) had purchased their items online wherein the

percentage of men (52.9%) was higher than women. This was despite the fact that the percentage of women in in-store shopping (60.6%) was reported higher than men; which was not unexpected since women normally tend to search a lot and experience goods closely. As well, families who had a monthly income of about one to two million Tomans had shopped online more than other households (about 31.8%). The respondents were also asked about their place of residence in the city of Tehran and it was found that the highest and the lowest percentage of these individuals were respectively living in municipal districts 2 and 21 (out of the 22 municipal districts in the city of Tehran). Among the purchased goods, about 35% of e-shoppers had bought electronic products and 25% of in-store shoppers had purchased items of clothing in their own favorite mode.

Table 1: Socio-demographic characteristics of Respondents

Socio-demographic variables	Total number (N=355)	Number of e-shoppers (N=119)	Number of in-store shoppers (N=236)
Gender			
Male	156 (43.9%)	63 (52.9%)	93 (39.4%)
Female	199 (56.1%)	56 (47.1%)	143 (60.6%)
Age			
¡20	88 (24.8%)	27 (22.7%)	61 (25.8%)
20-24	120 (33.8%)	43 (36.1%)	77 (32.6%)
25-30	98 (27.6%)	36 (30.3%)	62 (26.3%)
¿30	49 (13.8%)	13 (10.9%)	36 (15.3%)
Educational level			
Below a bachelors degree	93 (26.2%)	25 (21%)	68 (28.8%)
Bachelors degree	163 (45.9%)	59 (49.6%)	104 (44.1%)
Higher than a bachelors degree	99 (27.9%)	35 (29.4%)	64 (27.1%)
Employment Status			
Full-time employment	85 (23.9%)	27 (22.7%)	58 (24.6%)
Part-time employment	82 (23.1%)	34 (28.6%)	48 (20.3%)
Unemployment	188 (53%)	58 (48.7%)	130 (55.1%)
Number of cars per household			
No car	45 (12.7%)	15 (12.6%)	30 (12.7%)
1 car	206 (58%)	66 (55.5%)	140 (59.3%)
2 or more cars	104 (29.3%)	38 (31.9%)	66 (28%)

3.3. Structural Equation Modeling (SEM)

In this research, structural equation modeling (SEM) was used to model factors affecting e-shopping intention. In summary, it can be stated that SEM is considered as a statistical method to determine direct and indirect effects between a set of latent and observed variables [48]. In this respect, latent variables cannot be accurately and directly measured but observed ones (questionnaire items) are variables that can be directly identified and measured. Each latent variable can be made apparent by a number of observed ones. Determining the relationship between latent and observed variables can be also fulfilled through measurement models (as one model in SEM). Another model

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The Iranian Rial (IRR) is the currency of Iran but the word Toman is commonly used by Iranian, especially in the daily-based payments. 10 Rials = 1 Toman

in SEM is the structural model wherein cause-effect relationships between latent variables with each other or latent and observed variables (a category of observed variables that are not related to latent ones in a measurement model). In this model, dependent and independent variables were recognized as endogenous and exogenous variables, respectively.

4. Modeling and Interpretation of Results

4.1. Measurement Model

In this research, confirmatory factor analysis (CFA) was used in order to evaluate the validity of the questionnaire. In other words, this method showed to what extent observed variables could exactly measure latent ones in the statistical population according to recent research. For this purpose, measurement and structural models were presented using Amos23 software via maximum likelihood estimation (MLE) method. Questionnaire items, latent variables (positive attitudes towards online and in-store shopping, PIIT, trust, perceived risk, traffic restrictions, subjective norms, sense of place, and consumer resources) as well as factor loadings corresponding to each item are illustrated in Table 2. As specified in this Table, each item with greater factor loadings had higher ability to measure desired latent variables. It should be noted that since t-statistic for all the items was greater than 2.56, it could be assumed that the relevant coefficients could be confirmed at a significance level over 99.9% (p-value¡0.001). The value of most factor loadings was more than 0.7 indicating appropriate reliability of the items and latent variables. Moreover, Cronbachs alpha of total questionnaire (0.754) and most Cronbachs alpha confidents were reported to be greater than 0.7 verifying the appropriate reliability of the questionnaire [49, 50]. Furthermore, according to Hair et al, (2010) [51], the goodness-of-fit for the measurement model ($\chi 2$/df=1.963, RMSEA=0.049, GFI=0.9, AGFI=0.87, CFI=0.93) was reported acceptable.

Table 2: Standardized coefficients in the measurement model for latent variables

latent variables and related items	Factor loading	T-value	STD
Positive attitudes towards in-store shopping (Cronbachs α = 0.812)			
To purchase goods; it is imperative to search and experience them closely.	0.713*	-	-
Receiving goods fast after paying for them is among the benefits of in-store shopping.	0.691	4.335	0.323
Exchange of goods in stores can be easily performed.	0.696	4.298	0.434
Positive attitudes towards e-shopping (Cronbachs α = 0.812)			
E-shopping provides an opportunity to buy goods anytime and anywhere.	0.638*	-	-
E-shopping can save time and thus individuals can do other daily activities.	0.695	11.076	0.101
I will practice e-shopping more in the future.	0.808	12.404	0.111
E-shopping makes life more fascinating.	0.787	12.181	0.104
I enjoy e-shopping.	0.832	12.657	0.107
E-shopping is more comfortable and easier compared to in-store one.	0.718	8.644	0.097

Traffic restrictions (Cronbachs $\alpha = 0.708$)

Traffic congestions and busy streets in the city of Tehran can sometimes cause me not to have shopping trips.	0.834*	-	-
Congestion charge zone and even/odd road rationing policy can affect my shopping trips.	0.771	8.229	0.194
An increase in fuel prices can have a negative effect on my shopping trips.	0.684	8.077	0.177
Lack of parking spaces or a suitable place for car parking can reduce my in-store shopping.	0.784	6.637	0.145

Perceived risk (Cronbachs $\alpha = 0.774$)

I do not feel secure to provide my credit card information for online payments.	0.700*	-	-
I am not certain about receiving goods I order online.	0.637	8.873	0.088
I am not certain that the information I give to online stores are not used for other purposes.	0.785	8.419	0.086

Objective norms (Cronbachs $\alpha = 0.727$)

Media have a significant role in my decision-making for e-shopping.	0.696*	-	-
Advertising has a positive effect on my e-shopping.	0.752	9.749	0.102
I pay attention to e-shopping based on recommendations by family or friends.	0.714	9.037	0.084

Trust(Cronbachs $\alpha = 0.811$)

Online stores normally fulfill their obligations.	0.742*	-	-
Information provided in online stores website can be real and honest.	0.766	12.984	0.081
I feel that I can trust any promises from online stores.	0.802	13.387	0.082

PIIT(Cronbachs $\alpha = 0.713$)

I usually like to experience new technologies.	0.703*	-	-
I am not uncertain about testing new technologies.	0.730	8.866	0.112
I am usually the first person among friends and acquaintances who try out new technologies.	0.688	9.198	0.127

Consumer resources(Cronbachs $\alpha = 0.789$)

I regularly have access to the internet.	0.695*	-	-
I regularly have access to computers.	0.728	9.899	0.1
I have great skills in using the internet.	0.796	10.291	0.11
I have knowledge of e-shopping.	0.703	9.704	0.121

Sense of place(Cronbachs $\alpha = 0.741$)

Beauty and interior design of a store is very important to me.	0.731*	-	-
Area (size) of stores has a positive effect on my in-store shopping.	0.801	7.414	0.139
Access to stores is important to me.	0.823	3.603	0.061

*Item fixed on 1.00

4.2. Structural Model

Since the purpose of this study is to investigate the effect of psychological factors on choosing e-shopping mode, online shopping intention was considered as endogenous (dependent) variable. All the latent variables in the measurement model, some socio-demographic variables (gender, age, marital status, levels of education, and place of residence) along with purchase of some products

(electronic items, clothes, and their prices) were also selected as exogenous (independent) variables. Standardized coefficients in the structural model using the MLE are presented in Table 3. It should also be noted that goodness-of-fit indices in this model ($\chi 2$/df=2.44, RMSEA=0.059, GFI=0.89, AGFI=0.91, CFI=0.9) indicated an acceptable structural model.

Table 3: Standardized coefficients in the structural model

Exogenous variables	Coeff.	Std. Error	T-value	P-value	Hypothesis Result
Subjective Norms	-0.052	0.029	-1.081	0.28	H6-Not Supported
Positive attitudes towards in-store shopping	-0.119	0.102	-1.901	0.057	H5-Supported
Traffic restrictions	0.128	0.04	2.588	0.01	H8-Supported
Positive attitudes towards e-shopping	0.286	0.035	5.831	0.001	H4-Supported
Trust	0.362	0.031	7.088	0.001	H2-Supported
PIIT	0.004	0.033	0.086	0.932	H7-Not Supported
Perceived Risk	-0.150	0.025	-2.867	0.004	H1-Supported
Consumer resources	0.090	0.034	1.906	0.057	H3-Supported
Sense of place	-0.103	0.027	2.013	0.044	H9-Supported
Male (Dummy)	-0.063	0.036	-1.498	0.134	
Married (Dummy)	-0.078	0.047	-1.855	0.064	
People aged below 20 (Dummy)	-0.079	0.041	-1.874	0.061	
High levels of education (Dummy)	0.068	0.04	1.62	0.10	
Residents of municipal districts 1 to 5 (Dummy)	0.126	0.04	2.992	0.003	
Residents of municipal districts 6 to 13 (Dummy)	0.102	0.036	2.427	0.015	
Electronic products (Dummy)	0.162	0.047	3.842	0.001	
Clothes (Dummy)	-0.203	0.048	-4.82	0.001	
High-priced products (Dummy)	0.126	0.036	2.975	0.003	
ATM Card ownership (Dummy)	0.037	0.072	0.877	0.38	

*Online shopping intention was considered as endogenous variable.

As shown in Table 3, PIIT did not have a significant effect on online shopping intention. The influence of subjective norms was not also of significant acceptability although some previous studies had reported the significantly positive impact of this variable [44, 45, 46]. Individuals attitudes could be considered as a significant impact on their behavior. As expected, positive attitudes towards in-store shopping and e-shopping could have negative and positive effects on online shopping intention, respectively. These results were confirmed by numerous earlier investigations [40, 42, 44, 45, 52]. Similarly, traffic restrictions were supposed to make people more willing to do e-shopping. This issue could suggest planners and decision-makers in the domain of transport that traffic restrictions within a specific framework and based on a long-term plan in accordance with welfare standards could be one of the factors shaping customers attitudes towards e-shopping and reducing shopping trips. The modeling results implied that trust was considered as the most important factor affecting online shopping intention because its coefficient was higher than those of other variables. So, providing acceptable and customer-friendly services (providing full details, optimal quality, privacy maintenance, security in payments, timely receipt of goods, after-delivery services, appropriate discounts, etc.) could build the trust of customers and attract people to e-shopping. These findings were consistent with the results of previous studies [40, 41, 42, 43, 53, 54, 55]. Consumer resources could further have

a significantly positive effect on online shopping intention. This means that consumers with much more familiarity with the use of computers and the internet could regularly deal with them and they were more likely to try out e-shopping, which was not far unexpected. In addition, the coefficient of sense of place was significantly negative and it suggested that factors such as beauty, interior design, area (size), and suitable access to stores had caused customers to be less decided to do e-shopping. As illustrated in earlier studies [37, 38, 54, 55], perceived risk had a significantly negative effect. The results of descriptive statistics also demonstrated that approximately 65% of e-shoppers believed that such a risk had no impact on their e-shopping, while about half of the in-store buyers assumed it as one of the factors affecting their unwillingness towards e-shopping mode.

In this model, no significant relationship was reported between male customers and e-shopping although there are numerous studies suggesting a significantly positive or negative relationship about men and women considering cultural differences and geographical contexts [56]-[63]. It has been concluded that married people are less likely to shop online. It seems that married individuals consider in-store shopping as a leisure and entertainment because of restrictions and lack of recreational facilities for people in the city of Tehran, so they spend their spare time in shopping trips to stores and are less likely to practice e-shopping. In this study, individuals aged below 20 years were also investigated and it was found that these people had low online shopping intentions. With the development of technologies in the domain of the internet and their attractiveness for people (especially in this age group), it was expected to observe more willingness towards e-shopping in this social group, but shopping trips were likely to be assumed as recreation and entertainment even though the shopping by itself was not so. It should be noted that some studies reported the effects of age on e-shopping in reverse [56, 61, 62, 63]. It was concluded that people with higher levels of education tended to buy their goods online. Since this group of society had acceptable experiences in the field of the internet and electronic technologies, this issue was not unexpected and it was confirmed in some previous studies [58, 61, 64, 65]. As well, the residents living in municipal districts 1 to 13 in the city of Tehran (out of 22 municipal districts) had higher online shopping intention. Among these people, the residents of municipal districts 1 to 5 were experiencing more e-shopping which could be due to culture and lifestyle of individuals residing in those districts. In addition, people tended to buy high-priced products from the internet. Since shopping online from stores supplying daily products (goods with low prices) had not become conventional in an acceptable manner in the city of Tehran and considering discounts for high-priced goods, it was logical to find these individuals more inclined towards purchasing these items online. Results from modeling in this study indicated that the customers were more oriented to e-shopping for electronic products but not items of clothing. Since goods such as clothes needed closer search and experience as well as shopping for them has not still increased in the city of Tehran in an acceptable manner, it was natural that customers were not interested in online purchase of such items. However, development and trust-building of online stores in the field of electronic products and providing complete and updated information about such items had attracted online shoppers to buy these goods. Of course, it should be noted that investigating the relationship between e-shopping and in-store one in the field of search and experience of different goods had been investigated by many studies discussing factors affecting online and in-store shopping modes [57, 59, 60, 66].

5. Conclusion

Most human activities have been influenced by the ever-increasing advances in information and communication technology (ICT). Among the ICT-related domains is e-commerce or, in more specific terms, e-shopping; that can have an effect on urban transport system and also convert marketing,

trade, and business activities of buying and selling goods from its traditional mode into modern ones. Therefore, identifying factors affecting consumers online shopping intentions can be of utmost importance. In this respect, the results of the present study indicated that factors such as trust, attitudes towards e-shopping, traffic restrictions, as well as consumer resources could have positive impacts on such intentions and several factors such as perceived risk, sense of place, and positive attitudes towards in-store shopping could negatively influence online shopping intentions. In addition, highly educated people as well as residents of central and northern municipal districts of the city of Tehran had stronger e-shopping intention while married people and those aged below 20 years were not inclined to try out this shopping mode. Individuals could further have online shopping intention for products such as electronic items and high-priced goods contrary to products such as clothes. The results of this research could be of assistance to online stores adopt appropriate strategies with regard to factors influencing online shopping intention (e.g. providing a comprehensive information of goods and brands, comparing quality and prices, improving website features, expanding services and discounts, reinforcing shipping and delivery departments, offering a wide variety of suggestions to meet customers interests, and so on) in order to attract shoppers. Furthermore, the findings and the given strategies could be useful for planners in the domain of urban transport systems to encourage consumers to practice e-shopping (leading to lower demands for shopping trips and less traffic especially at peak hours and thus reducing air pollution and fuel consumption).

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