

Investigating Online Consumer Behavior in Iran Based on the Theory of Planned Behavior

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Abstract

The aim of this research is to study the online consumer behavior in Iran using a combination of Theory of Planned Behavior (TPB) and Technology Acceptance Model (TAM) with other variables. This study is objective, analytical, and descriptive. The subject of this research is online shoppers in the city of Shiraz. Sampling was simple random and was collected via the Internet. According to the conceptual model, the minimum required sample for this study was 80 samples; however, to ensure accuracy 390 questionnaires were collected. To analyze the data, structural equation modeling was used, using partial least squares (PLS) and analysis of one way variance (ANOVA). Results show that in online purchasing in Iran perceived ease of use (PEOU) has a positive effect on controllability and self-efficacy of individuals. Trust has a positive effect on the attitude and controllability of individuals. Media has a positive effect on subjective norms. Cost reduction has a positive effect on the attitude of individuals. Finally, age and income influence the intention of individuals in online purchasing. The other hypotheses of this study were not confirmed. It can be concluded that factors such as PEOU, trust, media, cost reduction, age and income affect online consumer behavior in Iran.

Keywords: Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM), online purchasing

1. Introduction

The Internet is a phenomenon that is allocated a special place in the present era and the number of users worldwide web has increased significantly. The new media causes changing customer behaviors that occur at the time of purchase. Studying the process of purchasing online is very important for e-commerce vendors to attract customers, increase sales and maximize profitability (Azizi & Negahdari, 2012). In recent years, Internet usage in Iran has grown dramatically. According to Internet World Stats, Internet users have increased in Iran from 250 thousand people in December 2000 to 45 million people in June 2014. (Internet World Stats, 2015). Studies in the United States show that 81% of those who search websites for products and services do not make any purchase. Although many web users have been stimulated to start purchasing, 75 percent of them cancel the transactions. This shows that web users know the attractive opportunities of purchasing from websites, however, barriers and factors cause to prevent purchasing (Soopramanien & Robertson, 2007). These issues emphasize the need to investigate the behavior of online shoppers.

Past researches have shown that there are many factors to investigate online consumer behavior. Some of these factors include demographic factors, personality, type of product or service, online service quality, website quality, brand influence, experience using the Internet, online purchasing experience, beliefs and social norms, incentives to purchase, ease of use and utility of the Web, trust, perception of risk, economic value of online purchasing and emotions (Lee & Zhang, 2002). Selecting invoices to study the consumer behavior is dependent on research questions and the type of society (Chen, 2009).

In this study, which used the combination of theory of planned behavior (TPB) and technology acceptance model (TAM), factors of economic value, perceived ease of use (PEOU), perceived usefulness (PU) of purchasing and trust of the Chen's research (2009), perceived risks of Sinha's research (2010), media from research of Park (2003) and the previous purchase experience of Wen's dissertation (2006) have been used. The aim of combining these models and invoices is to achieve a comprehensive and innovative model to study and understand online

consumer behavior in Iran.

1.1 Definition of Concepts

Perceived Usefulness (PU): Perceived Usefulness (PU) is defined as the degree to which a person believes that using a particular system would enhance his or her job performance (Davis, 1989).

Perceived ease of use (PEOU): Perceived ease of use (PEOU) is defined to the degree to which a person believes that using a particular system would be free of effort (Davis, 1989).

Trust: Refers to a person's beliefs about the behavior based on customers' perception of ability, benevolence and integrity of the seller's (Chiu et al., 2009).

Perception risk: Defined as a customer perception about the uncertainty and potential adverse outcomes of purchasing products or services (Littler & Melanthiou, 2006).

Controllability: Controllability describes consumers' judgments about the availability of resources and opportunities to perform online consumption (Pavlou & Fygenson, 2006).

Self-efficacy: Self-efficacy describes consumers' judgments of their own capabilities to conduct online consumption (Pavlou & Fygenson, 2006).

Attitude: Positive or negative evaluation about conducting a behavior that is formed from two infrastructure of behavioral beliefs and behavior outcome evaluation that make their attitude toward the behavior (Sharma & Ramos, 2011).

Subjective norm: The amount of perceived social pressure by individual to conduct the behavior (Ajzen, 2002).

Intention: Intention is intensity to conduct the target behavior (Conner & Armitage, 1998).

Perceived behavioral control: Degree of individual's feeling to which extent about conducting or not conducting a behavior in his control (Ajzen, 1991).

2. The Theoretical Framework and Research Hypotheses

2.1 The First Question: How do Factors of Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) of Online Purchasing in Technology Acceptance Model (TAM) Affect Online Consumer Behavior?

By investigating previous studies, the following results were obtained: Based on the TAM, two factors of PU and PEOU of purchasing affect on intention to purchase through attitude factor (Davis, 1989; Taylor & Todd, 1995). Self-efficacy factor will be also affected by PEOU factor (Davis, 1989). Furthermore, an easy website to navigate can affect on the perception and the behavior of online customers and the level of their controllability (Pavlou & Fygenson, 2006). To answer this question, we can propose the hypotheses H1, H2a, H2b and H2c:

H1: PU of online purchasing has a positive effect on the attitude of individuals toward online purchasing.

H2a: PEOU of online purchasing has a positive effect on the attitude of individuals toward online purchasing.

H2b: PEOU of online purchasing has a positive effect on the controllability of individuals toward online purchasing.

H2c: PEOU of online purchasing has a positive effect on the self-efficacy of individuals toward online purchasing.

2.2 The Second Question: How do Perceived Risk factors and Trust Affect Online Consumer Behavior?

By investigating previous studies, the following results were obtained: Lack of trust prevents transacting online (Jarvenpaa et al., 2000). For e-commerce vendors, trust influences intention of purchasing by creating positive attitude in individuals (Pavlou, 2003; Suh & Han, 2003). Moreover, trust increases the controllability of consumers by creating self-confidence in practical behavior (Pavlou & Fygenson, 2006). As trust does, perceived risk factors also affect the attitudes of individuals and the level of their controllability (Chen, 2009). The most important perceived risks toward online purchasing are financial risk, product risk and non-delivery risk (Sinha, 2010). To answer this question, we can propose the hypotheses H3a, H3b, H4a, H4b, H4c, H4d, H4e and H4f:

H3a: Trust has a positive effect on attitude of individuals toward online purchasing.

H3b: Trust has a positive effect on individuals' controllability toward online purchasing.

H4a: Financial risk has a negative effect on attitude of individuals toward online purchasing.

H4b: Financial risk has a negative effect on individuals' controllability toward online purchasing.

H4c: Product risk has a negative effect on attitude of individuals toward online purchasing.

H4d: Product risk has a negative effect on individuals' controllability toward online purchasing.

H4e: Non-delivery risk has a negative effect on attitude of individuals toward online purchasing.

H4f: Non-delivery risk has a negative effect on individuals' controllability toward online purchasing.

2.3 The Third Question: How is the Role of Previous Purchase Experience on Attitude and, as a Result, on the Online Consumer Behavior?

By investigating previous studies, the following results were obtained: Based on the model of Wen, previous purchase experience affects intention to purchase online (Taylor, 2006). To answer the question, we can propose hypothesis H5.

H5: Previous purchase experience has a positive effect on intention of individuals toward online purchasing.

2.4 The Fourth Question: Can Media Affect on Online Consumer Behavior by Changing Subjective Norms?

By investigating previous studies, the following results were obtained: Reference groups have a significant influence on consumer behavior toward online purchasing. Media is considered as one of the most influential reference groups (Park, 2003). To answer this question, we can propose the hypothesis H6.

H6: Media has a positive effect on subjective norms toward online purchasing.

2.5 The Fifth Question: How do Factors of Economic Value such as Time Saving and Cost Reduction Affect Attitude of Individuals in Online Purchasing?

By investigating previous studies, the following results were obtained: According to Transaction Cost Theory (TCT) and Economics of Information (Eoi) theory, factors of economic value including time saving and cost reduction have a positive effect on attitude of individuals in online purchasing (Chen, 2009). To answer the question, we can propose the hypotheses H7a and H7b.

H7a: Cost reduction has a positive effect on attitude of individuals toward online purchasing.

H7b: Time saving has a positive effect on attitude of individuals toward online purchasing.

2.6 The Sixth Question: How do Demographic Factors Affect the Online Consumer Behavior?

By investigating previous studies, the following results were obtained: Demographic factors affect intention to purchase through the Internet (Lee, 2003). To answer the question, we can propose the hypotheses H8a, H8b and H8c.

H8a: Age has a positive effect on intention of individuals toward online purchasing.

H8b: Level of education has a positive effect on intention of individuals toward online purchasing.

H8c: Income has a positive effect on intention of individuals toward online purchasing.

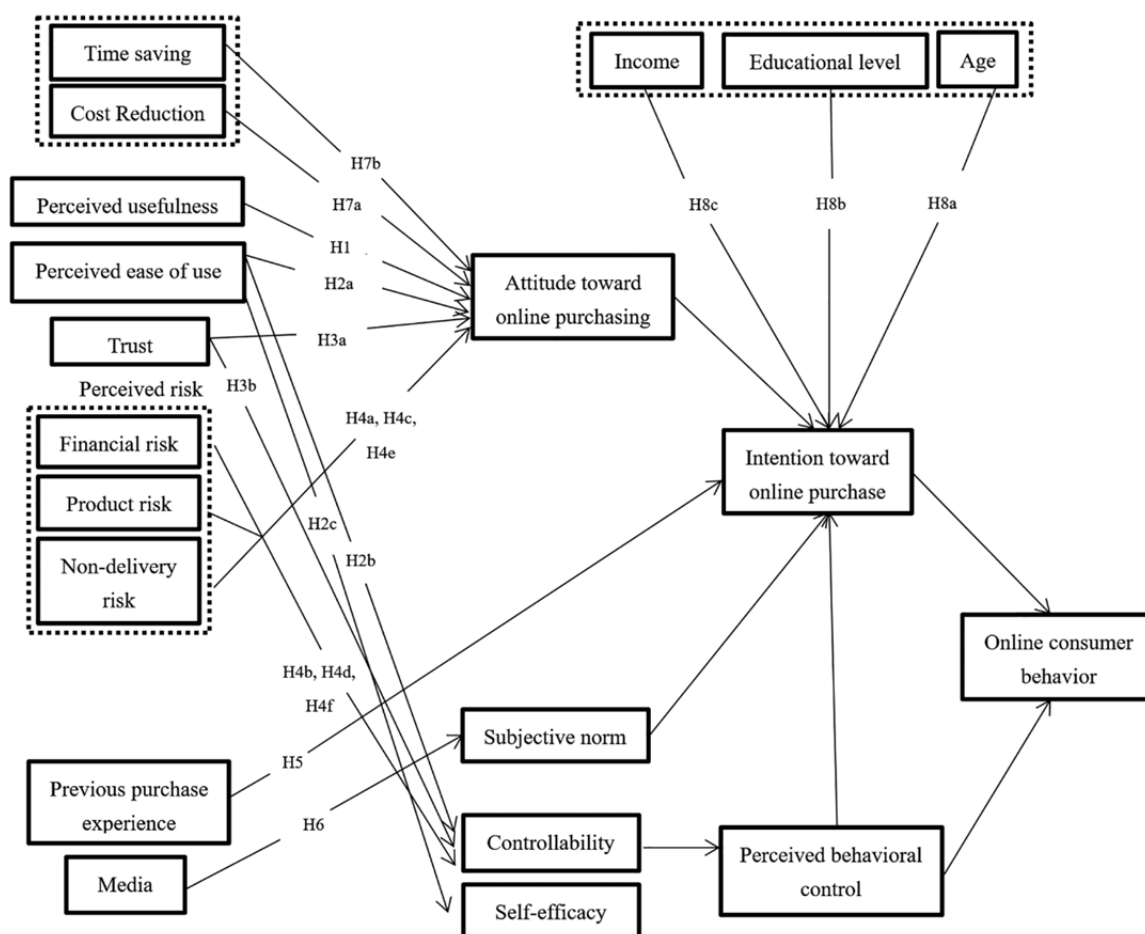


Figure 1. Conceptual Model of Research

3. Method

Based on its objective, this research is applied, descriptive, and analytical. The population of this research is the online shoppers in the city of Shiraz. Sampling was simple random and was collected via the Internet. According to the conceptual model and PLS method, the minimum required sample for this study is 80 samples, but due to the hard work of the researcher, a total of 390 questionnaires were collected properly. In this study, a questionnaire instrument was used. The questionnaire is also extracted from the combination of studies of Chen (2009), Sinha (2010), Park (2003), Wen (2006) and Lee (2003) and its reliability and validity will be tested during the research process. Reliability of the questionnaire will be investigated by Cronbach's alpha coefficients and combination (Delvin-Goldstein) and reliability will be tested by the factor loadings and average variance extracted (AVE). To analyze the data and Path Analysis, PLS method and one way variance (ANOVA) were used. ANOVA was tested by SPSS software.

3.1 Reliability Test of Measurement Models

For the reliability of the measurement models (Table 1), values higher than 0.7 show the internal consistency of reflexive measurement models. This index isn't calculated for measurement models that have been formed from an observable variable. Composite reliability index (p Delvin-Goldstein) and Cronbach's alpha, respectively, for all variables of the study show the internal consistency of measurement models.

3.2 Convergent Validity Test of Measurement Models

A model will be homogeneous if the absolute value of the factor loading in each of the observable variables corresponding to latent variable of that model has at least 0.5 values. However, 0.7 is the best range for its acceptance and the level of significance should be considered. If the factor loading is between 0.4 and 0.5, AVE of corresponding structure is over 0.5 and the level of its significance is confirmed, the factor loading is as

acceptable item. According to results from Table 1, all factor loadings of measurement models based on research data are over 0.5 and are significant at 95% confidence level.

Table 1. Values of convergent validity and reliability of the model structure

Variable	Item	convergent validity and reliability indexes			
		Factor loading	AVE > 0.5	CR > 0.7	Alpha > 0.7
Time saving	TimSav1	0.899	0.760	0.926	0.896
	TimSav2	0.917			
	TimSav3	0.802			
	TimSav4	0.864			
Cost reduction	CsRd1	0.882	0.784	0.879	0.724
	CsRd2	0.888			
Perceived Usefulness (PU)	PerUse1	0.931	0.844	0.955	0.938
	PerUse2	0.907			
	PerUse3	0.928			
	PerUse4	0.908			
Perceived ease of use (PEOU)	PerEase1	0.909	0.787	0.936	0.909
	PerEase2	0.929			
	PerEase3	0.812			
	PerEase4	0.894			
Trust	Trust1	0.939	0.846	0.942	0.908
	Trust2	0.942			
	Trust3	0.876			
Financial Risk	FnRsk1	0.926	0.705	0.877	0.809
	FnRsk2	0.733			
	FnRsk3	0.849			
Product Risk	PrdRsk1	0.919	0.778	0.913	0.861
	PrdRsk2	0.935			
	PrdRsk3	0.785			
Non -delivery risk	NDIRsk1	0.791	0.754	0.858	0.695
	NDIRsk2	0.939			
Previous purchase experience	PrchExp1	0.939	0.895	0.944	0.833
	PrchExp2	0.952			
Media	Media1	0.956	0.927	0.962	0.922
	Media2	0.970			
Self-efficacy	SelfEff1	0.963	0.927	0.962	0.921
	SelfEff2	0.962			
Attitude	Att1	0.944	0.892	0.943	0.879
	Att2	0.944			
Subjective norm	SbNrm1	0.950	0.848	0.918	0.827
	SbNrm2	0.890			
Controllability	Contrl1	0.878	0.769	0.869	0.701
	Contrl2	0.876			
Intention to purchase	AttPrch1	0.915	0.811	0.895	0.768
	AttPrch2	0.886			
Perceived behavioral control	BehvCnt1	1.000	1.000	1.000	1.000
Online consumer behavior	OnlBehv1	1.000	1.000	1.000	1.000

3.3 Quality Test of Measurement Models

According to the results of Table 2, the indexes CV-Com of variables are positive, proving the quality of the measurement models.

Table 2. Quality indexes of measurement models

CV COM	
Time saving	0.592 459
Cost reduction	0.779 497
Perceived Usefulness (PU)	0.833 858
Perceived ease of use (PEOU)	0.793 097
Trust	0.846 537
Financial risk	0.706 204
Product risk	0.780 513
Non-delivery risk	0.754 590
Previous purchase experience	0.895 575
Media	0.927 602
Self-efficacy	0.927 347
Attitude	0.556 168
Subjective norm	0.848 752
Controllability	0.769 888
Intention	0.810 794
Perceived behavioral control	0.993 358
Online consumer behavior	1.000 00

3.4 Quality Test of the Structural Model

Quality of structural model is calculated by CV Red and R Square indexes.

Table 3. Index of determination coefficient

Variable	R Square	Explanatory power
Self-efficacy	0.384	Medium
Attitude	0.339	Medium
Subjective norm	0.083	Medium
Controllability	0.461	Medium
Intention	0.489	Medium
Perceived behavioral control	0.420	Medium
Online consumer behavior	0.211	Weak

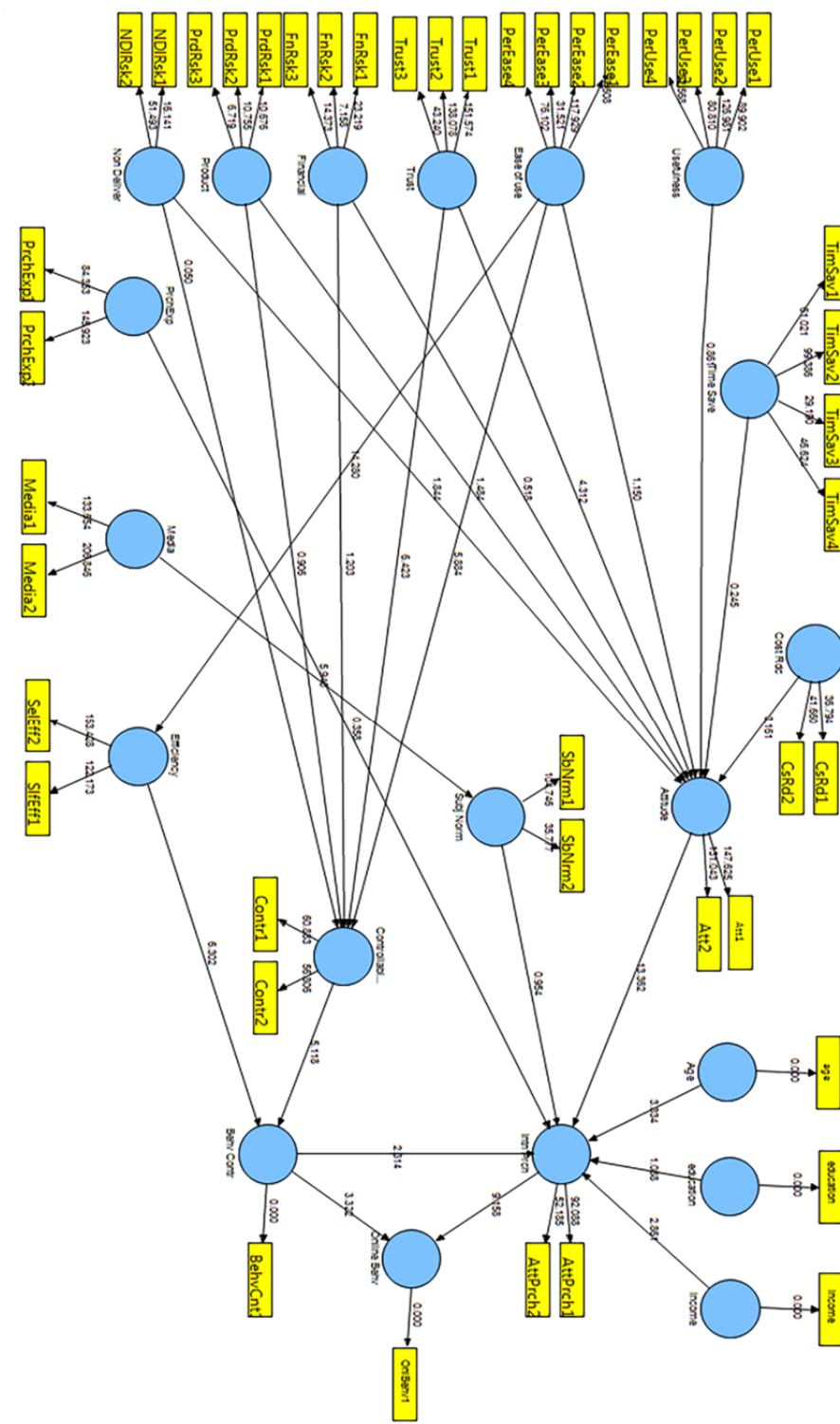
The aim of CV Red index is to investigate the ability of model in predicting as blindfolding method. According to the results in Table 4, index of CV Red for variables is positive and its quality is proved.

Table 4. Quality index of structural model

Variable	CV RED
Time saving	0.761 935
Cost reduction	0.776 226
Perceived Usefulness (PU)	0.844 070
Perceived ease of use (PEOU)	0.784 448
Trust	0.842 251
Financial risk	0.709 281
Product risk	0.780 579
Non-delivery risk	0.754 653
Previous purchase experience	0.889 159
Media	0.922 376
Self-efficacy	0.353 063
Attitude	0.287 739
Subjective norm	0.069 229
Controllability	0.346 746
Intention	0.338 456
Perceived behavioral control	0.413 761
Online consumer behavior	0.163 163

3.5 The Overall Test of Model

Index of GOF shown in Table 5 is squared multiplied of two average values of shared values (communality) and average of determination coefficient (R Square Average). GOF index of this model is 0.5362 showing the overall utility of the model.



As is shown in Figure 2 and Figure 3, the variable of PU has failed to have a significant effect on the attitude of individuals in online purchasing at confidence level of 95 percent (rejected the hypothesis H1). At 95 percent confidence level, PEOU does not have a significant effect on attitude of individuals in online purchasing (rejected the hypothesis H1b), but at the same confidence level, it affects the controllability of individuals in online purchasing (confirmed the hypothesis H2b). Variable of trust also at the confidence level of 95% has

significant effect on attitude and controllability of individuals in online purchasing (confirmed the hypotheses H3b and H3a). Financial risk, product risk and non-delivery risk (perceived risks) at the same confidence level don't have significant effect on attitude and controllability of individuals in online purchasing (rejected the hypotheses H4a, H4b, H4c, H4d, H4e and H4f). Previous purchase experience also doesn't have a positive effect on intention of individuals in online purchasing (rejected the hypothesis H5). Media at the confidence level of 95% has positive effect on the subjective norm in the field of online purchasing (confirmed the hypothesis H6). According to the obtained results, cost reduction has a positive effect on the attitude of individuals in online purchasing (confirmed the hypothesis H7a), but time saving doesn't have a significant effect on attitude of individuals in online purchasing (rejected the hypothesis H7b).

The results have confirmed the effect of attitude, previous purchase experience and perceived behavioral control on intention of individuals to purchase through internet. Controllability and self-efficacy have a positive and significant effect on perceived behavioral control. Factors of intention and perceived behavioral control have significant positive effect on online consumer behavior. However, subjective norm in this study does not have effect on intention of individuals to purchase online.

3.6 Determination the Influence of Demographic Variables (Income, Education and Age) on Intention to Purchase Online

Results of the Levene test that measures the error variance equality of age and income shown in Table 6 indicate that by increasing the level of F statistic error at confidence level of 95% from the error value 5%, the variance of these variables is different; In fact, null hypothesis of Levene test that is based on equality of research variables error variance are rejected. According to the level of error Fisher (F) test for these variables, we should use Games-Howell test with assuming no equality of errors variance. In contrast, according to the F statistic level at the 95% confidence, the value of education's variable is fewer than 0.05; therefore, to test this variable, Scheffe test with equality assumption of errors variances must be used.

Table 6. Levene test (equality of variances of error)

Intention to purchase	Levene Statistic	df1	df2	Sig
Age	1.933	4	385	0.104
Income	2.094	4	385	0.081
Education	2.528	4	385	0.040

Results of Table 7 show that at least between two groups of different groups in each variable of age, income and education in intention to purchase online, there is a significant difference in the 95% confidence level.

Table 7. ANOVA analysis

Intention to purchase online		Total squares	Degree of freedom	Mean square	Fisher test	Error level
Age	Between groups	40.832	4	10.208	4.308	0.002
	Within groups					
	Total	912.204	385	2.369		
Income	Between groups	28.327	4	7.082	2.948	0.020
	Within groups					
	Total	924.709	385	2.402		
Education	Between groups	31.403	4	7.851	3.280	0.012
	Within groups					
	Total	921.633	385	2.394		
		953.036	389			

The results of Games-Howell test in Table 8 show that there is a significant difference between age groups in terms of intention to purchase online:

- Intention to purchase online of individuals in the range of 20 to 25 years is more than those 31 to 40 years old and more than 40 years old.

- Intention to purchase online of individuals in the range of 30 to 36 years is more than those 31 to 40 years and more than 40 years old.

In other words, intention to purchase online of individuals declines by age increase and results show that intention of young individuals is more than individuals in the age groups above it in online purchasing. Consequently, age of individuals has a significant negative effect on intention of consumers in online purchasing (hypothesis H8a).

Table 8. Multiple comparisons of age groups

Dependent variables	Age (I)	Age (J)	Mean difference (I-J)	Standard error	Error level	The difference level in the confidence level of 95%	
						high limit	low limit
Intention to purchase online	Under 20 years	20 - 25 years	-.228 34	.327 91	.955	-1.2110	.7544
		26 - 30 years	-.224 60	.317 21	.952	-1.1878	.7386
		31 - 40 years	.473 54	.360 39	.685	-.5783	1.5254
		More than 40 years	.864 29	.432 73	.291	-.3871	2.1157
		Under 20 years	.228 34	.327 91	.955	-.7544	1.2110
	20 - 25 years	26 - 30 years	.003 73	.184 10	1.000	-.5020	0.5095
		31 - 40 years	.701 88*	.251 30	.048	.0043	1.3994
		More than 40 years	1.092 62*	.347 17	.0300	.0795	2.1057
		Under 20 years	.224 60	.317 21	.952	-.7386	1.1878
	26 - 30 years	20 - 25 years	-.003 73	.184 10	1.000	-.5095	.5020
		31 - 40 years	.698 15*	.237 18	.033	.0377	1.3585
		More than 40 years	1.088 89*	.337 09	.026	.0972	2.0806
		Under 20 years	-.473 54	.360 39	.685	-1.5254	.5783
	31 - 40 years	20 - 25 years	-.701 88*	.251 30	.048	-1.3994	-.0043
		26 - 30 years	-.698 15*	.237 18	.033	-1.3585	-.0377
		More than 40 years	.390 74	.378 01	.838	-.6940	1.4754
		Under 20 years	-.864 29	.432 73	.291	-2.1157	.3871
	More than 40 years	20 - 25 years	-1.092 62*	.347 17	.030	-2.1057	-.0795
		26 - 30 years	-1.088 89*	.337 09	.026	-2.0806	-.972
		31 - 40 years	-.390 74*	.378 01	.838	-1.4754	.6940

The results of Scheffe test in Table 9 show that there isn't a significant difference between the two groups of education in terms of intention to purchase online. In fact, education has no significant effect on the intention of customers to purchase online (hypothesis H8b).

Table 9. Table of multiple comparisons of education groups

Dependent variables	Education (I)	Education (J)	Mean difference (I-J)	Standard error	Error level	The difference level in the confidence level of 95%	
						high limit	low limit
Intention to purchase online	Under Diploma	Diploma	1.742 86	.640 60	.118	-.2400	3.7257
		BA degree	.242 86	.429 29	.988	-1.0859	1.5716
		MA degree	.474 32	.429 46	.875	-1.8550	1.8036
		PhD degree	-2.225 00	.733 91	.058	-4.4966	.0466
	Diploma	Under	-1.742 86	.640 60	.118	-3.7257	.2400
		Diploma					
		BA degree	-1.500 00	.502 68	.066	-3.0559	0.0559
	Diploma	MA degree	-1.268 54	.502 83	.176	-2.8249	.2878
		PhD degree	1.092 62*	.347 17	.0300	.0795	2.1057
	BA degree	Under	-.242 86	.429 29	.988	-1.5716	1.0859
		Diploma					
		Diploma	1.500 00	.502 68	.066	-.0559	3.0559

Intention to purchase online	MA degree	MA degree	.231 46	.163 55	.735	.2748-	.7377
		PhD degree	-.725 00	.559 04	.794	-2.4554	1.0054
		Under	-.474 32	.429 46	.875	-1.8036	.8550
		Diploma					
	PhD degree	Diploma	1.268 54	.502 83	.176	-.2878	2.8249
		BA degree	-.231 46	.163 55	.735	-.7377	.2748
		PhD degree	-.956 46	.559 18	.571	-2.6872	.7743
		Under	.482 14	.685 73	.974	-1.6403	2.6064
		Diploma					
		Diploma	2.225 00	.733 91	.058	-.0466	4.4966
		BA degree	.725 00	.559 04	.794	-1.0054	2.4554
		MA degree	.956 46	.559 18	.571	-.7743	2.6872

The results of Games- Howell test in Table 10 show that there is a significant difference only between two groups of income: less than 500 thousand tomans and 500 to 1 million tomans per month, in terms of intention to purchase. In other words, intention of individuals to purchase online with incomes between 500 and 1 million tomans per month is more than those with incomes below 1 million tomans per month. As a result, income has a significant effect on the intention of customers to purchase online (hypothesis H8c).

Table 10. Multiple comparisons of income groups

Dependent variables	Income (I)	Income (J)	Mean difference (I-J)	Standard error	Error level	The difference level in the confidence level of 95%	
						High limit	Low limit
Intention to purchase online	Less than 500 thousand tomans	500 - 1 million tomans	-.678 25*	.208 16	.011	-1.2508	-.1057
		1 - 2 million tomans	-.214 38	.216 50	.860	-.8099	.3811
		2 - 3 million tomans	-.067 71	.244 35	.999	-.7495	.6141
		More than 3 million tomans	-.448 66	.341 66	.685	-1.4237	.5264
	500 - 1 million tomans	Less than 500 thousand tomans	.678 25*	.208 16	.011	.1057	1.2508
		1 - 2 million tomans	.483 88	.213 99	.196	-.1253	1.0531
		2 - 3 million tomans	.610 54	.242 13	.096	-.0659	1.2870
		More than 3 million tomans	.229 59	.340 08	.961	-.7419	1.2010
	1 - 2 million tomans	Less than 500 thousand tomans	.214 38	.216 50	.860	-.3811	.8099
		500 - 1 million tomans	-.463 88	.213 99	.196	-1.0531	.1253
		2 - 3 million tomans	.146 67	.249 33	.976	.5486-	.8419
		More than 3 million tomans	-.234 29	.345 25	.960	-1.2180	.7495
	2 - 3 million tomans	Less than 500 thousand tomans	.067 71	.244 35	.999	-.6141	.7495
		500 - 1 million tomans	-.610 54	.242 13	.096	-1.2870	.0659
		1 - 2 million	-1.146 67	.249 33	.976	-.8419	.5486

	tomans					
	More than 3 million tomans	-.380 95	.363 36	.831	-1.4116	.6497
More than 3 million tomans	Less than 500 thousand tomans	.448 66	.341 66	.685	-.5264	1.4237
	500 - 1 million tomans	-.229 59	.340 08	.961	-1.2010	.7419
	1 - 2 million tomans	.234 29	.345 25	.960	-.7495	1.2180
	2 - 3 million tomans	.380 95	.363 36	.831	-.6497	1.4116

4. Discussion

The obtained results of data analysis showed that the index of perceived usefulness (PU) by the path coefficient of 0.062 and the T-statistic of 0.860 (smaller than 1.96) did not have a significant positive effect on the attitude of individuals in the online purchasing. The findings are consistent with results of Chen (2009).

According to the results, the perceived ease of use (PEOU) index by path coefficient of 0.081 and the T-statistic of 1.150 (smaller than 1.96) didn't have a significant positive effect on the attitude of individuals in the online purchasing. The finding is consistent with the research of Park (2003). Chen (2009) in his study on the subject of online consumer behavior: an empirical study based on theory of planned behavior confirmed the effect of perceived ease of use (PEOU) on the attitude of individuals in the online purchasing with the path coefficient of 0.507 and the T-statistic of 7.347 (larger than 1.96) that isn't consistent with the findings of the present study.

The obtained results of data analysis showed that PEOU index of purchasing by path coefficient of 0.357 and the T-statistic of 5.884 (larger than 1.96) had a significant positive effect on the controllability of individuals in the online purchasing. The findings are consistent with the research of Chen (2009).

Also, PEOU index of purchasing by path coefficient of 0.619 and the T-statistic of 14.280 (larger than 1.96) had a significant positive effect on the self-efficacy of individuals in the online purchasing. The findings are consistent with the research of Chen (2009).

The results of trust index by path coefficient of 0.297 and the T-statistic of 4.312 (larger than 1.96) had a significant positive effect on the attitude of individuals in the online purchasing. The findings are consistent with the research of Park (2003). Chen (2009) in his study investigated the effect of trust on the attitude of individuals to purchase online, but that hypothesis was rejected. Therefore, the findings are not consistent with the findings of Chen's study.

As the results showed, the trust index by path coefficient of 0.378 and the T-statistic of 6.423 (larger than 1.96) had a significant positive effect on the controllability of individuals in the online purchasing. The findings are consistent with the research of Chen (2009).

Financial risk index by path coefficient of 0.027 and the T-statistic of 0.518 (smaller than 1.96) didn't have a significant positive effect on the attitude of individuals in the online purchasing. The findings are consistent with the research of Chen (2009) and Sinha (2010).

Also the results showed that the financial risk index by path coefficient of 0.060 and the T-statistic of 1.203 (smaller than 1.96) didn't have a significant positive effect on the controllability of individuals in the online purchasing. The findings are consistent with the research of Chen (2009).

The results showed that the product risk index by path coefficient of -0.080 and the T-statistic of 1.484 (smaller than 1.96) didn't have a significant positive effect on the attitude of individuals in the online purchasing. The findings are consistent with the research of Chen (2009) and Sinha (2010).

The product risk index by path coefficient of 0.045 and the T-statistic of 0.906 (smaller than 1.96) didn't have a significant positive effect on the controllability of individuals in the online purchasing. The findings are consistent with the research of Chen (2009).

The obtained results of data analysis showed that non-delivery risk index by path coefficient of -0.130 and the T-statistic of 1.844 (smaller than 1.96) didn't have a significant positive effect on the attitude of individuals in the online purchasing. The findings are consistent with the research of Chen (2009). Sinha (2010) confirmed the effect of non-delivery risk on the attitude of individuals in the online purchasing by path coefficient of 0.199 and

significant percent of 0.025 (smaller than 0.05) that isn't consistent with the findings of this study.

The obtained results showed that the non-delivery risk index by path coefficient of 0.003 and the T-statistic of 0.050 (smaller than 1.96) didn't have a significant positive effect on the controllability of individuals in the online purchasing. The findings are consistent with the research of Chen (2009).

Previous purchase experience index by path coefficient of 0.032 and the T-statistic of 0.524 (smaller than 1.96) didn't have a significant positive effect on the attitude of individuals in the online purchasing. The findings aren't consistent with the research results of Wen (2006).

Media index by path coefficient of 0.228 and the T-statistic of 5.940 (larger than 1.96) had a significant positive effect on the subjective norm in the field of online purchasing. The findings are consistent with the research results of Lee (2003). Park (2003) in his study rejects the effect of media on the subjective norm in the fields of online purchasing that isn't consistent with the present findings.

Cost reduction index by path coefficient of 0.152 and the T-statistic of 3.161 (larger than 1.96) had a significant positive effect on the attitude of individuals in the online purchasing. The findings are consistent with the research results of Chen (2009).

Time saving index by path coefficient of 0.018 and the T-statistic of 0.243 (smaller than 1.96) didn't have a significant positive effect on the attitude of individuals in the online purchasing. The findings are consistent with the research results of Chen (2009).

Age index by path coefficient of -0.159 and the T-statistic of 3.843 (larger than 1.96) had a significant negative effect on the attitude of individuals in the online purchasing. The findings are consistent with the research results of Lee (2003).

Education level index by path coefficient of 0.043 and the T-statistic of 1.088 (smaller than 1.96) didn't have a significant positive effect on the attitude of individuals in the online purchasing. The findings are not consistent with the research results of Lee (2003).

Income index by path coefficient of 0.114 and the T-statistic of 2.851 (larger than 1.96) had a significant positive effect on the attitude of individuals in the online purchasing. The findings are not consistent with the research results of Lee (2003).

5. Conclusion and Suggestion

According to the obtained results, the following suggestions are offered:

- Perceived ease of use (PEOU) has positive effect on the controllability and self-efficacy of individuals and can have a positive effect on consumers' intention to purchase and through the perceived behavioral control. Company managers should pay attention to this issue in providing the Internet service in all stages such as web design, search for products, product selection and online payment.
- Trust has a positive effect on the controllability and the attitude of individuals to purchase online and with regard to the conceptual model ultimately has a positive effect on the intention of consumers to purchase. Managers should provide areas of consumer trust and avoid factors that eliminate the consumer trust.
- Media affects on subjective norm in the field of online purchasing and in this way can have a positive effect on the intention of consumers to purchase. Using the media as an example of the reference groups and advertisements in the media, especially social media can increase Internet sales of firms.
- Cost reduction affects on attitude of individuals in online purchasing and thus can affect consumers' intention to purchase. All actions in the field of cost reduction such as removal of the middlemen can encourage consumers to participate in online purchasing.
- Age and income affect individuals' intention in online purchasing. Meanwhile, firms should pay attention to this point in their target market.

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