

Intention to Purchase Online, Customer Commitment, and the Mediating Role of Perceived Brand Image: Examination and Analysis

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ABSTRACT

The purpose of this study was to examine the impact of intention to purchase online through the role of customer commitment with a particular emphasis on perceived brand image. This research is an applied study that employs the descriptive-correlational approach for its purpose. The required data were collected using field survey methods. A questionnaire was used to collect information. The statistical population of the present study included virtual customers on Instagram. Based on the Cochran's formula for an unlimited population, the proper sample size was determined at 444 people. In the present study, a convenience sampling was used to select the research sample. Cronbach's alpha was used to evaluate the reliability of the questionnaire, which was higher than 0.7 for all variables. Structural equations in SPSS and PLS software were used to analyze the data. The findings of the research indicated that customer commitment has a significant effect on customers, intention to purchase and also their perceived brand image. Moreover, commitment has a significant effect on customers' intention to purchase online through the mediating role of perceived brand image. Finally, brand image had a statistically significant effect on the intention to purchase online.

Keywords: Customer commitment, brand image, intention to purchase online

Introduction

Online trading and e-commerce are blessed with a plethora of significant features, including reduced costs, improved product quality, tapping into new customer or supplier markets and formation of new ways of selling products (Jafarpour, Rahman Seresht, 2009, Ghafarai Ashtiani et al., 2011). Consumer behavior analysis is of utmost importance for the success of e-business is (Makarem et al. 2016). Consumer behavior

is a new academic trend in marketing. As such, predicting consumer behavior can be the precursor to the consumer's inclination to purchase a product in the future. The consumers' intention to purchase is formed from their attitude. Consumer behavior can be defined as physical, mental and sensory activities that individuals exhibit when choosing, purchasing and using products and services to satisfy their needs and desires, itself including the decision-making process before, during and after these measures are performed (Sharifipour et al. 2015).

Organizations today have come to realize that they can achieve long-term profits only by repeating customer purchases. Therefore, they are always trying to seek trial and error steps to facilitate the process of customers' online purchasing. The intention to purchase online refers to the practice of customers repeating purchase of a particular brand after using it or the customer's insistence on purchasing from a particular company in the future (Aghazadeh et al., 2013). Rahimi Aghdam et al. (2016) explained the scientific and practical solution for intention to purchase online based on guarantee strategies with the mediating role of trust in online stores. Based on the findings, it is suggested that managers implement guarantee strategies in online stores with the purpose of gaining more trust and improving the consumers' intention to purchase online. Honarmand (2019) examined the effect of the role of the experience of online purchase on the satisfaction and the intention to purchase online in Digi-Kala customers, the results for which indicated that the experience of online purchase mediates the effect of self-efficacy, performance expectations, and trust on satisfaction. On the contrary, the results revealed that the experience of online purchase does not have a significant effect on the relationship between effort expectation and satisfaction.

It should be borne in mind that new technologies available to consumers offer information from new sources in the online environment, such as social media or blogs, and hence examining their impact on consumers' intention to purchase can be of academic significance. In particular, the nature of these relationships, and the impact of new actors emerging in relationship behavior in the new digital environment, need more in-depth academic scrutinization. This study sought to examine three prerequisites for purchasing intentions that would contribute to the literature on the relationships between the components of online marketing. Commitment is important as an internal input to strengthen relationships, yet the Internet provides information on products through external agents, such as online influencers. Moreover, many studies point to the fact that perceived product brand and brand image are crucial in consumer's intention to purchase. As such, the current study sought to determine the effect customer commitment in cyberspace has on customers' perceived brand image and intention to purchase online.

Research method

The present research was a descriptive-correlational study. The statistical population of the study included buyers of various products through Instagram who purchase from online clothing stores in Rasht, the population for which was deemed to be unlimited owing to the perceived lack of access. Since the statistical population was unlimited in this study, the Cochran's formula for infinite population was used to determine the sample size, which was revealed to be 444 subjects. Non-probability convenience method was used for sampling. The data collection tool was a questionnaire. After translating the items, the questionnaire was presented to the supervising professor, and using his feedbacks and comments, several items were revised. Then, several professors of management and online buyers in the online network were asked for professional comments with the ultimate purpose of confirming the content validity of the questionnaire. Cronbach's alpha method was used to measure the reliability of the questionnaire, the value for which was higher than the required 0.7 in all variables of the questionnaire, hence confirming the reliability of the questionnaire. Data analysis was performed based on structural equation modeling (SEM) using the partial least squares (PLS) approach in SPSS and PLS environment.

Findings

Descriptive Statistics

Table 1: Descriptive statistics of research variables

Variable	Frequency	Min	Max	Mean	SD	Skewness	Kurtosis
Customer commitment	444	1.50	5.00	4.2399	0.69759	-0.744	0.261
Customers' intention to purchase online	444	2.00	5.00	3.8483	0.89506	-0.903	-0.330
Customers' perceived brand image	444	1.00	5.00	3.4069	0.83975	0.200	-0.595

Findings from table 1 reveal that the minimum value for the variable of customer commitment is 1.5, the maximum value is 5, the mean value is 4.2399 and the standard deviation is 0.69759. Moreover, the minimum value for the variable of Customers' intention to purchase online is 2.00, the maximum value is 5.00, the mean value is 3.8483 and the standard deviation is 0.89506. Finally, the minimum value for the variable of Customers' perceived brand image is 1.00, the maximum value is 5.00, the mean value is 3.4069 and the standard deviation is 0.83975.

Normality of variable

After SPSS analysis on the output of Kolmogorov-Smirnov test, if the significance level is less than 5%, the distribution of the data of the desired variable is not normal and non-parametric test should be used.

Table 2: Kolmogorov-Smirnov test for research variables

Variable	Value	Sig. level
Customer commitment	362.1	034.0
Customers' intention to purchase online	334.1	033.0
Customers' perceived brand image	302.1	044.0

The results from Table 2 reveal that the value for the significance level obtained from the Kolmogorov-Smirnov test on the research variables is less than 0.05 and hence the variables do not have a normal distribution in the study sample.

Fitness of the research model

The fitness of the overall model is studied in three separate stages, corresponding to the measurement model, structural model and the general model. The purpose here is to examine the extent by which the research model fits with the data collected from the statistical sample. After confirming the fit of the model, the researcher is allowed to review and test the research hypotheses. Figure 1 represents the standardized coefficient estimation of the model while Figure 2 presents the significant coefficients t of model in the PLS. All further studies on the fitness of the measurement, structural and general models and testing of hypotheses are performed using the outputs from the PLS.

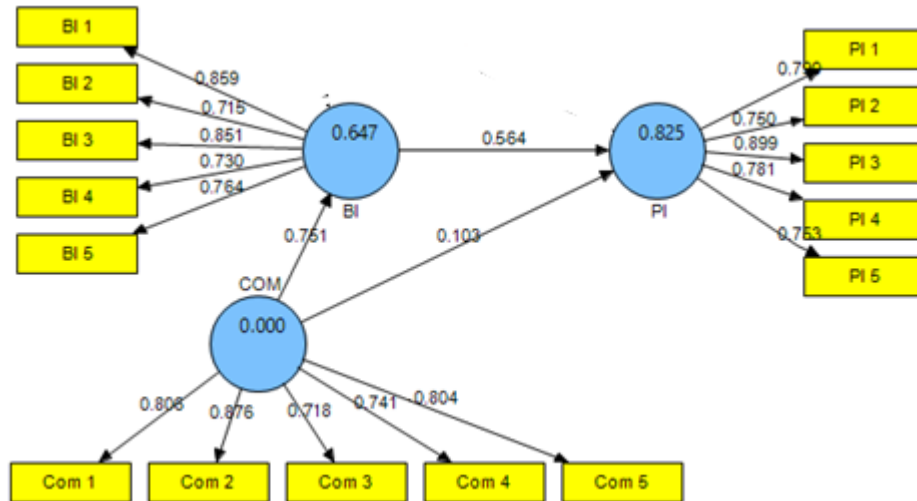


Figure 1: Estimation of the standardized coefficients of factor loading for the research model

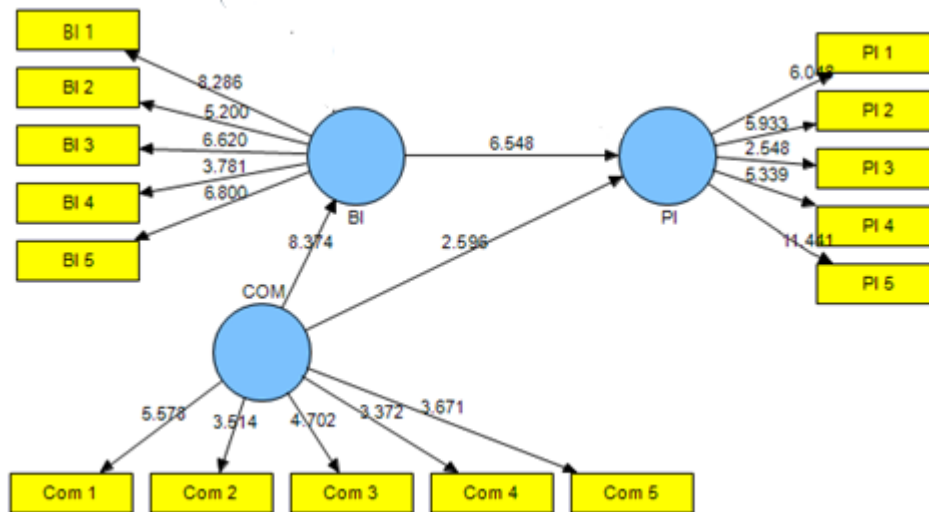


Figure 2: significance coefficients t for the research model

Reliability of the model

A) coefficients of factor loadings

Factor loading are determined by calculating the correlation value of the underlying factor with that structure. The value of 5.0 for these coefficients confirms that the variance between that structure and its parameters is greater than the variance of the measurement error of that structure and hence the reliability of that model is acceptable.

Table 3: Factor loadings of model structures

	Customer commitment	Brand image	Intention to purchase online
Com 1	0.806		
Com 2	0.876		
Com 3	0.718		
Com 4	0.741		
Com 5	0.804		
BI 1		0.859	
BI 2		0.715	
BI 3		0.851	
BI 4		0.730	
BI 5		0.764	
PI 1			0.790
PI 2			0.750
PI 3			0.899
PI 4			0.781
PI 5			0.753

The data from Table 3 indicate that for all of the underlying factors, the loadings have values greater than 5.0. Therefore, the reliability of the measurement models is acceptable, which indicates the proper fitness of the measurement model.

B) Cronbach’s alpha and composite reliability

According to the data analysis algorithm in the PLS method, the coefficients of Cronbach’s alpha and the combined reliability must be first determined. Cronbach’s alpha coefficients and the Composite reliability of the structures indicate the total amount of true score variance relative to the total scale score variance. A reliability coefficient higher than 7.0 is known as an acceptable value. The results of the reliability coefficients are presented in Table 4, which clearly indicates that all factors have an acceptable composite reliability coefficient and Cronbach’s alpha coefficient. Therefore, it can be concluded that the research questionnaire has good internal consistency. As a result, the fitness of the measurement model is also confirmed.

Table 4: Coefficients of the internal consistency of the scale

Variable	Cronbach’s alpha $\alpha > 0.7$	composite reliability CR > 0.7
Customers’ intention to purchase online	0.819	0.842
Customers’ perceived brand image	0.804	0.776
Customer commitment	0.779	0.871

Convergent validity

In the current study, the average variance extracted (AVE) index was used to evaluate the convergent validity. AVE represent the degree of correlation of a structure with its characteristics. It was first proposed by Fornell & Larcker (1981) to measure the convergent validity and stated that the critical value of this value is 0.5. That is, a value above 5.0 indicates acceptable convergent validity. The results of the convergent validity study of the model structures are presented in Table 5:

Table 5: Convergent validity of model structures based on AVE

Variable	AVE
Customers' intention to purchase online	0.754
Customers' perceived brand image	0.615
Customer commitment	0.590

Discriminant validity

Table 6 reveals the results on testing the discriminant validity of the model.

Table 6: discriminant validity of model using Fornell-Larcker criterion

Variable	Customers' intention to purchase online	Customers' perceived brand image	Customer commitment
Customers' intention to purchase online	0.868		
Customers' perceived brand image	0.266	0.748	
Customer commitment	0.419	0.355	0.768

Fitness of the structural model

According to data analysis algorithm in PLS method, the fitness of the structural model should be determined following the calculations on the fitness of measurement models. Here, the R Squares is used to determine the fitness the structural model.

Table 7: Convergent validity of model structures based on R2 values

Variable	Communality
Customers' intention to purchase online	0.825
Customers' perceived brand image	0.647
Customer commitment	-

According to Table 7, the obtained values indicate a relatively good fit of the structural model. The values show that the model is able to explain the 82.5% of the changes in variable of the intention to purchase online.

Overall model fit

In this section, the fit of the overall model based on the GOF criterion is examined. Considering the mean of common values of structures (common values of first-order structures) and the mean of R2 for all endogenous structures of the model, the GOF value for the overall fit of the present research model is equal to:

Table 8: Convergent validity of model structures based on R2 values

Variable	Communality
Customers' intention to purchase online	0.754
Customers' perceived brand image	0.615
Customer commitment	0.590
Data of influencers	0.636

$$GOF = \sqrt{Communalities \times R^2} = \sqrt{0.649 \times 0.736} = 0.691$$

Since the values of 0.01, 0.25 and 0.36 are often indexed as values respectively corresponding to weak, medium and strong fitness, the value of 0.691 for GOF indicates a strong overall fit of the research model.

Testing hypotheses

Hypothesis 1: Customer commitment has a significant effect on customers’ intention to purchase online.

The structural model of the research for the significance coefficients indicates that the value of t-statistic between the two variables of customer commitment and customers’ intention to purchase online is outside the interval of (-1.96 - 1.96) and hence the research hypothesis is accepted. The coefficient of the effect of customer commitment on customers’ intention to purchase online is equal to 0.103.

Hypothesis 2: Customer commitment has a significant effect on customers’ perceived brand image.

The structural model of the research for the significance coefficients indicated that the value of t-statistic between the two variables of customer commitment and customer perceived brand image is outside the interval of (-1.96 - 1.96) and hence the research hypothesis is accepted. The effect of customer commitment on customers’ perceived brand image is equal to 0.751.

Hypothesis 3: Customers’ perceived brand image has a significant effect on intention to purchase online.

According to the structural model of the research for the significance coefficients, the value of t-statistic between the two variables is customers’ perceived brand image and their intention to purchase online outside the interval of (-1.96 - 1.96) and hence the research hypothesis is accepted. The coefficient of the effect of customers’ perceived brand image on their intention to purchase online is equal to 0.564.

Hypothesis 4: Customers’ perceived brand image has a mediating role in the effect of customer commitment on customers’ intention to purchase online.

The structural model of the research further reveals that the t-statistic between customer commitment and customer perceived brand image (8.374) and customers’ perceived brand image and the customers’ intention to purchase online (6.548) is outside the interval of (-1.96 - 1.96) and therefore the hypothesis of the significant mediating role of customers’ perceived brand image is accepted. The Sobel test is used test the significance of a mediation effect:

$$Z = \frac{t_a * t_b}{\sqrt{(t_a^2 * t_b^2)}} = \frac{8.374 * 6.548}{\sqrt{(8.374^2 + 6.548^2)}} = 5.158$$

The results reveal that the value of Z-statistic from Sobel test is equal to 5.158, which is outside the interval of (-1.96 - 1.96), and hence it can be concluded that the mediating role of the variable of perceived brand image in the effect of to customer commitment on the intention to purchase online is statistically significant.

Table 9: Results of research hypotheses

Hypothesis 1				t-VALUE	Standard path coefficient	Test result
H _{2a}	Customer’s Commitment	----->	Intention to Purchase Online	2.596	0.103	Approved
Hypothesis 2				t-VALUE	Standard path coefficient	Test result
H _{2b}	Customer’s Commitment	----->	Perceived brand image	8.374	0.751	Approved
Hypothesis 3				t-VALUE	Standard path coefficient	Test result
H ₃	Perceived brand image	----->	Intention to Purchase Online	6.548	0.564	Approved
Hypothesis 4				t-VALUE	Standard path coefficient	Test result
H ₅	Customer Commitment	Perceived brand image	Intention to Purchase Online	158.5	0.751 0.564 0.425	Approved

Conclusion

Findings from this research indicate that customer commitment has a statistically significant effect on customers' intention to purchase online. The structural model of the research for the significance coefficients indicates that the value of t-statistic between the two variables of customer commitment and customers' intention to purchase online is outside the interval of (-1.96 - 1.96) and hence the research hypothesis is accepted. The coefficient of the effect of customer commitment on customers' intention to purchase online is equal to 0.103. This result is consistent with that of Khodabandeh and Lindh (2020) and Rahimi Aghdam et al. (2020). Customer commitment has a significant effect on customers' perceived brand image. The structural model of the research for the significance coefficients indicated that the value of t-statistic between the two variables of customer commitment and customer perceived brand image is outside the interval of (-1.96 - 1.96) and hence the research hypothesis is accepted. The effect of customer commitment on customers' perceived brand image is equal to 0.751. This finding is consistent with that of Asadollahi Dehkordi et al. (2019), Asadollahi Dehkordi et al. (2019) and Khodabandeh and Lindh (2020). Customers' perceived brand image affects their intention to purchase online. According to the structural model of the research for the significance coefficients, the value of t-statistic between the two variables is customers' perceived brand image and their intention to purchase online outside the interval of (-1.96 - 1.96) and hence the research hypothesis is accepted. The coefficient of the effect of customers' perceived brand image on their intention to purchase online is equal to 0.564. This result is consistent with the research of Rasouli et al. (2018), Asadollahi Dehkordi et al. (2019), Khodabandeh and Lindh (2020). Customers' perceived brand image has a mediating role in the effect of customer commitment on customers' intention to purchase online. The structural model of the research further reveals that the t-statistic between customer commitment and customer perceived brand image (8.374) and customers' perceived brand image and the customers' intention to purchase online (6.548) is outside the interval of (-1.96 - 1.96) and therefore the hypothesis of the significant mediating role of customers' perceived brand image is accepted. The value for coefficient corresponding to the indirect effect of customer commitment on customers' intention to purchase online is equal to 0.425. This result is consistent with that of Khodabandeh and Lindh (2020).

Based on the results, considering that brand image has a mediating role in the effect of commitment on brand image, it is advised to implement programs aimed at increasing trust in the desired brands to increase the impact of commitment on customers' intention to purchase online.

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