UNDERSTANDING ONLINE CONSUMER BEHAVIOR : INTENTION & SELECTION
An Empirical Study on Online Consumer Behavior in Turkey

Dr. Edin Güçlü SÖZER & Mustafa Emre CİYELEK

Presented by Mustafa Emre Civelek
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Internet is a communication tool and economic platform where consumers communicate and transact.

In this perspective, online consumer behavior became an important area for both academics and professionals.

Online consumer behavior includes a two-step process composed of intention to shop online and selection of e-store.

This study contributes to the existing literature by developing and testing a combined online consumer behavior model which explains the dynamics of the intention and the selection processes in Turkey.

A two-staged research design has been implemented in the study.

At the first stage, the dynamics of the intention process has been explored.

At the second stage the effect of retailer brand equity on e-store selection process has been measured.

The results of the study confirmed that risk perceptions, technology acceptance factors and benefit perceptions regarding online shopping play a decisive role in the intention of consumers to shop online.

A second important finding of the study is that once consumers’ involve into online shopping activity, the strength of retailers’ brand equity directly affects the consumers’ store preference.
The factors affecting Intention to Shop Online.

RQ1- Do ‘Risk Perceptions’ affect Intention to Shop Online?

RQ2- Do ‘Technology Acceptance Factors’ affect Intention to Shop Online?

RQ3- Do ‘Benefit Perceptions’ affect Intention to Shop Online?

Relationship between Intention to Shop Online and Actual e-shopping.

RQ4- Does Intention to Shop Online really trigger actual e-shopping?

Relationship between retailer brand equity and e-store preference.

RQ5- Does e-store equity have any effect on the patronage intentions?
Figure 1. Proposed Research Model

Initial Research Model

- Risk Perceptions
  - Product Risk
  - Financial Risk

- Technology Acceptance Factors
  - Ease of Use
  - Usefulness

- Benefit Perceptions
  - Shopping Flexibility
  - Product Selection
  - Shopping Convenience

- Intention To Shop Online
  - H4
  - H1a (-)
  - H1b (-)
  - H2a (+)
  - H2b (+)
  - H3a (+)
  - H3b (+)
  - H3c (+)

- Internet Experience
  - H5

- Shopping Orientation

- E-Store Patronage
  - H6 (+)
  - H7a (+)
  - H7b (+)
  - H7c (+)
  - H7d (+)

- Perceived Quality
- Retailer Loyalty
- Retailer Awareness
- Retailer Associations
Effect of ‘Risk Perceptions’ on Intention to Shop Online?

- The first group, Risk Perceptions, is composed of Product and Financial Risk perceptions of consumers.

- Many studies confirmed the effect of consumers’ risk perceptions on online shopping intention (Bianchi and Andrews, 2012; Chang and Wu, 2012; Pi and Sangruang, 2011; Lee and Huddleston, 2009; Jay et. all, 2002; Bhatnagar et. all, 2000). Based on the findings in the current literature and the classifications of perceived risk types in this context, we propose the following hypotheses:

  - **H1a.** Higher the perceived product risk of consumers towards online shopping, the less will be their intention to shop online.

  - **H1b.** Higher the perceived financial risk of consumers towards online shopping, the less will be their intention to shop online.

Effect of ‘Technology Acceptance Factors’ on Intention to Shop Online?

- The second group, Technology Acceptance Factors, is composed of consumer’s Ease of Use and Usefulness Perception towards the Internet as a shopping channel.

- Studies which are conducted to validate the Technology Acceptance Model (TAM) confirmed the effect of these factors in channel selection (Al Zubaidi and Al-Alnsari, 2010; Liao and Shi, 2009; Zhang and Prybutok, 2003; Straub et. all, 1997; Adams et. all, 1992). Based on these findings in the current literature we propose the following hypotheses:

  - **H2a.** Positive perception of Ease of Use by consumers will lead to higher levels of intention to shop online.

  - **H2b.** Positive perception of Usefulness by consumers will lead to higher levels of intention to shop online.
The third group, Benefit Perceptions, is composed of Shopping Flexibility, Product Selection and Shopping Convenience benefit perceptions of consumers.

Many studies in the literature confirmed the effect of consumers' benefit perceptions on online shopping intention (Chen-Yu and Seock, 2002; Szymanski and Hise, 2000). Based on the findings in the current literature and the classifications of perceived benefit types in this context, we propose the following hypotheses:

**H3a.** Higher the perceived shopping flexibility of consumers towards online shopping, the higher will be their intention to shop online.

**H3b.** Higher the perceived product selection benefit of consumers towards online shopping, the higher will be their intention to shop online.

**H3c.** Higher the shopping convenience benefit of consumers towards online shopping, the higher will be their intention to shop online.

The current literature includes studies which propose and confirm the moderating effect of both Shopping Orientations and Internet Experience on the Intention to Shop Online (Citrin et. all, 2000; Lohse et. all, 2000; Swaminathan et. all, 1999).

Based on the current findings, we propose the following hypothesis.

**H4.** Shopping Orientation of consumer will have a moderating effect on the intention to shop online.

**H5.** Internet Experience of consumer will have a moderating effect on the intention to shop online.
Factors affecting consumers’ online store selection

- For the purpose of this study and based on the current literature, retailer brand equity has been proposed to affect consumers’ online store selection.

- Many studies in the literature confirmed the positive effect of customer based brand equity on the consumers’ brand selection and purchase intention (Bian and Liu, 2011; Huang et. all, 2011; Chang and Liu, 2009). Based on the findings, we propose the following hypothesis.

H7. The strength of online store’s retailer brand equity will have a positive effect on consumers’ patronage intentions.

H7a. Higher the brand awareness of the retailer, the higher will be the consumers’ patronage intentions.

H7b. More positive the associations in consumers’ mind linked to the retailer’s brand, more will be the likelihood of consumers’ patronage intentions towards the retailer.

H7c. Higher the perceived quality of the retailer, the higher will be the consumers’ patronage intentions.

H7d. Higher the loyalty of the consumer towards the retailer’s brand, the higher will be the consumers’ patronage intentions.
Research Design

- The research was conducted in a campus of a private University in Istanbul, Turkey.
- The subjects of this study were the undergraduate students of the University. Due to their propensity to use the Internet, they were selected as the subject group.
- Total number of the subjects was 406.
- The study was composed of two stages. Prior to the first stage, the research instrument was tested in order to measure the face validity.
- In the first stage of the study, the target was to explore the relationship between the several independent factors and the Intention to Shop Online.
- The questionnaire also included several questions regarding the subjects’ Internet usage frequency, online shopping experience and their shopping orientations.
Research Design

- The second questionnaire measures the effect of e-store brand equity on the e-store patronage intention of the subjects.

- In this section, subjects are asked to mark three e-stores (Store A, Store B and Store C) from the list of ten stores in the questionnaire and rank these three e-stores based on their preference.
**Grouping of independent variables**

- The proposed research model of the study consisted of seven independent factors composed of twenty-eight different variables.

- In order to reduce the independent variables into a manageable number of factors, a Principal Component Analysis (PCA) has been conducted.

- The factor analysis resulted in the creation of six factors having an explanatory power of 63%, a Kaiser-Meyer-Olkin test score of 0.907, which shows that the data used is the homogenous collection of variables, and a significant Bartlett test of Sphericity.
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Definition</th>
<th>Cronbach's α Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Product Risk Perception</td>
<td>Subjects’ risk perception in online shopping transactions related to the product (No physical contact, no trial).</td>
<td>0,7329</td>
</tr>
<tr>
<td>2 Financial Risk Perception</td>
<td>Subjects’ financial risk perception in online shopping transactions (Fraud, wrong choice).</td>
<td>0,7559</td>
</tr>
<tr>
<td>3 Technology Acceptance Factors</td>
<td>Subjects’ perception of internet as a shopping channel from usefulness and ease of use perspectives.</td>
<td>0,8954</td>
</tr>
<tr>
<td>4 Shopping Flexibility Benefits</td>
<td>Subjects' perception on the flexibility (No physical boundaries, no time constraint) which is provided by online shopping environment.</td>
<td>0,8286</td>
</tr>
<tr>
<td>5 Product Selection Benefits</td>
<td>Subjects' perception on the product related benefits (Wide range, many alternatives, fast information) which are provided by online shopping environment.</td>
<td>0,8872</td>
</tr>
<tr>
<td>6 Shopping Convenience Benefits</td>
<td>Subjects' perception on the convenience (No waiting time, multiple store visits at once) which is provided by online shopping environment.</td>
<td>0,6947</td>
</tr>
</tbody>
</table>
The determinants of intention to shop online

- In order to understand the relationship between the independent factors and Intention to Shop Online, a multiple regression analysis has been conducted.

<table>
<thead>
<tr>
<th>Factor Name</th>
<th>Factor Explanation</th>
<th>Standardized Coefficient (β)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Acceptance Factors</td>
<td>Subjects’ perception of internet as a shopping channel from usefulness and ease of use perspectives.</td>
<td>0.424</td>
<td>0.000</td>
</tr>
<tr>
<td>Financial Risk Perception</td>
<td>Subjects’ financial risk perception in online shopping transactions (Fraud, wrong choice).</td>
<td>-0.191</td>
<td>0.000</td>
</tr>
<tr>
<td>Shopping Flexibility Benefits</td>
<td>Subjects’ perception on the flexibility (No physical boundaries, no time constraint) which is provided by online shopping environment.</td>
<td>0.165</td>
<td>0.001</td>
</tr>
<tr>
<td>Product Selection Benefits</td>
<td>Subjects’ perception on the product related benefits (Wide range, many alternatives, fast information) which are provided by online shopping environment.</td>
<td>0.085</td>
<td>0.047</td>
</tr>
<tr>
<td>Shopping Convenience Benefits</td>
<td>Subjects’ perception on the convenience (No waiting time, multiple store visits at once) which is provided by online shopping environment.</td>
<td>0.071</td>
<td>0.089</td>
</tr>
<tr>
<td>Product Risk Perception</td>
<td>Subjects’ risk perception in online shopping transactions related to the product (No physical contact, no trial).</td>
<td>-0.011</td>
<td>0.755</td>
</tr>
</tbody>
</table>

Model Summary  
- R: 0.743  
- R Square: 0.552  
- Adjusted R Square: 0.545
Moderating effects of shopping orientation and internet experience

- The results of the t-test confirm that Shopping Orientation type of subjects play a moderating role on the Intention to Shop Online.

- The analysis of the data shows that the level of Intention to Shop Online differs among Home Shoppers and Store Shoppers.

- Home shoppers have higher mean scores than Store Shoppers concerning the Intention to Shop Online.

- The results of the t-test also confirm that the difference is statistically significant \[t (383) =11.8, p=.000\]. Thus, Hypothesis 4 has been accepted.

- The results of the t-test showed that there is no significant difference in the Intention to Shop Online levels of subjects with low and high Internet experiences \[t (404) =-0.6, p=.512\]. Thus, Hypothesis 5 is not accepted.

The relationship between intention and actual participation into e-shopping

- The results of the Pearson correlation analysis confirmed that there is a strong relationship between Intention and actual participation into the online shopping \[r (406) =0.763**, p=.000\]. Thus, Hypothesis 6 has been accepted.
The effect of retailer brand equity on the e-store selection

- The analysis shows that the equity scores of Store A, B and C are in the same order with the preference rank of these stores.

- In order to test the statistical significance of this difference, a repeated measures ANOVA test has been conducted.

- The result of the ANOVA test also confirmed that there is a significant difference between the equity scores of each retailer \([F (1,871, 757,695) =207,926, p<0,005]\).

- The Pairwise comparisons of the equity scores also showed that the brand equities of Store A and B \([p<0,005]\), Store A and C \([p<0,005]\) and Store B and C \([p<0,005]\) are significantly different from each other without any exception.

- Thus, we accept Hypothesis 7 and conclude that the strength of online store’s retailer brand equity will have a positive effect on consumers’ patronage intentions.
Figure 2. Finalized Research Model

Risk Perceptions
- Financial Risk
- Technology Acceptance Factors
  - Benefit Perceptions
    - Shopping Flexibility
    - Product Selection

H1b (-)
H2 (+)
H3a (+)
H3b (+)

Shopping Orientation
H4

Intention To Shop Online

E-Store Patronage
- Retailer Awareness
  - H7a (+)
- Retailer Associations
  - H7b (+)
- Perceived Quality
  - H7c (+)
- Retailer Loyalty
  - H7d (+)
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