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# Identifying College Students' Feelings and Thoughts about Online Shopping

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**Abstract**

The Internet has been an essential part of everyday life with the information technologies developing rapidly. It has become a common place for people where they communicate with others, do banking transactions, shop and so on. Notably, supplying all kinds of needs through online shopping has turned into an outstanding phenomenon. Electronic web based shopping systems which are growing in number day by day have took the place of traditional, face-to-face and written trade systems based on record forms. Not only the benefits has it offered for customers preferring online shopping, but also the advantages it provides for the companies make it popular for both sides. This study aims to investigate the feelings and thoughts of college students about online shopping. The study was conducted on college students studying at Trakya University, Kesan Yusuf Capraz School of Applied Disciplines. The students' feelings and thoughts about online shopping were evaluated by analyzing the obtained data.

## 1. Introduction

The Internet has become an important part of human life with the recent developments in information technologies and the many improvements have been brought to our lives. It has become a common place for people where they communicate with others, do banking transactions, shop and so on. Especially, online marketing applications utilized by companies and the online shopping trends have gained popularity worldwide also providing many advantages for both companies and consumers. The increasing number of advantages with increasing varieties also makes online shopping much more popular. Electronic web based shopping systems which are growing in

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number day by day have took the place of traditional, face-to-face and written trade systems based on record forms. Consumers explore a brand-new shopping experience on electronic and web-based media. So, the online shopping options meet the consumers' all kinds of needs and wishes which affects the feelings and attitudes.

The internet has become a vital concept which removes the boundaries and helps people communicate worldwide. People can get goods and marketing services without coming face to face with others and thus helping the formation of new online consumption trends (Cankorkmaz, 2010). As a result, electronic commerce has come forward including consumers and marketers both. The concept broad in scope has many definitions regarding different institutions and persons. Electronic commerce has a wide range of definitions, such as any electronic communication that has a commercial end (Anbar, 2001), any online shopping activity in which all the payments including the sales and purchase of all kinds of goods and services are done using computer technologies, electronic communication media and related technologies (Sarısakal & Aydın, 2003), a process that enables people to use web-based technologies to make commercial transactions easier (Bulut et al.., 2006) or an umbrella term that is inclusive of service, online communication, cooperation and society (Arpacı & Ulucay, 2012). However, the rapid changes in e-commerce which pave the way for new oppurtunities reveal the deficiencies and shortnesses in those definitions resulting in differentiations (Bashan, 2011). Therefore, the definitions made by WTO (World Trade Organization), OECD (Organisation for Economic Co-operation and Development) and UN–CEFACT (United Nations Centre for Trade Facilitation and Electronic Business ) have been put forward in literature (Korkmaz, 2004). Based upon those definitions, it can be said that electronic commerce is the sales and purchase of all kinds of products and services through electronic systems, such as the Internet and other computer networks.

Electronic commerce should not be viewed as a mere shop in a different medium or a new sales channel with the help of communication technologies. Rather, it gives companies many more advantages like new supply chains, product distribution services, lower costs and direct sales all of which have vital importance for businesses. It has become a subject that must be taken into account especially by businesspeople (Yalcın & Bas, 2012). In addition, the documents and information that are required for business transactions are sent to relevant persons and organizations with minimum margin of error and no stationary costs thanks to electronic commerce and the Internet. For that reason, the intermediaries that have been replaced by web pages are not needed any more as the purchasers and dealers do not need to meet up. Companies have lowered the costs and the competence between suppliers has been increasing day by day (Ozel, 2013).With the rise of e-commerce, many businesses ranging from courier services to warehousing have turned into dynamic mechanisms with  multiple junctions instead of being a mechanic part of the trade between companies as in the past (Erkan, 2012).

Numerous studies have been conducted on online shopping recently. Tan (1999) studied the risk perceptions of Singaporean online customers while Mutum and Ghazali (2006) found that the people who do online shopping are more likely to be older, more educated and informed about internet with higher incomes compared to the ones who do not shop online. On the other hand, Erginkaya (2009) concluded that website design and its operational perfection is of critical importance for meeting the high expectations of online consumers. Cankorkmaz (2010) investigated the college students' levels of information technologies use and online consumption tendencies while Aksoy (2012) examined individuals' reliance attitudes towards electronic marketing and practices. Another example can be the study of social media's impact on consumer behaviors and tendencies (İslek, 2012).

In this study, the importance of electronic commerce was examined together with reference to its definitions and related research in the literature. Demographic information of the undergraduates who do online shopping was analyzed and the relation between this information and the feelings and ideas the students have while shopping online was probed.

## 2. Materials and Method

### 2.1. Sample and Assessment Instruments

Students at Trakya Univeristy Kesan Yusuf Capraz School of Applied Disciplines make up the population of the study. The study sample includes a total of 200 undergraduate students from five departments who are first-year, second-year, third-year and fourth-year students during 2013 Fall and 2014 Spring terms. A total of 200

questionnaires were completed and used for the analysis in the research. The questionnaire has two sections one of which for demographic information and the other for the attitudes towards online shopping. The questionnaire has a total of 24 questions 5 of which aimed to collect demographic information. The first section includes questions concerning gender, age, department, year of study and online shopping frequency. The second section includes questions to determine the feelings and ideas the students have when shopping online. The questions are answered as "Definitely disagree=1", "Disagree=2", "Not sure=3", "Agree=4" and "Definitely agree=5" in Likert type scale. The scale used was taken from (Mert et al., 2012) from the article titled "The Impacts of Consumers' Feelings and Expectations for Shopping Online on Sales" and modified in compliance with the aims of the study based on expert opinion was applied.

### 2.2. Aim of the Study and Research Model

The aim of this study is to find out whether the feelings and ideas of 200 students studying at School of Applied Disciplines about online shopping differ by gender, age, year of study, department and online shopping frequency. The research model has three subdimensions for satisfaction, utilization and convenience based on the demographic information of the students. Kruskal Wallis tests were used to determine whether the subdimensions differ by gender, age, year of study, department and online shopping frequency and 5 hypotheses were developed in the scope of the study which are;

$H_1$= Participants' attitudes towards feelings and ideas during online shopping scale subdimensions differ by gender.
$H_2$= Participants' attitudes towards feelings and ideas during online shopping scale subdimensions differ by age.
$H_3$= Participants' attitudes towards feelings and ideas during online shopping scale subdimensions differ by year of study.
$H_4$= Participants' attitudes towards feelings and ideas during online shopping scale subdimensions differ by department.
$H_5$= Participants' attitudes towards feelings and ideas during online shopping scale subdimensions differ by frequency of online shopping.

### 2.3. Data Analysis

The data analysis was done using SPSS 20 (Statistical Package for Social Sciences) software. Frequency distribution was done for the demographic information collected from 200 undergraduates. Then, factor analysis done for the feelings and ideas during online shopping scale data. Questions 4, 16 and 17 were excluded from the scale based on the factor weights. 4 factors were identified for the rest 16 questions and Cronbach's Alpha value was found 0,828, which was considered to be a good level and validity, reliability, factor and difference tests were done.

## 3. Findings

### 3.1. Factor and Reliability Analysis

Factor analysis was applied to the data of the scale used in the study after determining whether the data set was fit for factor analysis using KMO and Barlett's test. Kaiser-Meyer-Olkin (KMO) test result was 0,832, which shows that factor analysis was applicable to the data set. As the p value for Barlett's test was 0,00, $p < 0,05$ in other words, the relationship between the variable was sufficient to do the factor analysis. The data for analyses are presented in Table 1.

Table 1. Factor and Reliability Analyses for the Feelings and Ideas during Online Shopping Scale.

| Factors | Item | F.Weight | F.Explanation Rate | Cronbach's Alfa |
|---------|------|----------|--------------------|-----------------|
| Factor – 1 | S2 | ,808 | 22,215 | ,831 |
| | S1 | ,744 | | |
| | S7 | ,744 | | |
| | S8 | ,705 | | |
| | S18 | ,641 | | |
| | S5 | ,611 | | |
| | S3 | ,568 | | |
| Factor – 2 | S15 | ,808 | 14,432 | ,747 |
| | S12 | ,803 | | |
| | S13 | ,661 | | |
| | S14 | ,531 | | |
| Factor – 3 | S10 | ,716 | 12,450 | ,620 |
| | S9 | ,686 | | |
| | S11 | ,655 | | |
| Factor – 4 | S19 | ,754 | 9,260 | ,391 |
| | S6 | ,607 | | |

The four factors presented in the table explain 58,357% of the variance. However, Factor 4 was found to have a low reliability value so it was removed from the scale. The three factors left were named as Satisfaction, Utilization and Convenience respectively and total reliability value for the scale was found 0,823. Kolmogorov-Smirnov normal distribution test results for the factors are shown in Table 2.

Table 2. Kolmogorov-Smirnov Normal Distribution Test Results

| | Factor-1 | Factor-2 | Factor-3 |
|---|----------|----------|----------|
| Kolmogorov-Smirnov Z | 1,254 | 2,074 | 2,025 |
| Asymp. Sig. (2-tailed) | ,086 | **,000** | **,001** |

$H_0$= The feelings and ideas during online shopping scale subdimensions have a normal distribution.

As $p<0,05$, Hypothesis $H_0$ was rejected. As the subdimensions of the scale did not show a normal distribution, the use of parametric tests was thought inappropriate. So, a nonparametric, Kruskal Wallis, test was decided to be used.

*3.2. Testing the Differences in the Feelings and Ideas during Online Shopping Scale Subdimensions by Gender*

Mann-whitney u was used in order to identify the differences by gender of the participants. The difference test results are shown in Table 3.

Table 3. Mann Whitney U Test Results for Participants' Gender

|  | Factor-1 | Factor-2 | Factor-3 |
|---|---|---|---|
| Mann-Whitney U | 4393,500 | 4793,000 | 4439,000 |
| Wilcoxon W | 8488,500 | 10898,000 | 10544,000 |
| Z | -1,369 | -,389 | -1,271 |
| Asymp. Sig. (2-tailed) | ,171 | ,697 | ,204 |

As p>0,05, there is no significant difference between gender and the factors.

*3.3. Testing the Differences in the Feelings and Ideas during Online Shopping Scale Subdimensions by Age*

Kruskal Wallis test was used in order to identify the differences by the age of the participants. The difference test results are shown in Table 4.

Table 4. Kruskal Wallis Test for Participants' Age

|  | Factor-1 | Factor-2 | Factor-3 |
|---|---|---|---|
| Chi-Square | 2,679 | 6,836 | 4,721 |
| df | 3 | 3 | 3 |
| Asymp. Sig. | ,444 | ,077 | ,193 |

As p>0,05, there is no significant difference between age and the factors.

*3.4. Testing the Differences in the Feelings and Ideas during Online Shopping Scale Subdimensions by Year of Study*

Kruskal Wallis test was used in order to identify the differences by the number of years participants have spent at university.  The difference test results are shown in Table 5.

Table 5. Kruskal Wallis Test Results for Participants' Year of Study

|  | Factor-1 | Factor-2 | Factor-3 |
|---|---|---|---|
| Chi-Square | 4,232 | 6,601 | 2,033 |
| df | 3 | 3 | 3 |
| Asymp. Sig. | ,237 | ,086 | ,566 |

As p>0,05, there is no significant difference between the year of study and the factors.

*3.5. Testing the Differences in the Feelings and Ideas during Online Shopping Scale Subdimensions by Department*

Kruskal Wallis test was used in order to identify the differences by the departments the participants are currently studying at. The difference test results are shown in Table 6.

Table 6. Kruskal Wallis Test Results for Participants' Departments

|  | Factor-1 | Factor-2 | Factor-3 |
|---|---|---|---|
| Chi-Square | 4,608 | 2,845 | 4,049 |
| df | 4 | 4 | 4 |
| Asymp. Sig. | ,330 | ,584 | ,399 |

As p>0,05, there is no significant difference between the departments and the factors.

*3.6. Testing the Differences in the Feelings and Ideas during Online Shopping Scale Subdimensions by Online Shopping Frequency*

Kruskal Wallis test was used in order to identify the differences by the frequency of online shopping. The difference test results are shown in Table 7.

Table 7. Kruskal Wallis Test Results for Participants' Online Shopping Frequency

|  | Factor-1 | Factor-2 | Factor-3 |
|---|---|---|---|
| Chi-Square | 87,056 | 43,156 | 29,946 |
| df | 9 | 9 | 9 |
| Asymp. Sig. | ,000 | ,000 | ,000 |

As p<0,05, there is a significant difference between the frequency of online shopping and the factors. It implies that during online shopping, the frequency of online shopping differs significantly from all of the factors in all three subdimensions.

## 4. Conclusion

The impact of gender, age, year of study, department and frequency of online shopping on the feelings and ideas that the individuals have while shopping online was investigated in this study. Kruskal Wallis test was used and most of the students were between 18 and 23 according to the demographic data obtained. The analyses for gender, year of study and department showed a balanced distribution. According to the online shopping frequency distribution, most of the students were likely to do shopping online once or more times a year or did not use the Internet for shopping.

SPSS analyses showed that age, year of study and department did not make a significant difference in terms of satisfaction, utilization and convenience unlike the frequency of shopping online which seemed to have an influence. Therefore, the hypotheses $H_{5a}$, $H_{5b}$ and $H_{5c}$ were accepted related to the frequency of online shopping. In this context, it can be concluded that the individuals have the feelings of satisfaction, utilization and convenience in direct proportion to their frequency of online shopping.

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