

# **The Effect of Electronic Word of Mouth on Brand Image and Purchase Intention: An Application Concerning Cell Phone Brands for Youth Consumers in Turkey**

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*This study aims to explain the effect of Word of mouth on purchase intention through brand image. The focus on cell phone brands specifically. The sample of this study consisted of university students residing in Turkey. Data were obtained with a questionnaire and the face to face method after briefing the participants. The results of the study showed that there is a significant positive relationship between the electronic word of mouth on brand image and purchase intention.*

## **INTRODUCTION**

One of the biggest challenges for both marketing researchers and practitioners is to solve complex consumer behaviors. Products, product specifications, brands and shopping atmosphere which has different messages affect consumer perceptions in various ways. While the messages sometimes could be appealing to some consumers they are irritating to others. How consumer percept each message also affect buying decisions (Bambauer & Mangold, 2011). Similarly source of the messages is another impact factor that affects consumer perceptions.

Advertisements and peoples' thoughts such as product reviews, user comments or suggestions affect consumer perceptions in different ways. Some studies showed that consumers think word of mouth is the most reliable source of information (Bickart & Schindler, 2001; Trusov et al., 2009).

The widespread use of the internet globally has started spreading of electronic word of mouth (Jalilvand, 2012). Prominent information sources such as forums, sharing sites, blogs and customer

reviews raised the importance of electronic word of mouth. Today consumers try to find information about products they are interested in on the internet before they make purchasing decisions. However electronic word of mouth is one of the most favorite information source for consumers (Adjei et al., 2009; Zhu & Zhang, 2010).

In parallel with the increase of internet users in the world it is estimated that the number of internet users in Turkey is about 32 million (TUIK, 2013). In this context, understanding the effects of electronic word of mouth on purchasing decisions could be useful in analyzing consumer behaviors.

## **CONCEPTUAL FRAMEWORK**

The studies on purchase intention have been widely investigated by marketers considering the cost of gaining new customers (Maxham III, 2001). It also has been studied in the marketing literature about the relationship between purchase intention and Word of mouth. (Dichter, 1966; Arndt, 1967; Litvin, et.al., 2008). Consumers consider other consumers' reviews and obtain information about products in purchasing process. Word of mouth represents an informal and suggestive communication style. Word of mouth that is commercial, interactive, rapid and unbiased communication type has a strong impact on consumers' decisions (East et.al., 2008).

The studies demonstrated that Word of mouth has a critical role on consumers' preferences and behavioral intentions (Kiecker & Cowles, 2001; Sen & Lerman, 2007; Xia and Bechwati, 2008). These studies also indicated that Word of mouth is more effective than other communication methods due to perceived high reliability (Chatterjee, 2001; Mayzlin, 2006).

Internet has led Word of mouth to be simultaneously ubiquitous and removed necessity of being physically present anywhere (Chatterjee, 2001; Godes & Mayzlin, 2004; Xia & Bechwati, 2008). This new trend is named as the electronic word of mouth and it has a big potential in spreading consumers' ideas. (Bickart & Schindler, 2001; Godes & Mayzlin, 2004; Jalilvand, 2012). Electronic Word of mouth is also more effective compared to the traditional Word of mouth due to widespread access resources (Chatterjee, 2001).

Electronic Word of mouth can be described as a communication way that provides information to consumers about sellers and usage of products and services through internet-based technologies (Westbrook, 1987). Some sources for electronic word of mouth are blogs, virtual communities, newsgroups, product review websites, fan clubs, e-mail, etc.

Product reviews on the internet prior to purchase and consumers' consideration of these reviews is the most important aspect of communication by word of mouth. Therefore, electronic word of mouth critically affects consumers' product reviews and their purchase intention (Zhu & Zhang, 2010; Bambauer-Sachse & Mangold, 2011).

Brand image is important for companies' future profit and their long-term cash flow, companies' coalition and acquisition decisions, their stock price, sustainable competitive advantage and their success in the market (Yoo & Donthu, 2001). The brand image is referred as the sum of connotations accumulated by perceptions regarding a product that is formed in the consumers' mind (Keller, 1993). For that reason, brand image includes consumers' experience and evaluations related to brand (Wang & Yang, 2010; Bian & Moutinho, 2011).

Cellular phones have become one of the main devices and an indispensable element in our daily lives. Cell phone technologies have been improving dramatically and thus create rigorous competition among companies. As a result, cellular phones became one the important product that attracts consumers' attention and so their reviews regarding the product.

## **THE PURPOSE, SIGNIFICANCE AND HYPOTHESES OF THE STUDY**

This study aims to analyze the effect of Word of mouth on purchase intention through brand image. Previous studies in the literature were limited and no previous study had examined these variables in a

Turkish context at the time of this study. The following are the research hypotheses derived from the review of the relevant literature:

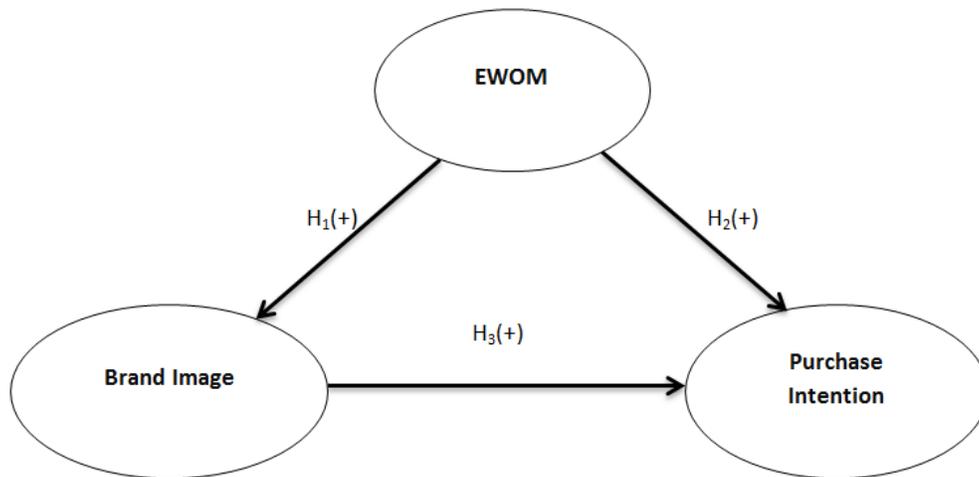
*H<sub>1</sub>: Electronic word-of-mouth has a positive impact on brand image.*

*H<sub>2</sub>: Electronic word-of-mouth has a positive impact on purchase intention.*

*H<sub>3</sub>: Brand image has a positive impact on purchase intention.*

The following is the research model of this study formed based on the above hypotheses. The research model, in a sense, applies Jalilvand's (2012) studies in the context of Turkey.

**FIGURE 1  
CONCEPTUAL FRAMEWORK**



## POPULATION AND SAMPLING

This study was conducted in Eskisehir, a commercial and industrial city in the Midwest of Turkey with an approximate population of 800.000. The study population consisted of university students living in Eskisehir, Turkey. About 50.000 students live in Eskisehir from all over the Turkey. Convenience sampling method, one of the non-probability sampling methods, was used in this study. A total of 265 people were initially included in the study. However, the analyses were carried out on 248 questionnaires because 17 of them were either incomplete or contained or incorrect data.

## DATA COLLECTION METHOD AND TOOL

Data collection part of this study was done through face-to-face methodology. The researchers used a questionnaire consisting of two sections. In the first part of the questionnaire, we used Bambauser-Sachse & Mangold's (2001) scale to measure electronic word of mouth; Shukla's (2009) scale to measure the brand image, and Shukla's (2010) scale to measure purchase intention. In the second part of the questionnaire, we gathered demographic information about participants.

Data were collected based on the principles of 5-point Likert scale ranging from "Strongly agree" to "Strongly disagree". The data were then analyzed using central distribution and variability measures. The scales were tested for validity using translation-back translation method and expert opinions and then the

final version of the scale was completed in the light of a pilot application. The reliability of the scales was tested using Cronbach's Alpha coefficient.

## FINDINGS AND INTERPRETATION

Table 1 shows participants' gender, monthly income and age categories.

**TABLE 1  
DEMOGRAPHICS OF PARTICIPANTS**

<b>Gender</b>	<b>Frequency</b>	<b>%</b>
Male	144	58.1
Female	100	40.3
Unspecified	4	1.6
<b>Monthly Income</b>		
750 TL* and below	100	40.3
751-1500 TL	64	25.8
1501-2250 TL	42	16.9
2251 TL and above	35	14.1
Unspecified	7	2.8
<b>Age</b>		
20 and below	61	24.6
21-24	108	43.5
25-28	47	19.0
29-32	10	4.0
32 and above	22	8.9

\*1 \$ approximately equals to 1,98 TL

As shown in the Table 1, 58.1% of the participants were male. When we look at the participants' income, 40.3% of them has 750 TL and below. In addition, most of the participants (43.5%) are at the age of 21-24 as indicated in the Table 1.

**TABLE 2  
INTERNAL CONSISTENCY OF THE SCALES**

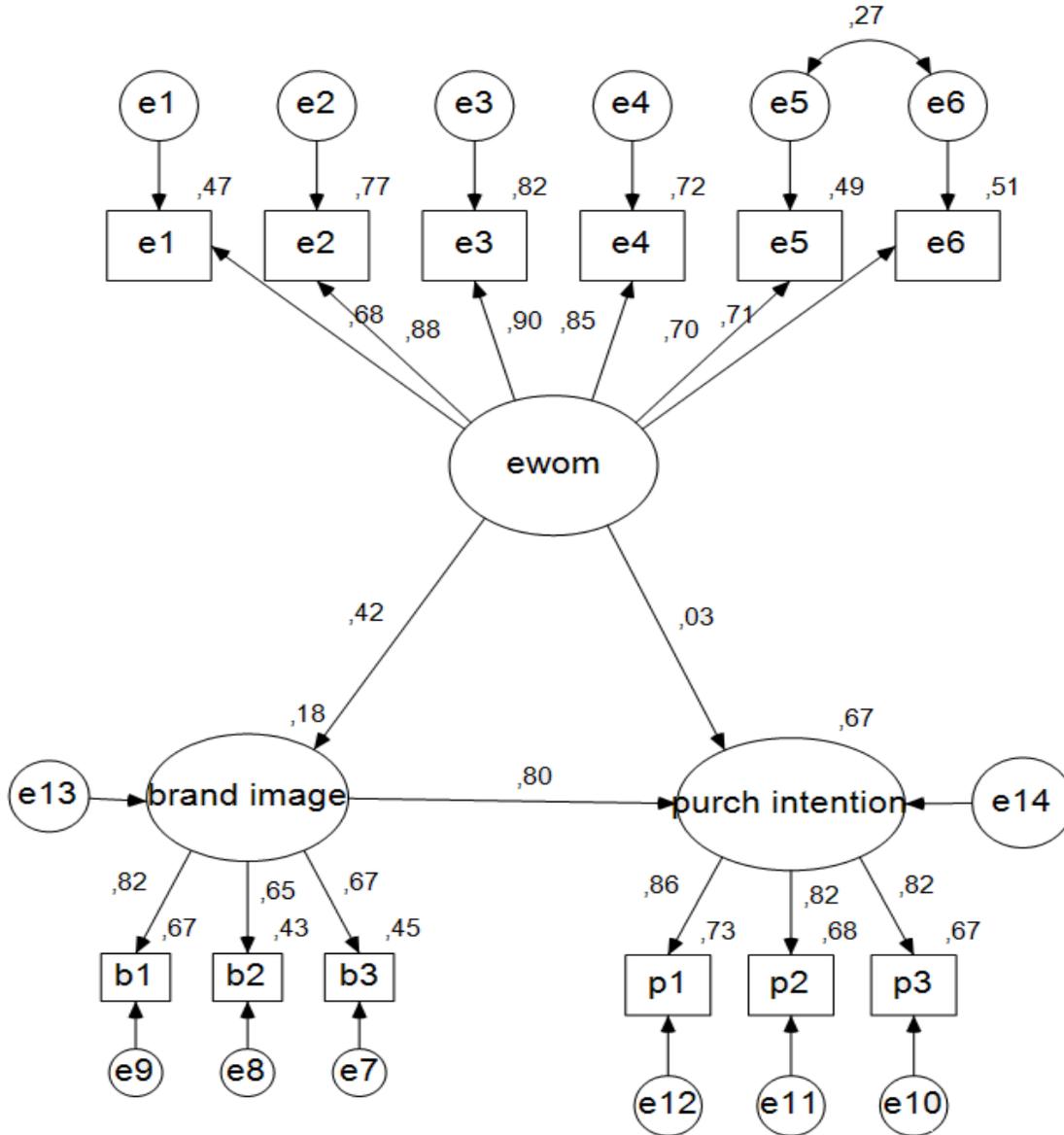
<b>Scales</b>	<b>Items</b>	<b>Cronbach's Alpha</b>
Electronic Word of Mouth	6	.915
Brand Image	3	.749
Purchase Intention	3	.871

Table 2 shows the scale's Cronbach Alpha Coefficient values for "Electronic Word of Mouth", "Brand Image" and "Purchase Intention". As indicated in the table 2, these values are within the acceptable levels.

The result of the confirmatory factor analysis indicated that all statements had displayed a sufficient commitment to the relevant dimension. Also, results of goodness of fit values have proven to be at a sufficient level ( $\chi^2/df=2.377$ , CFI=0.960, RMSEA=0.075).

The result of the analysis of the study model was further analyzed with Amos 16.0 and its path diagram is shown in the figure 2 below.

**FIGURE 2**  
**RESEARCH MODEL PATH DIAGRAM**



The goodness of fit indices of the research model were at acceptable levels ( $\chi^2/df=2.107$ , CFI=0.968, RMSEA=0.067). The result of the analysis of the structural equation model indicated that electronic word of mouth has a meaningful effect on brand image. The results also indicated that the perceived brand image has a meaningful effect on purchase intention. However electronic word of mouth has not meaningful effect on purchase intention in this study. In the research model, independent variables explain 67% ( $R^2=0.67$ ) of variability of purchase intention. The regression coefficients obtained through the model formed the hypotheses and its results were reported in the table 3 below.

**TABLE 3**  
**HYPOTHESIS TEST RESULTS**

<b>Hypothesis</b>	<b>Standardized Estimates</b>	<b>Results</b>
H <sub>1</sub> : Electronic word-of-mouth has a positive impact on brand image	0.421**	Supported
H <sub>2</sub> : Electronic word-of-mouth has a positive impact on purchase intention	0.033	Not Supported
H <sub>3</sub> : Brand image has a positive impact on purchase intention	0.803**	Supported

\*\*p<. 01

As the research results indicated that H<sub>1</sub> and H<sub>3</sub> hypotheses were supported, H<sub>2</sub> hypothesis was not. Hypotheses testing results are evaluated on the results and discussion section.

### **LIMITATION OF THE STUDY**

This study has some limitations. The sample of this study consists of university students in a state university in Turkey. This situation limits the generalizability of the findings. Additionally, since this study was conducted on cell phone brand, the results cannot be generalized to other products. Future studies are recommended to investigate the issue with different products and different groups of consumers.

### **CONCLUSION, DISCUSSION AND RECOMMENDATION**

This study aims to investigate the effect of electronic word of mouth on purchase intention through a model in which brand image is assigned as mediating variable. Traditional word of mouth has been widely investigated in the literature. Literature showed that word of mouth has a significant effect on purchase intention. As the result of advancement of internet-based technologies, not only traditional word of mouth, but also electronic word of mouth started to have an impact on purchase intention in recent years. For this reason, it is valuable to investigate how it differs in different cultures and regions not only as critical information for marketing practitioners, but also the extension of the related literature. Understanding consumers' profile in developing countries is especially important for practitioners. In this respect, it is reasonable to conduct research in an economically developing country such as Turkey since Turkish consumers differ from other nations' consumers both culturally and geographically.

When we look at the result of the study, the effect of electronic word of mouth on purchase intention can be explained through brand image. The results showed that there is a significant impact of brand image on purchase intention. Another conclusion can be drawn from the study that brand image has a decisive role on purchase intention regarding cell phone brands through electronic word of mouth. In a study related to another brand, Jalilvand (2012) constructed a model that the effect of electronic word of mouth with purchase intention as brand image being partial mediator variable. He also reported similar findings that brand image is a full mediator on purchase intentions. Additionally, Jalilvand's (2012) found that electronic word of mouth has a positive impact on brand image.

Consumers consider the reviews obtained from electronic word of mouth channels and use these reviews in forming brand image perception. On one hand, brand image, depending on product groups, is more effective on purchase intention compared to word of mouth and this shows that our results are meaningful. On the other hand, we can assert that brand image, when compared to word of mouth, is more effective on consumers' purchase intention of cellular phones.

It has emerged from this study that electronic word of mouth does not have a direct significant impact on consumers' purchase intention. This result can be occurring because of the study sample. Furthermore, traditional word of mouth can have an effect on purchase intention; this can be another reason for that result. Since this study has cultural context, it is suggested for future studies to be extended including traditional word of mouth. In this respect, this study has importance for Turkish consumers' decision about whether traditional or electronic word of mouth is more effective on their purchase intention. It should be noted that further studies investigating not only brand image, but also value given to brand variable would be a meaningful contribution to the relevant literature.

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