



### THE IMPORTANCE OF WORD-OF-MOUTH COMMUNICATION ON HEALTHCARE MARKETING AND ITS INFLUENCE ON CONSUMERS' INTENTION TO USE HEALTHCARE

**Maşide GÜRCÜ<sup>1\*</sup>, Sezer KORKMAZ<sup>2</sup>,**

**PhD-Student,** Gazi University Healthcare Management Department

**Prof.Dr.,** Gazi University Healthcare Management Department

masidegurcu@hotmail.com

#### Abstract

This study aims, to determine the influence of word-of-mouth communication with regards to the consumers' purchase intention on healthcare. The empirical part of the study was conducted with 430 consumers over the age of 18 living in Yozgat province. Questionnaire forms were used to obtain data, which were analyzed through SPSS 22 package software for reliability analysis, factor analysis, correlation analysis and regression analysis. It has been found that 68.1 % of the participants have recommendation on health care issue through word-of-mouth communication. It has been seen that 95.8% of participants express satisfaction and 94.7% of them express dissatisfaction on the use of health service. According to the results, references, internet and social network are the first contact tools, and medical specialists along with those who have already bought the service are the most effective source of information in regards to health service consumption. It also shows that all of the sub-dimensions of word-of-mouth communication have a positive influence on purchase intention.

**Keywords:** *Word-of-Mouth Communication, Word-of-Mouth Marketing, Health Institution Preference, Healthcare Preference, Purchase Intention*

## Introduction

Word-of-mouth communication has been used since people existed. However, the use of it in the marketing sense is relatively new. These communications, which have been hardly noticeable or ignored by businesses in the past, have become one of the most significant marketing tools nowadays.

Word-of-mouth (WOM) communication is considered to be an important factor affecting consumers' purchasing behavior. Especially recent studies show that many businesses have discovered the effectiveness of this communication method. These studies also show that marketing through word-of-mouth communication helps businesses to sell their products to consumers effectively (Meiners, Schwarting and Seeberger, 2010).

Features such as interaction, rapidity and being lack of commercial concern, especially relation with services with limited pre-purchase experience will probably make word-of-mouth communication as one of the most effective sources of information to be able to understand consumer choices in the future. In this sense, it can be said that word-of-mouth communication is one of the most important factors affecting the decision process of consumer (East, Hammond and Wright, 2007).

Consumers obtain information that will have an effect on their purchase intention from various channels. The information about products and services can be obtained from other people or sales staff through the relationship of people with their physical surroundings, mass media (East, Hammond and Wright, 2007; Mookerjee, 2001). Today, especially mass media is an integrated part of our lives and numerous information and advertisement messages are sent from these tools during the day. The existence of many alternatives for the same or similar products in the market environment causes consumers to turn to objective, independent and reliable sources of information about consumption preferences (Cop and Gümüş, 2009; Özkan and Yıldız, 2015). For consumers, purchase of certain products is more difficult than the others. Prior to the purchase of tangible products, many have been standardized and have comparatively easy-to-compare features. However, especially when it comes to services, purchase process is more complicated.

It is inherently difficult to assess services compared to products prior to purchasing (Zeithaml, 1981). Moreover, perceived risk for services is higher. The higher the perceived risk, the greater is the likelihood that the consumers tend towards word-of-mouth communication (Gabbott, 1991; Murray, 1991) and the decision to be taken will become significant (Dholakia, 1997).

The healthcare services sector is one of the leading sensitive sectors that incorporate the concept of confidence between service provider and receiver because of its unique features. Consumers are in the process of getting information from specialists, the ones who have consumed the service before or from their closest people before the healthcare supplying. The main purpose

underlying the communications that the consumers have carried out in order to receive information is usually assistance.

Word-of-mouth-oriented initial studies generally focus on new and concrete products (Arndt, 1967). The studies conducted in the following years inferred that word-of-mouth communication is likely to have an influence on consumers' purchasing processes in various sub-branches of service sector (Bansal and Voyer, 2000; File, Judd, and Prince, 1992; Harrison-Walker, 2001; Murray, 1991; Murray and Schlacter, 1990; Swanson and Hsu, 2011). One common aspect of the studies is that consumers put forth word-of-mouth communication as a basic source of information when they intent to make a purchasing decision in the service sector (Harrison-Walker, 2001).

### **Conceptual Framework**

Various studies made over the years have led to the formation of the literature that is used about word-of-mouth communication today (Murray, 1991; File, Judd, and Prince, 1992; Bansal and Voyer, 2000; Mookerjee, 2001; Harrison-Walker, 2001; East, Hammond and Wright, 2007). The development of technology and the introduction of new means of communication have led to a broader discussion of the concept of word-of-mouth communication, although considerable progress has been made in the conceptual framework since the concept of word-of-mouth communication was first discussed.

### **Word-of-Mouth Communication Concept**

Word-of-mouth communication can be defined as informal, person-to-person communication between a sender and a receiver which is not perceived commercially related to a product, business or service. (Arndt, 1967; Anderson, 1998; Wangenheim, 2005).

Lampert and Rosenberg (1975) identified word-of-mouth communication as a speech about product information between noncommercial people during a conversation. Richins (1983) defines word-of-mouth communication as telling at least one friend, acquaintance or family member about one's personal experience of a product or business that has been actualized satisfactorily or is not actualized.

In another definition, Liu (2006) expressed that word-of-mouth communication is the informal conversation between consumers about products or services, and emphasized two significant features that distinguish word-of-mouth communication from other sources of information such as advertisements. One of these is that word-of-mouth communication is usually more convincing and reliable, and the other is that it is more accessible via social networks.

Researchers working in the field of consumer behavior have found that various motivations are effective on consumers in order to pass to positive and negative word-of-mouth communication about products and services (Arndt, 1967; Trigg, 2011).

According to Sundaram, Mitra and Webster (1998), positive and negative word-of-mouth process is an important source of motivation of self-sacrifice in evaluations. Arndt (1967), on the other hand, expressed that the speaker has six possible motivations. These are “being well informed”, “helpfulness”, “self-protection”, “personal attention”, “assisting with decreasing the uncertainty” and “cognitive discordance”. In this process, every consumer has one or more reasons that will require talking to other consumers about the product he purchased. Furthermore, it is always not necessary for the initiator of the communication to be a consumer who performs the purchase activity. Every consumer who needs a purchase can be found in the position of being the initiator of these communications.

### **Types of Word-of-Mouth Communication**

Word-of-mouth communication is the result of product experiences. These experiences are often shared with others by consumers as positive and negative evaluations of the product they meet (Susskind, 2002). The likelihood of buying a brand is expected to be affected by the comparatively proportion of positive word-of-mouth communication and negative word-of-mouth communication (East, Hammond and Lomax, 2008). There are two types of word-of-mouth communication Positive and Negative.

### **Positive Word-of-Mouth Communication**

Positive word-of-mouth communication can be defined as positive recommendations given directly or indirectly to purchase a product. Negative word-of-mouth communication includes disparagement about the product, rumor and personal complaint. Negative word-of-mouth communication reduces the expected quality of communication while positive word-of-mouth communication increases the expected quality (consumers' attitude towards a product) (Liu, 2006).

Positive word-of-mouth communication by satisfied and loyal customers is a source of free advertisement. Therefore, businesses should try to broadcast positive word-of-mouth communications by creating satisfied and loyal customers (Avcılar, 2005).

Surveys indicate that positive word-of-mouth communication helps to create a positive image towards brand and business by decreasing the risks of communication (Dichter, 1966; Arndt, 1967). Word-of-mouth communication increases consumers' purchase intention for innovative products and decreases general promotion expenses of businesses (Holmes and Lett, 1977).

For this reason, it is necessary that marketing managers create a favorable environment for the development and dissemination of positive word-of-mouth communication. In addition, marketing managers must first understand how word-of-mouth communication is practiced in the market and learn how to manage the process in the marketplace effectively (Sundaram, Mitra and Webster, 1998).

## **Negative Word-of-Mouth Communication**

Negative word-of-mouth communication is an unfavorable talk between consumers about their experiences as a result of consumers failing to find the benefits that they expect from using any products or services (Liu, 2006). Taking into consideration the public pressures on expressing positive feelings, there is a widespread belief that a person who expresses negative feelings in society is sincerer (Mezerski, 1982).

Consumers who are dissatisfied with the product or service they receive are often reluctant to express their dissatisfaction to the business. Few consumers with courage actually act in complaining. Some prefer to tell their family and friends through negative word-of-mouth communication so as to pull their nerves rather than explaining businesses how to handle these dissatisfaction and problems (Richins, 1983; Cheng, Lam and Hsu, 2006). There is a correlation between participation levels of consumers in negative word-of-mouth communication and satisfaction levels with the product or service they receive. Whereas consumers who are not sufficiently satisfied with their products and services they use are the initiators of negative word-of-mouth communication, satisfied consumers are not the initiators of negative word-of-mouth communication (Cop and Gümüş, 2009).

The consumer dissatisfaction with the service may have a permanent impact on reducing both the business image and the business sales (Richins, 1983). Negative word-of-mouth communication leads to weakening of business reputation and financial standing by keeping away potential buyers from thinking about a particular brand or product or making a positive evaluation (Holmes and Lett, 1977; Lee and Cranage, 2014). So, though negative word-of-mouth communication turns into a positive and strong weapon for businesses due to its reliability and crossbench, negative comments can have devastating influences on businesses (Silverman, 2007).

## **The Correlation Between Word-of-Mouth Communication and Purchase Intention**

The main reason why consumers seek information in the purchase decision process is to reduce perceived risk and uncertainty (Bronner and Hoog, 2011). Arndt, who was one of the first researchers to state that word-of-mouth communication is influential on consumer behaviors, investigated the possibility of being affected by the benefits of these communications of people who have purchase intention and utilization of word-of-mouth communication about the product in 1967. Arndt examined the comments that participants receive from others on a new food product and their responses to these comments. He concluded that the ones who have purchase intention and preparation have a higher probability of receiving word-of-mouth communication which will benefit them compared to others.

## **Factors Affecting the Purchase Intention**

The best way to facilitate the consumer's decision-making process is that a reliable "*mentor encourages the consumer to use the product, that is, spreading through word of mouth*". The

main reason why marketing managers look for ways to influence the decision process is to increase business profit (Silverman, 2007). Factors affecting the purchase intention are outlined below.

- **Perceived Risk:** According to Schiffman and Kanuk (2004), consumers show many purchase behaviors that they never know about their consequences and perceive constant risk throughout each purchase process. The risks that consumers face during a purchase process are financial risk, performance risk, physical risk, psychological risk, social risk and time risk.  
**Personal Information Sources:** Consumers refer to individuals (such as friends, experts) and non-personal sources (such as mass media) during the purchase process of products or services. Consumers tend to trust their personal resources for various reasons in a service purchase process (Zeithaml, 1981).
- **Opinion Leaders:** Opinion leaders are amongst the most influential people in spreading the market knowledge through word-of-mouth communication. People who inform surrounding consumers when they need information or without knowledge are considered opinion leaders. These people have expertise in particular issues, they want to be seen as sources of information by consumers and as the people who are consulted with (Katz and Lazarsfeld, 1955).
- **Means of Communication:** Consumers use traditional word-of-mouth communication and electronic word-of-mouth communication (e-WOM) as well as mass communication tools during purchase decision-making process. While traditional word-of-mouth communication is the source of traditional interpersonal communication, electronic word-of-mouth communication refers to consumer comments on the internet about products and services (Bronner and Hoog, 2011).
- **Use of Word-of-Mouth Communication:** Word-of-mouth communication is an important market phenomenon that provides consumers with the information to make purchase decisions (Laczniak, DeCarlo and Ramaswami, 2001). Martin and Lueg (2013) have shown that word-of-mouth communication is effective on both attitude and intent.
- **Tie Strength:** In word-of-mouth communication recommendation, sources can be categorized according to the closeness of the relationship between the decision maker and the recommendation sources, or in other words the 'tie strength' (Godes and Mayzlin, 2004; Duhan, Johnson, Wilcox and Harrel, 1997). The more the sharing between consumers and word-of-mouth communication source and the stronger the tie between them, the stronger is the impact on the consumer (Bansal and Voyer, 2000; Özkan and Yılmaz, 2015).
- **Sender's Expertise in Communication:** Some researchers interpret resource expertise as a combination of education, ability and experience (Baber et al., 2015). Expertise can be explained as the ability of the source to give the exact information in general terms. Information sent by the expert source is expected to have a convincing influence on receiver. If the word-of-mouth communication sender occupies a highly ranked position in terms of education and experience, receiver can be said to have the expertise in terms

of the buyer's point of view. A person who wishes to receive information through word-of-mouth communication believes that the knowledge he gained from an expert source in the field that he wants to receive information is a huge benefit for him (Bansal and Voyer, 2000).

- **Receiver's Expertise in Communication:** The expertise of a person apart from those working on the scientific and technological field can be described as acquiring skills through systematic procedures related to his own standards of education. People tend to confuse expertise with experience and stereotype an expert person as an experienced person (Baber et al., 2015). The influence of word-of-mouth communication knowledge on receivers will be low or high, depending on whether the receiver's expertise is low or high (Herr, Kardes and Kim, 1991). The level of receiver's expertise influences not only his purchase intention but also receiver's risk perception and whether he will seek the knowledge of word-of-mouth communication. The greater receiver's expertise, the less active referral to word-of-mouth communication, the level of perceived risk about the service, and the influence of word-of-mouth communication on purchase decisions (Bansal and Voyer, 2000).
- **Receiver's Actively Sought Communication:** Actively seeking for a word-of-mouth communication message also includes the acquiring process. There is an active and independent participation between sender and receiver during the word-of-mouth communication process. The conversation in word-of-mouth communication starts with the desire of the person who needs information. The act of seeking for word-of-mouth communication is a significant element of the process. The consumer has already prepared for the message as he voluntarily joined the process. Actively sought information will be more effective than the one which is not sought actively (Bansal and Voyer, 2000).

### **Word-of-Mouth Marketing in Healthcare Services**

In the 1970s, when marketing was first incorporated to the healthcare field, as well as there were forecasts that word-of-mouth communication would collapse and traditional marketing tools would supersede giving recommendation to each other and counseling, it was not as it was expected. It has been seen that efficacy and strength of human contact is more goal-oriented and influential than traditional marketing whether from a person, via voice and internet channels or rating sites (Weiss, 2014). In this context, healthcare services are among service sub-branches of which contact rating is at maximum.

In addition, the increasing interest of consumers in the selection of healthcare services in recent years has significantly increased the healthcare market and consumers have become active decision makers for the first time. For this reason, marketing in healthcare has become the basis for clinics and the financial success of health institutions of all sizes (Corbin, Kelley and Schwartz, 2001). Consumers need more word-of-mouth communication and recommendation so as to find a qualified physician or health professional compared to other sectors (Uzun and Udyacı, 2010).

In terms of patients, persons whom they consulted are valuable for verifying information, understanding options, seeking information and reducing time lost in healthcare services. Recommendations are particularly more significant provided that they come from a reliable source (Dobele and Lindgreen, 2011).

That word-of-mouth communication or recommendations are esteemed highly leads to increased sharing of information about health services between people. These recommendations will both facilitate to abolish the information asymmetry in the healthcare services for health care system and be a tool for health providers to realize the exact value of patients as well (Dobele and Lindgreen, 2011).

Traditional patient-doctor relations are based on face-to-face communication and physical contact. With the emergence of information age, a new model has appeared in which consumers of health information, such as patients, academics, researchers and doctors, can use the internet to receive and send online health recommendation. Not only geographical distances have not become a barrier to access expertise, also patients have the opportunity to be able to share experiences with others under similar circumstances (Samuel, 2011).

Chaniotakis and Lympelopoulus (2009) examined the correlation between word-of-mouth communication, satisfaction and the quality of service in health services and concluded that quality of service has influence on word-of-mouth communication and satisfaction. Another study intended for exploring the value of recommendations given through word-of-mouth communication in health services showed that the information that mothers obtained from other mothers about children is perceived as reliable. In the same study, mothers expressed that word-of-mouth communication decreased the information search concern and time (Dobele and Lindgreen, 2011). Kitapci, Akdogan and Dortyol, (2014) examined the correlation between service quality, word-of-mouth communication and purchase intention in public healthcare sector. In the study, customer satisfaction was found to be closely associated with word-of-mouth and repurchase intention.

Although there is a rich literature on word-of-mouth communication, it can be said that the studies in our country are still in its infancy. However, the number of studies examining the relationship between health services and word-of-mouth communication in not only national but also international literature is very small. It is believed that all of the studies that will evaluate the relationship between word-of-mouth communication and health services from different angles will contribute to the literature significantly.

## Methodology

### Problem of the Study

Whether word-of-mouth communication has an influence on the purchase intention of the healthcare consumer, if so, the level of this influence and the possibility of using word-of-mouth communication service in the healthcare marketing constitute the problem of this research.

## Purpose, Model and Hypotheses of the Study

This study generally aimed to determine the expertise of the person who is recommended in the healthcare consumption, the expertise of sender, the risk of healthcare purchase, the power of the tie strength between receiver and sender, and the influence of the acquired information on the purchase intention of the person. The model of the study is shown in Figure 1.

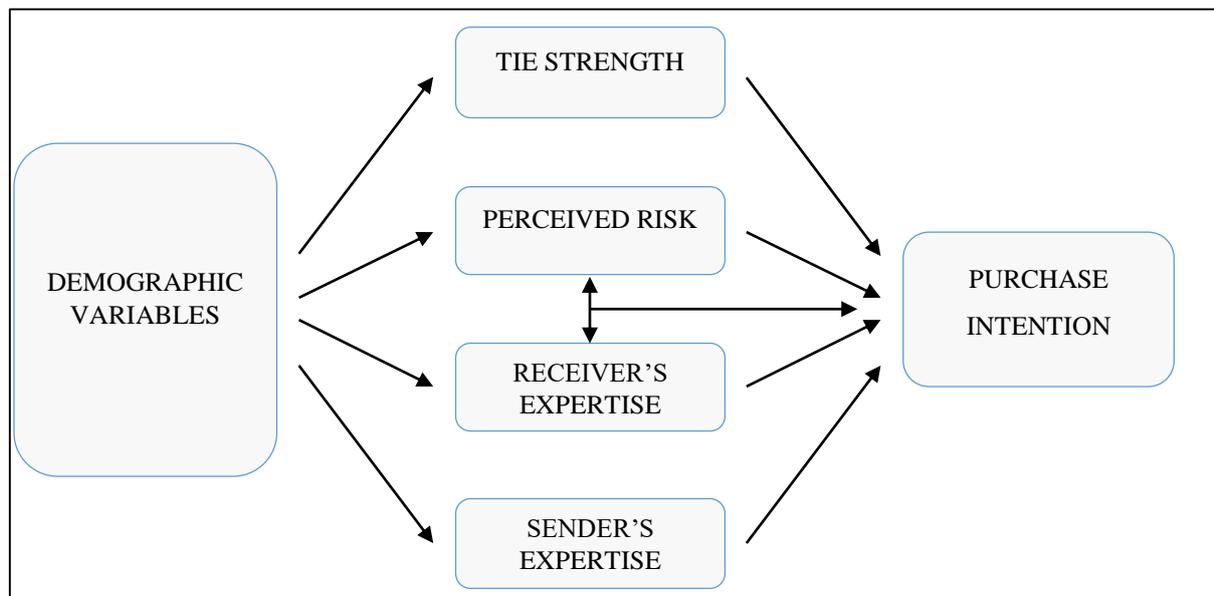


Figure 1. Research Model

Hypotheses of the study are as follows:

H1: Receiver's Expertise Influences Purchase Intention Positively.

H2: Sender's Expertise Influences Purchase Intention Positively.

H3: Perceived Risk Expertise Influences Purchase Intention Positively.

H4: Tie Strength Expertise Influences Purchase Intention Positively.

H5: The Correlation between Perceived Risk and Receiver's Expertise Influences Purchase Intention.

## The Scope of the Study and Sampling

The scope of the study refers to healthcare consumers over the age of 18 living in Yozgat city center with a population of 85, 679. The data of the study were collected between 12.01.2016 - 04.23.2017 by face-to-face interview based on survey method with individuals over 18 selected by simple random sampling method in Yozgat province. The sample size assigned for the study is 382. A total of 500 survey forms were distributed to increase the reliability of the study and due to the possibility of incorrect / incomplete feedbacks. Of these, 450 were answered and a total of 430 questionnaires among them were used as data sets for statistical analysis.

## Instruments

The article titled "A Dyadic Study of Interpersonal Information Search" by Gilly et al. (1998) and the article titled "Word of Mouth Processes within a Services Purchase Decision Context" by Bansal and Voyer (2000) provide the basis for the model proposed in this study. These studies have benefited substantially in composing the scale. Expressions in the study were evaluated with 7 point Likert scale. "1-Strongly disagree, 2- Disagree, 3- Somewhat disagree 4- Neither agree nor disagree, 5- Somewhat agree, 6- Agree, 7- Strongly agree" form.

## Data Analysis

The obtained data were processed through statistical analysis using the SPSS 22 program. The result of the Kolmogorov-Smirnov test showed that the scale did not come from the normal distribution. However, as taking exclusively this information into consideration would give a faulty result. The descriptive statistics of the normality test were examined and the mean and median values were found to be close to each other. Kurtosis (0.57) and Skewness (-0.70) scales are between -1 and +1. It can be said that these values in question do not deviate much from the normal distribution on these scales basis. For this reason, parametric tests were deemed appropriate. Data are subjected to reliability analysis, descriptive statistics, factor analysis, correlation analysis and regression analysis.

## Findings

The data obtained from the survey questionnaire were evaluated statistically and the findings were interpreted.

When the reliability coefficient of the scale of influence of word-of-mouth communication on the purchase intention of healthcare service consisting of 19 items is examined, it is seen that Cronbach's Alpha values of the scale are calculated as 0.878. In accordance with this information, the reliability coefficient calculated for the scale indicates that the scores obtained from the scale are "highly reliable".

As a result of factor analysis, it has been found that the influence of word-of-mouth communication on healthcare service purchase intention scale was 5-factor and the statement rate of the total variance of this 5 factor was 65.342%. The first factor (Sender's Expertise) expresses 33.39% of the total variance, the second factor (Purchase Intention) expresses %10.70 of the total variance, the third factor (Receiver's Expertise) expresses 8.98%, the fourth factor (Perceived Risk) expresses %6.87% of the total variance, the fifth factor (Tie Strength) expresses 5.41% of the total variance.

The data regarding the personal information of the participants are displayed in Table 1.

Table 1. Findings Regarding the Personal Information of the Participants

<b>Gender</b>	<b>f</b>	<b>%</b>	<b>Educational Status</b>	<b>f</b>	<b>%</b>
Female	223	51,9	Primary or Secondary Education	184	42,8
Male	207	48,1	Undergraduate-Graduate	214	49,8
Total	430	100	Postgraduate	32	7,4
<b>Age</b>	<b>f</b>	<b>%</b>	Total	430	100
18-24	91	21,2	<b>Household Income Status</b>	<b>f</b>	<b>%</b>
25-34	112	26,0	1.300 TL and less	62	14,4
35-44	118	27,4	1.301 TL-2.000 TL	104	24,2
45-54	61	14,2	2.001 TL-3.000 TL	84	19,5
55 and over	48	11,2	3.001 TL-4.000 TL	91	21,2
Total	430	100	4.001 TL-5.000 TL	43	10,0
<b>Marital Status</b>	<b>f</b>	<b>%</b>	5.001 TL-10.000 TL	46	10,7
Married	284	66,0	Total	430	100
Single	146	34,0			
Total	430	100			

When the demographic features of the 430 respondents were examined, from the total of participants, it was seen that 51.9% of them were female and 48.1% were male. When the age of the participants was examined, 21.2% were in the age range of 18-24 years, 26.0% in the 25-34 age range, 27.4% in the 35-44 age range, 14.2% in the 45-54 age range, and 11.2% of those 55 years and over. When examined in terms of marital status, the number of participants who expressed being married (66.0%) was higher than the ones who express being single (44.0%). According to the educational status, it is determined that 15 (3.5%) of the participants were not literate. In statistical analyzes, this group was included in the first or secondary education group, which is a higher group, due to fewer number. Thus, it was determined that 42.8% of them were in the education level at primary or secondary education level, 49.8% were undergraduate-graduate and 7.4% were in post-graduate education. 14.4% of the participants had household income less than 1.300 TL, 24.2% of them had between 1.301-2.000 TL, 19.5% of them had between 2.001-3.000 TL, 21.2% of them had between 3.001-4.000 TL, 10.0% had between TL 4.001-5.000. 11 participants (2.6%) were found to have over 10.000 TL. In statistical analyzes, this group was included in a subgroup of 5.001-10.000 TL group because of fewer number. Thus, 10.7% of the participants were in the group of 5.001TL-10.000 TL.

Participants were asked what type of health institution they preferred when they needed a health service. Participants replied it as state hospital (52%), private hospital (23.5%), university hospital (20.9%) and other answers respectively. It was seen that 13 people who marked the other option gave health center or family physician response.

Participants were asked what type of word-of-mouth communication channel through which they would get recommendation when they needed a healthcare service. They stated that they preferred to use face-to-face (68.1%), telephone (17.0%), online (14.0%) and other (9.0%) respectively. None of the participants who marked the other option stated what channel it was.

People who participated in the survey were asked about sharing status of their satisfaction / dissatisfaction with the healthcare they received. 95.8% of the respondents said they would share it with others when they were satisfied with the health service they received while 94.7% of them said they would share it with others if they are dissatisfied with the health service they received.

In the study, the effectiveness of the communication tools to which the consumers have applied for information about the preference of healthcare service has been investigated. For this purpose, pre-determined potential communication tools are expected to be ranked according to priority order. The weighted average was used in the calculation of this ranking and the results are shown in Table 2.

Table 2. Distribution of Effectiveness of Referable Communication Tools for Healthcare Services Preferences by Priority Order

Communication Tools	Priority Level			Weight		Priority Order
	1	2	3	Total	%	
References	238	66	46	892	34,57	1
Internet	120	164	66	754	29,22	2
Social Networks	15	88	161	382	14,81	3
TV-Ads.	41	71	47	312	12,09	4
Written Media	11	30	81	174	6,74	5
Radio	5	11	29	66	2,56	6

Total weight = "1. degree frequency x3+2. degree frequency x2+ 3. degree frequency x1" .

When the ranking of the communication tools that the participants apply to obtain information on health services preference is examined, it is seen that references are 34.57%, internet is 29.22% and social networks are 14.81%. This fact indicates that healthcare consumers' first preference as source of information is personal information sources. Although the references are placed on the top, it is seen that the use of internet and social networks as a source of information also occupy an important position as a result of the expansion of technological facilities and widespread usage of them.

Priority order of the sources affecting the purchase decision that the consumers applied in the selection of the healthcare service was investigated in the survey. For this purpose, pre-determined potential sources are expected to be ranked according to priority order. The weighted average was used in the calculations related to this ranking, and the results are shown in Table 3.

Table 3. Distribution of Resources Affecting the Purchase Decision in the Selection of a Healthcare Service by Priority Order

Resources	Priority Level			Weight		Priority Order
	1	2	3	Total	%	
Medical specialist	207	109	46	885	34,30	1
Previously bought services	114	114	70	640	24,81	2
Own idea	53	75	108	417	16,16	3
Family	37	74	90	349	13,53	4
Friends	11	28	69	158	6,12	5
Relatives	8	30	47	131	5,08	6

Total weight = "1. degree frequency x3+2. degree frequency x2+ 3. degree frequency x1"

When the order of priority of the sources affecting the purchase decision of participants is examined, medical specialists and service purchasers occupy the top position with a score of 34.30% and 24.81% respectively. The fact that information asymmetry in healthcare services affects people's health service consumption process considerably.

The Pearson's Correlation coefficient results, which determine the correlation between receiver's expertise and purchase intention, are shown in Table 4.

Table 4. Results of the Pearson's Correlation Coefficient Results Determining the Correlation Between Receiver's Expertise and Purchase Intention

	Receiver's expertise	Purchase intention
Receiver's expertise	<b>r</b>	1
	<b>p</b>	,263**
Purchase intention	<b>r</b>	1
	<b>p</b>	,000

When Pearson Correlation coefficient results were examined to analyze the correlation between receiver's expertise and purchase intention, there was a weak positive correlation between receiver's expertise and purchase intention ( $p < 0.01$ ) ( $0.20 < r < 0.40$ ) ( $r = 0.263$ ). In other words, it has been determined that the perception of purchase intention may increase if there is an increase in the perception of receiver's expertise. Vice versa is also true.

The results of the Regression Analysis intended for testing the influence of receiver's expertise on the purchase intention are shown in Table 5.

Table 5. Results of Regression Analysis Intended for Testing the Influence of Receiver's Expertise on Purchase Intention

Purchase Intention	Constant	R <sup>2</sup>	Corrected R <sup>2</sup>	F	Significance F	Standardized Beta	t value	P value
Receiver's Expertise	4,017	0,069	0,067	31,799	0,000	0,263	5,639	0,000

When the results of the regression analysis are examined receiver's expertise seems to have a significant influence on the purchase intention. Explanatory value of the model pertained to the influence of receiver's expertise on purchase intention has been determined as 6.7%. The receiver's expertise has been found to have a positive influence of 26.3% on the purchase intention (at a level of 0.05 significance). The regression model is as follows.

$$\text{Purchase Intention} = 4,017 + 0,263 * \text{Receiver's expertise}$$

In the correlation and regression analysis performed, receiver's expertise has been inferred to have a positive influence on the purchase intention (H1 has been accepted).

The Pearson's Correlation coefficient results which determine the correlation between the sender's expertise and the purchase intention, are shown in Table 6.

Table 6. Pearson's Correlation Coefficient Results Determining the Correlation Between Sender's Expertise and Purchase Intention

	Sender's expertise	Purchase intention
Sender's expertise	<b>r</b>	1
	<b>p</b>	,486**
Purchase intention	<b>r</b>	1
	<b>p</b>	,000

When the Pearson's Correlation coefficient for analyzing the correlation between sender's expertise and the purchase intention is examined, there is a positive moderate relationship between sender's expertise and the purchase intention ( $p < 0.01$ ) ( $0.40 < r < 0.60$ )  $r = 0.486$ ). In other words, when sender's perception of expertise has increased, the perception of purchase intention may increase. Vice versa is also true.

Regression analysis results intended for testing the effectiveness of sender's expertise on the purchase intention are shown in Table 7.

Table 7. Regression Analysis Results Intended for Testing the Effectiveness of Sender's Expertise on the Purchase Intention

Purchase Intention	Constant	R <sup>2</sup>	Corrected R <sup>2</sup>	F	Significance F	Standardized Beta	t value	P value
Sender's Expertise	3,109	0,236	0,234	132,216	0,000	0,486	11,499	0,000

When the results of the regression analysis are examined, it is seen that sender's expertise has a significant influence on the purchase intention. The explanatory value of the model pertained to the influence of sender's expertise on purchase intention has been determined as 23.4%. Sender's expertise has been found to have a positive influence of 48.6% on the purchase intention (at a level of 0.05 significance). The regression model is as follows.

$$\text{Purchase Intention} = 3,109 + 0,486 * \text{Sender's expertise}$$

In the correlation and regression analyzes performed, sender's expertise has been inferred to have a positive influence on purchase intention (H<sub>2</sub> has been accepted).

The Pearson's Correlation coefficient results which determine the relationship between perceived risk and purchase intention are shown in Table 8.

Table 8. The Pearson's Correlation Coefficient Results Determining the Correlation Between Perceived Risk and Purchase Intention

		Perceived risk	Purchase intention
Perceived risk	<b>r</b>	1	,550**
	<b>p</b>		,000
Purchase intention	<b>r</b>		1
	<b>p</b>		

When Pearson's Correlation coefficient results were examined to analyze the correlation between perceived risk and purchase intention, it was found that there was a positive moderate correlation between perceived risk and purchase intention ( $p < 0.01$ ) ( $0.40 < r < 0.60$ ) ( $r = 0.550$ ). In other words, when the perceived risk perception increases, it is determined that the perception of purchase intention may increase. Vice versa is also true.

The results of the Regression Analysis intended for testing the influence of perceived risk on purchase intention are shown in Table 9.

Table 9. Regression Analysis Results Intended for Testing the Influence of Perceived Risk on Purchase Intention

Purchase Intention	Constant	R <sup>2</sup>	Corrected R <sup>2</sup>	F	Significance F	Standardized Beta	t value	P value
Perceived Risk	2,196	0,302	0,301	185,320	0,000	0,550	13,613	0,000

When the results of regression analysis are examined perceived risk appears to have a significant influence on the purchase intention. The explanatory value of the model pertained to the influence of perceived risk on purchase intention has been determined as 30.1%. The perceived risk has been found to have a positive influence of 55% on the purchase intention (at a level of 0.05 significance). The regression model is as follows.

$$\text{Purchase Intention} = 2,196 + 0,550 * \text{Perceived Risk}$$

In the correlation and regression analysis performed, the perceived risk has been inferred to have a positive influence on purchase intention (H3 has been accepted).

The Pearson's Correlation coefficient results which determine the correlation between the tie strength and purchase intention are shown in Table 10.

Table 10. Pearson Correlation Coefficient Results Determining the Correlation Between Tie Strength and Purchase Intention

	Tie strength	Purchase intention
Tie strength	<b>r</b>	1
	<b>p</b>	.251**
Purchase intention	<b>r</b>	1
	<b>p</b>	.000

When the Pearson' Correlation coefficient results for the correlation between tie strength and purchase intention are examined, there is a positive strong correlation between tie strength and purchase intention. ( $p < 0.01$ ) ( $0.20 < r < 0.40$ ) ( $r = 0.251$ ). In other words, it has been determined that purchase intention perception may increase when there is an increase in tie strength perception. Vice versa is also true.

The results of the Regression Analysis intended for testing the influence of tie strength on purchase intention are shown in Table 11.

Table 11. Regression Analysis Results Intended for Testing the Influence of Tie Strength on Purchase Intention

Purchase Intention	Constant	R <sup>2</sup>	Corrected R <sup>2</sup>	F	Significance F	Standardized Beta	t value	P value
Tie Strength	4,396	0,063	0,061	28,899	0,000	0,251	5,376	0,000

When the results of regression analysis are examined it seems that the power of tie strength has a significant influence on purchase intention. Explanatory value of the model pertained to the influence of tie strength on purchase intention has been determined as 6.1%. Tie strength has been found to have a positive influence of 25.1% on the purchase intention (at a level of 0.05 significance). The regression model is as follows.

$$\text{Purchase Intention} = 4,396 + 0,251 * \text{Tie strength}$$

In the correlation and regression analysis performed, the tie strength has been inferred to have a positive influence on purchase intention (H4 has been accepted).

The Pearson Correlation coefficient results which determine the correlation between receiver's expertise and perceived risk are shown in Table 12.

Table 12. Pearson's Correlation Coefficient Results Determining the Correlation Between Receiver's Expertise and the Perceived Risk

	Receiver's expertise	Perceived risk
Receiver's expertise	<b>r</b>	1
	<b>p</b>	,000
Perceived Risk	<b>r</b>	1
	<b>p</b>	

When Pearson Correlation coefficient results were examined to analyze the correlation between receiver's expertise and perceived risk, a weak positive correlation was found between receiver's expertise and the perceived risk ( $p < 0.01$ ) ( $0.20 < r < 0.40$ ) ( $r = 0.367$ ).

The results of the Regression Analysis intended for the influence of the correlation between the perceived risk and receiver's expertise on purchase intention are shown in Table 13.

Table 13. Regression Analysis Results Intended for the Influence of the Correlation between Perceived Risk and Receiver's Expertise on Purchase Intention

Purchase Intention	Constant	R <sup>2</sup>	Corrected R <sup>2</sup>	F	Significance F	Standardized Beta	t value	P value
<b>Model 1</b>	2,355	0,226	0,224	125,073	0,000	0,476	11,184	0,000

When the results of the regression analysis are examined the correlation between the receiver's expertise and the perceived risk seems to have a significant influence on purchase intention. The explanatory value of the model pertained to the influence of perceived risk and receiver's expertise on purchase intention has been determined as 22.4%. Receiver's expertise has been found to have a positive influence of 47.6% on the purchase intention (at a level of 0.05 significance). The regression model is as follows.

$$\text{Purchase Intention} = 2,355 + 0,476 * \text{Receiver's expertise} + \text{perceived risk}$$

The correlation between perceived risk and receiver's expertise has been found to have a positive influence on purchase (H5 has been accepted).

In the correlation and regression analysis performed, the correlation between perceived risk and receiver's expertise has been concluded that it has a positive influence on the purchase intention.

## Results and Discussion

The word-of-mouth communication method, which has now become a topic of research in many fields, has begun to attract attention of the health sector in recent years. Especially in Turkey as well as in many parts of the world, the fact that health providers have to comply with legal restrictions on advertising and publicity causes them to have difficulty in informing consumers about the services they offer. Apart from this, health institutions are basically business entities and carry out business activities. For this reason, they are in competition with other businesses under difficult economic conditions. Whether public or private healthcare providers, they need to realize marketing activities.

That satisfied people are initiator of positive word-of-mouth communication while dissatisfied ones are initiator of negative word-of-mouth communication is concluded. Because of the fact that a negative opinion the initiator of which is an unsatisfied consumer may spread in an unobtrusive and uncontrollable manner, it is necessary for healthcare institutions to be aware of the complaint of the patient. Solving problems and a more encouraging patient-hospital communication for positive recommendation should be paid attention so that negative word-of-mouth communication does not occur initially.

In the investigations made, it has been seen that the most effective source in selecting the healthcare institution is medical specialists and the receivers who had already consumed the service while the most effective communication tool is references. The Internet and social networks are in a position that can be called a sine qua non. It can be expressed that the more active use of references, internet and social networks in promoting the health institution compared to the traditional communication tools will be more effective for the consumers to be aware of the services. Also, using these tools together rather than focusing on one will increase the expected effectiveness. The healthcare institution should accept every consumer as a volunteer delegate, present real consumer experiences in promotional campaigns, and choose opinion leaders from health professionals and consumers.

Compared to traditional promotion tools the use of word-of-mouth communication will both provide cost advantage and stronger influence on the consumer. Businesses that have included word-of-mouth communication in integrated marketing communication will be able to gain a significant competitive advantage against their opponents.

In the research, it has been concluded that word-of-mouth communication affects consumers' purchase intention. The effect of all sub-dimensions of word-of-mouth communication (receiver's expertise, sender's expertise, perceived risk and tie strength) on purchase intention was found to be influential on the purchase intention.

This research is limited to the province of Yozgat. It is known that word-of-mouth communication can affect the purchase process in different cultural structures. For this reason, different results can be reached in the studies to be done in different provinces and regions. The influence of word-of-mouth communication is significant issue not only in the preference of hospital but in the usage proportion in certain branches that provide services in the hospital and in purchase process as well. For instance, in some branches where experience and privacy are fundamental, such as gynecology, urology, and even in some branches where advertising and promotion are sometimes not possible due to the social structure, influences of word-of-mouth communication can be stronger compared to branches such as dermatology, internal medicine and radiology. In subsequent studies, researchers are addressed to study the influence of word-of-mouth communication on the purchase process in different provinces and in certain branches.

## References

- Anderson, E. W. (1998). Customer Satisfaction and Word of Mouth. *Journal of Service Research*, 1(1), 5-17.
- Arndt, J. (1967). Role of Product-Related Conversations in the Diffusion of a New Product. *Journal of Marketing Research*, 4, 291-295.
- Avcılar, M.Y. (2005). Kişisel Etki Kaynakları ve Ağızdan Ağıza İletişim Ağı. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 19(2), 333-347.
- Baber, A., Thurasamy, R., Malik, M. I., Sadiq, B., Islam, S., and Sajjad, M. (2016). Online Word-of-Mouth Antecedents, Attitude and Intention-to-Purchase Electronic Products in Pakistan. *Telematics and Informatics*, 33(2), 388-400.
- Bansal, H. S., and Voyer, P.A. (2000). Word-of-Mouth Processes Within a Services Purchase Decision Context. *Journal of Service Research*, 3(2), 166-177.
- Bronner, F. and Hoog, R. (2011). Vacationers ans eWom: Who Posts, and Why, Where, and What?. *Journal of Travel Research*, 50(1), 15-26.
- Cheng, S., Lam, T., and Hsu, C. H. (2006). Negative Word-of-Mouth Communication Intention: An Application of the Theory of Planned Behavior. *Journal of Hospitality & Tourism Research*, 30(1), 95-116.
- Cop, R., ve Gümüş, N. (2009). Pazarlamada Ağızdan Ağıza İletişimin Tüketici Davranışlarındaki Rolü ve Bir Araştırma. *Ticaret ve Turizm Eğitim Fakültesi Dergisi*, 2, 179-202.
- Corbin, C. L., Kelley, S. W., and Schwartz, R. W. (2001). Concepts in Service Marketing for Healthcare Professionals. *The American Journal of Surgery*, 181(1), 1-7.

Dholakia, U. M. (1997). An Investigation of the Relationship Between Perceived Risk and Product Involvement. *NA-Advances in Consumer Research*, 24, 159-167.

Dichter, E. (1966). How Word-of-Mouth Advertising Works. *Harvard Business Review*, 44 (November/December), 147-57.

Dobele, A., and Lindgreen, A. (2011). Exploring the Nature of Value in the Word-of-Mouth Referral Equation for Health Care. *Journal of Marketing Management*, 27(3-4), 269-290.

Duhan, D. F., Johnson, S. D., Wilcox, J. B., and Harrell, G. D. (1997). Influences on Consumer Use of Word-of-Mouth Recommendation Sources. *Journal of the Academy of Marketing Science*, 25(4), 283-295.

East, R., Hammond, K., and Lomax, W. (2008). Measuring the Impact of Positive and Negative Word of Mouth on Brand Purchase Probability. *International Journal Of Research in Marketing*, 25(3), 215-224.

East, R., Hammond, K., and Wright, M. (2007). The Relative Incidence of Positive And Negative Word of Mouth: A Multi-Category Study. *International Journal of Research in Marketing*, 24(2), 175-184.

File, M. K., Judd, B. B., and Prince, R. A. (1992). Interactive Marketing: The Influence of Participation on Positive Word-of-Mouth and Referrals. *Journal of Services Marketing*, 6(4), 5-14.

Gabbott, M. (1991). The Role of Product Cues in Assessing Risk in Second-Hand Markets. *European Journal of Marketing*, 25(9), 38-50.

Gilly, M. C., Graham, J. L., Wolfinbarger, M. F., and Yale, L. J. (1998). A Dyadic Study of Interpersonal Information Search. *Journal of the Academy of Marketing Science*, 26(2), 83-100.

Godes, D., and Mayzlin, D. (2004). Using Online Conversations to Study Word-of-Mouth Communication. *Marketing Science*, 23(4), 545-560.

Gülmez, M. (2011). İnternet Üzerinde Ağızdan Ağıza Pazarlama Uygulama Örnekleri. *İnternet Uygulamaları ve Yönetimi Dergisi*, 2(1), 29-36.

Harrison-Walker, L. J. (2001). The Measurement of Word-of-Mouth Communication and an Investigation of Service Quality and Customer Commitment as Potential Antecedents. *Journal of Service Research*, 4(1), 60-75.

Herr, P. M., Kardes, F. R., and Kim, J. (1991). Effects of Word-of-Mouth and Product-Attribute Information on Persuasion: An Accessibility-Diagnosticity Perspective. *Journal of Consumer Research*, 17(4), 454-462.

Holmes, J. H., and Lett, J. D. (1977). Product Sampling And Word of Mouth. *Journal of Advertising Research*, 17(5), 35-40.

İnternet: WOMMA (2017), URL: <http://womma.org/>, Son Erişim Tarihi: 10.04.2017.

Katz, E., and Lazarsfeld, P. F. (1955). *Personal Influence, The Part Played by People in the Flow of Mass Communications*. New York: Free Press.

Laczniak, R. N., DeCarlo, T. E., and Ramaswami, S. N. (2001). Consumers' Responses to Negative Word-of-Mouth Communication: An Attribution Theory Perspective. *Journal of Consumer Psychology*, 11(1), 57-73.

Lampert, S. I., and Rosenberg, L. J. (1975). Word of Mouth Activity as Information Search: A Reappraisal. *Journal of the Academy of Marketing Science*, 3(3-4), 337-354.

Lee, C. H., and Cranage, D. A. (2014). Toward Understanding Consumer Processing of Negative Online Word-of-Mouth Communication: The Roles of Opinion Consensus and Organizational Response Strategies. *Journal of Hospitality & Tourism Research*, 38(3), 330-360.

Liu, Y. (2006). Word of Mouth for Movies: Its Dynamics and Impact on Box Office Revenue. *Journal of Marketing*, 70(3), 74-89.

Martin, W. C., and Lueg, J. E. (2013). Modeling Word-of-Mouth Usage. *Journal of Business Research*, 66(7), 801-808.

Meiners, N., Schwarting, U. and Seeberger, B. (2010). The Renaissance of Word-of-Mouth Marketing: A 'New' Standard in Twenty-First Century Marketing Management?!. *International Journal of Economic Sciences and Applied Research*, (2), 79-97.

Mookerjee, A. (2001). A Study of the Influence of Source Characteristics and Product Importance on Consumer Word of Mouth Based on Personal Sources. *Global Business Review*, 2(2), 177-193.

Murray, K. B. (1991). A Test of Services Marketing Theory: Consumer Information Acquisition Activities. *The Journal of Marketing*, 55(2), 10-25.

Murray, K. B., and Schlacter, J. L. (1990). The Impact of Services Versus Goods on Consumers' Assessment of Perceived Risk and Variability. *Journal of the Academy of Marketing Science*, 18(1), 51-65.

- Özkan, E., ve Yıldız, S. (2015). Müşteri Sadakati ile Ağızdan Ağıza İletişimin Tüketici Satın Alma Davranışlarına Etkisi: Elektronik Eşya Sektöründe Bir Uygulama. *International Journal of Economic & Administrative Studies*, 8(15), 359-380.
- Richins, M. L. (1983). Negative Word-of-Mouth by Dissatisfied Consumers: A Pilot Study. *The Journal of Marketing*, 47(1), 68-78.
- Samuel, H. W. (2011). *Content Management for Online Health Advice Sharing*. Master Thesis, University of Alberta, Department of Computing Science, Canada.
- Schiffman, L. G. and Kanuk, L. L (1997). *Consumer Behaviour*. (Sixth Edition). New Jersey: Upper Saddle River.
- Silverman, G. (2007). Ağızdan Ağıza Pazarlama: Dünyanın En Güçlü Pazarlama Yönteminin 28 Sırrı. (Çev. E. Orfanlı). İstanbul: Mediacat Yayınları.
- Sundaram, D. S., Mitra, K., and Webster, C. (1998). Word-of-Mouth Communications: A Motivational Analysis. *NA-Advances in Consumer Research*, 25, 527-531.
- Susskind, A. M. (2002). I Told You So!: Restaurant Customers' Word-of-Mouth Communication Patterns. *Cornell Hospitality Quarterly*, 43(2), 75.
- Swanson, S. R., and Hsu, M. K. (2011). The Effect of Recovery Locus Attributions and Service Failure Severity on Word-of-Mouth and Repurchase Behaviors in the Hospitality Industry. *Journal of Hospitality and Tourism Research*, 35(4), 511-529.
- Trigg, L. (2011). Patients' Opinions of Health Care Providers for Supporting Choice and Quality Improvement. *Journal of Health Services Research & Policy*, 16(2), 102-107.
- Uzun, B., ve Uydacı, M. (2010). Sağlık Kurumlarında Ağızdan Ağıza Pazarlama ve Bir Pilot Çalışma. *Öneri*, 9(34), 87-95.
- Wangenheim, F. V. (2005). Post Switching Negative Word of Mouth. *Journal of Service Research*, 8(1), 67-78.
- Weiss, R. (2014). Influencer Marketing. How Word-of-Mouth Marketing can Strengthen Your Organization's Brand. *Marketing Health Services*, 34(1), 16-17.
- Zeithaml, V.A. (1981). "How Consumer Evaluation Processes Differ Between Goods and Services". James H. Donnelly and William R. George (Eds). *Marketing of Services*. Chicago: American Marketing Association, pp.186–189.