

## Effect of Viral Marketing in Health Services on Purchasing Decisions of Consumers: Sample of Ankara, Çankaya Province

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### ABSTRACT

The purpose of this study was to examine reflections of viral marketing phenomenon in health sector, which grows dependently to rapid improvement in ways of communication in globalizing world. In this study, It was observed that in health sector (service, product), viral marketing effects marketing activities positively. The population of the study was defined as the residents living in Çankaya/ Ankara and the sampling was chosen with the convenience sampling method and consists of 600 people who were older than 18. A survey was used to collect data. The survey results were evaluated with SPSS 22 package programme. This process transformed the data into quantitative and measurable and provided scientific ground to the study.

Findings of the study: In terms of demographic variables, health service consumers' purchasing decisions varies within the scope of viral marketing. Consumers' expectations on debriefing from the network increase patient satisfaction. Another important finding is that there is a meaningful difference in consumers' response levels to the positive and negative comments according to demographic variables. These variables also effect the level of sharing positive or negative experiences with others via network meaningfully. The behaviour of researching the health service on the network before a treatment also changes demographically.

As a result; The importance and usage of viral marketing increases day by day. Health care is a proper field for viral marketing because it has a limited substitution and not possible to stock it. It is suggested that measures to overcome the bias against viral marketing should be taken.

**Keywords:** viral marketing, healthcare services, customer purchasing process

**JEL classification:** M31.

### 1. INTRODUCTION

The information they obtain from the environment, from mouth to mouth, affect their purchasing decisions positively or negatively. Viral marketing is a new approach which can be defined as the mouth to mouth marketing adapted for our age.

In our age, marketing techniques and methods develop very rapidly. Today, when network webs have become widespread and technological improvements featured the phenomenon of consumer, manufacturers are in struggle for explaining themselves better. In addition, they benefit from technological enterprises to develop marketing strategies and to be competitive (Cevher, 2014).

In this study, consumer behaviors in health services, viral marketing and the effects of viral marketing in health services on the purchasing decisions of consumers were researched.

#### 1.1. Consumer Behaviors in Health Services

Rapid perception of the positive effects of health services on the individual and the society makes the impression of benefiting from health services as much as possible in the general of individuals. Health indicators within the society are the main indicators of the status of being healthy, which constitutes the basic source of individual welfare (Bakır, 2006). The process of carrying out health services indicate a quite different attitude compared to other branches of operation. In health services, demand causes the supply. Knowledge, skill and qualification of health product and service manufacturer cause the differentiation of the result. As its scale factor is human, degrees of satisfaction are variable (İlgün, 2006)

That the consumer has the freedom to choose the provided goods or services in the market conditions makes he/she the basic determinant of the market activities. This situation obliged manufacturers to provide better service and make productions to create awareness in terms of the needs, desires and wished of the consumers (Akgün, 2008).

Consumer is the most difficult element to be understood and planned on within the structure of marketing. This is because the humans are social beings (İslamoğlu, 2013). Companies which can understand consumer behaviors and which determine their strategies in this context have a great superiority of competition in the market (Karaca, 2010).

## **1.2. Viral Marketing**

That the technology develops and becomes widespread at an unpredictable speed shifted the communication and interaction among people very rapidly. Source and receivers, which are the keystones of communication change by being affected by these factors. While shortening the distances, this interaction makes close distances far. Audio and visual communication can be made with people all over the world (Cevher, 2014).

In the last period, consumption levels are at their highest, thousands of products come out of production lines per second. Consumer, who fall under the spell of the virtual media, finds reliable to purchase a product, the visually of which he/she likes, without any effort, touching or trying (Meriç, 2010).

Viral marketing application is based on three main factors. Positive feedback from the implementation of the factors indicates the success of the application. These are, spreading motivator, purchasing motivator and spreading medium (Hüseyinoğlu, 2009)

### **1.2.2. Viral Marketing Campaign Process**

Today, traditionalism is left aside and new technologies with more virtual reality and instant mutual interaction opportunity are demanded more. Therefore, viral marketing campaigns through internet and successful sustainment of these campaigns gain importance. Factors that would help viral marketing campaign be carried out in a sustainable way are compiled under six titles. These are:

- Incentive should be provided in viral marketing,
- Persistent transmission shouldn't be considered,
- Sent e-mails should be personalized,
- Data should be monitored and analyzed,
- Sending to a friend should be encouraged all the time,
- Traffic of the web site should be well managed (Cevher, 2014).

### **1.2.3. Viral Marketing Strategies**

Product and service providers, who plan to commission viral marketing strategies, should decide which marketing channel would be used. Viral marketing strategies may be assessed within six factors. These are;

- Sending goods or services free of charge,
- Providing easy transfer to others,
- Spreading easily from small masses to large masses,
- Using general motivations and behaviors,
- Benefiting from existing communication webs
- Benefiting from the advantages of other sources (Wilson et al., 2012).

## **2. MATERIAL AND METHOD**

### **2.1. Purpose and Importance of the Research**

The purpose of the study is to measure the effects of viral marketing in health services on the consumer. In terms of demand, health services are coincidental. It emerges in emergencies and sudden needs. As purchasing process is short, individuals rely on applying the views of the people who received

the same service before. Within this scope, the effectiveness of viral marketing is tried to be understood in health product and service preferences of individuals and repeated need conditions.

## 2.2. Research Problem

Does viral marketing have an effect on the purchasing decisions of health service consumers?

## 2.3. Scope and Limitations of the Research

Research was confined to the area of Çankaya Province. Coincidental sampling method was used. Therefore, certain occupation, gender, age or educational status are not emphasized.

## 2.4. Research Population and Sampling

Research population comprises the habitants of Ankara, Çankaya Province. In the research, sample is comprised of people between age 18-65 selected using coincidental sampling. Coincidental sampling method is a preferred method as it provides the opportunity to reach an abundance of data rapidly. Questionnaire method (**non-parametric**) was used in the research.

According to 2014 data of Turkish Statistical Institute, the population of Çankaya province is 913715. According to this, size of sample (n) was estimated to be about 599. Questionnaire was applied to a total of 600 people.

## 2.5. Hypotheses of the Research

The hypotheses below were constituted to guide the research and allow more detailed explanation. The hypotheses, which were created using literature, will be discussed and each hypothesis will be tested in detail. In this context, research hypotheses are defined below.

H1: There is a relation between the status of gender and Research on Internet about the Product/Service before Purchasing Health Product/Service.

H2: There is a relation between the status of age and Research on Internet about the Product/Service before Purchasing Health Product/Service.

H3: There is a meaningful relation between sharing positive and negative experiences with others over network and gender.

H4: There is a relation between the age status and Levels of Being Affected By Negative Remarks rather than Positive Remarks in the Purchase Decision Process of Health Consumers.

H5: There is a relation between the education status and Levels of Being Affected By Negative Remarks rather than Positive Remarks in the Purchase Decision Process of Health Consumers.

## 2.6. Data Collection and Evaluation Method

In the research, questionnaire method (non-parametric) was benefited as data collection method. Questionnaire questions were prepared in accordance with literature scanning and expert advises. The questionnaire is comprised of 40 questions. Questions between 1-7 aimed at learning demographical properties of the participants, 8-11 aimed at measuring social media use factors of the consumer and 12-40 were comprised of expressions regarding the effect of viral marketing in health services on purchase decisions of consumers, prepared using five point likert scale. Data entry on questionnaire results were made using IBM SPSS 22 (Statistical Package For Social Sciences) program. Reliability analysis was applied for the questionnaire and it was found to be reliable. Frequency analysis and chi-square test were used, expression analysis was made.

In this research, acceptable error rate was determined as %5 considering financial potential and time factors. P value, which expresses community ratio and estimation was determined as 0,5.

## 3. FINDINGS

In the study, the questionnaire was applied to 600 people. Of the participants, %50,5 were female and %49,5 were male. Of the participants, %12,3 were between age 18-21, %33,7 were between 22-30,

%26,7 were between 31-40, %17,7 were between 41-50, %6,3 were between 51-60 and %3,3 were 61 and older.

VARIABLES		FREQUENCY (N)	PORTION (%)
GENDER	FEMALE	303	50,5
	MALE	297	49,5
	TOTAL	600	100,0
AGE	18-21	74	12,3
	22-30	202	33,7
	31-40	160	26,7
	41-50	106	17,7
	51-60	38	6,3
	61+	20	3,3
	TOTAL	600	100
EDUCATIONAL STATUS	ILLITERATE	14	2,3
	PRIMARY SCHOOL	36	6,0
	SECONDARY SCHOOL	58	9,7
	HIGH SCHOOL	187	31,2
	BACHELOR	259	43,2
	POST GRADUATE	46	7,7
	TOTAL	600	100,0
MARITAL STATUS	SINGLE	246	41,0
	MARRIED	354	59,0
	TOTAL	600	100,0
MONTHLY INCOME	LESS THAN 1000 TRY	91	15,2
	1001-2500 TRY	241	40,2
	2501-3500 TRY	153	25,5
	3500-4500 TRY	78	13,0
	4501TRY AND MORE	37	6,2
	TOTAL	600	100,0
OCCUPATION	CIVIL SERVANT	217	36,2
	WORKER	157	26,2
	STUDENT	41	6,8
	RETIRED	27	4,5
	INDEPENDENT	40	6,7
	HOUSE WIFE	28	4,7
	UNEMPLOYED	9	1,5
	OTHER	81	13,5
	TOTAL	600	100,0
HEALTH INSURANCE	SSI	505	84,2
	PRIVATE HEALTH INSURANCE	34	5,7
	GREEN CARD	17	2,8
	NONE	10	1,7
	OTHER	34	5,7
TOTAL	600	100,0	

*Table 1. Demographical Properties Distribution of the Participants*

Nr.	Statements	Strongly Disagree		Disagree		Irresolute		Agree		Strongly Agree	
		N	%	N	%	N	%	N	%	N	%
1	Before I purchase health product or service, I research that product/service online	27	4,5	51	8,5	84	14	240	40	198	33

2	After I purchase health product or service, I share my positive and negative experiences with other, I pass the information to my friends via internet etc.	26	4,3	68	11	107	18	238	40	161	27
3	I purchase health product or service based on the information disseminated through internet or the experiences we obtain from internet	79	13	118	20	146	24	151	25	106	18
4	Negative remarks about health services affect my purchasing decisions more than positive remarks do	35	5,8	74	12	134	22	222	37	135	23

**Table 2. Distributions of Answers given to the Expressions in the Questionnaire on the Effect of Viral Marketing in Health Services on Purchasing Decisions of the Consumers**

It was detected that women do research on network before they purchase health service at a higher rate. As a result of the Chi-Square Test, there is a meaningful relation between two variables ( $p < 0,05$ ). When age categories are examined, it was detected that 22-30, 31-40, 41-50 age groups do research on network before purchasing health service at a higher rate. As a result of the Chi-Square Test, there is a meaningful relation between two variables ( $p < 0,05$ ). When educational status category is examined, it was detected that more the education level increases, more the frequency of doing research on network before purchasing health service increases. As a result of the Chi-Square Test, there is a meaningful relation between two variables ( $p < 0,05$ ).

When marital status category is examined, it is detected that single people do research on network before purchasing health service more frequently than married people do. As a result of the Chi-Square Test, there is a meaningful relation between two variables ( $p < 0,05$ ) (Table 3.).

VARIABLES		After I purchase health product or service, I share my positive and negative experiences with other, I pass the information to my friends via internet etc.					TOTAL	p	
		STRONGLY DISAGREE	DISAGREE	IRRESOLUTE	AGREE	STRONGLY AGREE			
GENDER	FEMALE	N	4	32	60	126	81	0,00 5	
		%	1,3%	10,6%	19,8%	41,6%	26,7%		
	MALE	N	22	36	47	112	80		
		%	7,4%	12,1%	15,8%	37,7%	26,9%		
TOTAL		N	26	68	107	238	161		600
		%	4,3%	11,3%	17,8%	39,7%	26,8%		100,0%
AGE	18-21	N	4	4	19	25	22	0,56 9	
		%	5,4%	5,4%	25,7%	33,8%	29,7%		
	22-30	N	6	24	32	88	52		
		%	3,0%	11,9%	15,8%	43,6%	25,7%		
	31-40	N	5	19	27	67	42		
		%	3,1%	11,9%	16,9%	41,9%	26,3%		
	41-50	N	7	16	14	40	29		
		%	6,6%	15,1%	13,2%	37,7%	27,4%		
	51-60	N	2	3	10	12	11		
		%	5,3%	7,9%	26,3%	31,6%	28,9%		
	61 AND OVER	N	2	2	5	6	5		
		%	10,0%	10,0%	25,0%	30,0%	25,0%		
TOTAL		N	26	68	107	238	161	600	
		%	4,3%	11,3%	17,8%	39,7%	26,8%	100,0%	
EDUCATIONAL STATUS	ILLITERATE	N	1	3	6	2	2	0,00 2	
		%	7,1%	21,4%	42,9%	14,3%	14,3%		
	PRIMARY SCHOOL	N	0	5	8	8	15		36

		%	0,0%	13,9%	22,2%	22,2%	41,7%	100,0%	
	SECONDARY SCHOOL	N	5	6	13	19	15	58	
		%	8,6%	10,3%	22,4%	32,8%	25,9%	100,0%	
	HIGH SCHOOL	N	11	24	38	63	51	187	
		%	5,9%	12,8%	20,3%	33,7%	27,3%	100,0%	
	BACHELOR	N	9	25	39	116	70	259	
		%	3,5%	9,7%	15,1%	44,8%	27,0%	100,0%	
	POST GRADUATE	N	0	5	3	30	8	46	
		%	0,0%	10,9%	6,5%	65,2%	17,4%	100,0%	
TOTAL		N	26	68	107	238	161	600	
		%	4,3%	11,3%	17,8%	39,7%	26,8%	100,0%	
MARITAL STATUS	SINGLE	N	7	22	45	102	70	246	0,28 4
		%	2,8%	8,9%	18,3%	41,5%	28,5%	100,0%	
	MARRIED	N	19	46	62	136	91	354	
		%	5,4%	13,0%	17,5%	38,4%	25,7%	100,0%	
TOTAL		N	26	68	107	238	161	600	
		%	4,3%	11,3%	17,8%	39,7%	26,8%	100,0%	

*Table 3. Examination of the Relation between Demographical Properties and the Status of After I purchase health product or service, I share my positive and negative experiences with other, I pass the information to my friends via internet etc. (Chi-Square Test)*

VARIABLES			I purchase health product or service based on the information disseminated through internet or the experiences we obtain from internet					TOTAL	P
			STRONGLY DISAGREE	DISAGREE	IRRESOLUTE	AGREE	STRONGLY AGREE		
GENDER	FEMALE	N	32	47	76	83	65	303	0,005
		%	10,6%	15,5%	25,1%	27,4%	21,5%	100,0%	
MALE	N	47	71	70	68	41	297		
	%	15,8%	23,9%	23,6%	22,9%	13,8%	100,0%		
TOTAL		N	79	118	146	151	106	600	
		%	13,2%	19,7%	24,3%	25,2%	17,7%	100,0%	
GENDER	18-21	N	10	2	20	28	14	74	0,000
		%	13,5%	2,7%	27,0%	37,8%	18,9%	100,0%	
	22-30	N	13	47	51	46	45	202	
		%	6,4%	23,3%	25,2%	22,8%	22,3%	100,0%	
	31-40	N	24	35	39	42	20	160	
		%	15,0%	21,9%	24,4%	26,3%	12,5%	100,0%	
	41-50	N	21	24	23	25	13	106	
		%	19,8%	22,6%	21,7%	23,6%	12,3%	100,0%	
	51-60	N	4	8	9	6	11	38	
		%	10,5%	21,1%	23,7%	15,8%	28,9%	100,0%	
	61 AND OVER	N	7	2	4	4	3	20	
		%	35,0%	10,0%	20,0%	20,0%	15,0%	100,0%	
TOTAL		N	79	118	146	151	106	600	
		%	13,2%	19,7%	24,3%	25,2%	17,7%	100,0%	
MARITAL STATUS	SINGLE	N	23	41	59	67	56	246	0,010
		%	9,3%	16,7%	24,0%	27,2%	22,8%	100,0%	
	MARRIED	N	56	77	87	84	50	354	
		%	15,8%	21,8%	24,6%	23,7%	14,1%	100,0%	
TOTAL		N	79	118	146	151	106	600	
		%	13,2%	19,7%	24,3%	25,2%	17,7%	100,0%	
OCCUPATION	CIVIL SERVANT	N	23	65	54	48	27	217	0,000
		%	10,6%	30,0%	24,9%	22,1%	12,4%	100,0%	
	WORKER	N	26	22	37	42	30	157	

	%	16,6%	14,0%	23,6%	26,8%	19,1%	100,0%
STUDENT	N	0	3	12	16	10	41
	%	0,0%	7,3%	29,3%	39,0%	24,4%	100,0%
RETIRED	N	7	1	5	4	10	27
	%	25,9%	3,7%	18,5%	14,8%	37,0%	100,0%
INDEPENDENT	N	6	3	4	17	10	40
	%	15,0%	7,5%	10,0%	42,5%	25,0%	100,0%
HOUSE WIFE	N	5	2	9	5	7	28
	%	17,9%	7,1%	32,1%	17,9%	25,0%	100,0%
UNEMPLOYED	N	2	2	1	2	2	9
	%	22,2%	22,2%	11,1%	22,2%	22,2%	100,0%
OTHER	N	10	20	24	17	10	81
	%	12,3%	24,7%	29,6%	21,0%	12,3%	100,0%
TOTAL	N	79	118	146	151	106	600
	%	13,2%	19,7%	24,3%	25,2%	17,7%	100,0%

**Table 4. Examination of the relation between Demographical properties and Tendency to purchase health product or service based on the information disseminated through internet or the experiences obtained from internet (Chi-Square Test)**

It was detected that female participants are affected at a higher rate. As a result of the Chi-Square Test, there is a meaningful relation between two variables ( $p < 0,05$ ).

### 1.9. Conclusion

Health product and service providers use viral marketing actively in our country due to lower costs and rapid access to masses. Turkey is 18<sup>th</sup> out of 142 countries in internet use. As it can be understood from these statistical data, it is seen that product marketing in Turkey is made considerably over internet. Therefore, companies should give importance to viral marketing, make necessary efforts for customer satisfaction and consider even the smallest complaints of customers sensitively. Especially social media should be used adequately and followed constantly, personnel who work in this area should be employed.

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