Word-of-Mouth Communications: A Powerful contributor to Consumers Decision-making in Healthcare Market

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ABSTRACT: Healthcare market is highly complex and sensitive in nature. Furthermore, selection of a healthcare practitioner is largely dependent on the practice quality, reputation, and success stories rather than on their level of education, reputation of graduating institution or excess to the information. Therefore, consumers of this market are very confused in taking effective decisions or relying on only one practitioner at a time due to opinions coming from different fronts. This study examines the contribution of different factors by mapping the possible dimensions of consumer decision-making in Healthcare market. Specifically, this study investigates two core questions. First, what are the key factors that contribute in consumer decision-making? Secondly, what is the contribution level of Word-of-mouth (WoM) communications in consumer decisionmaking? Because, WoM is well documented in consumer decision-making literature and proven as most important, influential, trustful and credible source of information. A study sample has been drawn from the University of Guirat and data were obtained from 400 respondents by using structured questionnaires. The hypothesized relationships between variables were then assessed by using Structural Equation Modeling (SEM). The result of this study reveals that the social factors and personal factors have very important contribution in consumer decision-making. However, the WoM communications are regarded as most powerful contributor in the effective decision-making based on the social structure of the consumers. This study also concludes that as WoM is a very influential tool therefore, the healthcare practitioners should use it to enhance and promote their personal image.

Keywords: Decision Making, Word-of-Mouth, Confirmatory Factor Analysis, Structural Equation Modeling.

I. INTRODUCTION

Consumer behavior is a complex process involving the activities people engage in when seeking for, choosing, buying, using, evaluating and disposing of products and services with the goal of satisfying needs, wants and desires (Belch and Belch, 2004). The consumer's decision to purchase or not to purchase a product or service is an important factor for the marketers (Kotler and Armstrong, 2012). It can indicate whether a marketing plan has been successful or not. Hence, marketers are much interested in the consumer's decision making process. These days, for a consumer there is possibly more than one option or alternatives available for making decision. This reflects the complexity in the consumer decision making. With the passage of time, the purchase decision is becoming difficult for the consumers. Therefore, the marketers are in the continuous search to investigate the factors that influence consumer to make their purchase decision (Schiffman and Kanuk, 2010). This question is very important for marketers because they plan different strategies for the marketing of their services. The focus of research is to explore the factors that have great influence on consumer decision of choosing a service. In this perspective, consumer behavior has been defined as the actions of people engaged in actual use of market items-whether products, services, retail environment, or ideas (Berkman and Gilson, 1978).

Marketers may spend millions of rupees on advertising campaigns but often consumer make their decision on the bases of word-of-mouth from their own trustworthy source (Sernovitz, 2012). There are different sources for consumer like personal source: family and friends commercial sources: advertising, newspapers, radio and television for getting information. The influence of these sources of information varies by product or service and by customer. Research suggests that customers value the word-of-mouth information from personal source and commercial sources. Now, it is necessary for the marketers to identify which information sources are most influential for the consumer. Word-of-mouth considers one of the most leading forces in the market (Zamil, 2011), particularly in health care, where services can be complex and complicated to evaluate. In health care, positive word-of-mouth from experienced and trustworthy sources can reduce the different risk of making a health care services decision.

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Word-of-mouth marketing is defined as the sharing of information from one person to another person though human communication such as face-to-face contact, telephone, or social media etc. The term word-of-mouth was originated by Whyte (1954) and on the basis of observations he recommended that "People who talk about products and services together also show alike purchase behavior and have similar product preferences". Arndt (1967) defined word-of-mouth as oral communication between a sender and a receiver whether the receiver perceives as noncommercial regarding a brand, a product or a service. Furthermore Chaniotakis and Lymperopoulos (2009) argued that word-of-mouth offers customers to have ability or skill to make more familiar choices. Through this they can advantage from reduced perceived risk of a certain buying behavior. Bansal and Voyer (2000) indicated that customers trust on informal communication in making purchase decision as compare to advertising campaigns. As in the service industry, customers may extensively rely on WoM messages, either positive or negative, to evaluate a service brand (Litvin et al., 2008; Trusov, Bucklin, and Pauwels, 2009). In word-of-mouth the sender have nothing to earn something from the receivers.

There is indication to accept argue that word-of-mouth actually works. Rising lack of trust in advertising communications has made customers to find out information from other resources so mostly customers trust on word-of-mouth (Allsop, et al. 2007). Since consumers trust their friends they also trust their friend's recommendations. Consumers think that the people they know and have relationship they concern about their best interest while marketers are having a financial interest (Dichter, 1966). Considering word-of-mouth is becoming more important because, traditional forms of communication show to be losing effectiveness. For instance one survey shows that consumer attitudes toward advertising decreased between September 2002 and June 2004 (Trusov, et al., 2009). Allsop, et al. (2007) find that in 2006 U.S.A consumers were seeking for information sources that is helpful when deciding which products to buy in common product categories. Word-of-mouth from friends and family were the most significant sources for purchasing fast food, cold medicine, and breakfast cereal.

To conclude this we can say that word of mouth is one of the tools used for promoting organization or business and it can be more influential than traditional advertisement. A main part of consumer behavior is the decision used in making purchases. In this situation Murray (1991) confirms that consumers take in mind the opinions and experiences of other individuals before making service purchase decisions and suggests that word-of-mouth reduces the risk that is associated with buying decisions. Selection of doctor is very sensitive and it is consist of series of visit therefore peoples are very selective and seek word-of-mouth information from others.

The peoples make their private health-care decisions based on word-of-mouth. People are more conscious about their health and often when they go to the doctor or hospital they cannot check the quality of each hospitals or doctor because they have not time or resources to check the quality of doctor or hospital so they take recommendation from their relative or friends. When they ask to their friends or family then word of mouth communication generate and they make their decision on the base of word-of-mouth to go to a specific doctor or hospital. Therefore word-of-mouth plays vital role in decision making. We can also compare the decision making path .The center of attention of this study will be the impact of word -of -mouth, on decision making of people regarding the selection of doctor for a specific medical service.

II. SIGNIFICANCE AND OBJECTIVE OF STUDY

Word-of-mouth has been accepted as a powerful force affecting consumer choice, loyalty and switching a product or service. The results of this study improve our understanding of how word-of-mouth influences making decisions particularly in the service sector. Doctors and hospitals have limited options to make their advertising so word-of-mouth may be useful and influential advertising technique for hospitals advertisement. In addition, findings support to the literature on word-of-mouth effects and perceived word-of-mouth influence on the effective decision making. This study is helpful to the doctors or hospital management to recruit relevant person to create their positive word-of-mouth in the society as research support that people make their decision on the base of word-of-mouth. This research will provide clear dimensions and guidance to advertise, retain and attract the new customers. On the other hand this will also facilitate the patients to select the most appropriate medical facility based on the prevailing information and trust base knowledge of the health care industry. Following objectives have been formulated to achieve the above sited goals;

- To develop a model for decision making based on word-of-mouth.
- To investigate the relative importance of factors with respect to decision making in medical market.
- To explore that how word-of-mouth significantly relate to the decision making.

Effective Decision Making

In effective decision-making process there are number of contributors that have direct or indirect role. The effective decision making is contextual based in which the contributing variable change according to the situation. Following are the factors of decision making that are carefully selected for the study in hand.

2.1 Perceived Risk

Perceived risk has been distinct as negative or harmful consequences that can occur from the purchase of a product or services (Bauer, 1967). There are different types of perceived risk such as financial, social, psychological, time, functional and security risk. Similarly, Hablemitoglu and Yildirim, (2008) argued that decision-making is influenced by the descriptive variables including gender, family, location etc. Health is very important for the human they cannot take risk so sometimes people give priority to the financial issues or others while selecting doctor or medical service. Murray (1991) suggested that word-of-mouth give the most efficient information for reducing risk in purchases of a service.

2.2 Personal Information Source

Personal information source includes person's personal effort to collect information for the selection of the products and services (Kinley, T., Conrad, R.A. and Brown, G. 2008) including doctors for particular disease. He/she search information from different channels for example bulletin boards, news papers, pamphlets regarding doctors and make their decision on the basis of that information.

2.3 Opinion Leaders

An opinion leader is those who lead the opinion of others people and give the opinions to the individuals (Richey, 2009). Opinion leader include convincing personality to convince others, more knowledgeable and aware people and have influential role in the communities (Kautz and Larsen, 2000). Selection of doctor is very sensitive and consist series of visit so people take word-of- mouth information from opinion leaders. Others opinion often shape our decision so it is very important factor for decision making.

2.4 Communication Medium

We often influenced by information that we get from different type of electronic medium. The communication coming from these medium allows organization to connect with their customers (Sharma, 2012). Advertisement from different electronic medium plays important role in our decision making. Especially in selection of doctor decision we often convinced through advertisement play by cable or radio.

2.5 Word-of-Mouth

Word-of-mouth is defined as the sharing of information from one person to another .If actively sought word-of-mouth then it has greater impact on the decision. Arndt (1967) stated that actively sought word-of-mouth were very important element in decision making process. Receiver's participation towards word-of-mouth is very important element in decision making. Since if a message is actively sought then it have greater influence on decision (Chaniotakis and Lymperopoulos, 2009).

2.6 Social Structure

Social structure based on the information that we get from friends, family and other people in our society. It includes that person to which we can easily share our personal experiences. Friends, peers and family member's preferences about doctor are more influential. So we can say that social network have great effect on decision. The following model has been proposed in the study based on the above mentioned factors of effective decision making.

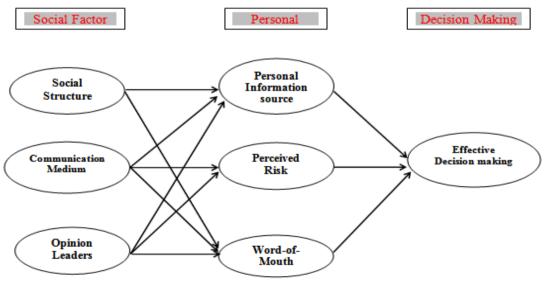


Figure 1: Proposed Model of Effective Decision Making

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III. METHODOLOGY

Population of study in hand includes all students of Social Sciences, CS&IT and Management Sciences, Faculty and Administrative staff of University of Gujrat in Hafiz Hayat Campus. The total population size is our selected campus is 3269. As we know the population and we can find sample size using the methods where population standard deviation is required. Hence, the sample size n can be determined by using Yamne (1967) formula as

$$n = \frac{N}{1 + Ne^2} = 400$$
 (Yamne, 1967) where Population

size N = 3269 and Margin of error e = 0.05

Two-Stage Stratified random sampling design is used for selecting a sample from the sampled population. In first stage stratified random sampling we have used equal allocation and at the second stage proportional allocation method used. Firstly for total sample of 400 respondents, we have selected 200 students and 200 faculty and administrative staff. By proportional allocation we will select 56 students' from 831 students of BBA, 62 students from 901 students of CS&IT and 82 students from 1189 students of social sciences. We will select 63 employees of administrative from 109 and 137 faculty members from 239 of University of Gujrat. There was 25% non response received from faculty and administration staff (58 out of 63 & 92 out of 137 from administration and Faculty respectively). The total sample of 350 was collected for the analysis. A well-structured questionnaire is used as research instrument for data collection. There are 38 items using a 5-point Likert-Scale.

Confirmatory Factor analysis (CFA) is used to confirm the measurement theory that is to reject or accept the preconceived measurement theory. In other words it is to use to confirm the hypothesis that a set of variables belongs to a construct known as latent variable. In confirmatory factor analysis (CFA), theory is a systematic set of casual relationships that provide the comprehensive explanation of a phenomenon. In confirmatory factor analysis (CFA), model is a specified set of dependant relationships that can be used to test the theory. In confirmatory factor analysis (CFA), path analysis is used to test structural equations. The path diagram shows the graphical representation of cause and effect relationships of the theory. Usually, statistical software like AMOS, LISREL, EQS, Statistica and SAS are used for confirmatory factor analysis (CFA).

Structural equation modeling (SEM) is a family of statistical models that finds out and explains the relationship among multiple variables. It examines the structure of interrelationships expressed in a series of equations, similar to a series of multiple regression equations. Structural equation modeling (SEM) can be considered of as a unique combination of both types of techniques (interdependence, dependence) because SEM's base lies in two known multivariate techniques: factor analysis and multiple regression analysis. SEM is the only multivariate technique that allows the simultaneous estimation of multiple equations. Every multi-item constructs in a SEM model can be thought of as variate. Goodness of fit index (GFI), adjusted goodness of fit index (AGFI), root mean square error approximation (RMSEA) provides adequate evidence of model fit.

IV. RESULTS AND DISCUSSION

Reliability of the questionnaire is a key factor for statistical results. Table-1 consists of the test of reliability; the value of Cronbach's alpha based on standardized item is 0.854 which indicates that the data is reliable for further statistical analysis.

Descriptive statistics are considered primarily to explain the basic features of the data. It provides simple summaries about the sample measures. Table-2 contains the mean and standard deviation of age of the respondents. Results show that the minimum age of the respondent is 18 years and maximum is 45 years. The mean age is 23.358 years with S.D 4.3247; it shows that most of the respondents are within 19 to 28 years of age.

Table-3 contains the sample information; there were 57.1, 26.3 and 16.6 percent students, faculty and administrative staff accordingly. Among the students 76.4 percent were from BS and remaining 23.6 percent were from MA/MSc Program. Among the faculty, half of them (50%) having M.Phil, 13.3 percent having BS, 32.2 percent having Master and 4.4 percent having Phd degree. Similarly, among administrative staff 39.3 percent having BS, 50.0 percent having MA/MSc, 8.9% having M.Phil and 1.8 percent of them having Phd degree. There were almost two third (61.2%) of the respondents were female in overall sample of students faculty and administrative staff.

Further respondents were asked to tick their monthly family income category. More than half (54.5%) of respondents were fall in "above 30,000" monthly income category while, on the other side, 4.1 percent of them also showed below Rs.10, 000 monthly income of their family. Table-4 describes the percentages of

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ordinal scale variables. Table-4 shows that average rank of respondents on the statement that financial issues greatly influence your decision is 12.95, it means on the average respondents are agree with that statement. Average rank of the respondents on the statement that health is more important in the selection of doctor decision is 4.00, it means on the average respondents are agree on the above statement. Average rank of respondent on the statement that social pressure influence your decision is 2.72, it means on the average respondents are agree with that statement. Average rank of the respondents on the statement that people choose doctor that available on time is 3.86,it means on the average respondents are agree with that statement that psychological risk influence on your decision is 3.09, it means on the average respondents are agree with that statement. Average rank of the respondents on the statement that give priority to inner satisfaction in selection of doctor decision is 3.97. 8.6% respondent strongly disagrees, 17.1% respondents disagree, 16.7% neutral, 37.5% agree and 20.1% strongly agree about the perceived risk factor. Average rank of respondents on the statement that friend's opinion is valuable in their decision is 3.56. Average ranks of respondents on the statement that family opinion play significant role in their decision 4.09. Table-4 contains the percentages and average rank of other variables which can be interpreted in similar manner.

In this paper, we run confirmatory factor analysis on all of the factors which we used in the analysis. In CFA, distinguishing between independent and dependent variables is not necessary. Table-5 shows the model estimates of confirmatory factor analysis of all factors. Perceived risk factor with six items is tested for confirmation. Two items are not confirmed for the factor. p values of all the confirmed items are significant. So we conclude that four items of that factor are confirmed for that factor. Results show that inner satisfaction parameter estimate value of 0.693, which is high as compared to other variables in the factor; it means that variable is most important for the factor. Psychological risk in selection of doctor has a parameter estimate value of 0.209, which is low as compared to other variables in the factor; it means that variable is less important for the factor.

Opinion leader's factor with six items is tested for confirmation. p-values of all the items are significant so we reject the null hypothesis that all items are not confirm for that factor. So we conclude that all items of that factor are confirmed for that factor. Results show friends opinion is valuable for the selection of doctor has a parameter estimate value of 0.596, which is high as compared to other variables in the factor; it means that variable is most important for the factor. Influenced by your own opinion for effective decision has a parameter estimate value of 0.209 which is low as compared to other variables in the factor; it means that variable is less important for the factor. Table-5 contains the model estimates of other factors; which can be interpreted in similar manner.

Table-6 shows the Goodness of Fit measures. Chi-square (χ^2) is the fundamental Goodness of fit measure used in CFA. Recommended value of $(\chi^2/d.f)$ is less than 3. In the Perceived risk factor, the value of $(\chi^2/d.f)$ is 0.0765 that is less than 3. So it also supports our estimated model. Goodness of Fit Index (GFI) is absolute goodness of fit measure. GFI value is 1.000 and AGFI value is .99, which supports our estimated model. Another measure to assess the goodness of fit of estimated model is Root Mean Square Error of Approximation (RMSEA). Recommended range of RMSEA is less than .08. Typically values are below 0.10 for most acceptable model. In this model, the value of RMSEA is .000 that is less than .08. So RMSEA is supported to fitted model. Almost all goodness of fit measures meets the recommendation level for this factor. So goodness of fit measures supports our estimated model. After Confirmatory Factor Analysis now we fit the structural equation model on those factors (including items) that are confirmed by Confirmatory Factor Analysis

5.1 Structural Equation Modeling:

In this study we use Structural Equation Modeling to make model for decision making. We use communication medium, opinion leaders, personal information source, perceived risk, word-of-mouth, decision making as a constructs. Structure model involves specifying Structural relationships between latent constructs. Table-7 contains the Parameter estimates of Structure Equation model. P-values of all the relation are significant so we reject the null hypothesis that the coefficients are zero. So we conclude that all relations are significant. Table-8 shows the Goodness of Fit measures of SEM. p-value of Chi-Square test is significant. So our model is fit. Recommended value of $(\chi^2/d.f)$ is less than 3. In this case, the value of $(\chi^2/d.f)$ is 2.346 that is less than 3. So it also supports our estimated model. In this case, GFI value is 0.875 the value of AGFI is .0.848, which supports our estimated model. All the important Goodness of fit measures indicates that our estimated model is best fitted. From figure 2 we can say that the factors social structure, communication medium and opinion leader are indirectly relate to the decision making and personal information source and word-of-mouth are directly relate to decision making.

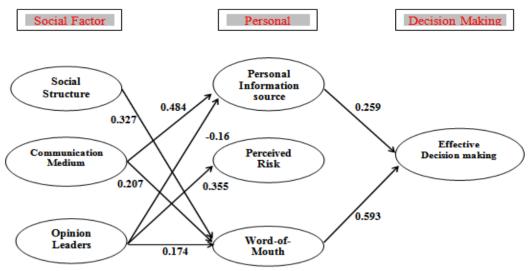


Figure 2: Fitted Model of Effective Decision Making

5.1.1 Estimated Equation of Decision Making:

Let denote PIS, PR, WOM, SS, CM and OL by X_1, X_2, X_3, X_4, X_5 and X_6 respectively from figure 2.

$$X_1 = 0.484X_5 + (-0.16) X_6$$

$$X_2 = 0.355X_6$$

$$X_3 = 0.327X_4 + 0.207X_5 + 0.174X_6$$

5.1.2 Measuring Overall Effect on Decision Making:

The total direct and indirect effect of factor on decision making (DM)

SS \rightarrow WOM \rightarrow DM = (0.327) (0.593) =0.193

 $CM \rightarrow PIS \rightarrow DM = (0.484) (0.259) = 0.125$

 $CM \rightarrow WOM \rightarrow DM = (0.207) (0.593) = 0.122$

 $OL \rightarrow PIS \rightarrow DM = (-0.16) (0.259) = -0.041$

 $OL \rightarrow WOM \rightarrow DM = (0.174) (0.593) = 0.103$

V. CONCLUSION

In this study we determine the different factors that are related to decision making and develop a model for decision making of population of University of Gujrat by using Structural equation modeling. Study findings reveal that, most significant factor which influenced decision making is word-of-mouth. Hence it can be concluded that people in our population are more relaying on word-of-mouth information for the selection of doctor. It can also be concluded that word-of-mouth is powerful marketing technique and doctor can use for their personal marketing. The effects mentioned in estimated equations show that, in current situation, path Social Structure \rightarrow Word-of-mouth \rightarrow Decision Making playing important role so it can be suggested as the most efficient path for decision making for selection of doctor. It is inferred that social structure promotes word-of-mouth for decision making and information through word-of-mouth from friends, peers have great influence in decision making as compared to other factors.

VI. LIMITATIONS OF THE STUDY

Several limitations of the current study need to be mentioned here. Firstly, the respondents of the study were the students and employees of university of Gujrat, data can also be taken on large scale. Secondly, due to the time constraints, uneducated beeople are not included in the study. Thirdly, longitudinal research design can be used for more reliable and general results.

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APPENDIX

Table-1: Test of Reliability

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of items
0.850	0.854	38

Table-2: Descriptive Statistics of Quantitative Variable

I ubic .	Tuble 2. Descriptive Statistics of Qualitative variable									
Descriptive Stati										
Variables	Minimum	Maximum	Mean	Std.Deviation						
Age in years	18	45	23,3582	4.32477						

Table- 3: Percentages of Demographic Variables

Variable	Categories	s			· · · · · · ·						
Gender	Male						Female				
	38.8	38.8					61.2				
Status	Student	Student Faculty				Admin					
	57.1 26.3				16.6						
Region	Rural Urban				Suburban						
	41.1	41.1 51.3			7.6						
Family Setup	Single		Joint				Extended				
	65.3		30.0				4.2				
Program	BS	MS	BS	MS	M.Phil	Phd	BS	MS	M.Phil	Phd	
	76.4	23.6	13.3	32.2	50.0	4.4	39.3	50.0	8.9	1.8	
Family Income	Below Rs.	w Rs.10,000/- 11,000			000 -20,000			21,000 – 30,000		Above30,000/-	
	4.1		19.2				22.2 54.5				

Table -4: Percentages, Mean and Standard Deviation of all Ordinal Scale Variables

Table -4: Percentages, Mean and Sta							
Factor/Variables	SD%	DA%	N%	A%	SA%	Mean	S.D
Social Structure							
Friend's opinion valuable	6.9	9.7	16.6	54.9	12.3	3.56	1.05
Family's opinion	2.6	4.9	6.9	52.0	33.7	4.09	0.91
Influence other people that have awareness	3.1	10.3	17.4	55.1	14.0	3.66	0.95
Overall	4.2	8.3	13.6	53.9	20.0	3.8	1.0
Perceived Risk							
Financial issues	16.3	24.3	18.6	29.7	11.1	12.95	1.28
Health risks	3.7	7.7	8.9	44.3	35.4	4.00	1.04
Social pressures	16.0	30.9	22.9	25.7	4.6	2.72	1.14
Available on time.	3.4	10.6	10.0	48.3	27.7	3.86	1.04
Psychological risks	8.0	24.3	28.9	28.0	10.9	3.09	1.12
Give priority to inner satisfaction	4.0	5.1	10.9	49.1	30.9	3.97	0.99
Overall	8.6	17.1	16.7	37.5	20.1	3.4	1.2
Opinion Leaders		-					
Medical expert's opinion	3.1	7.1	14.0	48.0	27.7	3.90	0.99
Influenced by your own opinion	2.3	9.7	24.9	44.3	18.9	3.67	0.96
Rely on yours peers opinion	4.9	18.9	28.9	38.6	8.9	3.27	1.02
Experienced person opinion matter in decision	3.1	6.9	10.9	51.4	27.7	3.93	0.97
Overall	3.4	10.6	19.6	45.6	20.8	3.7	1.0
Personal Information Source							
Make own efforts for the selection of doctor	6.0	15.4	18.3	45.1	15.1	3.48	1.11
Search different sign board	11.7	39.1	22.0	20.9	6.3	2.71	1.11
Own knowledge regarding doctors make	3.4	13.7	21.7	48.6	12.6	3.53	0.99
decision							
Without help of others make decision	10.3	33.7	21.4	26.0	8.6	2.89	1.16
Prefer to search newspaper	15.4	40.3	18.6	18.9	6.9	2.61	1.16
Always try to make decision through personal	4.6	16.3	22.0	42.3	14.9	3.46	1.07
efforts							
Search pamphlets for getting awareness	16.0	34.0	20.9	20.3	8.9	2.72	1.21
Overall	9.6	27.5	20.7	31.7	10.4	3.1	1.2
Communication Medium							
T.V gives more reliable information	12.0	24.9	22.9	31.1	9.1	3.01	1.19
Role of advertisement play by cable	12.9	34.0	20.3	24.9	8.0	2.81	1.18
Radio is good source of information	10.9	31.7	22.3	29.4	5.7	2.87	1.12
Electronic media helpful in decisions	5.4	16.3	23.7	42.9	11.7	3.39	1.06
Internet provide effective information	6.9	14.9	18.3	42.6	17.4	3.49	1.14
Influence of Print media in decisions	6.6	19.1	26.9	32.3	15.1	3.30	1.14
Overall	9.1	23.5	22.4	33.9	11.2	3.1	1.2

Table -4: Cont...

Variables SD of-Mouth (Oral Communications) of-mouth information from friends word-of-mouth different risks give priority to word-of-mouth of-mouth is more reliable as compare personal 5.7	12.6 16.0	N% 21.4	A% 50.0	SA% 10.0	Mean	S.D
f-mouth information from friends word-of-mouth different risks give priority to word-of-mouth 4.6		21.4	50.0	10.0		
word-of-mouth 4.3 different risks give priority to word-of-mouth 4.6		21.4	50.0	10.0		
different risks give priority to word-of-mouth 4.6	16.0			10.0	3.45	1.03
	10.0	25.1	46.3	8.0	3.38	0.98
f mouth is more reliable as compare personal 5.7	19.7	25.4	41.7	8.6	3.29	1.02
ration 3.7	22.9	25.4	36.9	9.1	3.20	1.07
ce of face to face communication from others 2.6	8.9	20.0	54.0	14.6	3.69	0.92
ant role of family word-of-mouth 2.9	6.9	13.1	52.6	24.6	3.89	0.95
4.3	14.5	21.8	46.9	12.5	3.5	1.0
n Making:						
decisions on your own without the help of 9.7	31.7	22.6	25.1	10.9	2.95	1.18
ime decision bases on word-of-mouth 4.6	30.6	29.1	30.9	4.9	3.00	0.99
others people about your decision 2.9	10.6	19.4	57.4	9.7	3.60	0.91
te your decision whether it right or wrong 3.1	10.3	14.3	59.7	12.6	3.68	0.93
ecision leads to your doctor's loyalty 2.0	7.4	20.3	49.1	21.1	3.80	0.92
lecision on the bases of word-of-mouth 5.1	13.4	26.3	41.7	13.4	3.45	1.05
4.6	17.3	22.0	44.0	12.1	3.4	1.1
4.3 In Making: Idecisions on your own without the help of general decision bases on word-of-mouth general decision bases on word-of-mouth general decision whether it right or wrong general decision leads to your doctor's loyalty general decision on the bases of word-of-mouth general decision bases of word-of-mouth general decision on the bases of word-of-mouth general decision so word-of-mouth general decision of the bases of word-of-mouth general decision so word-of-mouth general decision of the bases of word-of-mouth general decision so word	31.7 30.6 10.6 10.3 7.4 13.4	21.8 22.6 29.1 19.4 14.3 20.3 26.3	25.1 30.9 57.4 59.7 49.1 41.7	12.5 10.9 4.9 9.7 12.6 21.1 13.4	3.5 2.95 3.00 3.60 3.68 3.80 3.45	

S.A: Strongly Agree A: Agree N: Neutral D: Disagree S.D: Strongly Disagree

Confirmatory Factor Analysis and Structural Equation Modeling Table- 5: Parameter Estimates of Confirmatory Factor Analysis

Perceived Risk	Factors/ Variables	Parameter	Standard	Т	Prob.
Perceived Risk Realth risks 0.490 0.089 5.500 0.000	1 detois/ variables			-	
Health risks	Perceived Risk				
Available on time		0.490	0.089	5.500	0.000
Psychological risks	Available on time				
Inner satisfaction 0.693 0.110 6.285 0.000					
Friend's opinion valuable 0.596 0.069 8.596 0.000 Family opinion 0.502 0.060 8.390 0.000 Medical expert opinion 0.528 0.065 8.116 0.000 Influenced by own opinion 0.209 0.064 3.241 0.001 Peers opinion 0.213 0.068 3.114 0.002 Experienced person 0.480 0.064 7.546 0.000 Personal information Source 0.062 0.067 4.551 0.000 Make own effort for selection of doctor 0.306 0.067 4.551 0.000 Search different sign board 0.663 0.064 10.371 0.000 Without help of other make decision 0.445 0.069 6.428 0.000 Prefer to search newspaper 0.871 0.067 13.088 0.000 Search pamphlets for getting awareness 0.821 0.069 11.838 0.000 Communication Medium 5.067 0.065 10.329 0.000 Role of adver	_ •				
Friend's opinion valuable 0.596 0.069 8.596 0.000 Family opinion 0.502 0.060 8.390 0.000 Medical expert opinion 0.528 0.065 8.116 0.000 Influenced by own opinion 0.209 0.064 3.241 0.001 Peers opinion 0.213 0.068 3.114 0.002 Experienced person 0.480 0.064 7.546 0.000 Personal information Source 0.062 0.067 4.551 0.000 Make own effort for selection of doctor 0.306 0.067 4.551 0.000 Search different sign board 0.663 0.064 10.371 0.000 Without help of other make decision 0.445 0.069 6.428 0.000 Prefer to search newspaper 0.871 0.067 13.088 0.000 Search pamphlets for getting awareness 0.821 0.069 11.838 0.000 Communication Medium 5.067 0.065 10.329 0.000 Role of adver					
Family opinion	-	0.596	0.069	8.596	0.000
Medical expert opinion 0.528 0.065 8.116 0.000 Influenced by own opinion 0.209 0.064 3.241 0.001 Peers opinion 0.213 0.068 3.114 0.002 Experienced person 0.480 0.064 7.546 0.000 Personal information Source Without person 0.306 0.067 4.551 0.000 Search different sign board 0.663 0.064 10.371 0.000 Without help of other make decision 0.445 0.069 6.428 0.000 Prefer to search newspaper 0.871 0.067 13.088 0.000 Search pamphlets for getting awareness 0.821 0.069 11.838 0.000 Communication Medium T.V gives more reliable information 0.674 0.065 10.329 0.000 Role of advertisement play by cable 0.844 0.062 13.670 0.000 Radio is good source of information 0.720 0.060 11.936 0.000 Internet provide effective information<		0.502	0.060	8.390	0.000
Influenced by own opinion	· ·	0.528	0.065	8.116	0.000
Peers opinion	• •	0.209	0.064	3.241	0.001
Personal information Source Make own effort for selection of doctor 0.306 0.067 4.551 0.000	<u> </u>	0.213	0.068		0.002
Personal information Source Make own effort for selection of doctor 0.306 0.067 4.551 0.000	•		0.064	7.546	0.000
Search different sign board 0.663 0.064 10.371 0.000 Without help of other make decision 0.445 0.069 6.428 0.000 Prefer to search newspaper 0.871 0.067 13.088 0.000 Search pamphlets for getting awareness 0.821 0.069 11.838 0.000 Communication Medium T.V gives more reliable information 0.674 0.065 10.329 0.000 Role of advertisement play by cable 0.844 0.062 13.670 0.000 Radio is good source of information 0.720 0.060 11.936 0.000 Radio is good source of information 0.713 0.056 12.633 0.000 Electronic media helpful 0.713 0.056 12.633 0.000 Internet provide effective information 0.572 0.064 8.905 0.000 Influence of Print media in decisions 0.665 0.062 10.682 0.000 Word-of-Mouth(Oral Communication) 0.686 0.056 12.138 0.000 Prefer word-of-mo					
Without help of other make decision 0.445 0.069 6.428 0.000 Prefer to search newspaper 0.871 0.067 13.088 0.000 Search pamphlets for getting awareness 0.821 0.069 11.838 0.000 Communication Medium T.V gives more reliable information 0.674 0.065 10.329 0.000 Role of advertisement play by cable 0.844 0.062 13.670 0.000 Radio is good source of information 0.720 0.060 11.936 0.000 Electronic media helpful 0.713 0.056 12.633 0.000 Internet provide effective information 0.572 0.064 8.905 0.000 Influence of Print media in decisions 0.665 0.062 10.682 0.000 Word-of-Mouth(Oral Communication) 0.686 0.056 12.138 0.000 Word-of-mouth information from friends 0.686 0.054 15.980 0.000 Prefer word-of-mouth more reliable as compare personal consideration 0.053 0.057 9.688 0.000 <	Make own effort for selection of doctor	0.306	0.067	4.551	0.000
Without help of other make decision 0.445 0.069 6.428 0.000 Prefer to search newspaper 0.871 0.067 13.088 0.000 Search pamphlets for getting awareness 0.821 0.069 11.838 0.000 Communication Medium T.V gives more reliable information 0.674 0.065 10.329 0.000 Role of advertisement play by cable 0.844 0.062 13.670 0.000 Radio is good source of information 0.720 0.060 11.936 0.000 Electronic media helpful 0.713 0.056 12.633 0.000 Internet provide effective information 0.572 0.064 8.905 0.000 Influence of Print media in decisions 0.665 0.062 10.682 0.000 Word-of-Mouth(Oral Communication) 0.686 0.056 12.138 0.000 Word-of-mouth information from friends 0.686 0.054 15.980 0.000 Prefer word-of-mouth more reliable as compare personal consideration 0.053 0.057 9.688 0.000 <	Search different sign board	0.663	0.064	10.371	0.000
Prefer to search newspaper 0.871 0.067 13.088 0.000 Search pamphlets for getting awareness 0.821 0.069 11.838 0.000 Communication Medium T.V gives more reliable information 0.674 0.065 10.329 0.000 Role of advertisement play by cable 0.844 0.062 13.670 0.000 Radio is good source of information 0.720 0.060 11.936 0.000 Electronic media helpful 0.713 0.056 12.633 0.000 Internet provide effective information 0.572 0.064 8.905 0.000 Influence of Print media in decisions 0.665 0.062 10.682 0.000 Word-of-Mouth(Oral Communication) 0.686 0.056 12.138 0.000 Word-of-mouth information from friends 0.686 0.054 15.980 0.000 Prefer word-of-mouth 0.863 0.054 15.980 0.000 Word-of-mouth more reliable as compare personal consideration 0.535 0.060 8.922 0.000 <td>· · ·</td> <td>0.445</td> <td></td> <td></td> <td></td>	· · ·	0.445			
Search pamphlets for getting awareness 0.821 0.069 11.838 0.000 Communication Medium T.V gives more reliable information 0.674 0.065 10.329 0.000 Role of advertisement play by cable 0.844 0.062 13.670 0.000 Radio is good source of information 0.720 0.060 11.936 0.000 Electronic media helpful 0.713 0.056 12.633 0.000 Internet provide effective information 0.572 0.064 8.905 0.000 Influence of Print media in decisions 0.665 0.062 10.682 0.000 Word-of-Mouth(Oral Communication) 0.686 0.056 12.138 0.000 Word-of-mouth information from friends 0.686 0.056 12.138 0.000 Prefer word-of-mouth more reliable as compare personal consideration 0.552 0.057 9.688 0.000 Word-of-mouth more reliable as compare personal consideration 0.535 0.060 8.922 0.000 Every time decision bases on word-of-mouth 0.543 0.070 <t< td=""><td></td><td>0.871</td><td>0.067</td><td>13.088</td><td>0.000</td></t<>		0.871	0.067	13.088	0.000
T.V gives more reliable information 0.674 0.065 10.329 0.000					
Role of advertisement play by cable 0.844 0.062 13.670 0.000 Radio is good source of information 0.720 0.060 11.936 0.000 Electronic media helpful 0.713 0.056 12.633 0.000 Internet provide effective information 0.572 0.064 8.905 0.000 Influence of Print media in decisions 0.665 0.062 10.682 0.000 Word-of-Mouth(Oral Communication) 0.686 0.056 12.138 0.000 Word-of-mouth information from friends 0.686 0.054 15.980 0.000 Prefer word-of-mouth 0.863 0.054 15.980 0.000 Word-of-mouth more reliable as compare personal consideration 0.552 0.057 9.688 0.000 Word-of-mouth more reliable as compare personal consideration 0.535 0.060 8.922 0.000 Make decisions on your own without the help of others 0.667 0.083 8.009 0.000 Every time decision bases on word-of-mouth 0.543 0.070 7.769 0.000					
Role of advertisement play by cable 0.844 0.062 13.670 0.000 Radio is good source of information 0.720 0.060 11.936 0.000 Electronic media helpful 0.713 0.056 12.633 0.000 Internet provide effective information 0.572 0.064 8.905 0.000 Influence of Print media in decisions 0.665 0.062 10.682 0.000 Word-of-Mouth(Oral Communication) 0.686 0.056 12.138 0.000 Word-of-mouth information from friends 0.686 0.054 15.980 0.000 Prefer word-of-mouth 0.863 0.054 15.980 0.000 Word-of-mouth more reliable as compare personal consideration 0.552 0.057 9.688 0.000 Word-of-mouth more reliable as compare personal consideration 0.535 0.060 8.922 0.000 Make decisions on your own without the help of others 0.667 0.083 8.009 0.000 Every time decision bases on word-of-mouth 0.543 0.070 7.769 0.000	T.V gives more reliable information	0.674	0.065	10.329	0.000
Decision Making Decision Medical in decision with the first provide effective information Decision Medical in decisions Decision Medical in decision Decision Decision Medical in decision Decisi		0.844	0.062	13.670	0.000
Internet provide effective information 0.572 0.064 8.905 0.000 Influence of Print media in decisions 0.665 0.062 10.682 0.000 Word-of-Mouth(Oral Communication) Word-of-mouth information from friends 0.686 0.056 12.138 0.000 Prefer word-of-mouth 0.863 0.054 15.980 0.000 Due to different risk give priority 0.552 0.057 9.688 0.000 Word-of-mouth more reliable as compare personal consideration 0.535 0.060 8.922 0.000 Decision Making Make decisions on your own without the help of others 0.667 0.083 8.009 0.000 Every time decision bases on word-of-mouth 0.543 0.070 7.769 0.000 Evaluate your decision whether it right or wrong 0.323 0.064 5.070 0.000 Right decision leads to your doctor's loyalty 0.362 0.063 5.714 0.000		0.720	0.060	11.936	0.000
Internet provide effective information 0.572 0.064 8.905 0.000 Influence of Print media in decisions 0.665 0.062 10.682 0.000 Word-of-Mouth(Oral Communication) Word-of-mouth information from friends 0.686 0.056 12.138 0.000 Prefer word-of-mouth 0.863 0.054 15.980 0.000 Due to different risk give priority 0.552 0.057 9.688 0.000 Word-of-mouth more reliable as compare personal consideration 0.535 0.060 8.922 0.000 Decision Making Make decisions on your own without the help of others 0.667 0.083 8.009 0.000 Every time decision bases on word-of-mouth 0.543 0.070 7.769 0.000 Evaluate your decision whether it right or wrong 0.323 0.064 5.070 0.000 Right decision leads to your doctor's loyalty 0.362 0.063 5.714 0.000	Electronic media helpful	0.713	0.056	12.633	0.000
No.000	<u> </u>	0.572	0.064	8.905	0.000
Word-of-mouth information from friends 0.686 0.056 12.138 0.000 Prefer word-of-mouth 0.863 0.054 15.980 0.000 Due to different risk give priority 0.552 0.057 9.688 0.000 Word-of-mouth more reliable as compare personal consideration 0.535 0.060 8.922 0.000 Decision Making Make decisions on your own without the help of others 0.667 0.083 8.009 0.000 Every time decision bases on word-of-mouth 0.543 0.070 7.769 0.000 Evaluate your decision whether it right or wrong 0.323 0.064 5.070 0.000 Right decision leads to your doctor's loyalty 0.362 0.063 5.714 0.000		0.665	0.062	10.682	0.000
Prefer word-of-mouth 0.863 0.054 15.980 0.000 Due to different risk give priority 0.552 0.057 9.688 0.000 Word-of-mouth more reliable as compare personal consideration 0.535 0.060 8.922 0.000 Decision Making Make decisions on your own without the help of others 0.667 0.083 8.009 0.000 Every time decision bases on word-of-mouth 0.543 0.070 7.769 0.000 Evaluate your decision whether it right or wrong 0.323 0.064 5.070 0.000 Right decision leads to your doctor's loyalty 0.362 0.063 5.714 0.000	Word-of-Mouth(Oral Communication)				
Due to different risk give priority0.5520.0579.6880.000Word-of-mouth more reliable as compare personal consideration0.5350.0608.9220.000Decision MakingMake decisions on your own without the help of others0.6670.0838.0090.000Every time decision bases on word-of-mouth0.5430.0707.7690.000Evaluate your decision whether it right or wrong0.3230.0645.0700.000Right decision leads to your doctor's loyalty0.3620.0635.7140.000	Word-of-mouth information from friends	0.686	0.056	12.138	0.000
Word-of-mouth more reliable as compare personal consideration Decision Making Make decisions on your own without the help of others 0.667 0.083 8.009 0.000 Every time decision bases on word-of-mouth 0.543 0.070 7.769 0.000 Evaluate your decision whether it right or wrong 0.323 0.064 5.070 0.000 Right decision leads to your doctor's loyalty 0.362 0.063 5.714 0.000	Prefer word-of-mouth	0.863	0.054	15.980	0.000
consideration Decision Making Make decisions on your own without the help of others 0.667 0.083 8.009 0.000 Every time decision bases on word-of-mouth 0.543 0.070 7.769 0.000 Evaluate your decision whether it right or wrong 0.323 0.064 5.070 0.000 Right decision leads to your doctor's loyalty 0.362 0.063 5.714 0.000	Due to different risk give priority	0.552	0.057	9.688	0.000
Decision Making Make decisions on your own without the help of others 0.667 0.083 8.009 0.000 Every time decision bases on word-of-mouth 0.543 0.070 7.769 0.000 Evaluate your decision whether it right or wrong 0.323 0.064 5.070 0.000 Right decision leads to your doctor's loyalty 0.362 0.063 5.714 0.000	Word-of-mouth more reliable as compare personal	0.535	0.060	8.922	0.000
Make decisions on your own without the help of others0.6670.0838.0090.000Every time decision bases on word-of-mouth0.5430.0707.7690.000Evaluate your decision whether it right or wrong0.3230.0645.0700.000Right decision leads to your doctor's loyalty0.3620.0635.7140.000	consideration				
Every time decision bases on word-of-mouth0.5430.0707.7690.000Evaluate your decision whether it right or wrong0.3230.0645.0700.000Right decision leads to your doctor's loyalty0.3620.0635.7140.000	Decision Making				
Evaluate your decision whether it right or wrong 0.323 0.064 5.070 0.000 Right decision leads to your doctor's loyalty 0.362 0.063 5.714 0.000		0.667	0.083	8.009	0.000
Evaluate your decision whether it right or wrong 0.323 0.064 5.070 0.000 Right decision leads to your doctor's loyalty 0.362 0.063 5.714 0.000	Every time decision bases on word-of-mouth	0.543	0.070	7.769	0.000
· · · · · · · · · · · · · · · · · · ·	Evaluate your decision whether it right or wrong	0.323	0.064	5.070	0.000
Better decision on the bases of word-of-mouth 0.489 0.072 6.794 0.000	Right decision leads to your doctor's loyalty	0.362	0.063	5.714	0.000
Utily Vital	Better decision on the bases of word-of-mouth	0.489	0.072	6.794	0.000

Table -6: Measure of Goodness of Fit of CFA Model

Factor	χ^2	d.f	p-value	$\chi^2/d.f$	GFI	AGFI	RMSEA
Perceived Risk	0.15298	2	0.926	0.0765	1.000	0.999	0.000
Opinion leaders	22.0819	9	0.008	2.454	0.979	0.951	0.065
Personal Information source	6.929	5	0.225	1.386	0.99	0.97	0.03
Communication Medium	22.66	9	0.007	2.517	0.977	0.94	0.070
Word-of-mouth	13.686	2	0.001	6.843	0.98	0.90	0.128
Decision Making	13.02	5	0.023	2.604	0.98	0.95	0.070
Recommended				≤3	≥.90	≥.90	≤ 0.08

Table -7: Parameter Estimates of Structural Equation Model

Factors/ Variables	Parameter Estimate	Standard Error	T Statistics	Prob. Level
SS→WOM	0.327	0.071	4.597	0.000
CM → PIS	0.484	0.056	8.657	0.000
CM→WOM	0.207	0.045	4.648	0.000
OL → PIS	-0.106	0.046	-2.284	0.022
OL→PR	0.355	0.071	4.995	0.000
OL→WOM	0.174	0.047	3.682	0.000
PIS→DM	0.259	0.065	3.999	0.000
WOM→DM	0.593	0.112	5.274	0.000

Table 8: Measure of Goodness of Fit of SEM Model

Factor	χ2	d.f	p-value	χ2 / d.f	GFI	AGFI	RMSEA
Model	626.558	267	0.0000	2.346	0.875	0.848	0.062