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A STUDY OF EFFECTS OF DEMOGRAPHIC VARIABLES ON SOURCES OF INFORMATION IN FINANCIAL INVESTMENT DECISION

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Abstract: *Investments have become basic necessity for everyone. The behavior of the investor can be affected by many of internal and external environment. The demographical factors play critical role in determining individual purchasing behavior for any products or even services. A proper understanding of money and its value, the availability of various financial avenues and various numerical data are essential to successfully manage one's finance for achieving life's aim. These kinds of information can be collected from various sources of information by investors. This paper covers the various sources of information as well as their association with demographic variables in financial investment decision. The study was conducted on 735 investors of Surat city, India through structured questionnaire using multi-stage sampling method. The data were analysed with the help of SPSS package using chi-square analysis, reliability test and mean score analysis. The researcher confirmed that there seems to be certain degree of association between demographic variables and sources of information. The finding from this research will provide an understanding regarding various sources of information and also enrich the knowledge of business managers, marketers and researchers to understand the significant association between demographic variables and sources of information influencing financial investment decision. This article provides the scope for further hypothesis development and finding the correlation between these two variables.*

Keywords: *sources of information, financial avenues, chi-square analysis, internet, demographic variables*

1. INTRODUCTION

Today, India's financial system is considered to be sound and stable as compare to many other Asian countries where the financial market is facing many crisis. India is now being ranked as one of the fastest growing economy of the world (Prasad and Srinivas, 2012). Investments have become a basic necessity for everyone, and there is a rapid growth in investment in India. Every investor has different objectives that need to be met depending on demographic profiles. Nowadays the salaried and business class investors select almost all kinds of investment avenues

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for their investment. They all contribute to improve the economic development of country.

Individual financial investment behavior is concerned with preferences given to investing a small amount in financial avenues for his or her account. Financial investment decisions are often supported by various decision tools. It is assumed that structure of information received through various information sources and the factors of markets systematically influence the individual investors' financial investment decision as well as market outcomes.

Financial investment decisions are taken by both investors as well as investment advisers or managers. Investors usually do investment analysis by making use of various techniques like fundamental analysis, technical analysis and judgement. Investors' financial investment behaviour derives from psychological principles of decision making to explicate why people buy or sell the securities. These factors will concentrate upon how investors interpret and react on such information for financial investment decisions. Behavioral finance is defined by Shefrin (2000) as "a rapidly growing area that deals with the influence of psychology on the behavior of financial practitioners". Individual investors' investment behavior is concerned with choices about purchasing small amounts of stocks for their account. Sometimes investors' behaviour may become irrational with the fear of the loss in the future (Nofsinger and Richard, 2002).

The financial investment decision making for financial products can be described within the framework of consumer buying decision making process. This process include certain steps namely, problem recognition, information search, evaluation of alternatives, purchase decision and post-purchase decision (Schmidt and Spreng, 1996). Under this framework, information search is one of the significant elements of consumer's decision making process towards investment (Malhotra, 1983; Moore and Lehmann, 1980; Newman, 1977). Information plays a vital role in investment decisions especially for the financial investment in various financial avenues.

The sources of information are the ones which give knowledge about product and services, contribute advantages of the products and also suggest the utility of products. These include family members, friends, media, opinion leaders, experts, colleagues, agents, brokers. Sometimes people interaction as source of information play an important role in deciding either to adopt or to reject the particular financial avenues. The sources of information actually initiate the process of decision making among the investors.

Investors may employ in more information search activities before making financial investment decisions. Previously researcher offered two different bases. First, investors' tend to involve in exhaustive information search activities while making investment desions that actually carry more risks (Beatty and Smith, 1987; Capon and Burke, 1980; Cunningham, 1967b; Moore and Lehmann, 1980;

Srinivasan, 1987). Second, time taken for information search activities tends to be greater than experiencing and acceptance of the products (Mitra, Reiss and Capella, 1999). Since, financial investment decisions have high level of risk and greater acceptance characteristics, investors are expected to involved extensively in information search activities while taking financial investment decision.

Investors' demographic profile includes gender, age, qualification, occupation, marital status, race, family type, family income and individual income. Investors' choice of information sources is expected to be affected by their subjective knowledge and different categories of demographics. Investors may get different information from various sources of information including books, journals, newspapers, television, out-door ads, radio, internet, agents or brokers, consultants, financial experts and word of mouth from friends, colleagues, community leaders and from different religion. Several investors have tendency to collect their own information through their desirable sources of information, whereas others are more likely to rely upon intermediaries for acquiring information.

By identifying the effect of demographic profile on investors' information search behavior while making financial investment decision, this study will contribute to the limited literature survey on investors' information search for financial investment avenues. This study will also recognize the difference among various sources of information on reliability scale and factors that influence investors' preference for various sources of information. The finding of this study will be helpful to marketer for providing insight of preferences given to sources of information for financial investment decision.

Surat is India's 8th and Gujarat's 2nd largest city with the population of 4.5 million. Surat is also ranked 4th fastest growing cities in Asia per capital. Among the highest income growing tax payer city in Asia in the year 2010-11, Surat put up at 2200 cr. to national exchequer. Surat is the city with the highest average annual household income. Surat has nearly the population size of a megacity; it is the youngest city in the entire group (with over 64% of the population below the age of 30); and the city's household income growth maximize the urban universe by a sufficient margin. After make adjustment for cost of living distinctions, Surat emerges as the leader in household income levels. The city is having generously proportioned consumer market than Ahmedabad and Pune. As the well developed commercial city of Gujarat, Surat has contributed a GDP of $40 billion. The city is crowned as the diamond capital of the world and the textile capital of India. In 2008, Surat was entitled to the wealthiest city of India in terms of per-capita income — at approximately equal to INR 4, 57,671 according to a study jointly conducted by the National Council of Applied Economic Research's Rajesh Shukla and Future Capital Research's Roopa Purushothaman. Besides textile manufacturing, trade, diamond cutting and polishing industries, the city is also supported by intricate Zari works, chemical industries and the petrochemical and natural gas-based

industries at Hazira, established by leading industry houses like Oil and Natural Gas Company Limited, Reliance Industries Limited, Essar Limited and Shell Limited (http://www.thesuniljain.com).

1.1. Objectives of the study

This study seeks to achieve the following main objective:

- To understand the role of demographic variables on reliability of sources of information for financial investment decision

2. LITERATURE SURVEY

Jagongo and Mutswenje (2014) conducted the study of the factors influencing investment decisions with respect to individual investors at the NSE. The study was conducted using 50 investors out of which 42 investors have responded. The researchers have used a structured questionnaire which constituted 28 items for collection of data. In this study, data was analyzed using frequencies, mean scores, standard deviations, percentages, Friedman's test and factor analysis techniques. The researcher observed that the major factors that influence individual investment decisions were firm's status in industry, reputation of the firm, reaction on the economy, past performance, profit and condition of statement, firms stock, price per share, expected corporate earnings and expected divided by investors.

Dimitrios (2007) conducted a study on investors' behavior in the Athens Stock Exchange (ASE). He found that individual investors considered newspapers or media as reliable information source and noise in the market for making their investment decisions, whereas professional investors considered fundamental and technical analysis. They also found that professional investors less rely on portfolio analysis. Market participants are covering constant flow of information ranging from quantitative financial data to financial news in the media and socially exchanged opinions and recommendations. Processing all this information is a complicated task. Variables that are loaded heavily on this factor include coverage in the financial and general press, current economic indicators, information obtained from internet, recent stock index returns and recommendations by investment advisory services (Francis and Soffer, 1997).

Al-Ajmi (2009) studied the investors' use of corporate reports in Bahrain for an investigation of the factors influencing buying, selling and holding of securities on the Bahrain Stock Exchange (BSE). The purpose of the study was to investigate the perception of individual investors' about corporate financial statement as a source of information. He approached 800 individual investors through online survey method by mailing questionnaire. 42.6 percent response rate was observed. The research methodology was covered by field interviews of 20 investors and 6 stock brokers for acquiring additional insights. The researcher found that corporate

financial statement as the most important source of information perceived by individual investors for their financial investment decisions. It has also been observed that the greatest difference between the large and small user groups is regarding their perception of the relative importance towards other sources of information like cash flow statement, income statement and other information items which are required for investors' decision making.

Abdulla (1992), Al-Razeen and Karbhari (2004, 2007), Mirshekary and Saudagaran (2005), Al-Abdulqader *et al.* (2007) and Al-Attar and Al-Khater (2007) observed that corporate reports as sources of investment are considered to be most important by investors for investment decisions. On the other hand, Naser et al. (2003) reported that individual investor rank the annual report as the second most important source of information, followed by direct information from companies. They also reported that institutional investors rank annual reports as the main source of information. Al-Abdulqader *et al.* (2007) found that large investors use annual reports more than small investors in Saudi Arabia. Furthermore, they argued that large and small investors share similar opinions regarding the ranking of relative importance of sources of information for the purpose of investment decisions.

Shaheen (2010) have conducted the research for the perceived usefulness of information for investment decisions of Palestine Securities Exchange (PSE). The basic objective of this research was to investigate the perception of users regarding usefulness, adequacy, relevance and availability of information published in the financial report of the companies listed on the PSE. A survey was conducted through well-designed questionnaire and distributed to the selected sample during the time frame 1/8/2008 to 1/11/2008. The finding of the study revealed that the users perception about information which is availability is inadequate and irrelevant to investment decision. Furthermore, relevant information was insufficient as companies listed on PES did not fulfil with minimum discloser requirement as per internation standard. In addition, it demonstrated the incredibility and timeliness of information, which leads to a lack of information, being impounded into prices consistent with Al-Fayoumi (2003) results. Results of the study demonstrated that rejection of the Weak Form Efficient in this market [Al-gareh (2001), Alfayoumi (2003), Abuzarour (2005), Abdel-Karim & Shaheen (2009)] is due in part to the perception of users that reported information available is not adequate or relevant to investment decisions. It also contributes to illiquidity, low volume of trading, weakness confidence, and perceived risks of the market.

Gibbins (2008) conducted a study of british internet shoppers. The researcher found that fifty percent of the british population from the sample selected for survey, the most popular source of information related to financial matters was the internet. The study reported that 48% of the respondents make savings decisions based on the internet and 56% of the younger population were using the internet to find the information regarding saving and finance. Finding different ways to

save online has become more popular and convenient for money British. Many comparison can make from variety of websites which allow user to review the products and services, observe customer authentication and compare prices among many different retailers. In addition to savings, the study found that most people prefer the ability to manage their accounts online.

Rock *et al.* (2010) has studied the use of internet as a sources of financial information by household in the United States. The objective was to investigate the usage of the internet as a tool in personal finance decision making with a focus on investment decision. They have collected the data by telephone interviews from a national survey of randomly selected 911 U.S. households whose income were $75,000 or more. The results of this study reported that older Americans were more interested than younger Americans to use internet to access financial information for investment purpose. In addition, men were more positive than women to use the internet to access financial information. Internet usage was also differentiated by race. Usage of internet for accessing financial information was most common among Asian Americans, followed by Whites, Hispanics and Blacks. The most common reasons for not using internet included security concerns, difficulty in operation, confusing and preferences for working with people.

3. RESEARCH METHODOLOGY

This study is exploratory and descriptive and is undertaken to understand the investor's behavior in the Surat city, India. The data has been collected from the homogenous sample that is the investors of Surat city, India. But again there has been heterogeneity among the investors as they fall into different ethnic groups. Data is collected from various respondents through a structured questionnaire. Questionnaire contains rating scales and multiple choice questions. The target respondents have been requested to indicate their preference using a five scale likert scale. A sample survey has been conducted to estimate the population attributes by using a multi-stage sampling method using purposive sampling, convenient sampling and snowball sampling. The approximate sample size has been targeted 735 investors of Surat City, India.

4. DATA ANALYSIS AND INTERPRETATION

The data in this study were coded and tabulated. The data were analyzed with the help of SPSS package (IBM SPSS Statistics v22.0) which enabled data interpretation and making of statistical inferences.

4.1. Reliability Test

Reliability of the data was assessed with the help of Cronbach's alpha. Cronbach's alpha allows researcher to measure the reliability of the different categories. It

consists of estimates of how much variation in values of different variables is attributable to chance or random errors (Selltzm *et al.*, 1976). As a general rule, coefficient greater than or equal to 0.5 is considered acceptable and good indication of construct reliability (Nunnally *et al.*, 1978).

The overall Cronbach's alpha for the nine different demographic variables shown in Table 1 is 0.871, which is higher than 0.5. Hence, it is considered acceptable and good for construct reliability. The Cronbach's alpha for the nine different demographic variables, namely, gender, age, marital status, qualification, occupation, ethnic group, family type, family income and individual income are 0.903, 0.900, 0.902, 0.902, 0.902, 0.903, 0.903, 0.901 and 0.900 respectively.

Table 1
Reliability Statistics

Cronbach's Alpha	*Cronbach's Alpha Based on Standardized Items*	*N of Items*
.871	.771	23

4.2. Hypothesis

H_0: Demographic variables do not have association with investors' reliability on various sources of information.

H_1: Demographic variables have association with investors' reliability on various sources of information.

Table 2 shows the demographic profile of investors.

Table 2
Profile of investors

Variables		*No. of investors*	*Percentage*
Gender	Male	550	74.8
	Female	185	25.2
	Total	735	100
Age	18-24	90	12.2
	25-34	182	24.8
	35-44	170	23.1
	45-54	160	21.8
	55-64	87	11.8
	65 & above	46	6.3
	Total	735	100
Marital Status	Single	132	18
	Married	582	79.2
	Divorced	5	0.7

contd. table 2

Variables		*No. of investors*	*Percentage*
	Widowed	12	1.6
	Separated	4	0.5
	Total	735	100
Qualification	Under Graduate	134	18.2
	Graduate	355	48.3
	Post Graduate	181	24.6
	Professional	42	5.7
	Others	23	3.1
	Total	735	100
Occupation	Student	26	3.5
	Service	408	55.5
	Business	127	17.3
	Professional	98	13.3
	Retired	62	8.4
	Housewife	14	1.9
	Total	735	100
Ethnic Group	Ethnic Group A	521	70.9
	Ethnic Group B	106	14.4
	Ethnic Group C	98	13.3
	Ethnic Group D	10	1.4
	Total	735	100
Family Type	Joint	399	54.3
	Nuclear	265	36.1
	Extended	71	9.7
	Total	735	100
Family Income	<200000	92	12.5
	200001-350000	129	17.6
	350001-500000	185	25.2
	500001-650000	102	13.9
	650001-800000	75	10.2
	More than 800000	152	20.7
	Total	735	100
Individual Income	<50000	107	14.6
	50001-100000	79	10.7
	100001-200000	134	18.2
	200001-300000	136	18.5
	300001-400000	88	12
	More than 400000	191	26
	Total	735	100

a) Association between investors' gender and their reliability on various sources of information

H_0: There is no significant association between investors' gender and their reliability on various sources of information.

H_1: There is significant association between investors' gender and their reliability on various sources of information.

Table 3
Association between investors' gender and their reliability on various sources of information

Sources of information	*Gender*	
	Pearson Chi-square Value	*p value*
Television	1.261	0.868
Newspaper	3.163	0.531
Out-door ads	4.803	0.440
Radio	2.044[a]	0.843
Internet	2.493[a]	0.778
Mobile Media	3.392[a]	0.640
Magazines	9.662[a]	0.085
Financial experts on television	12.066[a]	0.034
Consultants	16.403[a]	0.006
Agents or brokers	15.480[a]	0.008
Word of mouth from friends	2.692[a]	0.611
Word of mouth from Colleagues	12.925[a]	0.012
Word of mouth from religion	6.698[a]	0.153
Word of mouth from different religion	7.702[a]	0.103

From Table 3, it is evaluated that calculated value of chi-square for financial experts on television, consultants, agents or brokers and word of mouth from colleagues as sources of information are 12.066, 16.403, 15.480 and 12.925, respectively. The chi-square values at 5% significant level are 0.034, 0.006, 0.008 and 0.012, respectively. As the calculated value of chi-square is less than the critical value, so we reject H_0 and concluded that there is no significant association between investors' gender and their reliability on various sources of information except financial experts on television, consultants, agents or brokers and word of mouth from colleagues as sources of information.

b) Association between investors' age and their reliability on various sources of information

H_0: There is no significant association between investors' age and their reliability on various sources of information.

H_1: There is significant association between investors' age and their reliability on various sources of information.

Table 4
Association between investors' Age and their reliability on various sources of information

Sources of information	*Age*	
	Pearson Chi-square Value	*p value*
Television	33.597[a]	0.029
Newspaper	21.485[a]	0.369
Out-door ads	52.024[a]	0.001
Radio	37.711[a]	0.049
Internet	89.848[a]	0.000
Mobile Media	67.223[a]	0.000
Magazines	49.922[a]	0.002
Financial experts on television	35.414[a]	0.081
Consultants	39.829[a]	0.030
Agents or brokers	61.481[a]	0.000
Word of mouth from friends	24.906[a]	0.205
Word of mouth from Colleagues	18.770[a]	0.537
Word of mouth from religion	31.273[a]	0.052
Word of mouth from different religion	28.434[a]	0.100

From Table 4, it can be concluded that calculated value of chi-square for television, Out-door ads, radio, internet, mobile media, magazines, consultants and agents or brokers as sources of information are 33.597, 52.024, 37.711, 89.848, 67.223, 49.922, 39.829 and 61.481, respectively. The chi-square values at 5% significant level are 0.029, 0.001, 0.049, 0.000, 0.000, 0.002, 0.030 and 0.000, respectively. As the calculated value of chi-square is less than the critical value, so we reject H_0 and concluded that there is no significant association between investors' age and their reliability on various sources of information except newspaper, out-door ads, radio, internet, mobile media, magazines, consultants and agents or brokers as sources of information.

(c) Association between investors' marital status and their reliability on various sources of information

H_0: There is no significant association between investors' marital status and their reliability on various sources of information.

H_1: There is significant association between investors' marital status and their reliability on various sources of information.

Table 5
Association between investors' Marital Status and their reliability on various sources of information

Sources of information	*Marital Status*	
	Pearson Chi-square Value	*p value*
Television	38.766[a]	0.001
Newspaper	17.429[a]	0.358
Out-door ads	65.784[a]	0.000
Radio	46.115[a]	0.001
Internet	89.495[a]	0.000
Mobile Media	92.118[a]	0.000
Magazines	83.665[a]	0.000
Financial experts on television	73.296[a]	0.000
Consultants	70.675[a]	0.000
Agents or brokers	71.243[a]	0.000
Word of mouth from friends	13.392[a]	0.644
Word of mouth from Colleagues	13.838[a]	0.611
Word of mouth from religion	27.044[a]	0.041
Word of mouth from different religion	26.199[a]	0.051

From Table 5, it can be discoverd that calculated value of chi-square for television, out-door ads, radio, internet, mobile media, magazines, financial experts on television, consultants, agents or brokers and word of mouth from own religion as sources of information are 38.766, 65.784, 46.115, 89.495, 92.118, 83.665, 73.296, 70.675, 71.243 and 27.044, respectively. The chi-square values at 5% significant level are 0.001, 0.000, 0.001, 0.000, 0.000, 0.000, 0.000, 0.000 and 0.041, respectively. As the calculated value of chi-square is less than the critical value, so we reject H_0 and concluded that there is no significant association between investors' marital status and their reliability on various sources of information except television, out-door ads, radio, internet, mobile media, magazines, financial experts on television, consultants, agents or brokers and word of mouth from religion as sources of information.

(d) Association between investors' qualification and their reliability on various sources of information

H_0: There is no significant association between investors' qualification and their reliability on various sources of information.

H_1: There is significant association between investors' qualification and their reliability on various sources of information.

Table 6
Association between investors' Qualification and their reliability on various sources of information

Sources of information	*Qualification*	
	Pearson Chi-square Value	*p value*
Television	26.563[a]	0.047
Newspaper	21.457[a]	0.162
Out-door ads	30.307[a]	0.065
Radio	34.093[a]	0.026
Internet	23.670[a]	0.257
Mobile Media	25.315[a]	0.190
Magazines	24.239[a]	0.232
Financial experts on television	19.184[a]	0.510
Consultants	18.688[a]	0.542
Agents or brokers	12.769[a]	0.887
Word of mouth from friends	14.926[a]	0.530
Word of mouth from Colleagues	12.894[a]	0.680
Word of mouth from religion	17.085[a]	0.380
Word of mouth from different religion	13.051[a]	0.669

From Table 6, it is evaluated that calculated value of chi-square for television and radio as sources of information are 26.563 and 34.093, respectively. The chi-square values at 5% significant level are 0.047 and 0.026, respectively. As the calculated value of chi-square is less than the critical value, so we reject H_0 and concluded that there is no significant association between investors' qualification and their reliability on various sources of information except television and radio as sources of information.

(e) Association between investors' occupation and their reliability on various sources of information

H_0: There is no significant association between investors' occupation and their reliability on various sources of information.

H_1: There is significant association between investors' occupation and their reliability on various sources of information.

From Table 7, it can be seen that calculated value of chi-square for television, our-door ads, radio, internet, mobile media, consultants, agents or brokers and word of mouth from different religion as sources of information are 43.860, 66.484, 54.028, 52.653, 51.766, 50.098, 66.994 and 33.620, respectively. The chi-square values at 5% significant level are 0.002, 0.000, 0.001, 0.001, 0.001, 0.002, 0.000 and 0.029,

Table 7
Association between investors' Occupation and their reliability on various sources of information

Sources of information	*Occupation*	
	Pearson Chi-square Value	*p value*
Television	43.860[a]	0.002
Newspaper	22.293[a]	0.325
Out-door ads	66.484[a]	0.000
Radio	54.028[a]	0.001
Internet	52.653[a]	0.001
Mobile Media	51.766[a]	0.001
Magazines	24.380[a]	0.498
Financial experts on television	35.415[a]	0.081
Consultants	50.098[a]	0.002
Agents or brokers	66.994[a]	0.000
Word of mouth from friends	29.812[a]	0.073
Word of mouth from Colleagues	24.861[a]	0.207
Word of mouth from religion	29.429[a]	0.080
Word of mouth from different religion	33.620[a]	0.029

respectively. As the calculated value of chi-square is less than the critical value, so we reject H_0 and concluded that there is no significant association between investors' occupation and their reliability on various sources of information except television, our-door ads, radio, internet, mobile media, consultants, agents or brokers and word of mouth from different religion as sources of information.

(f) Association between investors' ethnic group and their reliability on various sources of information

H_0: There is no significant association between investors' ethnic group and their reliability on various sources of information.

H_1: There is significant association between investors' ethnic group and their reliability on various sources of information.

From Table 8, it can be found that the calculated value of chi-square for television, our-door ads, magazines, financial experts on television, consultants, agents or brokers, word of mouth from friends, word of mouth from colleagues, word of mouth from religion and word of mouth from different religion as sources of information are 25.010, 30.105, 32.032, 25.081, 36.487, 32.836, 30.171, 31.936, 42.547 and 22.95,1 respectively. The chi-square values at 5% significant level are 0.015,

Table 8
Association between investors' Ethnic Group and their reliability on various sources of information

Sources of information	*Ethnic group*	
	Pearson Chi-square Value	*p value*
Television	25.010[a]	0.015
Newspaper	11.952[a]	0.450
Out-door ads	30.105[a]	0.012
Radio	24.883[a]	0.052
Internet	17.123[a]	0.312
Mobile Media	18.051[a]	0.260
Magazines	32.032[a]	0.006
Financial experts on television	25.081[a]	0.049
Consultants	36.487[a]	0.002
Agents or brokers	32.836[a]	0.005
Word of mouth from friends	30.171[a]	0.003
Word of mouth from Colleagues	31.936[a]	0.001
Word of mouth from religion	42.547[a]	0.000
Word of mouth from different religion	22.951[a]	0.028

0.012, 0.006, 0.049, 0.002, 0.005, 0.003, 0.001, 0.000 and 0.028, respectively. As the calculated value of chi-square is less than the critical value, so we reject H_0 and concluded that there is no significant association between investors' ethnic group and their reliability on various sources of information except television, our-door ads, magazines, financial experts on television, consultants, agents or brokers, word of mouth from friends, word of mouth from colleagues, word of mouth from religion and word of mouth from different religion as sources of information.

(h) Association between investors' family type and their reliability on various sources of information

H_0: There is no significant association between investors' family type and their reliability on various sources of information.

H_1: There is significant association between investors' family type and their reliability on various sources of information.

From Table 9, it is evaluated that calculated value of chi-square for mobile media as sources of information is 18.251. The chi-square values at 5% significant level is 0.051. As the calculated value of chi-square is very near to the critical value, so we reject H_0 and concluded that there is no significant association between investors' family type and their reliability on various sources of information except

Table 9
Association between investors' Family Type and their reliability on various sources of information

Sources of information	*Family Type*	
	Pearson Chi-square Value	*p value*
Television	8.455[a]	0.390
Newspaper	9.602[a]	0.294
Out-door ads	9.995[a]	0.441
Radio	14.699[a]	0.143
Internet	16.072[a]	0.098
Mobile Media	18.251[a]	0.051
Magazines	12.105[a]	0.278
Financial experts on television	10.847[a]	0.370
Consultants	10.593[a]	0.390
Agents or brokers	9.406[a]	0.494
Word of mouth from friends	6.159[a]	0.629
Word of mouth from Colleagues	8.166[a]	0.417
Word of mouth from religion	12.112[a]	0.146
Word of mouth from different religion	8.308[a]	0.404

mobile media as sources of information. There is a positive correlation between family type and mobile media as sources of information as the Spearman rho value is 0.44.

(i) Association between investors' family income and their reliability on various sources of information

H_0: There is no significant association between investors' family income and their reliability on various sources of information.

H_1: There is significant association between investors' family income and their reliability on various sources of information.

From Table 10, it is evaluated that calculated value of chi-square for television, newspaper, our-door ads, internet, mobile media, magazines, financial experts on television, consultants, agents or brokers, word of mouth from colleagues and word of mouth from different religion as sources of information are 35.963, 33.910, 46.195, 38.801, 43.770, 45.955, 54.024, 41.605, 44.441, 38.014 and 39.110, respectively. The chi-square values at 5% significant level are 0.016, 0.027, 0.006, 0.039, 0.012, 0.006, 0.001, 0.020, 0.010, 0.009 and 0.006, respectively. As the calculated value of chi-

Table 10
Association between investors' Family Income and their reliability on various sources of information

Sources of information	*Family Income*	
	Pearson Chi-square Value	*p value*
Television	35.963[a]	0.016
Newspaper	33.910[a]	0.027
Out-door ads	46.195[a]	0.006
Radio	33.703[a]	0.114
Internet	38.801[a]	0.039
Mobile Media	43.770[a]	0.012
Magazines	45.955[a]	0.006
Financial experts on television	54.024[a]	0.001
Consultants	41.605[a]	0.02
Agents or brokers	44.441[a]	0.01
Word of mouth from friends	28.468[a]	0.099
Word of mouth from Colleagues	38.014[a]	0.009
Word of mouth from religion	25.872[a]	0.17
Word of mouth from different religion	39.110[a]	0.006

square is less than the critical value, so we reject H_0 and concluded that there is no significant association between investors' family income and their reliability on various sources of information except television, newspaper, our-door ads, internet, mobile media, magazines, financial experts on television, consultants, agents or brokers, word of mouth from colleagues and word of mouth from different religion as sources of information.

(j) Association between investors' individual income and their reliability on various sources of information

H_0: There is no significant association between investors' individual income and their reliability on various sources of information.

H_1: There is significant association between investors' individual income and their reliability on various sources of information.

From Table 11, it can be concluded that calculated value of chi-square for television, internet, magazines, consultants, word of mouth from religion and word of mouth from different religion as sources of information are 35.835, 45.622, 46.105, 39.599, 32.988 and 31.945, respectively. The chi-square values at 5% significant level are 0.016, 0.007, 0.006, 0.032, 0.034 and 0.044, respectively. As the calculated

Table 11
Association between investors' Individual Income and their reliability on various sources of information

Sources of information	*Individual Income*	
	Pearson Chi-square Value	*p value*
Television	35.835[a]	0.016
Newspaper	24.486[a]	0.222
Out-door ads	36.708[a]	0.062
Radio	31.335[a]	0.178
Internet	45.622[a]	0.007
Mobile Media	29.491[a]	0.244
Magazines	46.105[a]	0.006
Financial experts on television	35.772[a]	0.075
Consultants	39.599[a]	0.032
Agents or brokers	26.191[a]	0.397
Word of mouth from friends	16.088[a]	0.711
Word of mouth from Colleagues	20.070[a]	0.454
Word of mouth from religion	32.988[a]	0.034
Word of mouth from different religion	31.945[a]	0.044

value of chi-square is less than the critical value, so we reject H_0 and concluded that there is no significant association between investors' individual income and their reliability on various sources of information except television, internet, magazines, consultants, word of mouth from religion and word of mouth from different religion as sources of information.

4.3. Mean Score Analysis

The mean is the arithmetic average of a set of values or distribution of a various sources of information considered to be reliable while making financial investment decision.

As shown in table 12, the most reliable sources of information considered while making financial investment decision are newspaper (3.62) followed by internet (3.53), consultants (3.46), television (3.43) and financial experts on television (3.36).

The least reliable sources of information for financial investment decision are word of mouth from different religion (2.41), out-door ads (2.43), radio (2.58) and word of mouth from religion (2.58).

Table 12
Descriptive Statistics for mean score analysis

	N	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
Television	735	1	5	3.43	1.192
Newspaper	735	1	5	3.62	1.140
Out-door ads	735	-99	5	2.43	5.423
Radio	735	-99	5	2.58	5.437
Internet	735	-99	5	3.53	3.962
Mobile Media	735	-99	5	2.81	3.967
Magazines	735	-99	5	3.20	3.941
Financial experts on television	735	-99	5	3.36	3.943
Consultants	735	-99	5	3.46	3.944
Agents or brokers	735	-99	5	3.16	3.963
Word of mouth from friends	735	1	5	2.99	1.139
Word of mouth from Colleagues	735	1	5	2.85	1.134
Word of mouth from religion	735	1	5	2.58	1.116
Word of mouth from different religion	735	1	5	2.41	1.064
Valid N (listwise)	735				

5. RECOMMENDATIONS

- Based on demographic variables (gender, age, marital status, qualification, occupation, family type, ethnic group, family income and individual income) different respondents prefer different range as sources of information for making financial investment decision. Therefore, this study will be useful to marketer for providing insight of preferences given to sources of information for financial investment decision.
- Most of the respondents have given preference to newspaper followed by internet as most reliable sources of information for financial investment decision. Hence, the marketer should concentrate on these sources of information for circulating the news and updates in context to generating more business from the investors.

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