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INVESTMENT BEHAVIOUR AND RISKTAKING ABILITY AMONG RETAIL INVESTOR: ROLE OF DEMOGRAPHIC FACTORS

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Abstract:
Demography factor has a great influence in determining the risk-taking ability among the retail investor which has an ultimate effect on the investment option taken by them. This research paper focuses on understanding the behaviour of retail investor on the basis of demography i.e. age, gender, educational qualification, family, income and so on, and on the basis of these factor which investment option is suitable for which type of investor as investor is categories into 3 different categories i.e. risk taker, risk averse, risk neutral. Primary data is collected with a sample size 200 on the Judgemental non random sampling techniques using the Tableau and SPSS software for analysis of the data through different visualizations and by applying the z- test. In this study it was found that there is direct relationship between demographic factors with risk taking ability among the retail investors which has the direct impact on the investment option. It was found that male are more risk taker as compare to women. The higher the income level retail investor are more likely to take more risk and invest more. Age young aged retail investor are more into investment option as compare to 50's-60's retail investor according to data the young generation 19-35 are investing for capital growth meanwhile the aged investor for saving purpose and in less risky investment option.

Introduction:

Investment behaviour of retail investor is influenced by different factors like age, gender, income level and educational qualification which determine the risk taking ability of retail investor and try to finding out the best suitable option for different types of investors. In finance term the retail investor is divided into broader three categories i.e. Risk Averse, Risk seeker and risk neutral. Investment behaviour can be defined that how the individual or investor makes the decision on the basis of judgement, predict according to future, analyse the past, making information gathering and doing the proper research and analysis. On the basis of the market research, an investor or individual makes the decision whether to invest or not and if want to invest then how much amount it should be.

Retail investors are the individual investor who has limited capital or less capital as compare to the institutional investor. Who invest the share market what is left after their consumption? As retail investor has less capital so there is less impact by their individual decision in stock market. Retail investor are non-professional investor who buys and sell of financial instrument in share market. Investment is not a primary source of income for most of the retail investor most of them are involved in service and business and make investment as their secondary source of income. The investment option they consider as the saving option more than the income option. Retail or individual investor invest in smaller amount and have the great impact of sentiment in their portfolio.

Risk taking ability of retail investor depends on various factors. As risk in finance term is regarded as the return the higher the risk the higher the return. In case of the retail investor the risk is less of return then capital loss. In this research study we will discuss the risk taking ability on the basis of the demographic factor i.e. age, gender, educational qualification, family size and family income. As this aspect has the greater influence. The risk taking ability of the investor who has less responsibility is high on other hand the individual having more responsibility is very less. Gender influence is also there for risk taking ability the female professional is found less who take more risk in investment. Educational qualification give the strength, confidence and boost the sentiment of the retail investor to invest in the market the individual investor who have more knowledge about the stock market take more risk as compare to the person having less knowledge and who are depended on the brokers.

In India there are various investment option available for retail investor. There are various need for which the investor tries to invest like to secure their present and future by retirement planning, fixed income, real estate planning, for fulfilling their family needs and so on.

Investment behaviour of individual investor depends upon all the above mention factor and investment option available to them. Return is the ultimate goal of the investment most of the retail investor go for the diversification of their portfolio as this strategy tries to reduce their risk and give them confidence of fair investment. Investor behaviour is further studied on the basis of demographic factor and risk taking ability of the investors. Which help them to choose the appropriate investment option which is suitable for them as per their risk taking ability. Every retail investor has different perception toward risk and return. The same age individual have different perception to see and understand the risk as compare to same age group individual. There is vast diversion of the behaviour of different investors for investments.

For financial independence earning money is just a half equation. Investing your money to strategically be equally important. In addition, circumstances are frequently different for different investor, and no matter what choices you make will be well again as a result of greater knowledge of the underlying issues & your options. Financial Planning is significant as it helps us meet up our future goals. Every individual must understand their aspiration to manage his or her investment portfolio.

Table-I Investment option available in India

Investment option	Maximum Amount	Minimum Amount	Returns Rate	Tax Benefits
Public Provident fund Mutual Fund (SIP)	Rs. 1,50,000/- (one FY)	500/- (one FY)	7.9%	Offers tax benefits under 80C
Bank Fixed Deposit	No Limit	As low as 1000/-	It varies from bank to bank	Offers tax benefits under 80c
Direct Equity	No limit	No limit	8%-13%	N/A
Real Estate Investment	No limit	No limit	Not applicable, it may be high or low depends on market	N/A
RBI taxable bonds	No limit	Rs. 100	7.75%	Offers tax benefits under 80c
Gold ETF	No limit	Variable	6-7.5%	N/A

Risk refers to a 'condition where there is a possibility of undesired able occurrence of a particular result which is known as or best quantifiable and therefore insurable' .A risk can be defined as an unplanned event with financial consequences resultant in loss may be called a risky proposition due to insecurity or irregularity of the activity of trade in future. In other words, it can be defined as the insecurity of the consequence. As the risk is directly proportionate to profit, the more risk a bank takes, it can expect to make more money. Risk Management is a planned method of dealing with the possible loss or damage. It is an unending process of risk judgment through various methods and tools which always measure what could go wrong and define which risks are important to deal with according to which it implement approaches to deal with those risks. The objective of risk management is not to forbid or prevent risk taking activity, but to ensure that the risks are consciously taken with full knowledge, purpose and clear understanding so that it can be measured and mitigated.

I Type of Investors

(A) Risk Averse: Risk averse is a description of an investor who, prefer with two investments giving the same return with different level of risk will prefer the one with the lower risk. A risk averse investor avoids risks, who stays away from the high-risk investment and prefers the investments who provides a possible shot return. Such types of investors prefer to invest on government bonds and debentures to stocks and money market investments. Before we get too far, what is the definition of risk? It means permanent loss of capital. Naturally, the hunger for risk will be determined by a few factors, among the age.

The investment plan where they should invest are:

- Government Securities
- Bank Products
- Preferred Stocks
- Corporate and Municipal Bonds

(B) Risk Neutral: In economics and finance, risk neutral describe as as investors are insensitive to risk, where the investors effectively ignore the risk completely while making the investment decisions. Risk neutral is also known as neither risk averse nor risk seeking. A risk neutral party's decision is not affected by the degree of uncertainty in a set of outcomes, so a risk neutral party is indifferent between choices with equal expected payoffs even if one choice is riskier.

Investment plan for risk neutral:

- Risk neutral investor should always invest in the risk-free market where there is surety for at least minimum.
- The risk neutral investor's portfolio would have a higher expected return, but also a greater variance of possible returns.

- A risk neutral investor who is able to choose any combination of an array of risky assets of various companies' stocks, various companies' bonds, etc.
- He would invest exclusively in the asset with the highest expected yield, ignoring its risk features relative to those of other assets
- He would even sell short the asset with the lowest expected yield as much as is permitted in order to invest the proceeds in the highest expected-yield asset

(C) Risk Seeker: Risk seeker are the investors who cannot get enough risk and enjoy the investment portfolio with an uncertain outcome rather than one with the same expected return. They prefer greater volatility and uncertainty in investments in exchange for anticipated higher returns. Risk seekers might pursue investments such as small-cap stocks and international stocks, preferring growth investments over value investments.

Investment plan for risk seeker:

- Price risk is the risk which are involved in decline in the value of a security or a portfolio which can be minimized through the diversification of their investment.
- Risk seeker investors has lower in stocks with less volatility such as blue-chip stocks
- Investors can use a variety of tools and techniques to hedge price risk, ranging from relatively conservative decisions such as buying put options to more aggressive strategies including short selling and inverse ETFs,

They can either invest in 100% equity or around 90% in equity and few % in debt.

(D) Retail Investor

A retail investor is a non-professional individual investor who involves in buys and sells activities of securities, mutual funds or exchange traded funds (ETFs) through traditional or online brokerage firms or savings accounts.

Retail investors invest much lesser amounts than large institutional investors, such as mutual funds, pensions and university endowments, and trade less frequently. But wealthier retail investors can now access alternative investment classes like private equity and hedge funds.

Critics say retailer investors typically trade in much smaller amounts than institutional investors where investors do not have the expertise to research their investments. As a result, they undermine the financial markets role in allocating resources efficiently and through crowded trades, cause panic selling. These unsophisticated investors are said to be vulnerable to behavioural biases and may underestimate the power of the masses that drive the market. Retail investors do have a big impact on market sentiment.

II Demographic Factor

Socioeconomic uniqueness of a population which are characterized by age, sex, education level, income, marital status, family size, birth rate, marriage age, death rate is known as demographic factors.

While taking the financial/investing decision demographic factor plays the major role as it shapes an individual risk-taking ability ultimately which decide the investing pattern in particular assets class.

For example: Young retail investor are much aggressive in nature while investing on other hand the senior investor will always likely to take less risk.

III LITRACTURE REVIEW

A literature review is an all-inclusive summary of prior research on a topic. The literature review surveys scholarly articles, books, and other sources relevant to a particular area of research. The review should enumerate, describe, summarize, objectively evaluate and clarify this previous research. It should give a theoretical base for the research and help you (the author) determine the nature of your research. The literature review acknowledges the work of previous researchers, and in so doing, assures the reader that your work has been well conceived. It is assumed that by mentioning a previous work in the field of study, that the author has read, evaluated, and assimilated that work into the work at hand.

Mishra and Mittal (2019)analysed whether there is association between demographic factors such as (age, gender, income, marital status, occupation and education) and risk tolerance. A single cross-sectional survey and structured questionnaire was used and 236 investor of different age group and investment experiences was taken. Individual investors who have minimum two year of experience were taken. The research finding concluded that there is strong association between the socioeconomic such as (occupation, marital status, and age) with Financial Risk Tolerance of Indian investors.

Sutejo, Pranata and Mahadwartha (2018) examined the influence of demography, as an independent variable for the financial risk tolerance among retail investors who conducted investment on stock in Indonesia stock exchange, as a dependent variable. Quantitative data was used and online survey method was used for data collection. Social media and mail were used for communicating the survey questionnaire. 162 respondents were surveyed which conclude that there is a positive partial effect from independent variable income against dependent variable financial risk tolerance on other hand other independent variables such as gender, age, marital status, education and occupation did not establish any significant impact on financial risk tolerance.

Dickason. Ferreira. (2018) studied the risk tolerance in the investment decision where the demographic factors are used as independent variable which when effect on risks involved in the investment decisions. As the study emphasises on two among the demographic factors such as gender and age in term of sampling for South African investors because the vital role and effect of the risk involve in correspondence with the decision have not been exercised for along in such a effective manner. The study is focusing on diminishing the risk factor involvement through the South African continent considering the factors like age and gender. The forecast in this study will enhance the investor to rescale their decision on the basis of gender and age so that the risk factor can be analysed diminished.

Patel. Modi. (2017) studied that most of the concepts in security market was based on the opinion of rational investment decision behaviour from investor. But it observed that it was not the case permanently. A new zone of research had come and challenge the traditional model by making financial decision through the demographic element. The purpose was to study the influence of demographic factor such as gender, age, education, occupation, members in the family. This was done with the help of the primary data collected using sample technique by filling questionnaire from 100 investor from south Gujarat region. The result came out from these questionnaires helpful for the managers so that the they gave advise to their client for improved area of investment and risk level according to the result. This result gives both the significant influence of investment decision as well as the insignificant influence. The study also relates a general view of investor's perception over various investment possibilities and also the various investment decision affected by the factors like risk, return, past performance etc.

Subramaniam (2016) studied that investors invest their savings for the purpose of getting more return in order to backing their future consumption. Investment decisions are made with the expectation of earning certain rate of return and the actual return earned by the investor may differ from it. Investors provide more emphasis for risk associated with variable investment avenues when making their investment decisions. Different people have different risk tolerance level and it depends on several factors. The objective of the study is to identify the relationship between demographic factors and investor's risk tolerance. It is found that demographic factors such as age, education, investment experience and income of the investors are correlated with their risk tolerance and; gender, occupation and civil status are not related with risk tolerance.

Nguyen. Gallery. Newton. (2016) studied that the investment decision makers advice the investors how to pay their decisions like investing. Though various diminishing factors includes the changes in return and the type of risk involved in the investment. So, the key expected that determines the risk tolerance with trust and with the financial advisor. The survey has been identified from different countries such as Australia which revealed the positive correlation existence been the decision maker investment risk tolerance. This study will focus on client trust on financial advisor which will provide a slab of understanding the factors one affecting and improved advice in the industry.

Arora. Kumari. (2015) emphasises how different factors like age, gender affects the risk involving in the capability of the investors is their investment decisions through temperament influence whether that is loss to a thing or repentance. Considering the number of 372 males, 93 females, an overall of 450 investors, the constituted schedule was performed using AMOS 20 to preview the existence of age, gender and risk that correlated through risk analysis, implementing over the impact of age, gender and risk-taking capacity that drives within the investment decision bases, loss avenison of investor.

Kannadhasan (2015) examines whether demographic factors namely gender, age, marital status, income, occupation, and education have any impact toward retail investors in terms of financial risk tolerance (FRT) and risk-taking behavior (FRB), and categorizing retail investors into FRT and FRB. A single cross-sectional survey was conducted among 778 retail investors with various levels of investment experience, through a structured questionnaire covering a variety of demographic factors. Four of the six demographic factors were found to be useful in differentiating between levels of investors' FRT and FRB as well as classifying individuals into different FRT and FRB categories. There is a positive relationship between FRT and FRB as a result found.

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Shanmughama and Ramyab (2012) studied that individual investors' trading behaviour has pinched the concentration of academicians and investment practitioners globally. The appearance of behavioural finance as a new field in the capital market research is a crate in point. Studies point out that individual investors are characterized by too much trading and often to their harm (Barber and Odean, 2000). In this study, we apply the theory of reasoned action (TRA) and the theory of planned behaviour (TPB) to explain individual investor behaviour. Further, an effort has also been made to study the sway of social factors such as social interactions, media and internet.

Kermanshah, Shirin, Amiri (2012) studied that the principle of this research is to converse the relationship between Personality traits and demographic ones on the financial behaviour prejudices in Tehran Stock in 2011. In this way, among the 1000 member of the population implicated in the study, about 215 people of individual investigators are preferred based on simple random sampling as the appropriate and steadfast samples. The necessary data are used by a questionnaire with the consistent coefficient of 0.855 for evaluating the extreme blow of five characteristics and demographic variables on the investment's prejudices during structural equation modelling analysis (SEM), and through AMOS6 software. The consequences show that the investment prejudices in individual investigators has relationship with personal characteristics significantly and with some of the demographic variables.

Geetha. Ramesh. (2012) studied the effect of demographic factors likes age, sex, education level, income level, average size of the family, average age at marriage over some components of investment decision like characteristics of investment, growth investment, shares, defensive investments, rate of investment and logical abilities. The study was made conducted in survey of Nagapattinam district of Tamil nadu. It tells that the demographic factor significant influence on decision of the investment and in other elements also because different people have different risk patience level. The main objective of this study is to found the relation between demographic factor and investor risk taking ability on the basis of age, gender, education level, experience, occupation.

Jain. Mandot. (2012) studied the market had been moved from the statism to dynamism which also changes continuously exposure to risk. As the risk increased more and more money is stick among different demographic profile. This paper studied about the relationship between risk and demographic factor of investor in Rajasthan. The investor is been increased on the basis of the desired risk for investing in various bank deposits, different bonds, shares, real estate, mutual funds, gold etc. The primary objective of investor in investing is to earn income and expected rate of return differ from others investor on the basis of their market knowledge and risk-taking ability. This paper added reveals that there is an adverse connection between marital status, gender, age, education qualification and occupation of the investor and also there is the optimistic connection between income level, cities and knowledge of investors. This had been acknowledged on the basis of cross analysis by applying correlation analysis.

Yao, Sharpe and Wang (2011) studied that the significance of very manifest since the beginning of the of the late 2000s exceptional depression. Separation disposition to take financial risks influence portfolio decisions and investment returns between other factors. Earlier search revealed that people of different ages have unequal levels of risk bearing but the influence of generation, period, and aging were baffled. Using the 1998 – 2007 assessment of consumer finances cross-sectional datasets, this study uses an investigative method to differentiate such influences on financial risk tolerance. Aging and period impacts on financial risk tolerance were statistically beneficial. Imputation for researchers and financial planning practitioners and educators are provided.

Sultana, Pardhasadhi (2011) studied the relationship between the risk tolerance and socio-economic characteristics of retail investor. The objective of the research was to determine the risk tolerance level of an individual retail investor and identify the relationship between the investor's socioeconomic characteristics like (marital status, education qualification, occupation, earnings, number of dependents) and risk tolerance. Research technique statistical technique chi-square was used and finding concluded that investor's socioeconomic characteristics such as (marital status, occupation, earnings, and number of dependents) are dependent where as educational qualification, regularity of investment decision and basis of investment decision are not dependent on risk tolerance level of an Indian individual investor.

Anbar, Adem, Aker and Melek (2010) studied the financial risk tolerance is one of the key factors that should by both investment managers and investors while making investment. Analyzing and understanding the risk tolerance factor is not an easy task according to him. Determining the factor affecting the financial risk perceptions of investor have been always a matter of interest for the researchers. The objective of this study was to examine the correlation between financial risk tolerance and demographic characteristics such as age, gender, marital status, number of children, income and total net assets.1,100 university students were taken as a sample, logistic regression analysis, and t-test and ANOVA analysis were used for the analysis of the data. Gender, department and working in a job were important predictors of financial risk tolerance factor were analyzed by logistic regression. Analysis indicated by t-test and ANOVA that gender, department, working in a job, monthly personal income, monthly family's total income and total net assets were considerable factor in differentiating individuals into risk tolerance levels, even though age, marital status and number of children had insignificant effect on financial risk tolerance.

C.Rajalakshumi1 and Dr.L.Manivannan2 (2017) analysed the behaviour of the investors in which the psychology, information gathering, defining and understanding, research and analysis are to be done by the investors regarding the judgement, prediction and analysis for their investments. The whole process is known as "Investment Behaviour" (Alfredo and Vicente, 2010). There are many theories on economics which are based on the credence that individuals behaved in a coherent way and all the existing information is entrenched in the investment procedure. This assumption is the nub of the efficient market hypothesis. But some of the researchers are putting questions that the assumptions are opposite of what researchers believe that this assumption has bare evidence the coherent behaviour is not always as predominant. The study tries to analyse the influence of demographic characteristics which influences the investors on their investment patterns as behavioural finance goes with understanding and explaining that how the human emotions will influence the investors in the procedure of their decision making. This study has also stabbed the implications between the type of investors and what the corporate have made the announcements.

Reena Rani (2014) studied the investment, in the comprehensive sense, means the sacrifice of current money for the future income. There are two attributes involved: time and risk. The investment takes place in the present and is generally certain. The reward comes later and the amount of reward is generally uncertain. There are large numbers of investment avenues available in the market. The investors choose avenues, depending upon their specific need, risk appetite, and return expected. Every individual is different from others due to different factors which include demographic factors, age, race and sex, education level, social and economic background; same is the situation with the investors. The most important challenge faced by them is the investment decision. The investigation of previous studies reveals the significance of various factors which affect their investment decision making behavior. This paper aims an attempt to discuss the various factors affecting investor decision making behavior in the stock market, were identified by extensive review of literature.

Tomola Marshal Obamuyi (2013) The study seeks to determine the main factors that how the investors are influenced while making the investment decisions, and the relation of these factors with the socio and economic aspects of the Nigerian Capital Market investors'. This study had done by taking responses from 297 respondents by using convenient sampling method which has modified questionnaire by AI-Tamimi (2005) in which independent t-test, Analysis of variance (ANOVA) and post hoc tests were employed. This study has exposed that there are five factors which are influencing most the investors while making investment decisions in Nigeria which are past performance of the company's stock, expected stock split/capital increases/bonus, dividend policy, expected corporate earnings and get-rich-quick and also, the five least influencing factors include religions, rumours, loyalty to the company's products/services, opinions of members of the family and expected losses in other investments. Findings that study provides are the socio and economic aspects of investors' i.e age, gender, marital status and educational qualifications which are statistically and significantly influencing the investors in their investment decisions, by taking in the consideration past performance of the company's stock as an evaluating factor, groups of investors statistically differed in factor valuation, as segments of a group considered the factor as the most important/unimportant and the utmost recognized as the most influencing factors are usually classified as wealth maximising factor.

Abdel-Raheem F. Fares & Faisal G. Khamis (2011) There are so many studies which have find out the factors that are affecting the investments in stock trading in developed and developing countries, but the appearances of the investors are still not well documented. As it is found that the trading behaviour of the investors' is influenced by the several behavioural factors. This paper is seeking towards these factors and their influences on investors' financial exposure. In this study the multiple regression technique was used on the basis of which for explanatory variables were identified that are the age of the investors'; usage of internet gender wise; his or her formal level of education which are statistically significant from 1% to 5% level with a positive sign and the broker variable which was highly significant has to be less than 1% level with a negative sign.

Mark KY Mak and WH IP (2017) The financial industry of the Mainland Chinese and Hong Kong has a great impact on the economy and it also has increased the managerial and academic interests in the last few spans. After suffering from several financial crisis it becomes difficult for financial services providers to frame the marketing strategies because individual investors are now becoming more prudent towards financial investment. The previous researches have advised that there are various factors which would affect the financial investment behaviour, which includes the demographic characteristics of individuals; however, they infrequently study the differences in the behaviour of the financial investments between the investors of Mainland Chinese and Hong Kong to deliver an easy-to-use approach for practical usage. The main aim of this exploratory study is to fill up the identified research gap This exploratory study aims at filling the identified research gap by propositioning linear regression models of the financial investment behaviour of the investors of Mainland Chinese and Hong Kong. After analysing the regression analysis it results in that (i) there is an existence of the significant differences in the behaviour of financial investments of the investors of Mainland Chinese and Hong Kong and; (ii) the psychological, sociological and demographic factors are the main significant interpreters of the investment behaviour of the investors. And now financial service providers are able to forecast the investment preference of their customers and can frame marketing as well as strategic decisions, such as with the help of regression model now they can customize the portfolio of the investment of customers.

Bhiwani and Shetty (2017) analysed that how investment choice gets affected by the demographics and observations of the investor. Through this investor's action while taking investment decision influenced by many factor. In this investment Demographic profile and perception plays a key factor in this particular choice of investment. This help in to enhance the knowledge on different investment like mutual funds, equity, life insurance policies etc. which is very important for the financial advisor and this will also help in the advice their client regarding their investment ways for their respective demographic profiles. This study was conducted by Mann Whiteny U test, kruskal-wallis to test the hypotheses with the help of SPSS. Age, Gender, education and occupation are the important factors which influence the selections of investment possibilities.

Ansari And Pathak (2017) analysed that the Financial risk tolerance is the level that defined the investors minimum risk risk bearing capacity while taking investment decision. It is most important factor that influence to control the mind of investors to select the particular investment path. This study analyses the effect of demographic effect of investors on risk tolerance level of investor. In this data was collected by making the questionnaire and taking response from 974 individual investors. In this questionnaire age, income, gender, education was the independent variable while financial risk tolerance was taken as dependent. FRT was measured through Grable and Lytton scale in 1999. This study helps in finding that the most of the investors belongs to normal risk tolerance category and demographic variables like age, gender, income, education affects the financial risk tolerance of investors.

Diacon (2004) analysed the detailed comparison of the individual consumer and expert financial advisor perception on investor risk involved in various UK personal financial services product. Factor similarity test was used to show that the there is the significant difference between lay and expert investor in the way financial risk perceived. Through this can be said that the financial expert are the less loss averse than the lay investor. The traditional response to finding that the experts and non-expert having different perception and consideration about risk to institute risk communication programmes designed to re-educate consumers.

Barber and odean (2001) analysis that the in finance area men are the more overconfident than women while investing, psychological research demonstrates while theoretical models forecast that the overconfident investors trade extremely. Thus, theory predicts that women will not trade as much as men do. This was taken will the help of sample account data of more than 35000 households from large discount brokerage, this analysis taken from February 1991 through January 1997 of common stock investment of men and women. Through this it finds that men trade 45 percent more trade than women.

Jasim Al-Ajmi (2008) This study has undertaken the new evidence on the topic ‘Determinants of risk tolerance of individual investors in Bahrain. In this, a questionnaire method has used for getting the data in which near to 1500 respondents have participated. The findings of the have given a result which shows that an investor as men have a high tendency towards risk tolerance than a women investor. Another finding is that investors with higher education and wealth would seek more risk than the less educated and wealthier ones. The study also proves that the tolerance of investors will decrease when they are more financially committed and moving towards their retirements or are retired, that means the effect of the investor's age on risk tolerance is complex.

John Gilliam & Swarn Chatterjee (2011) In this study the birth order has been scrutinized as an interpreter of financial risk tolerance as there are very few papers are available, and this is the first study which reconnoitre’s the difference of risk tolerance between the firstborn and later-born married individuals. In which 368 married individuals, chiefly from a large Southwestern university, have completed a psychometrically solid financial risk tolerance measure firstly by 'Grable and Lytton, 1999'. The results show that firstborn individuals were shown to be expressively less risk-tolerant than later-born individuals.

John Gilliam, Swarn Chatterjee, John Grable (2010) This study was done by comparing two practical measures of risk tolerance and discretely examines the connotation between these measures of risk tolerance and asset allocation. The instruments which have used to regulate investors’ perception of financial risk tolerance are the Survey of Consumer Finance’s i.e. ‘SCF’ single-question measure and a thirteen-item, multidimensional measure have also developed by Grable and Lytton in 1999. The total respondents who participated are 328 A sample comprised of 328 respondents from the university situated in southwest.

Problem Statement

- Understanding the demographic factor that shapes an individual risk tolerance level
- Understanding the different investment alternatives and it’s portion that can suite each type of investor as per their risk tolerance

- Financial investment controls an individual's spending pattern

Research Objectives

- To identify the influence of demographic nature of investor on their investment pattern.
- To identify the relationship between demographic factors of investor and their risk tolerance.

(IV) Research Methodology

The present study focuses on. The study is descriptive in nature. It focuses on understanding of the demographic factors that affect the Investment behavior and risk taking ability and financial planning, secondly it emphasizes on understanding association between financial planning, Risk taking ability and role of demographic factors.

(A) Sample Size and Sample Technique

The both male and female population i.e. students, faculty, industry professional who are investing in stock market (that can be virtually or real investment) or have some knowledge of stock market irrespective of location are taken as a sample from which 80% respondents are of Lovely Professional University and 20% are industry professional considered for the study. The sample will be collected from the students i.e. MBA'S and BBA'S and faculty of Lovely Professional University and industry professional irrespective of company and location are selected as sample.

A sample of around 200 male and female who invest in stock market will be collected for the study. The selection of respondents is on the basis of convenience random sampling techniques.

Software Used

In this study, the hypotheses were made and then analyzed with the help of two software i.e. "SPSS" and "Tableau".

Variable Identified

1. **Age:** The primary variable is age as age has a crucial impact on the risk taking ability among the retail investor. For example the young person is more likely to take risk as compare to the old investor because of inverse relationship between age and risk taking ability among retail investor.
2. **Gender:** Both male and female have different risk taking ability female take less risk as compare to male.
3. **Relationship Status:** Relationship status such as single, married, divorcee and widow has also a crucial impact on risk taking ability among the investor which ultimately has an influence on financial planning of retail investor.

4. Family Member: Large the family the size less the risk taking ability because of more dependent member the risk taking ability decreases.

5. Educational Qualification: Educational qualification is fundamental key to analysis the knowledge and interest of the investors in which has a direct implication on the decision making ability of an individual investor which is associated with the risk taking ability as well as in financial planning.

6. Annual Income: Indirect relationship is there between the annual income and risk taking ability as the less annual income the individual will less likely to take the risk because he/she also have to fulfil his/her basic requirement i.e. consumption on other hand individual having more annual income will obviously invest more because he/she might be having alternate source of income as well.

(B) Hypothesis

µo: There is no relationship between the demographic factor and risk taking ability among the retail investor.

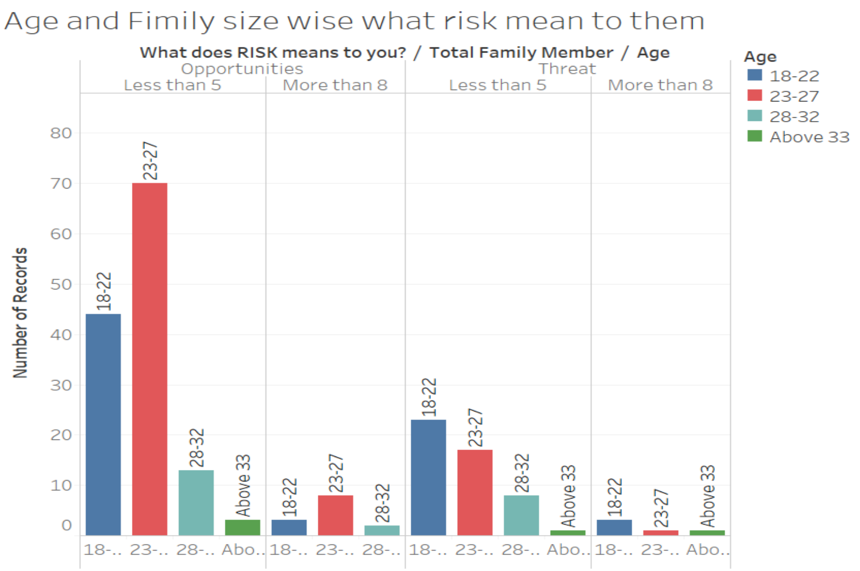
µo: There is no relationship between the demographic factor and investment option chosen by retail investor.

H1: There is relationship between the demographic factor and risk taking ability among the retail investor.

H2: There is relationship between the demographic factor and investment option chosen by retail investor.

(VI) Analyse & Interpretation

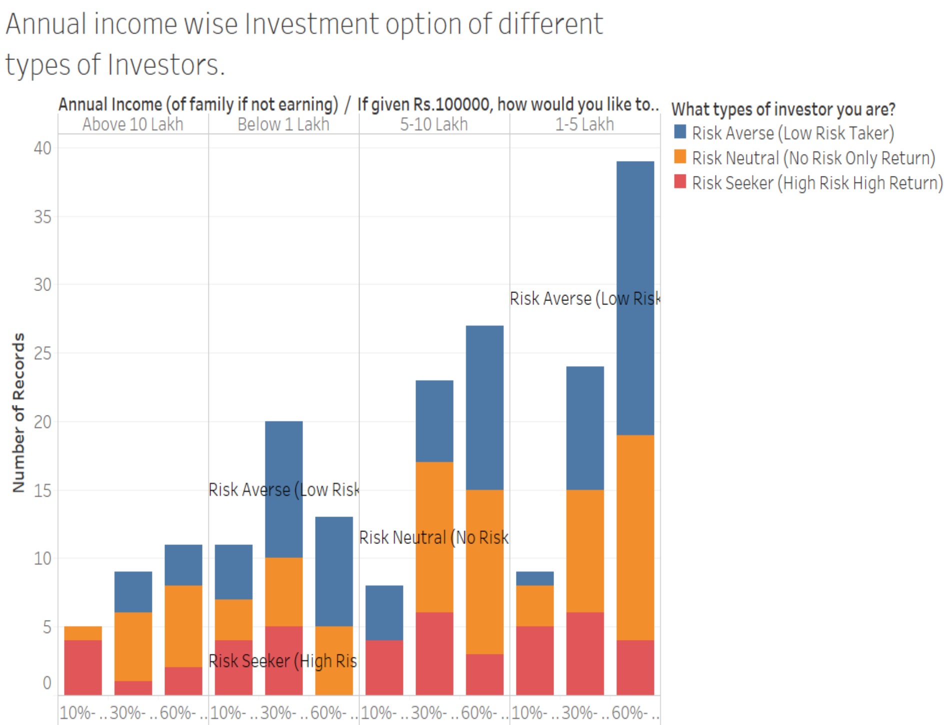
(1) Age and Family size wise what does Risk mean to Retail Investors?



Sum of Number of Records for each Age broken down by What does RISK means to you? and Total Family Member. Color shows details about Age. The marks are labeled by Age. The view is filtered on Exclusions (Age,Total Family Member,What does RISK means to you?), which keeps 14 members.

Interpretation: The above given bar chart shows the relationship between the demographic factor i.e. Age and family member and what does risk mean to them. Here we can see that there is a direct relationship between the ages, Number of family member with the does risk mean to them. The age group between 18-22 and 23-27 having family member less than 5 thinks that risk means opportunities to them on other hand the age group above 33 and having family member less than 5 family members are very less in number. It can be clearly as the age of the retail investor is increasing and high number of family member is their the risk taking ability of the retail investor declines as the number of dependent member increases and responsibility increases the retail investor are less likely to take risk as they think risk as a threat.

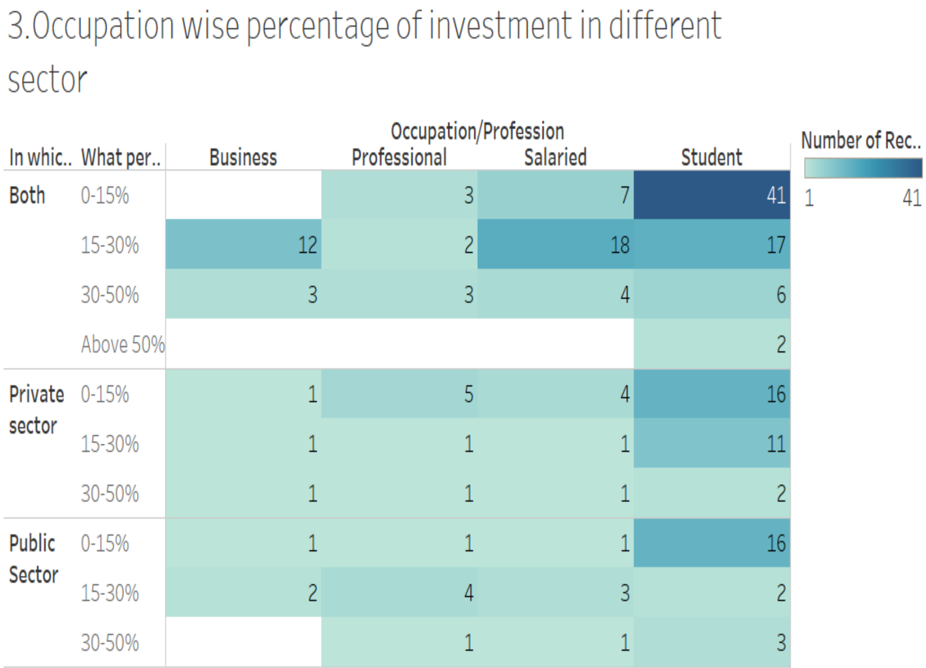
(2) Annual income wise Investment option of different types of Investors.



Sum of Number of Records for each If given Rs.100000, how would you like to invest? broken down by Annual Income (of family if not earning). Color shows details about What types of investor you are?. The marks are labeled by What types of investor you are?.

Interpretation: According to above given visualization we can clearly see that the Annual income wise what type of investor they are and in which option of investment they would like to invest. As we can see that the investor having the high annual income are more Risk seeker investor as compare to other group of annual income on other side the retail investor having the low annual income less than 1 lakh are more of risk Averse and risk neutral because the capital is limited and opportunities are unlimited in capital market. we can conclude that there is direct relationship between the annual income and risk taking ability among the retail investors.

(3) Occupation wise percentage of investment in different sector?



3.Occupation wise percentage of investment in different sector

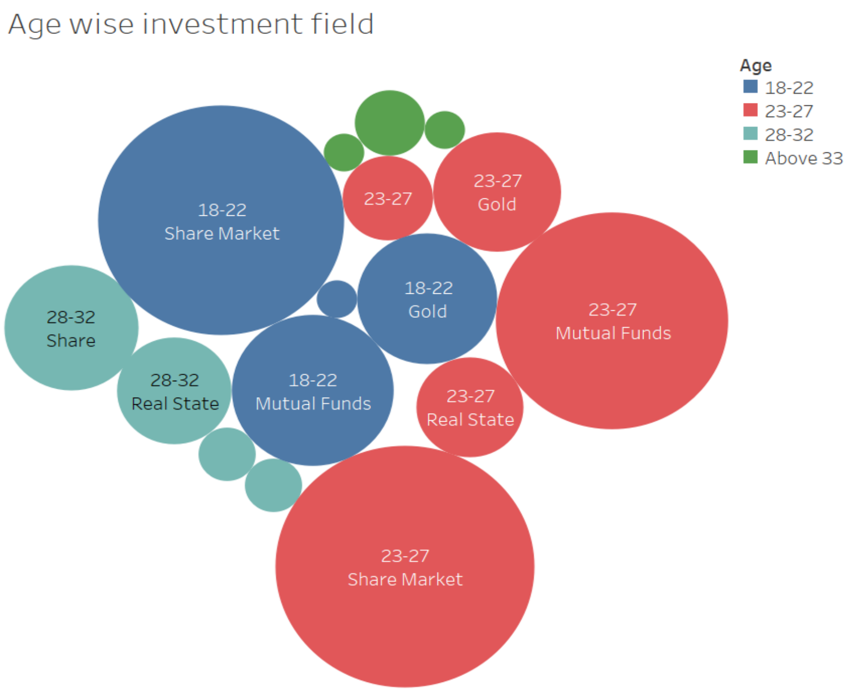
In whic..	What per..	Business	Professional	Salaried	Student
Both	0-15%		3	7	41
	15-30%	12	2	18	17
	30-50%	3	3	4	6
	Above 50%				2
Private sector	0-15%	1	5	4	16
	15-30%	1	1	1	11
	30-50%	1	1	1	2
Public Sector	0-15%	1	1	1	16
	15-30%	2	4	3	2
	30-50%		1	1	3

Sum of Number of Records broken down by Occupation/Profession vs. In which sector do you prefer to invest your money? and What percentage of your income do you invest?. Color shows sum of Number of Records. The marks are labeled by sum of Number of Records.

Interpretation:

The above given heat map shows the relationship between the occupation wise percentages of investment in different sector. The dark side indicated the strong correlation where as the light shade shows the less correlation between these variables. Investment in financial market needs the knowledge and skill as we can see here the students are having more theoretical knowledge about the financial market and they are at the initial stage of investing so they are investing more in the both private and public sector where as the salaried and business retail investor invest 15-30% of their income in both sector as they are having good knowledge about the financial market. We can also see that investment in public and private sector is almost same but diversified investment option i.e. both in public and private sector is taken into consideration so that the risk is diversified and optimal return can be gain by the retail investors.

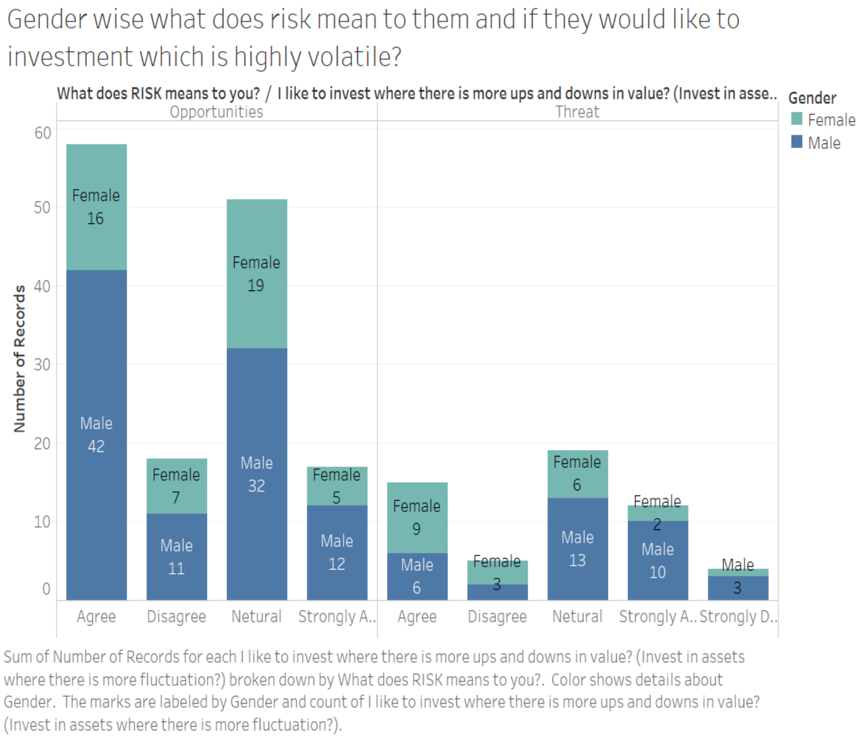
(4) Age wise investment field?



Age and In which field do you prefer to invest your money?. Color shows details about Age. Size shows sum of Number of Records. The marks are labeled by Age and In which field do you prefer to invest your money?. The view is filtered on Exclusions (Age,In which field do you prefer to invest your money?), which keeps 18 members.

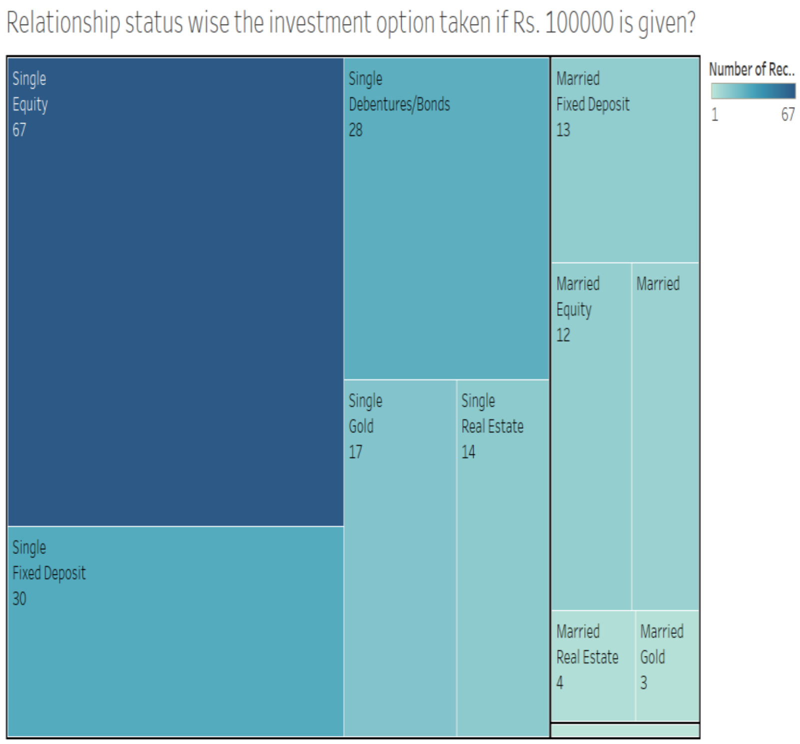
Interpretation: The above give visualization shows the age wise investment option chosen by the retail investors. With these investment option we are trying to correlate the risk taking ability along with the investment planning because all the option available here represent the different set of risk and return associated with it. As we can see here that the age group between 18-22 are more likely to invest in the share market which is highly volatile i.e. High risk and high return option as compare to all their option taken by the retail investor 18-22 age group i.e. gold and mutual funds on other hand we can see directly that age group between 23-27 has also preferred more to invest in the share market as well as in mutual funds these directly indicate that the young aged retail investor are much likely to take risk as compare to all other age group i.e. 28-32 age group and above 33 age grouped has mostely taken bonds and gold into consideration.

(5) Gender wise what does risk mean to them and if they would like to investment which is highly volatile?



Interpretation: According to above given visualization it can draw the clear picture regarding the gender wise what the risk mean to them. The female respondent are 68 in number were as male respondent are 131 that is around doubled than the female respondent. Here it can be concluded that the male have more ability to take risk as compare to female. 16 female think risk mean opportunities and 42 male think same which is around have of that here we can conclude that there is gender impact on the risk perception among the retail investors.

(6) Relationship status wise the investment option taken if Rs. 100000 is given?



Relationship Status, If you have Rs.1000, where would you like to invest? and sum of Number of Records. Color shows sum of Number of Records. Size shows sum of Number of Records. The marks are labeled by Relationship Status, If you have Rs.1000, where would you like to invest? and sum of Number of Records.

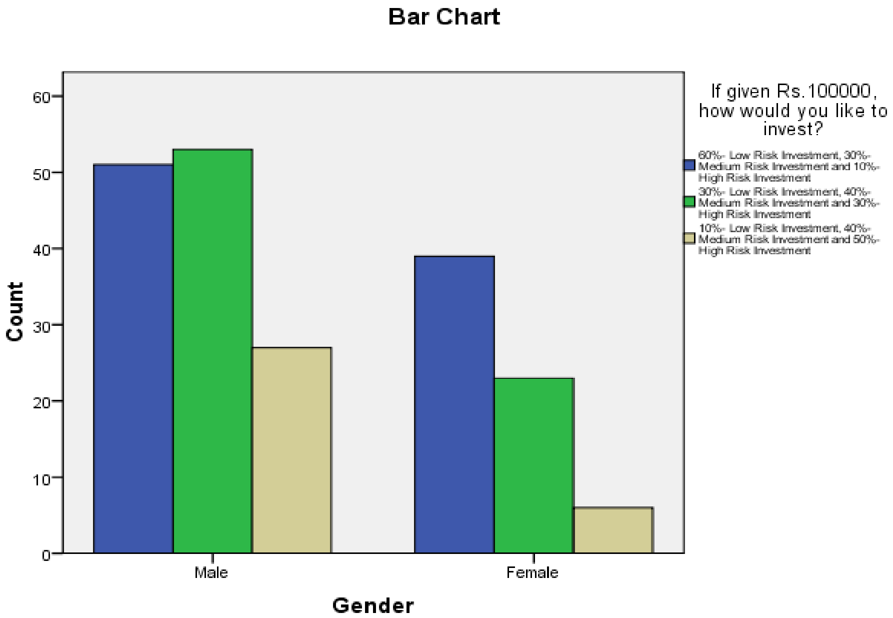
Interpretation: As per the above given tree map it is transparent that the individual investor who are single are more likely to invest in the equity market as they give high return and are also high risky on other hand it can see that the married retail investor mostly invest in the debenture/bonds as they are more secured compared to the equity share. It can be concluded that the demographic factor has the influence on the risk taking ability among the retail investors.

(7) Gender wise investment option taken if Rs. 100000 is given?

Table (II) Gender * If given Rs.100000, how would you like to invest? Crosstabulation

Count

		If given Rs.100000, how would you like to invest?			
		60%- Low Risk Investment, 30%- Medium Risk Investment and 10%- High Risk Investment	30%- Low Risk Investment, 40%- Medium Risk Investment and 30%- High Risk Investment	10%- Low Risk Investment, 40%- Medium Risk Investment and 50%- High Risk Investment	Total
Gender	Male	51	53	27	131
	Female	39	23	6	68
Total		90	76	33	199



Interpretation: By the above given data we can analysis and understand the behaviour of investor gender wise i.e. risk taking ability reflected by investment option by creating hypothetical situation that if Rs.100000 is being given to them. In first option i.e. 60%- Low Risk Investment, 30%- Medium Risk Investment, and 10%- High Risk Investment (risk neutral) 51 are male and 39 are female that are more familiar to take less risk mean while according to second option 53 male and 23 female are likely to invest 30%- Low Risk Investment, 40%- Medium Risk Investment and 30%- High Risk Investment which shows that they are risk averse that they try to minimize their risk and are searching more opportunities of return for the same amount of risk and at last the number of male is 26 on other hand number of female is 6 who want to invest in 10%- Low Risk Investment, 40%- Medium Risk Investment and 50%- High Risk Investment by this it can conclude that male are on the in terms of taking risk and most of the retail investors are risk averse that mean for the same amount of risk want to take more return.

(VII) Findings

According to the given analysis we reject the null hypothesis and accept the alternative hypothesis i.e. there is close relationship between the demographic factor and risk taking ability and investment planning of retail investors. In this study it was clearly identified the relationship between the demographic factor and investment planning and risk taking ability among retail investor. As per the study it was found that as they age increases the risk taking capabilities of the retail investors decline because of increasing responsibility along with the increasing number of dependent member. Female are less likely to take risk as compare to male on other hand annual income also has a great influence upon the risk taking ability and investment option because the less the annual income retail investors less likely to take risk as capital is limited and opportunities in stock market are unlimited as per the concept.

This study was purely based upon the understanding the individual investor behaviour in financial market to monitor their risk appetite and understand the investment planning. It this study it was found that there are various demographic that are playing key role in measurement of risk taking ability among the retail investors and according to the risk taking ability different investment are taken by different types of investors. In this study the investor were categorised into three categories i.e. Risk Averse, Risk Neutral and Risk seeker were it was found that the individual investors who are in their young age i.e. 18-22 and 23-27 are more compatible to take more risk as compare to the age group of 28-32 and above 33 retail investors. The single individual investors are found to be more of risk seeker as compare to the married retail investors. The burden of dependent members are less for single retail investors as compare to married investors which is main contributor in the behaviour of the investors.

The capital is limited so the retail investors are much more conscious about the investment planning and the investment option taken into consideration by them as in this study was found the retail investors having less annual income take less risk as compare to the retail investor who are having high annual income.

(VIII) Conclusion

The analysis made on the results of the survey found that there has been significant relationship between demographic factors and other factors that influence the investment decision making process. However in case of relationship between demographic factors and periods of investments, it was found that a few demographic variables such as family size, annual income, gender, age, education, occupation and annual income have significant relationship.

Furthermore, the study brings out thatthere is significant relationship between the demo-graphic factors such as gender, age, education, occupation, annual income and annual savings with the sources of awareness obtained by the investors.. At the same time, the study establishes an absolute relationship between all the demographic variables and the frequency of investment by the people. Finally, the analysis of data collected discloses significant relationship of demographic factors such as gender, education, occupation, annual income and annual savings with the analysis of investment avenues by the investors. Here too the study indicates that the demographic variables such as age and family size have significant relations.

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