

# How Demography Plays an Explanatory Role in Investment Choices?

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## 1. INTRODUCTION

Money plays a vital role in everyone's life. People engage themselves in ethical and unethical practices in order to generate money. Investment is a complex issue and decision-making process and people forego their present income in order to earn extra money in the form of a return that can be either capital appreciation or the return in the form of interest or dividend. Risk and return play a vital role in the determination of investment decisions.

Individual investors play a very dominant role in the efficient operations of the economy. They are contributing their role as a factor of production by helping in capital formation in the economy as well as contributing to the GDP of the country. The economy will prosper in the long run if there is a good rate of capital formation and investment. Investment decision-making encapsulates in itself the complex process of identification, evaluation, and then the. Investment decisions involve a certain degree of risk which is considering that markets are more efficient now and it will be effective if the financial risk tolerance of investors' decision-making will be assessed.

The investment decision is being affected by risk tolerance and demographic variables of investors including age, education, income, financial literacy, and occupation being among the prominent factors. Researchers in the area of investment assert that there exist two views of making decisions the rational approach, Traditional Finance " Efficient Market Theory " ,Modern Portfolio Theory supposes that investors are logical and rational (**Wen F, 2018**), and all the info and the irrational approach. The rationality approach is the one in which the investors are considered rational beings at the time of making decisions means that whenever new information will be arising they will update the same, and they will be behaving in an objective manner. On the other side of the irrational approach, Behavioral Finance are being developed by Kahneman & Tversky (**Kahneman D, 1979; 47(2)**) the researcher asserts that as human beings are social human beings they are subject to various behavioral anomalies and are affected by demographic factors. Behavioral finance is being categorized into two parts Behavioral Finance Macro, Behavioral Finance Micro former dealing with institutional investors and later with individual investors (**M., 2012**) Popular research nowadays are deviating from the rationality approach. Stock market anomalies and market bubbles are being studied in the behavioral finance theories in order to increase the effectiveness in the decision by adopting psychological theories and behavioral principles (**Kourtidis D, 2012**) The reason why standard finance, the body of knowledge based on the arbitrage principles of Merton Miller and Franco Modigliani, the principles of portfolio construction of Harry Markowitz, the capital asset pricing theory of John Lintner and William Sharpe, and the option-pricing theory of Fischer Black, Myron Scholes, and Robert Merton, is so compelling is

that it uses just a few fundamental building blocks to create a unified theory that should provide solutions. Standard finance supposes that peoples are not confused. Investors maximize expected utility by relying on rational decisions in standard finance, a significant & dominant paradigm for many decades asserting that in an efficient market, the prices will be reflected fully. Investors are sometimes subjected to nasty decisions in which they will be behaving irrationally. Behavioral finance assumes that investors' decision-making is subject to be affected by emotional characteristics. Investors tend to behave in a greedy manner, subjected to be affected by speculation market fluctuations. (Shiller, n.d.)

des. Classical decision theory, rationality, risk aversion, model portfolio theory (MPT), the capital asset pricing model (CAPM), and the efficient market hypothesis are the core theories of traditional finance (EMH). Empirical researchers are nowadays focusing on psychological aspects of Behavioral Finance. With this framework of study, the study will be focusing on the aspects of the effect of various demographic factors on investment Decision making of Retail Investors in Gorakhpur city.

### **Expected Contributions**

- Identification of various demographic factors which will be contributing to Investment choices
- Identification of the most prominent avenue which is chosen by investors.
- Association of Demographic Factors and investment choices will be explored.

In addition to that these contributions will be helping financial advisors, academicians, researchers, policymakers, and the investors to understand the factors which will contribute to their investment decisions.

## **2. REVIEW OF LITERATURES**

The literature review has been carried out in order to analyze the previous studies what are the gaps in the studies and the variables of the study, which have been explored and which need further exploration in order to support the study.

### **(Subramaniam & Athiyaman, 2016)**

In this research work the author investigated the financial risk tolerance and its relation with various demographic variables. The data has been collected using the survey method of the questionnaire analysis has been carried out with the help of descriptive statistics, the profile of retail investors are being prepared and the association has been studied with the help of the Pearson Chi-square test. Investors' risk tolerance is categorized into 5 different parts.

### **(Ang et al., 2016; )**

The objective of this study is the identification of the relationship and significance of the independent variables towards the dependent variable. In this research, there are a total of eight independent variables combined with five personality traits and three demographic characteristics. The five personality traits are extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience while demographic characteristics are gender, investment experience, and financial literacy. Our study also investigates the relationship between independent variables and dependent variables based on the

moderating variable. The moderating variable in this study is risk tolerance. The questionnaire survey was conducted for this study in order to obtain primary data from the targeted respondents in Kampar, Perak. The age of the targeted respondents for this study is between 18 to 29. These respondents help us to do the analysis on risk tolerance and investment decision-making. There were a total of 340 questionnaires being conducted for this research. This survey had been done by using the SPSS software. The results from the SPSS have shown that the personality of extroversion, agreeableness, neuroticism, openness to experience, and financial literacy are significant to the risk tolerance of young potential investors. There is an insignificant relationship to risk tolerance based on the independent variables of gender and investment experience. However, there is a significant relationship between investment decisions and the young potential investor's risk tolerance.

**(Clark -Murphy M, 2005)**

Investment decision plays a complex role and in this study the factors affecting were being studied with help of cluster analysis the study diagonalised various factors affecting with special emphasis on demographic and psychological factors. The important variables are Age, investment experience, education.

The study only focused on variables and further scope of study can be enhanced with additional behavioral factors, such as herding, anchoring, gambling fallacy. The result will have implications for financial service providers, and other investors.

**(Geetha& Ramesh, 2012;)**

The study investigated the relevance of various demographic factors such as age, investment experience, family size, over the investment variables like priorities on characteristics of investment, period of investment, reach of information, frequency of information, analytical abilities

### **3. RESEARCH QUESTIONS**

Research questions helps in the identification of problems and make the study specific to the objectives. It helps in making the study specific as per the gaps and questions to be addressed

- What are the various avenues available for making Investments?
- What are the objectives of making an investment?
- How the demographic factors influence investment choices?
- What is the Demographic profile of Retail Investors in Gorakhpur City?

### **4. RESEARCH OBJECTIVES**

- To frame the demographic profiles of the investors
- To study the association between Demographic Variables and Investment choices

## 5. RESEARCH METHODOLOGY

Research design serves as a blueprint for research work. It serves as the foundation of empirical research. Positivist methods use surveys, Field surveys are nonexperimental that do not manipulate the variables but test the relationships, and experimental methods for testing the theories. A quantitative method of data focuses on the collection of data using a metric scale. It is not easy to say which method should be adopted but as per the objectives of the study the methods should be chosen. In order to explore the study when no existing theories are there and the researcher wants to explore them the exploratory method will be best suited, in the case of theories and relationship justification the survey method should be chosen. The research design elaborates on the method of data collection, sample size, population size, sampling elements of the study, and the research design. Research studies have adopted the descriptive method. The research strategy should depend upon the following questions such as the

- a) The question which is to be addressed
- b) The sample elements to be focused.

- **Data Collection Method:** The primary method of data collection has been adopted. The researcher has collected the data by going through the relevant kinds of literature and a survey has been conducted in order to gather through questionnaire method and online Google forms. The survey method is the best-chosen method when the unit of analysis involves individuals, survey method has key strengths such as the measurement of unobservable characteristics or qualitative characteristics and this method is economical as compared to experimental and case studies. Response bias is the demerit of the survey method. This is basically classified into two parts questionnaire survey & interview survey, survey is self includes self-administered surveys, group surveys and these days popular survey is online survey.
- **Sampling technique:** The study focuses on the collection of data from the retail investors of Gorakhpur city. Investors are scattered and it is not feasible to conduct the probability method. The data has been collected through the Judgemental Method of Non-Sampling.
- **Data Analysis :**  
Data analysis has been conducted with the help of SPSS AND Excel software. Firstly the collected data has been cleaned out, and coded and further analysis has been carried out by Descriptive Method, Univariate analysis to understand the profile of Investors, & Chi-square was chosen in order to study the association of variables.

## 6. DATA ANALYSIS AND INTERPRETATIONS

### Demography of Respondents :

The Demographic characteristics of respondents are presented with the help of Frequency analysis, and percentage. Table No. 1 shows the Gender of Respondents, the female is represented by 40%, and males are 60%. This signifies that males are the most active participants in making investments. Most of the respondents fall in the age group of (28-44), representing 29% of the respondents, the 0-28 age bracket is covering 22% of data, 55 and above is representing 22% of the respondents. 54% of the

respondents fall in the category of Matriculations, 24% have cleared their Intermediate, 165 of the respondents fall under the category of completing undergraduates, and only 5.3% of the respondents fall under the category of P.G. Marital status signifies that 55.6% are married, 23.1% are unmarried, whereas 21% of whom falls under widow category, Income of respondents has been categorized into 3 sub-categories and 52% falls under 0-5 Lacs, 34.7% falls under the category of 5- 10lacs, 13.3% falls under the category of above 10lacs signifies that middle category investors are the active participants in investment decision making. Most preferred investment avenues by respondents fall under the category of fixed deposits representing 27% of the investment made, 21% of the investments are made in mutual funds, and 19.8% of the investments are made in gold signifies that investors are more desirous of making an investment in the securities which will be giving an assured return.

**Table 1**

**Demographic Profile of Respondents**

Demographic Profile		Count	Column N %
<b>Gender of Respondents</b>	<b>Male</b>	<b>269</b>	<b>59.8%</b>
	<b>Female</b>	<b>181</b>	<b>40.2%</b>
<b>Martial Status of Respondents</b>	<b>Married</b>	<b>250</b>	<b>55.6%</b>
	<b>Unmarried</b>	<b>104</b>	<b>23.1%</b>
	<b>widowed</b>	<b>96</b>	<b>21.3%</b>
<b>Education of Respondents</b>	<b>10</b>	<b>246</b>	<b>54.7%</b>
	<b>12</b>	<b>108</b>	<b>24.0%</b>
	<b>U.G</b>	<b>72</b>	<b>16.0%</b>
	<b>P.G</b>	<b>24</b>	<b>5.3%</b>

The very first objective of the research study has been completed by describing various characteristics of the respondents. The second objective is focusing on studying the association between various demographic variables such as ( Age, Gender, Income, Educational, and Marital Status) in order to assess whether these factors are influencing investment choices or not.

**Table 2**

AGE GROUP	FREQUEN CY	PERCENTAGE
<b>0-28</b>	<b>105</b>	<b>23.3</b>
<b>28-44</b>	<b>134</b>	<b>29.8</b>
<b>44-55</b>	<b>112</b>	<b>24.9</b>
<b>55- 60</b>	<b>99</b>	<b>22.0</b>
<b>Total</b>	<b>450</b>	<b>100.0</b>

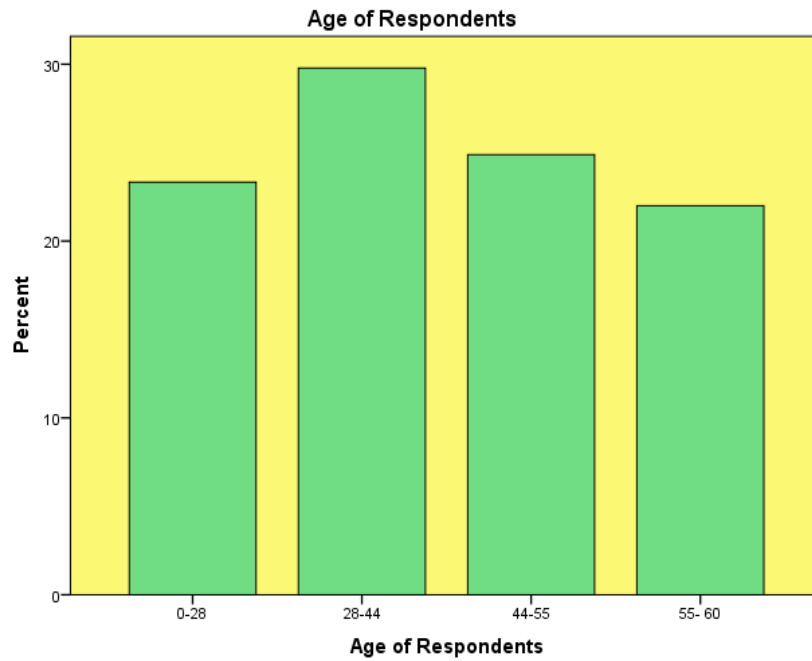
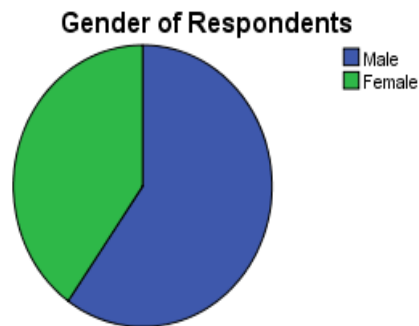


Table 3

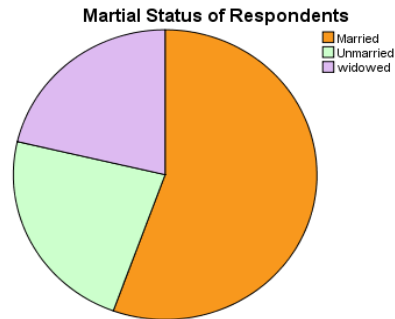
Gender of Respondents		
GENDERS	FREQUENCY	PERCENT
MALE	269	59.8
FEMALE	181	40.2
TOTAL	450	100.0



**Table 4**

**Marital Status**

Martial Status	Frequenc y	Percent	Valid Percent
Married	250	55.6	55.6
Unmarrie d	104	23.1	23.1
Widowed	96	21.3	21.3
Total	450	100.0	100.0



**Table 5**

**Income of respondents**

N	Valid	450
	Missing	0
Mean		1.61
Minimum		1
Maximum		3

Income	Frequenc y	Percent
0-5lacs	234	52.0
5-10	156	34.7
10-15	60	13.3
Total	450	100.0

**Objective: 2** To test the association between Demographic factors and Investment Avenues

**H0 :** There is no association between Marital status and Investment Choices

**H1:** There is a significant association between Marital Status and Investment Choices

**Marital Status of Respondents \* Investment Avenues Crosstabulation**

Count

Marital Status		Investment Avenues					Total
		Equity	FD	Gold	Mutual Funds	Real Estate	
Martial Status of Respondents	Married	67	63	47	60	13	250
	Unmarried	21	33	20	21	9	104
	widowed	25	27	22	11	11	96
Total		113	123	89	92	33	450

*Table 4*

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.475 <sup>a</sup>	8	.131
Likelihood Ratio	12.970	8	.113
Linear-by-Linear Association	.006	1	.940
N of Valid Cases	450		

The table above explains that a maximum 67 of married respondents have ranked Fixed Return Investments as their most preferred investment choice and the lowest of 13 respondents in this category have ranked Real Estate as their most preferred investment choice. Similarly, in the case of single respondents also, Fixed return investments are the most preferred investment choice 33 preferred FD and 9 Real Estate is the least preferred investment choice. So, apparently, there seemed to be no significant association between investment choice and the marital status of academicians of higher learning institutes of Indore. This was confirmed by a chi-square value of 12.75 with an asymptotic significance of .131.

**Gender of Respondents \* Investment Avenues Crosstabulation**

Count		Investment Avenues					Total
		Equity	FD	Gold	Mutual Funds	Real Estate	
Gender of Respondents	Male	73	57	56	65	18	269
	Female	40	66	33	27	15	181
Total		113	123	89	92	33	450

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.595 <sup>a</sup>	4	.004
Likelihood Ratio	15.578	4	.004
Linear-by-Linear Association	.857	1	.355
N of Valid Cases	450		

The table above shows that a maximum of 73 male respondents have ranked Fixed Return Investments as their most preferred investment choice, which is also the most preferred investment choice of the maximum of female respondents 40. In the case of the least preferred investment choice, male and female respondents have exhibited Real Estate. The chi-square value of 15.595 with an asymptotic significance value of 0.061 reveals that there is no significant association between investment choice and gender.



**Age of Respondents \* Investment Avenues Crosstabulation**

Count		Investment Avenues					Total
		Equity	FD	Gold	Mutual Funds	Real Estate	
Age of Respondents	0-28	38	29	22	26	7	105
	28-44	34	29	27	30	14	134
	44-55	31	38	24	15	4	112
	55- 60	27	27	16	21	8	99
Total		113	123	89	92	33	450

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.870 <sup>a</sup>	12	.309
Likelihood Ratio	14.585	12	.265
Linear-by-Linear Association	2.658	1	.103
N of Valid Cases	450		

The respondents were categorized in four age groups shown in the table above. The respondents in the youngest age group were different from all the other age groups in terms of their most preferred investment choice Equities and Derivatives as their most preferred investment choice, whereas the maximum number of respondents in all the other age groups have marked Fixed Return Investments as their most preferred investment choice. The chi-square value of 13.870 with an asymptotic significance value of .309 indicates that there is no significant association between investment choice.

**Income of respondents \* Investment Avenues Crosstabulation**

Count		Investment Avenues					Total
		Equity	FD	Gold	Mutual Funds	Real Estate	
Income of respondents	0-5lacs	64	58	46	49	17	234
	5-10	31	50	32	32	11	156
	10-15	18	15	11	11	5	60
Total		113	123	89	92	33	450

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.056 <sup>a</sup>	8	.752
Likelihood Ratio	5.098	8	.747
Linear-by-Linear Association	.002	1	.964
N of Valid Cases	450		

The table shows that mostly the respondents in 0-5 lacs have also invested in Equity , 5-10 lacs have invested in FD . The result shows that mostly the investment are made in FD’S . The result of chi-square signifying a value of 5.06 and the significance value .752 showing that there is no association between the Income and Investment Decisions.

**7. CONCLUSION, FINDINGS, LIMITATIONS OF STUDY & FUTURE SCOPE**

The key objectives of this study was to explore the investment choice of retail investors in Gorakhpur city. The study explored that “Fixed return investments” is the most preferred investment choice. This is followed by Gold/Silver/Precious Metals, Insurance and Annuities. A large number of studies have empirically evidenced that those in comparatively less income prefers to invest in less risky investment avenues like Fixed deposits, Post-office Savings, Government Securities, bonds, etc. For the purpose of this research work, all such investment avenues were categorized as fixed-return investments. Finding of the work should also be seen from the aspect of income level of individuals. Existing literature (see Riley and Chow, 1992:209, Cicchetti and Dubin, 1994:59, Schooley and Worden, 1996:219, Sung and Hanna, 1996a:24'. Grable and Lytton, 1999a:110, Grable E. John, 2000:104) more or less supports this notion that individuals with comparatively lower level of income prefers to invest in safer investment avenues. As the respondents of the study are retail investors with diversified incomes who are tend to have a low or moderate level of income, this finding of the work is also justifiable and is in line with earlier findings including literature quoted above. Approx. 52% of respondents of this study has reported a family gross annual income level of Rs. 0-5 Lacs or less and only 13.33% respondents have reported a family gross annual income of more than Rs. 10 Lacs. So, this finding of the study seems to be justifiable from this perspective as well. “Insurance and Annuities” being arrived as third most preferred investment choice of respondent. “Gold/Silver/other Precious Metals and Stones” has arrived as second most preference. A large number of studies regarding demographic and socio-economic factors affecting risk tolerance and investment choice of individuals have been conducted by various researchers and experts in the area of behavioral finance. The findings and conclusions drawn in most of these studies have been contradictory in nature and have further added to confusion in this regard. The basic reason behind this is that as risk tolerance and investment choice of individuals are behavioral in nature, these are largely affected by psychological traits and perceptions. Considering this aspect, following are the major limitations of this research work: The basic technical limitation of this research work is that it is based on sample and generalization can be made only for Gorakhpur investor not at India level Result and findings of this study are also not conclusive universally regarding demographic and socio-economic

traits affecting investment choice. Further the research can also be conducted for institutional investors as well. This study has not attempted to explore the impact of financial risk tolerance on investment decisions of the respondents, so the researchers of future may avail this platform to conduct their studies. Similar studies may also be conducted for other segments of the individuals in Indore, like professionals, employees of specific industries, working and nonworking women, etc.

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