

Financial Literacy of investors and its relation with Demographic Variables

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Published Online: 18 December 2020

Abstract

With the widespread increase in the financial inclusion drives throughout the world shows sufficient evidence that without proper financial literacy financial inclusion cannot be attained completely. In the financial economy there are so many instruments and each of having different advantages. The objective of the research paper is to find out the financial literacy level of retail investors of Gurugram and also check the relationship of demographic variables and financial literacy. The paper represents the overview of the relationship among financial literacy and the demographic variables. This paper mainly considered primary data to achieve the objectives but with that secondary data is also used. It has been found that the level of financial literacy is below the level required in the people to invest it as manifest from different studies. So, there is a need of some policy actions to be taken for strong the financial literacy so that people can make wisely decision to save and invest it in profitable investment alternatives. To find out the result descriptive statistics tool such as frequency, Crosstabs, compare means and one way ANOVA is used through SPSS to check the relationship between financial literacy level and demographic variables. This research paper is deliberated as the first of its kind conducted in Gurugram. The city Gurugram presently the millennium city and true representative of diversity of India is chosen to conduct the survey. From this study it was found that the financial literacy level of retail investors is still very low as per the requirement of the economy and some of the demographic variables have a relationship with financial literacy level.

Keywords: *Financial literacy, Financial inclusion, Literacy level, Demographic variables*

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1. Introduction

In current scenario financial literacy has become a serious issue in several groups like governments, bankers, employers, Stock Market, NBFC & various other industries particularly in developed nations. Financial literacy has gain such significance due to the introduction of various new financial products like SGB (Sovereign Bond), changing financial markets & changes in political, demographic, economic and socio-culture factors.

The provision of financial literacy in developing countries could be treated as a first step towards minimization of poverty. In our country where the largest part of the population especially in the rural areas deprived of recognized financial system, the provision of financial literacy is much more important. However India has the world's best proficient financial markets because of it technology and its rule, law & system.

The various ongoing projects over the world of policymakers and academicians, academic and empirical studies, reports etc. have demonstrate the significance of financial literacy as a skill which is necessary for participants operating in a complex financial landscape. A higher level of financial literacy of market participants plays a crucial role that helps financial market to achieve its primary objective of mobilization and allocating the savings more efficiently and effectively. The understanding of risk pooling and risk sharing opportunities enhance the efficiency of financial intermediation, so it is necessary to make the participants, borrowers and investors financially literate. A level of financial literacy in a particular economy provides a good indicator of the country's economic progress and expansion. So financial literacy is an effort towards reducing poverty, enhance standard of living and increasing financial stability of an economy. The OECD (Organization for Economic Co-Operation and Development) defines "Financial Literacy as a combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing." As it's evident that financial literacy is the first phase towards the financial planning and with the successful implementation of financial education drives to make the different sections of the society financial literate than only the financial inclusion drives are also going to be successful. Dr. K C Chakrabarty, Former Deputy Governor (RBI), at the workshop on "Financial literacy", conducted by The United Nations Development Programme, NABARD and Micro Save in Mumbai on 4 Feb. 2013 states that "everyone who is associated with financial system needs to be financially literate including all the users of financial services not only financial services users but the financially excluded poor, the lower and middle income groups as well as the high net-worth

individuals, those persons who are a supplier of services and even the maker of policy and the regulators also”. It is also evident from the different studies done in different countries at institutional/organizational stage as fit as at the academic level that financial literacy level is low and needs serious policy measures for its improvement. With the widespread increase in the financial inclusion drives throughout the world shows sufficient evidence that without proper financial literacy financial inclusion cannot be attained completely. If an individual lacks in financial literacy it will affect him in saving and investing wisely and in the long run this will lead to severe future problems like- children education planning, buying a home, retirement planning etc. In the present study, we are going to discuss about the financial literacy level and its association with demographic variables.

2. Review of Literature

Kumar and Aness (2013) “identified the determinant of financial literacy and financial education which are gender, age, education and income and geographical region & employment. The influence of elements advocates that the strategy for cultivating financial well-being of individuals in India should be concentrating on the young investors. The financial education can help a person to understand the various angles related to investment, risk and return associated with the fund which is invested and evaluating the various alternatives”. Gupta and Negi (2014): “focused on determining the financial literacy level of people living in Shimla and also analyzed the relationship between financial literacy and the demographic and socio economic factors. They found that the financial literacy level of male is more than female because the decision making power in the hand of male further people who are working in government, semi government or in private sectors are more financial literate in comparison to those who are business man or involve in agricultural activities. The education level also affects the level of financial literacy”. Padmasri Deka (2015): “observed that in India where women constitute 46% of total population majority of them are denied to opportunities and rights due to their financial dependence. Financial inclusion is much needed for women as it helps in increasing amount of regular savings along with enabling women to pay for micro insurance and obtain credit. It also helps in increasing income from employment and micro enterprise, usage of mainstream banking services that offer appropriate designed products and service. In other words financial inclusion makes women informed about their role and rights in economic development to improve access to markets and other information for overall empowerment”.

Biswas and Gupta (2015): “analyzed that financial literacy of rural people is lower than that of urban people. And this is one of the reasons for financial fraud that hit the state again and again. They further found that there was a statistical significant relationship between financial inclusion and financial literacy and then these two are complimentary to each other. Also demographic factors such as occupation, educational background, and household income are significantly associated with financial literacy”. Amberkhane et.al (2015): “found that financial literacy helps the people preventing them in getting into frauds taking place in financial sectors. So, there is a need for basic level of financial education in the curriculum of the school and also suitable inputs at college level that address the attitude and behavioral aspects in addition to knowledge”.

Arora (2016) “analyzed the financial literacy level of women working in the state of Rajasthan. The women from cities and towns had much financial knowledge as compared to women from rural origin. The women have positive behavior about financial matters but poor financial knowledge and lack of awareness about investment products. So, the financial knowledge can be improved among women at the school level or at least in the college”. Sharma and pandey (2017) “analyzed that with the different socio- demographic factors that affect the financial literacy, there are few other factors in India like joint family and consultative decision-making process which influence the finance literacy largely. It was further found that there is a positive relationship between financial knowledge but the negative relationship between financial attitude and financial behavior.” Shylaja and Parsad (2018) “focused on measuring financial access and usage dimensions of financial services with regards to banking services. It was found that there was a strong correlation between the increase in the number of bank branches and demographic and geographic distribution of bank branches. There is a need to educate people about the loan services because households are less availing to this service. The bank and central govt. should take up the task of ensuring financial inclusion even more seriously.”

3. Research Gap

In the light of the reviewed literature, it is observed that in India the financial literacy level is low that has been observed in various studies. The efforts to increase the financial education are done by RBI, financial institution, government and regulators so that people access the financial services. Most of the studies are region specific like status of financial literacy in Jhansi, Sonipat, Uttar Pradesh, Mumbai and Rajasthan; also include some other states of India or India as a whole. In this area few researches are available, so to fill this gap the

current study is finished in the area of Gurugram to find out the level of financial literacy of retail investors of Gurugram.

4. Objectives

The aim of the present is to measure the financial literacy level of retail investors of Gurugram the District of Haryana. For the fulfillment of the study following objectives are framed:-

- To investigate the financial literacy level among the retail investors.
- To analyze the financial literacy across investor's demographics.
- To evaluate the relationship between the financial literacy and various demographic variables.

5. Hypothesis

In the harmoniousness with the last objectives, the hypothesis is set for confirmation:

H₀₁: There is no significant difference regarding the financial literacy level amongst the respondents of different age group

H₀₂: There is no significant difference regarding the financial literacy amongst the male and female respondents

H₀₃: There is no significant difference regarding financial literacy amongst respondent of various income groups

H₀₄: There is no significant difference regarding financial literacy amongst respondent of various occupation groups

H₀₅: There is no significant difference regarding financial literacy amongst the respondents who possess general and technical qualification.

H₀₆: There is no significant difference regarding financial literacy amongst the respondent who have different work experience

H₀₇: There is no significant difference regarding financial literacy amongst respondent of various saving groups

6. Research Methodology

The main purpose of research methodology is to give work plan of research to the researcher. In the present study with keeping in mind the objectives and the available data the study is interested in exploration and description.

6.1 Sample: In the sampling unit retail investors are considered by using judgmental sampling and only contacted with them. To support the key objectives, a random sample would obviously not provide the desired investor and non-investor mix. Thus, the sample use a detailed and unique targeted sampling process, which is skewed towards localities with a higher number of ethnicity mix i.e. urban, rural, men, women, salaried, businessman, service sector employees, manufacturing sector employees, relative work experience in years etc. This ensures that the survey's sampling technique is exclusive and directed at generating accurate insights. Consequently, participants in the listings exercise are, on an average, a healthy mix and this survey cannot be compared to either earlier investor surveys or with other surveys that use different kind of sampling technique.

The population is infinite but for the sake of research the sample size is taken 125. This size is indicative and represents the demography we intend to study. For study both primary and secondary data has been collected.

6.2 Measure: A questionnaire has been used as research instrument for the intention to determine the financial literacy of the respondents. It is divided in two parts first for personal or demographic information and second is related to financial aspects. In second part 10 questions are based on basic financial knowledge in which objective type question are asked related to the concept of saving accounts, life insurance, risk and return, inflation, stock market etc. Another section of second part is based on advance financial literacy in which true and false type 10 questions are included based on the concept of fixed deposit, PPF, equity shares, mutual funds and debentures. To calculate the financial literacy level one marks given for every correct answer and zero for incorrect answer.

6.3 Statistical tool: The collected data is analyzed through SPSS and the techniques included simple statistics like descriptive analysis with the help of frequency distribution, cross tabulation, compute mean and in advance statistics one way ANOVA has been used.

6.4 Respondent's Profile: The majority of the respondents (58.4 percent) are dominated by age group of up to 30 years. 31.2 percent respondents fall under the age group between 31-45 years and rest 10.4 percent respondents belonging from the age group of above 45 years. The male respondents are 64.8 percent and 35.2 percent are female respondents. With respect to annual income 32 percent respondents come under the income slab of Up to 3 lakh. The annual income between 3-5 lakh was earned by 32.8 percent respondents. The occupation is heavily dominated by employee (govt. /private) i.e. 69.6 percent. Respondents belonging to the category of professional are 16.8 percent and rest are businessmen (13.6 percent). The respondents (61.6 percent) have general qualification and 38.4 percent respondents have professional qualification. With regard to years of work experience, 49.6 percent respondents possess work experience of up to five year. According to number of years of investment experience it is constituted by 65.6 percent respondents who have been investing for up to 5 years, 17.6 percent respondents who have been investing for 6-10 years, while 16.8 percent respondents have been investing for more than 10 years. (Table 1)

Table 1 Respondent's Profile Sheet

Characteristics	Frequency	Percent
Age		
below 30	73	58.4
30-45	39	31.2
above 45	13	10.4
Gender		
Male	81	64.8
Female	44	35.2
Annual Income		
up to 3 lakh	40	32
3-5 lakh	41	32.8
above 5 lakh	44	35.2
Occupation		
Employee	87	69.6
Professional	21	16.8

Businessmen	17	13.6
Qualification		
General	77	61.6
Professional	48	38.4
Work experience		
less than 5	62	49.6
5 to 10	44	35.2
10 &more	19	15.2
Investment period		
less than 5	82	65.6
5 to 10	22	17.6
more than 10	21	16.8

Source: Field survey

7. Data analysis and finding

A level of financial literacy in a particular economy provides a good indicator of the country's economic progress and expansion. So financial literacy is an effort towards reducing poverty, improve the standard of living and increasing financial stability of an economy. So, the present study examine that what is the financial literacy level of our investors and the association between financial literacy level and demographic variables.

Analysis of Financial Literacy Level

To present transparency in the discussion, firstly financial literacy level has been calculated "The financial literacy of respondents was measure by calculating respondent's total score as the percentage of correct answer (Lyons, 2007), by attempting the total 20 questions". Out of these, 10 questions were related to basic financial literacy and 10 questions were related to advance financial literacy. For structured the level of financial literacy, the median was calculated using percentage of the correct answers of respondent. The score of the respondents if equal to median or above the median then they are considered as respondents who have higher level of financial literacy and if respondents score is less than the median then they are considered as respondent who have lower level of financial literacy.

From the complete survey the central tendency values are calculated which are shown in Table 2 those are calculated with the help of the responses composed from every investor. The outcome shows that 74.2 percent answers are corrected of the respondents on an average. For the correct score the median percentage is 75.00.

Table 2 Overall Financial Literacy of Respondents

Central tendency	Value
Mean	74.2
Median	75.00
Std. deviation	17.4631
Minimum	15
Maximum	100

Source: Field survey

The results came from the analysis shows that 58.4 percent respondents (n=73) scored equal to or greater than the calculated value of median that is shown in the table, therefore the respondents who are scored more than or equal to the median value are considered as the investors with higher level of financial literacy. The result also shown that out of the total 41.6 percent respondents (n=52) scored lower than the calculated value of median. So these respondents are considered as investors that have a lower level of financial literacy.

Figure 1: Classification of respondents

Analysis of Financial Literacy across Investor's Demographics

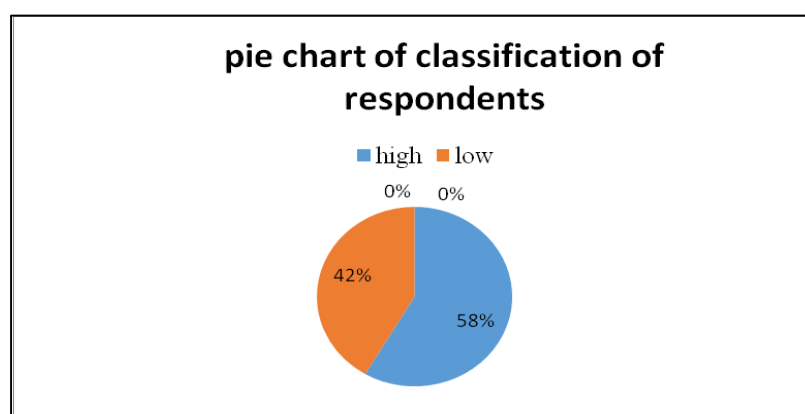


Table 3: Level of Financial Literacy among Demographic Variables

Demographic dimensions		Levels		
		Low Count (%)	High Count (%)	Overall status Count (%)
Age	Upto 30	31(42.47)	42(57.53)	73(100)
	31-45	14(35.90)	25(64.10)	39(100)
	Above 45	7(53.85)	6(46.15)	13(100)
Gender	Male	31(38.27)	50(61.73)	81(100)
	Female	21(47.73)	23(52.27)	44(100)
Annual Income	Upto 3 lakh	25(62.5)	15(37.5)	40(100)
	3.1-5 lakh	18(43.90)	23(56.10)	41(100)
	Above 5 lakh	9(20.45)	35(79.55)	44(100)
Qualification	General	38(49.35)	39(50.65)	77(100)
	Professional	14(29.17)	34(70.83)	48(100)
Occupation	Employee	40(45.98)	47(54.02)	87(100)
	Professional	4(19.05)	17(80.95)	21(100)
	Businessmen	8(47.06)	9(52.94)	17(100)
Work Experience	Upto 5	29(46.77)	33(53.23)	62(100)
	6 to 10	14(31.82)	30(68.18)	44(100)
	Above 10	9(47.36)	10(52.63)	19(100)
Investment Period	Upto 5	38(46.34)	44(53.66)	82(100)
	6 to 10	7(31.82)	15(68.18)	22(100)
	Above 10	7(33.33)	14(66.67)	21(100)

Source: Field survey

The next objective of the study is to find out whether there is any relationship between financial literacy level and demographic variables. To evaluate the variation in demographic variables about financial literacy the One-way ANOVA has been used. Through this statistical tool it can be confirmed whether the difference among financial literacy and demographic variables i.e. age, gender, income etc. is statistically significant or not and the result of the same are presented in Table 4. The first null hypothesis is that there is no significant difference regarding financial literacy level among respondents of various age groups. The mean value of age group 30-45 is high in comparative to other but on the basis of

one way classification of ANOVA, the variations has been found insignificant at 0.05 level ($p = 0.79$). Hence null hypothesis is accepted. It reveals from the result that there is no difference in various age group of respondents regarding financial literacy. On the basis of gender variable, the mean value of male i.e. 1.62 is slightly high followed by the mean value of female but the t-value is 1.041 and p-value is 0.31 which signifies insignificant variation at 0.05 level and hence H_{02} is accepted. From the result we can abstract that the literacy of male and female is almost same and both have capable of making financial decision in present economic environment. According to the annual income of investors the mean value for financial literacy level are 1.37, 1.56 and 1.79 for the income group of up to 3 lakhs, 3 to 5 lakhs and above 5 lakhs. It has been found that the highest mean score (1.79) is shown by income group of above 5 lakhs. The t-value is 17.171 is significant at 0.05 level. So H_{03} is rejected on the basis of above finding. It means the difference between the income group of respondents regarding financial literacy is different.

When the financial literacy of investors are considered with respect to occupation it was found that professionals have witnessed maximum level of financial literacy (mean score = 1.81) as compared to employees (mean = 1.54) and businessmen (mean = 1.52) respectively. According to occupation of respondents, the result reveals that the investors who are working under the supervision of employer and the businessmen are not much aware about the financial matters. The t-value is 5.080 and p-value is 0.02 which depicts significant at 0.05 level, leads to reject the H_{04} . Thus it can be extracted that there is a relevant difference in the financial literacy level with concerns to occupation of retail investors.

It is highlighted from the table that who have done professional course have higher knowledge of financial literacy. The mean value for professional and having general qualification are 1.71 and 1.51 respectively. Further the t-value 0.521 is insignificant at 0.05 level ($p \text{ value} = 0.47$), hence H_{05} is accepted. It implies that there is no relevant difference between qualifications of respondents with respects to financial literacy level. According to work experience of investors it has been found that the highest mean score (1.68) is shown by the experience holder come under the category of 6 to 10 years. The t-value is 0.273 and the p-value is 0.602 which is insignificant at 0.05 level, hence H_{06} is accepted. So it can be said that there is a no relevant difference among the respondents of various work experience groups with respects to financial literacy. With regards to investment period it was found that the mean value is 1.53 for Upto 5 years, 1.68 for 6 to 10 years and 1.67 for above 10 years. Further the t-value 1.775 and p-value is 0.18 which reveals that it is insignificant at 0.05 level of significant so H_{07} is accepted.

So, the findings exemplify that there is relevant difference among financial literacy level depends on annual income and occupation. Surprisingly the difference in financial literacy level is irrelevant depends on age, gender, qualification, and work experience and investment period. **Actually it is not expected but our result shows that the difference between age, gender, qualification, work experience respondents regarding financial literacy is not different.**

Table 4 Association among Demographic Variables and Financial Literacy Level

Demographic dimensions		Mean	t-value	Sig.
Age	Upto 30	1.57	.065	.799
	31-45	1.64		
	Above 45	1.46		
Gender	Male	1.62	1.041	.310
	Female	1.52		
Annual Income	Upto 3 lakh	1.37	17.171	.000
	3.1- 5 lakh	1.56		
	Above 5 lakh	1.79		
Occupation	Employees	1.54	5.080	.026
	Professional	1.81		
	Businessmen	1.52		
Occupation	General	1.51	.521	.472
	Professional	1.71		
Work experience(Yrs.)	Upto 5	1.53	.273	.602
	6-10	1.68		
	Above 10	1.52		
Investment period(Yrs.)	Upto 5	1.53	1.775	.185
	6-10	1.68		
	Above 10	1.67		

Source: Field survey

At significant level 5%

8. Conclusion

In today's scenario the importance of financial literacy is due to development of economy and enhancement of the financial market. Financial literacy means, "The possession of knowledge and understanding of financial matters. Financial literacy is mainly used in connection with personal financial matters". On the basis of data analysis it is finalized that the level of financial literacy of respondent is still very low as per the requirement of the economy. With regard to the demographic and the socio economic profile of respondents and the financial literacy, it was found that female possess lower level of financial literacy as compared to male. The respondents whose income level is above 5 lakh and work experience of 5 to 10 years and also invested in investment alternative more than 5 years makes maximum no. of inquiries while investing, possess comparatively upper level of financial literacy. After testing the hypothesis the result reveals that annual income and occupation have significant difference regarding financial literacy level of respondents. So some demographic variables have a relationship with financial literacy level.

9. Implication of the Study

The main focus of the study is on the investors because they play a crucial role in the capital market of the country. The study reveals that even the investors did not have a good knowledge of financial matters. This is a serious issue for the economic growth of the country. Even in the urban and metro city like Gurugram the investors registered a low level of financial literacy. So the study is a resource to help the policy makers and other representative to take necessary action and make plan for future in this context.

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Appendix

Questionnaire

I Meenakshi, Research scholar of M.Phil Programme, requested to spare your precious time to answer the following questions; which will help me in carrying out my dissertation research work on the topic “Role of Financial Literacy in Investment Decision Making of Retail Investors in Gurugram city”. Information collected is only for academic purpose and will be kept secretly confidential.

Section A- Personal Information

1. Name(Optional): _____

2. Age(in years):

Upto 30 31-45 above 45

3. Gender: Male Female

4. Annual Income:

Up to 3 Lakh 3.1-5 lakh Above 5 lakh

5. Occupation:

Employee-Govt. /Private Professional Businessmen

6. Qualification:

General ☐Professional ☐

7. Works experience (in years):

Upto 5 ☐6 to 10 ☐above 10 ☐

8. How long have you invested your saving?

Upto 5 ☐5-10 years ☐above 10 ☐

Section B (I) - Basic financial literacy

1. Out of following, which account cannot be open by layman individual?

Savings account ☐ Current account ☐ DEMAT account ☐

2. Savings Account is opened in:

Post office ☐ LIC ☐ Post office & Banks ☐

3. Life Insurance is for:

Savings & Investment ☐ Risk Cover ☐

4. When an investor spreads his money among different assets, does the risk of losing money:

Increase ☐ Decrease ☐ Don't know ☐

5. High inflation means that the cost of living is increasing rapidly

True ☐ False ☐ Don't know ☐

6. Stocks are normally riskier than bonds .

True ☐ False ☐ don't know ☐

7. Out of following; normally which asset displays the higher price fluctuations over time?

Savings account ☐ Bonds ☐ Stocks ☐

8. KYC: "Know your customer" (KYC) is a document, which is used for customer/client identification process.

True ☐ False ☐ Don't know ☐9. Regulatory body as a part of market structure: Out of following which is not the regulatory authority. IRDA ☐ RBI ☐ AMFI ☐

10. Which of the following is the main function of the stock market?

Predict stock earnings ☐ Increase in the price of stocks ☐Brings people who want to buy stocks together with those who want to sell stocks ☐

Section B (II) - Advanced Financial Literacy

Following are the statements regarding the features of various investment alternatives available for individual investors. On the basis of your understanding and knowledge about the investment alternatives answer the following (Tick any one)

		True	False	Don't know
	Fixed Deposits			
1.	It is a lump sum amount in the bank at a certain rate of interest for a fixed period of time			
2.	Rate of interests offered on fixed deposits by various banks are same.			
	Public Provident Fund (PPF)			
3.	There is no minimum and maximum limit of investment made in PPF per year.			
4.	There is no lock in period for PPF.			
	Equity Shares			
5.	An equity shares represent the ownership of a company.			
6.	The return that the owner of a share receives is known as earning per share.			
	Mutual Fund			
7.	When an investor invests in mutual fund, he receives units in return.			
8.	Mutual funds pay a guaranteed rate of return which depends on their past performance.			
	Debentures and Bonds			
9.	Investment in infrastructure bonds is not eligible for income tax benefits.			
10.	The return on bonds and debentures is remaining same over the investment period.			