International Journal of Advanced Research in Commerce, Management & Social Science (IJARCMSS)
ISSN : 2581-7930, Impact Factor : 5.880 , Volume 05, No. 01(II), January - March, 2022, pp 154-169

FINANCIAL LITERACY AND ITS DETERMINANTS: EVIDENCE FROM DELHI-NCR

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ABSTRACT

Purpose: *The purpose of this article is to determine the level of financial literacy along with its components amongst respondents of Delhi-NCR*

Design/Methodology/Approach: *Data is collected through random sampling and first-hand information is received through a structured questionnaire. Multivariate regression analysis is used for finding results.*

Findings: *As a percentage to the maximum, the mean financial literacy, financial attitude, financial knowledge and financial behaviour scores are found to be 72, 69, 77 and 69 per cent respectively. Gender, education, age and income are found to be significant determinants of financial literacy scores.*

Practical Implications: *To substantiate the efforts initiated by the Government, financial literacy programmes at the level of educational institutions can improve financial literacy and behavioural change. Basic financial concepts can augment one's understanding of money multiplying and its long-term implications. An early start for each individual leads to wealth creation at personal level and contributes to the country's economic growth.*

Originality/Value: *A comprehensive study has helped to identify areas that require attention, such as compound interest and risk diversification. Since mean financial literacy scores are higher among men, higher income groups and higher levels of education, the policy must focus on females, lower income and age groups.*

Keywords: *Financial Literacy, Financial Attitude, Financial Knowledge, Financial Behaviour.*

Introduction

Financial Literacy enables a person to make viable and informed choices with respect to management of money. To let the future take care of itself and spend the present income is not a wise financial strategy. Struggling with basic financial calculations and concepts and not being able to decide the financial products to invest in, is certainly not a desirable outcome. Financial literacy, not only, helps in multiplying money but also helps in planning and realizing financial needs such as retirement goals, expenses on education, buying a car or property or even going on a vacation. With a large variety of financial products available in the market, financial literacy provides the ability to compare, evaluate and choose the products wisely. In the words of OECD INFE (2011:3), financial literacy is "a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing". It is important for people to acquire financial literacy not only to augment their personal financial strength but also to give positive thrust to development of the economy as a whole. Effective management of money promotes resource mobilisation and contributes to economic growth. Financial planning, contingency savings and wise investments are important both at personal and economy level for inclusive growth and development of a sound financial system.

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The COVID-19 pandemic has taught us a major lesson, as numerous families have gone through extreme financial distress. It is extremely important to engage in money management. A sound knowledge of financial concepts and financial back-up serves as a breakthrough in sailing through a crisis.

Huge variations have been observed in levels of financial literacy across countries. The Standard & Poor's Ratings Services Global Financial Literacy Survey (S&P Global FinLit Survey) Report, 2014 finds levels of financial literacy[1] to be low globally and women trailing behind men. The financial literacy levels are observed to be the highest (65% and above) in Australia, Canada, Denmark, Finland, Germany, Israel, the Netherlands, Norway, Sweden, and the United Kingdom. South Asian countries exhibit lowest financial literacy rates (25% or less). Among the BRICS, the percentage of financially literate adults ranges from 28% in China, 35% in Brazil, 38% in Russian Fed to 42% in South Africa.

As per OECD/INFE 2020 International Survey of Adult Financial Literacy covering twenty six countries from Asia, Europe and Latin America, the average score[2] is found to be only 12.7 or just under 61% of the maximum financial literacy score. The average score for respondents from participating OECD member countries is marginally higher at 13. The survey finds the financial literacy score to be highest in Hong Kong and lowest in Italy. Since most countries had a score between 12 and 14, it suggests that there is a scope as well as a need for improving various elements of financial literacy. The survey also finds men to have statistically greater financial knowledge and financial well-being scores and young people (aged 18-29) to have lower financial literacy and financial attitude scores than the rest of the sample consistently and significantly.

The S&P's Global FinLit Survey, 2015 finds prevalence of financial literacy in India to be a meagre 24 per cent(See Klapper et al; 2015). This percentage is not only lower as compared to developed countries but also lower than several Asian countries such as Singapore (59per cent), Sri Lanka (35per cent) and Pakistan (26per cent).

NCFE (2019) finds the overall Financial Literacy in India as 27per cent with Goa, Chandigarh and Delhi being the top three states and Odisha, Sikkim and Chhattisgarh at the bottom. There are several studies that document the state of financial literacy in India. Lower levels of financial literacy in women as compared to men are observed in various studies such as Agarwalla et al (2015) for six major cities spread across urban India, Choudhary and Kamboj (2017) for Haryana and Sinha (2018) for the state of West Bengal.

In terms of components of financial literacy, Agarwalla et al (2015) find that both men and women in cities across India have low levels of financial knowledge, men show poor financial attitude and women show poor financial behavior. Arora (2016) finds that women have performed comparatively better in terms of financial attitude and behaviour as compared to financial knowledge score. Choudhary and Kamboj (2017) find that though the majority of people possess basic financial knowledge and exhibit positive financial behaviour, more than half of the respondents lack a positive financial attitude. Kiliyanni and Sivaraman (2018) find low levels of financial literacy among educated youth in the state of Kerala; and gender, age, religion, discipline of study, occupation, personal income as key determinants of financial literacy. Patel (2018) finds respondents in the state of Gujarat to be reasonably well-informed about financial terms, concepts and its working.

Several studies have been conducted on financial literacy among Indian women. Arora (2016) finds that awareness about financial planning tools and techniques among women remains poor due to poor financial knowledge, their reliance on other family members for finance related matters and non-involvement in investment decisions; and that single woman outperforming married women in terms of their financial literacy score. The study by Chijwani (2014) on financial literacy among working women in Pune reveals that financial literacy scores among women are low but women in urban areas seem to have financial freedom to make decisions with respect to their personal investments as well as for the family as a whole. However, the majority of females were found to be highly ignorant about investment opportunities in the market and reported not having a demat account or not trading frequently. Bordoloi (2019) finds low levels of financial literacy among women working in the unorganised sector of Guwahati city. Mathivathani and Velumani (2014) find a low level of financial literacy among women in rural areas of Tamil Nadu among marginalized rural women.

There are several studies that focus on the impact of socio-demographic factors on financial literacy. Bhushan and Medury (2013) find, using a sample of three districts namely Shimla, Solan and Kangra of Himachal Pradesh, that the financial literacy level of males is higher than that of females, level of financial literacy is positively related to education, income level, people working in urban areas and non-government jobs compared to those working in rural areas and government jobs. Agarwalla et al (2015) find similar results for gender, education and income among youth in Indian cities and also conclude that participatory family processes and the consultative decision-making process also affect financial literacy. Bordoloi (2019) concludes that demographic and socio-economic variables such as age, income and marital status do impact financial literacy among women working in the unorganised sector of Guwahati city, but education and occupation are found not to have any substantial effect. Choudhary and Kamboj (2017) find low levels of income, income instability and low age to be associated with lower levels of financial literacy.

This article, using primary data collected through a survey with the instrument largely based on OECD questionnaire, aims to measure the level of financial literacy of people residing in Delhi-NCR, to identify patterns in financial literacy and its components across gender, age, marital status, education, occupation, income level and to explore the determinants of financial literacy and its components.

Methodology

We use the structured questionnaire developed by the OECD INFE (International Network on Financial Education) and have suitably modified it keeping in mind the socio-cultural context of the population. The questionnaire was prepared in both English and Hindi.

The following discussion on measuring financial literacy is largely based on OECD INFE (2011) that gives a detailed description of the questionnaire as well as guidelines to generate financial literacy scores. The extent of financial literacy of a person is gauged by aggregation of three parameters, namely financial knowledge, financial behaviour and financial attitude. The questionnaire comprises nine questions related to financial knowledge, eleven questions pertaining to financial behavior and three questions pertaining to financial attitude. The questions on financial knowledge (FK) aim to test the numeric ability of respondents to calculate simple interest, compound interest, risk-return relationship, impact of inflation on cost of living, diversification of investment portfolio and awareness of various sources of investment. The questions on financial behaviour (FB) include behaviours relating to budgeting, active saving, avoiding borrowing to make ends meet, choosing products after comparison, keeping watch on financial affairs, striving to achieve goals, making considered purchases, paying bills on time. Each question carries one point each. Each question for financial knowledge and behaviour is given equal weightage with one point for each correct answer. The questions on Financial Attitude (FA) include the respondent's preference to spend, tendency to live for today, and preference to consume. These responses are collected on a five-point Likert scale. The FA score is computed by adding the scores for the three attitudinal questions and dividing it by three.

The Financial literacy (FL) score, out of 25, is obtained by adding the scores of the three dimensions, namely, financial attitude (maximum score being 5), financial knowledge (maximum score being 9) and financial behaviour (maximum score being 11). We then categorize, for overall financial literacy as well as its three dimensions, a score of 80per cent and above as "High", 60-80per cent as "Moderate" and a score of less than or equal to 60per cent as "Low".

The scores for financial knowledge, financial behaviour, financial attitude and financial literacy are then graphically presented against various characteristics of respondents such as gender, age, qualification, marital status, monthly family income and stability of income. These visualizations help us to understand in which particular categories of various characteristics the scores are observed to be high, moderate or low.

Lastly, multi-variate regressions are estimated, using ordinary least squares (OLS), to explore the determinants of financial literacy and its components. The Financial Literacy and its component scores are taken as the dependent variable and independent variables include respondents' characteristics, namely gender, education, marital status, monthly family income and stability of income. The regression equations estimated are as follows:

$$FIN\_LIT_i = \alpha_1 + \beta_{11}GENDER_i + \beta_{12}\,AGE + \beta_{13}EDUC_i + \beta_{14}\,MARITAL_i + \beta_{15}INCOMEi + \beta_{16}\,STABILITYi + u_{1i}$$

$$FIN\_ATT_i = \alpha_2 + \beta_{21}GENDER_i + \beta_{22}\,AGE + \beta_{23}\,EDUC_i + \beta_{24}\,MARITAL_i + \beta_{25}\,INCOMEi + \beta_{26}\,STABILITYi + u_{2i}$$

$$FIN\_BEH_i = \alpha_3 + \beta_{31}GENDER_i + \beta_{32}\,AGE + \beta_{33}\,EDUC_i + \beta_{34}\,MARITAL_i + \beta_{35}\,INCOMEi + \beta_{36}\,STABILITYi + u_{3i}$$

$$FIN\_KNOW_i = \alpha_4 + \beta_{41}GENDER_i + \beta_{42}\,AGE + \beta_{43}\,EDUC_i + \beta_{44}\,MARITAL_i + \beta_{45}\,INCOMEi + \beta_{46}\,STABILITYi + u_{4i}$$

Where,

FIN_LIT = Financial Literacy score

FIN_ATT = Financial Attitude score

FIN_BEH = Financial Behaviour score

FIN_KNO = Financial Knowledge score

GENDER = 1 if Female, 0 otherwise

AGE = 1 if Age >=30 years, 0 otherwise

EDUC= 1 if Graduate and above, 0 otherwise

MARITAL= 1 if married, 0 otherwise

FAM_INC = 1 if Monthly Family Income is more than Rs. 60,000, 0 otherwise

STABILITY = 1 if income is stable, 0 if unstable

Data and Sample Profile

The responses for a sample of 1005 respondents from Delhi-NCR were collected during the period February 2021 to April 2021 through a primary survey with a combination of online and offline mode using face-to-face interaction, online meetings and telephonic conversations. Figure-1 gives an overview of the respondents' profile in terms of gender, age, qualification, marital status, employment status, monthly family income and stability of income.

The sample comprises 33per cent males and 67per cent females. 35per cent of respondents have qualification below graduation, 42per cent of respondents are graduates and 23per cent have qualification above graduation. 78per cent of respondents belong to the age-group of 18-29 years and 22per cent fall in the higher age groups. 78per cent of respondents have marital status as Single and 22per cent are married. 25per cent of respondents report monthly family income upto Rs. 40,000, 14per cent have monthly family income in the range of Rs. 40,000 to Rs. 60,000 and 61per cent have monthly family income of Rs. 60,000 and above. We also asked respondents as to whether they perceive their income to be stable. 78per cent of the respondents reported that they perceive their income to be stable while 22per cent of respondents reported their income to be unstable.

Findings and Discussion

The summary statistics of scores are presented in Table-1. The mean financial literacy score for the entire sample is 18 that is 72per cent as a percentage of maximum score; minimum score is found to be 6 and maximum is observed to be 25. The mean financial attitude score is 3.44 (that is 69per cent as a percentage to maximum), minimum score is 1 and maximum is 5. The average financial knowledge is found to be 6.95 (that is 77per cent as a percentage to the maximum), minimum score is 0 and maximum is 9. The average financial behaviour score is observed to be 7.69 (that is 69per cent of maximum, minimum score is 1 and maximum is 11. While mean scores for financial attitude and financial behaviour are lower at 69per cent, the mean score for financial knowledge is relatively higher at 77per cent. Hence, efforts to augment financial literacy will require focus on all three components, more so on attitude and behaviour.

The mean scores as a percentage of maximum for the present sample for financial literacy (72per cent), financial attitude (69per cent), financial knowledge (77per cent) and financial behaviour (69per cent) are relatively higher than the mean scores as a percentage of maximum obtained in the OECD (2020), namely 67per cent for financial literacy, 59per cent for financial attitude, 63per cent for financial knowledge and 59per cent for financial behaviour.

The percentage of respondents in "High", "Moderate" or "Low" categories for various scores are given in Figure-2. The results show that 40.2per cent of the respondents fall in the high financial literacy category with a score of 80per cent and above, 42.39per cent of respondents in the "Moderate" category with their scores in the range 60-80per cent and 17.49per cent fall in the low literacy category with their scores being less than60per cent. Coming next to financial attitude scores, 38.81per cent of respondents exhibit a high level of financial attitude, 34.23per cent moderate and 26.97per cent exhibit low level of financial attitude. As far as financial knowledge scores are concerned, 45.77per cent of respondents exhibit a high level of financial knowledge, 43.88per cent moderate and 10.35per cent represent low level of financial knowledge. Regarding the financial behaviour scores, 43.18per cent of respondents exhibit high level of financial behaviour, 27.06per cent moderate and 29.75per cent low level of financial behaviour.

While only 10.35per cent of the respondents fall in the “Low” category of Financial Knowledge, a higher percentage of respondents fall in the “Low” category of Financial Behaviour (29.75per cent) and Financial Attitude (26.97per cent). This clearly shows that mere knowledge of concepts is not sufficient, financially correct attitudes and behaviours are also needed which then become important issues to be addressed.

We now present the mean scores of financial literacy and its parameters vis-a-vis various characteristics of the respondents (Figure-3 here).

The mean scores are found to be lower for females (17.52 for financial literacy, 6.71 for financial knowledge and 7.37 for financial behaviour) as compared to males (19.27 for financial literacy, 7.44 for financial knowledge and 8.34 for financial behaviour). However, the mean scores for females and males for financial attitude are quite close (3.42 for females and 3.49 for males). The mean scores for married respondents are found to be higher (19.34 for financial literacy, 7.23 for financial knowledge and 8.75 for financial behaviour) as compared to those who are not married (17.76 for financial literacy, 6.88 for financial knowledge and 7.39 for financial behaviour). However, the mean scores for financial attitude are slightly lower for married respondents (3.37) as compared to respondents who are single (3.47). As can be seen Figure-3, the average scores for financial literacy, attitude, knowledge and behaviour and are higher in higher income-groups as compared to lower income groups, whether we take the cut-off monthly income level to be Rs. 40,000 or Rs. 60,000.

To summarize, we find higher average financial scores among respondents who are males, who are married, who are in higher income-groups, who belong to higher age-groups, who have higher educational qualification, and those who have stable income.

We now explore the percentage of respondents falling in the categories of high, moderate and low scores of Financial Literacy and its parameters across various characteristics of respondents. We first discuss the results for Financial literacy scores (Figure-4 here). The proportion of males (55.65per cent) in the “High” financial literacy score category is much higher than for females (32.44per cent). The proportion of married persons (54.79per cent) in the “High” financial literacy score category is much higher than for single (36.13per cent). The percentage of respondents with high financial literacy score is 27.68per cent among those whose qualification is below graduation, while it is 57.71per cent for graduates and above. High financial score is observed among 29.48per cent of the respondents with monthly family income less than Rs. 40,000, whereas the corresponding percentage is much higher at 43.77per cent for those with monthly family income of Rs. 40,000 and above. The percentage of respondents with high financial literacy score is relatively higher among those who have stable income (42.88per cent) as compared to those with unstable income (30.59per cent). To summarize, the percentage of respondents with a high financial literacy score is higher among males, rises with education level, income level, marriage and stability of income.

We now turn to financial attitude scores (Figure-5 here). The percentage of respondents who score high on financial attitude is higher among males as compared to females, among single as compared to married, among those with higher education outcome as compared to those with education level below graduation and those with higher income. The percentage of respondents with a high attitude score is observed to be slightly higher among those who have unstable income compared to those who have stable income. As can be seen from Figures 6 and 7, amongst the respondents who have scored high on financial knowledge and financial behaviour, males are faring far better than females and the percentage of married respondents is higher. Higher financial knowledge is observed in respondents with higher education levels, higher income level and stability of income.

To summarize, a similar pattern is observed across all financial scores. Better scores are observed for males relative to females, married relative to single status respondents, those with higher family income relative to lower income, those with higher education relative to lower education and those with stable income relative to those with unstable income. This is in line with global evidence (see Xu and Zia; 2012 for a summary of global evidence).

We now analyze responses to the three questions that make up the parameter of Financial Attitude. As can be seen from Figure 8, 45.27per cent of respondents prefer to spend than to save, 41.29per cent tend to live for today and let tomorrow take care of itself; and 60.7per cent agree with the statement that money is there to be spent. This implies that a high proportion of respondents seem to possess a carefree and non-serious kind of attitude towards use of money and do not seem to be much bothered about the future.

Coming next to the questions on financial knowledge, nearly 95.12per cent of respondents could handle simple division and nearly 98.31% are familiar with formal sources of investing money. 89.75per cent of the respondents are familiar with the concept of interest and 80.5per cent can correctly calculate simple interest (Figure-9 here). While 84.58per cent respondents correctly answered the question on the relationship between inflation and cost of living, only 69.85per cent answered correctly the question on impact of inflation on purchasing power. Less than 50per cent respondents gave the correct answer on whether diversification can help reduce risk. Only 47.36per cent could calculate compound interest correctly. This is indeed unfortunate as the power of compounding is immense and if people are not aware of how compound interest works, it implies they are unaware about how money can multiply using the principle of compounding. The "interest on interest" concept has been highlighted by Einstein in "mankind's greatest invention" and "eighth wonder of the world". In the words of Benjamin Franklin, "Money makes money. And the money that money makes, makes money." The fact that a large percentage of respondents are not able to handle the question on compound interest depicts a low level of literacy in this regard that indeed turns out to be too expensive in terms of lost financial opportunities.

We probed into the profile of respondents to get further insights related to knowledge about compound interest. As shown in Figure-10, we find that as compared to males, less proportion of females have correctly answered the question on compound interest. Across age-groups, correct response is recorded by 44.9per cent of respondents with age 18-29 years, 53.33per cent in the age group 30-39 years, 46.58per cent in the age group 40-49 years, 74.42per cent in the age group 50-59 years and 60per cent in the age group 60 years and above. Clearly, literacy related to compound interest is low in younger age groups. This low level of awareness would then translate into lower efforts to seek and invest in avenues that lead to wealth creation effect.

Figure -11 presents the summary of responses to various questions pertaining to financial behaviour. We find that more than 80per cent of respondents consider affordability before buying a product, pay bills on time, gather information before investing and do not rely on credit to make ends meet. However, only 68.46per cent of respondents keep a close watch on their personal affairs and 65.27per cent of respondents prefer to set long term financial goals. This clearly shows low prevalence of financial planning. We probe deeper into the profile of respondents who do not engage in financial planning. As presented in Figure-12, we find that the proportion of females (62.33per cent) engaged in planning is less than males (71.13per cent). The proportion engaging in financial planning increases with the level of education and therefore, programmes must be devised to start financial orientation early. School curricula, for example, can include modules on financial awareness so as to promote financial literacy.

Exploring Determinants of Financial Literacy Scores

In order to explore the determinants of financial scores, each of the four scores- financial literacy scores financial attitude scores, financial knowledge scores and financial attitude scores- are regressed on various characteristics of respondents such as gender, age, income, education, marital status and income stability. The regression results are reported in Table-2. The findings indicate that gender, education, age and income are significant determinants of financial literacy scores. The average financial literacy score is lower by 1.5 points for females as compared to males, higher by 0.88 points for persons who are graduates than those who are not graduates, higher by 1.05 points for persons with family income equal to or more than Rs. 40,000 per month than those whose income is lower and higher by 1.07 points for persons with age more than 30 years as compared to those whose age is less than 30 years. Financial literacy is found to rise with education level, income, age and is higher among males. In other words, relatively lower levels of financial literacy are indicated among women over men, younger groups over older age groups, lower income over higher income, less educated than more educated.

Coming next to financial knowledge, gender, age, income and stability of income turn out to be significant determinants of financial knowledge scores. The average financial knowledge score is lower by 0.62 points for females as compared to males, higher by 0.49 points for persons with family income equal to or more than Rs. 40,000 per month than those whose income is lower, higher by 0.42 points for persons with stable income as compared to those with unstable income and higher by 0.47 points for persons with age more than 30 years as compared to those whose age is less than 30 years.

The average financial behaviour scores are found to be lower for females than males (by 0.8 points), higher for graduates than non-graduates (by 0.57 points) and higher for higher income groups (by 0.39 points). The financial attitude score rises with income and is significantly higher by 0.17 points for income above Rs. forty thousand per month. Marital status turns out significant at 15per cent level of significance for financial attitude indicating a more prudent attitude and behaviour among married as compared to those who are single (average attitude score being higher by 0.55 points). This is expected as family responsibilities rise after marriage.

Income turns out to be a significant factor in all the dimensions of financial literacy. Age turns out to be a significant determinant of financial literacy and financial knowledge. Education turns out to be a significant determinant for financial literacy and financial behaviour. Surprisingly, financial knowledge is not found to be higher in persons with higher levels of education, thereby pointing towards lacunas in the education system that does not seem to prepare individuals for handling personal finances in life. Marital status does not turn out to be a highly significant factor for any of the financial scores that probably indicates a continuum on the financial front even after marriage, whereas we would expect a greater need for financial prudence after marriage to be able to cater to greater financial responsibilities.

Summing Up and Policy Recommendations

Being financially literate is important in today's society. It is a tool that improves one's ability to ensure financial stability, improve living standards, make sound financial decisions, manage money and debt effectively, plan and achieve financial goals and regulate expenditure. It helps to reduce financial stress and anxiety and equips a person to make better financial decisions such as choosing the right insurance, investments, loans etc.

The present study finds better financial scores for males relative to females, married relative to single status respondents, those with higher family income relative to lower income, those with higher education relative to lower education and those with stable income relative to those with unstable income. The attempt has been made to understand the various processes in order to identify the concepts that need more attention such as compound interest and risk diversification. It also seeks to identify the determinants of financial literacy and finds that the mean financial literacy scores are higher among men, higher income groups, higher levels of education and income stability.

A low level of financial literacy in India is a matter of serious concern. Low financial literacy amongst females indicates low level of awareness as well as low level of involvement in financial matters. The fact that financial literacy score is higher in higher age groups clearly indicates loss of advantage of starting early. If investment starts late, the built-up corpus of wealth by the individual will be relatively smaller. Investing early and smartly is not just important at individual level but also significantly impacts the quality of functioning and extent of penetration of financial markets and hence becomes an important determinant of economic growth. It will also promote financial inclusion.

There is an urgent need to educate people regarding personal finance by initiating programmes and policies in order to bring about a behavioural change, particularly in the vulnerable groups. An attempt on the part of policy makers as well as individuals can improve financial literacy levels of people. An early start for each individual can provide a secured future and wealth creation that will also contribute to the country's financial and economic growth.

Several initiatives have been taken by government[3] to promote financial literacy in India such as setting up of National Centre for Financial Education (NCFE) by four financial regulators namely Reserve Bank of India, SEBI, IRDA and PFRDA that organises various programs to improve financial literacy and also collaborates with educational institutions and develops new curriculum to incorporate concepts of managing finance. The Reserve Bank of India (RBI) has launched the National Strategy for Financial Education (NSFE) 2020-25 with the aim to familiarize people with financial literacy concepts, encourage them to be proactive with regard to their savings and boost participation of masses in financial markets.

Joshi (2013) discusses various initiatives by SEBI, RBI and other players and recommends financial literacy programs in developing countries; development of global guidelines and standards for financial literacy initiatives, among others to increase the financial literacy of the country. Xu and Zia (2012) conduct a literature review and summarize the impact of financial education intervention programmes across countries for entrepreneurs. It is found across studies that the evidence of impact of such programmes is mixed and that there is need to combine intervention programmes with some complementary interventions.

Knowledge about various terms and schemes like, JAM (Jandhan, Aadhaar, Mobile), PM Mudra Yojana, micro finance schemes, bank credit policies for land ownership, can promote financial skills across all age groups and gender. There can be different programmes designed for men and women to suit their demographic profile.

The move to include finance education at school and college level, as a curricular, co-curricular and extra-curricular aspect, would help youngsters understand the financial concepts which can be applied once a person starts earning and hence make an apt financial planning. The knowledge about compound interest needs to be emphasized more as part of the curriculum which is, at present, taught as a part of basic maths at school level.

It is important to promote the five important components of financial literacy, namely 'Earn, Spend, Save, Invest and Protect'. Financial awareness should be promoted amongst those with lower incomes (more so because they need to better manage their money), lesser education (so that they learn to manage finances), non-earning population (so they have prior knowledge of better handling the financial attitude once they start earning), people with unstable income (to make it more stable) and younger age (to be better equipped with finances as they grow older).

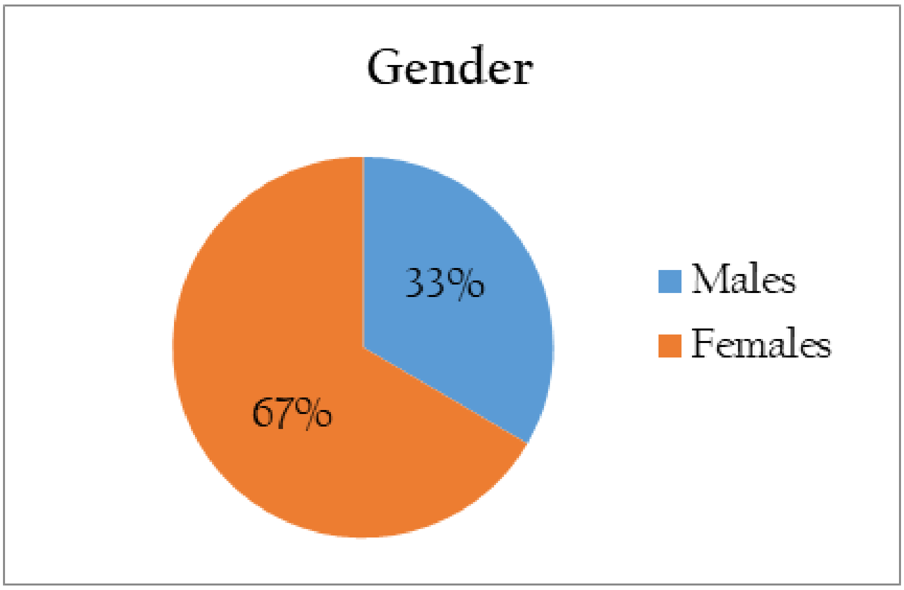
Knowledge management is an important aspect that needs to be promoted among women who, in many families, perform the task of dealing with household budgets, interest calculation, insurance policies etc.) and advanced financial knowledge (reading stock market indices, portfolio management etc.) can make a huge difference in intergenerational transfer of financial knowledge. Being closest to children, financially literate women can teach their children the role of SLR (safe, liquidity, return). Basic 72 rule of doubling money (72/r) can develop interest in money multiplication.

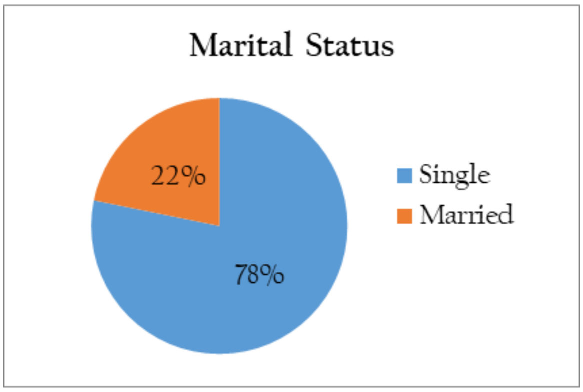
The way forward includes a little push at school, college and institutional level to bring the desired change. Policies for overcoming the blocks in the way to achieve financial literacy at the individual, societal and government level in terms of framing literacy programmes and their effective implementation by making it compulsory in schools and colleges can go a long way in improving financial strength of people and the country as a whole. Augmented efforts in this regard will help in better financial planning and a safer future for people in general.

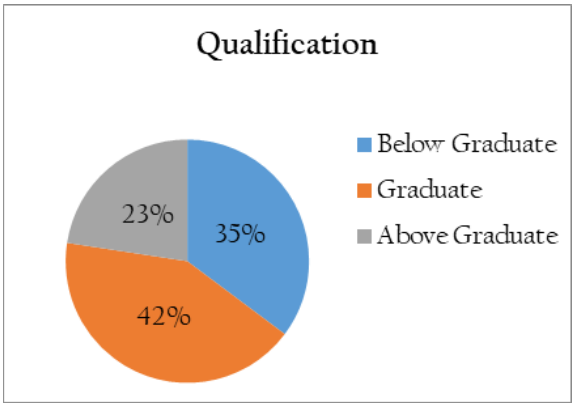
Endnotes

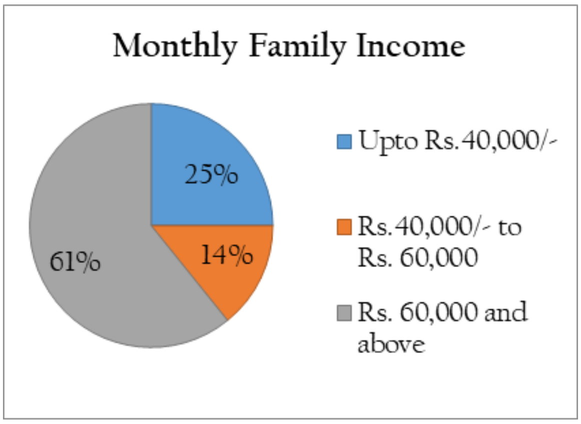
1. In this survey, individuals were asked questions to test their knowledge of four basic financial concepts, namely numeracy, risk diversification, inflation, and compound interest. A person was defined as financially literate if he/she answered at least three out of the four concepts correctly.
2. Please refer to 2018 OECD/INFE Financial Literacy Measurement Toolkit for details. The survey covered twenty-six countries and it used the updated 2018 OECD/INFE toolkit to collect cross-comparable data. (http://www.oecd.org/financial/education/2018-INFEFinLit-Measurement-Toolkit.pdf)
3. For details, please refer to https://m.rbi.org.in/Scripts/ PublicationReport Details.aspx?UrlPage=&ID=1156#AN

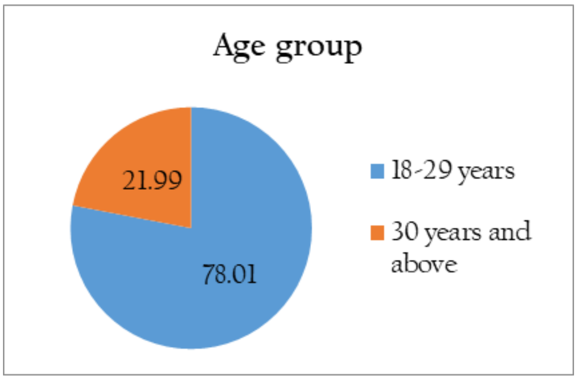
Figures and Tables

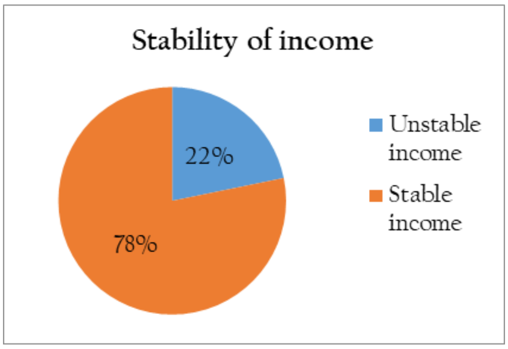



Marital Status
22%
78%
Single
Married


Qualification
23%
35%
42%
Below Graduate
Graduate
Above Graduate


Monthly Family Income
25%
14%
61%
Upto Rs.40,000/-
Rs.40,000/- to Rs. 60,000
Rs. 60,000 and above


Age group
21.99
78.01
18-29 years
30 years and above



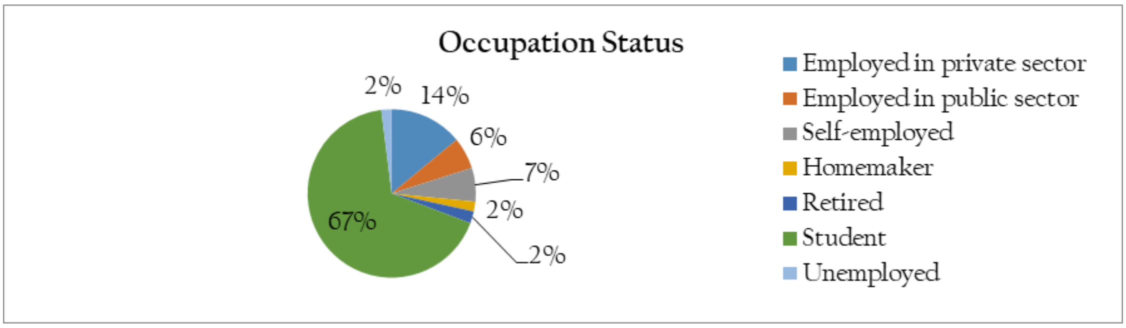


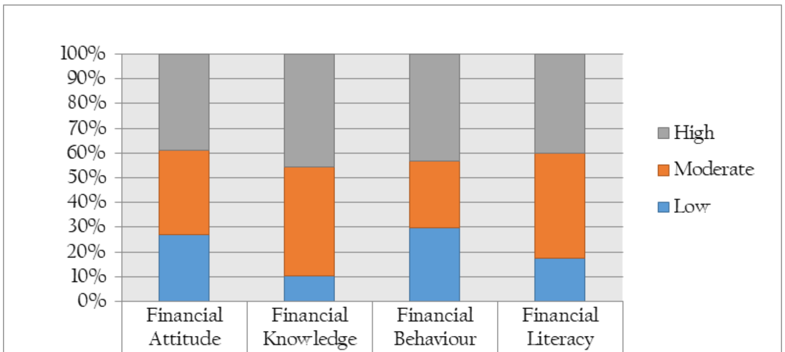
Figure 1: Profile of the Respondents

The figure explains the profile of respondents on the basis of age, gender, income, occupation, qualification, stability of income and marital status.

Table 1: Summary Statistics of Scores

Variable	Mean Score	Standard Deviation	Minimum Score	Maximum Score	Mean score as a percentage of maximum score
Financial Literacy	18.10	3.73	6	25	72%
Financial Attitude	3.45	0.99	1	5	69%
Financial Knowledge	6.95	1.80	0	9	77%
Financial Behaviour	7.69	2.35	1	11	69%

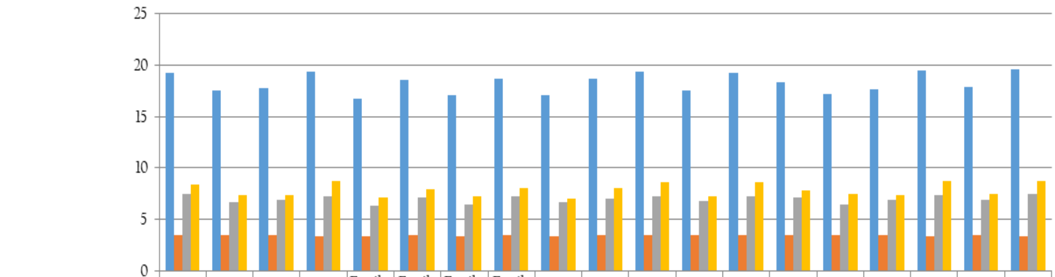
The table represents summary statistics of financial literacy and its parameters for the sample.



	Financial Attitude	Financial Knowledge	Financial Behaviour	Financial Literacy
High	38.81	45.77	43.18	40.2
Moderate	34.23	43.88	27.06	42.39
Low	26.97	10.35	29.75	17.41

Figure 2: Percentage of Respondents in Different Categories of Financial Literacy and its Parameters

The figure represents the percentage of respondents categorized as “High”, “Moderate” and “Low” in terms of financial literacy along with its parameters; financial attitude, financial knowledge and financial behaviour.

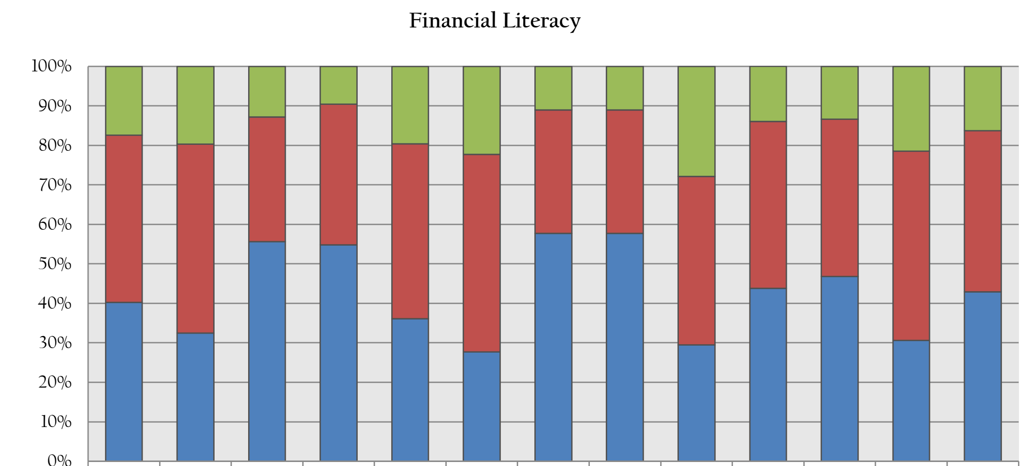


	Males	Females	Single	Married	Family Income less than Rs. 40,000	Family Income Rs. 40,000 and above	Family Income less than Rs. 60,000	Family Income Rs. 60,000 and above	Below Graduate	Graduate & above	Post Graduate & above	Student	Non-student	Income stable	Income unstable	Age below 30 years	Age 30+	Age < 40 years	Age 40+
Financial Literacy score	19.27	17.52	17.76	19.34	16.78	18.54	17.13	18.73	17.11	18.64	19.41	17.52	19.3	18.34	17.24	17.71	19.48	17.84	19.63
Financial Attitude score	3.49	3.42	3.47	3.37	3.34	3.48	3.38	3.49	3.34	3.5	3.49	3.46	3.42	3.45	3.43	3.46	3.41	3.46	3.39
Financial Knowledge score	7.44	6.71	6.88	7.23	6.34	7.16	6.49	7.25	6.73	7.07	7.3	6.81	7.26	7.11	6.39	6.85	7.33	6.87	7.45
Financial Behaviour score	8.34	7.37	7.39	8.75	7.08	7.89	7.23	7.99	7.03	8.05	8.6	7.24	8.61	7.77	7.42	7.39	8.76	7.5	8.79

Financial Literacy score ■ Financial Attitude score ■ Financial Knowledge score ■ Financial Behaviour score

Figure 3: Average Scores of Financial Literacy and its Components

The figure represents average scores of financial literacy for various characteristics of the respondents along with its components; financial attitude, financial knowledge and financial behaviour. The financial literacy scores are obtained by adding the scores of its components.

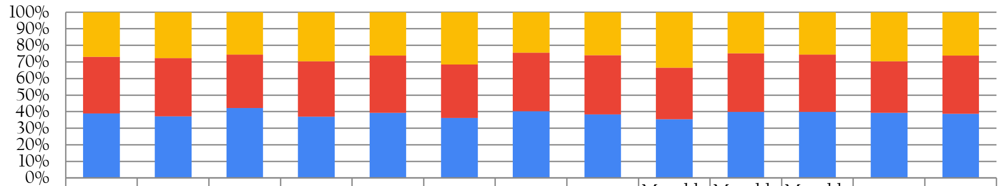


	Total sample	Females	Males	Married	Single	Below graduate	Graduate and above	Post Graduate and above	Monthly family Income Upto 40,000	Monthly family Income 40,000 & above	Monthly family Income 60,000 & above	Unstable income	Stable income
Low	17.41	19.73	12.8	9.59	19.59	22.32	11.01	11.01	27.89	13.93	13.42	21.46	16.28
Moderate	42.39	47.83	31.55	35.62	44.27	50	31.28	31.28	42.63	42.31	39.77	47.95	40.84
High	40.2	32.44	55.65	54.79	36.13	27.68	57.71	57.71	29.48	43.77	46.81	30.59	42.88

Figure 4: Percentage of Respondents in Different Categories of Financial Literacy

The figure represents the percentage for various characteristics of respondents categorized as “High”, “Moderate” and “Low” in terms of financial literacy

Financial Attitude

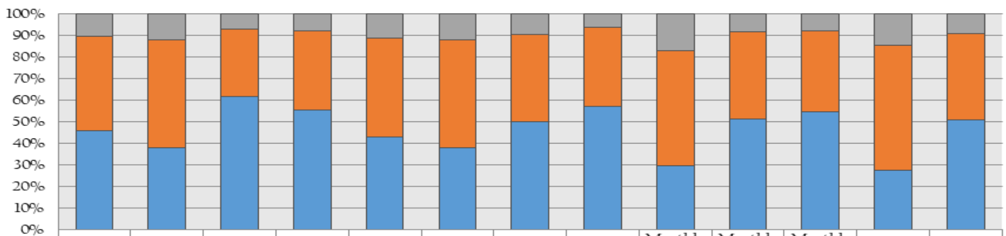


	Total sample	Females	Males	Married	Single	Below graduate	Graduate and above	Post Graduate and above	Monthly family Income Upto 40,000	Monthly family Income 40,000 & above	Monthly family Income 60,000 & above	Unstable income	Stable income
Low	26.97	27.65	25.6	29.68	26.21	31.64	24.42	25.99	33.47	24.8	25.87	29.68	26.21
Moderate	34.23	35.28	32.14	33.33	34.48	32.2	35.33	35.68	31.08	35.28	35.02	31.05	35.11
High	38.81	37.07	42.26	36.99	39.31	36.16	40.25	38.33	35.46	39.92	40.43	39.27	38.68

Figure 5: Percentage of Respondents in Different Categories of Financial Attitude

The figure represents the percentage for various characteristics of respondents categorized as "High", "Moderate" and "Low" in terms of financial attitude.

Financial Knowledge

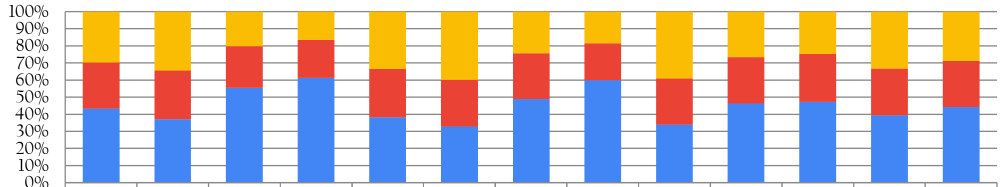


	Total sample	Females	Males	Married	Single	Below graduate	Graduate and above	Post Graduate and above	Monthly family Income Upto 40,000	Monthly family Income 40,000 & above	Monthly family Income 60,000 & above	Unstable income	Stable income
Low	10.35	12.11	6.85	7.76	11.07	12.15	9.37	6.17	17.13	8.09	7.86	14.61	9.16
Moderate	43.88	50.07	31.55	36.53	45.93	49.72	40.71	36.56	53.39	40.72	37.48	57.99	39.95
High	45.77	37.82	61.61	55.71	43	38.14	49.92	57.27	29.48	51.19	54.66	27.4	50.89

Figure 6: Percentage of Respondents in Different Categories of Financial Knowledge

The figure represents the percentage for various characteristics of respondents categorized as "High", "Moderate" and "Low" in terms of financial knowledge.

Financial Behaviour



	Total sample	Females	Males	Married	Single	Below graduate	Graduate and above	Post Graduate and above	Monthly family Income Upto 40,000	Monthly family Income 40,000 & above	Monthly family Income 60,000 & above	Unstable income	Stable income
Low	29.75	34.53	20.24	16.44	33.46	39.83	24.27	18.5	39.04	26.66	24.71	33.33	28.75
Moderate	27.06	28.4	24.4	22.37	28.37	27.4	26.88	21.59	27.09	27.06	28.15	27.4	26.97
High	43.18	37.07	55.36	61.19	38.17	32.77	48.85	59.91	33.86	46.29	47.14	39.27	44.27

Figure 7: Percentage of Respondents in Different Categories of Financial Behaviour

The figure represents the percentage for various characteristics of respondents categorized as "High", "Moderate" and "Low" in terms of financial behaviour.

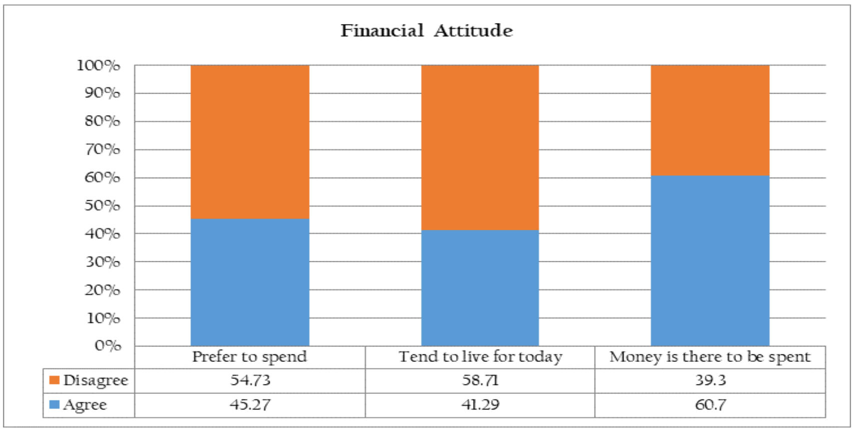


Figure 8: Responses to Financial Attitude

The figure represents summary of responses to three questions that measure financial attitude.

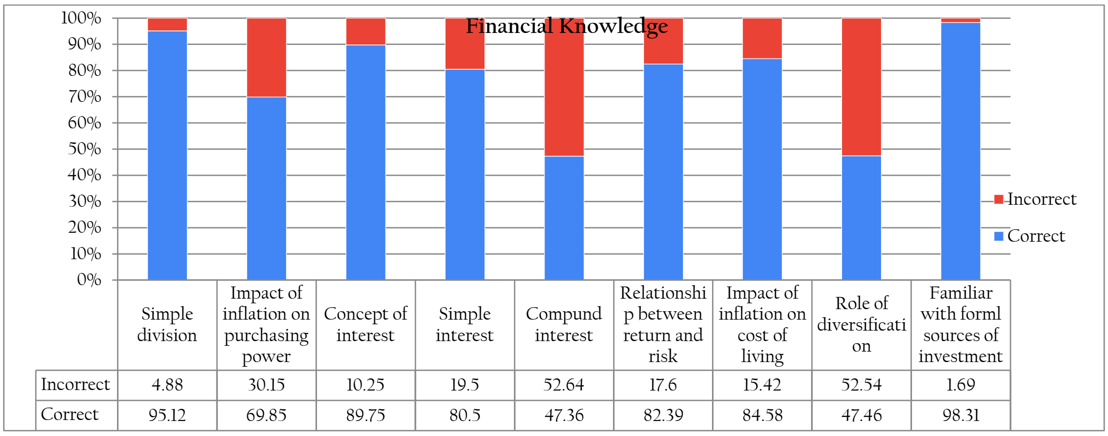


Figure 9: Responses to Financial Knowledge

The figure represents summary of responses to nine questions that measure financial knowledge.

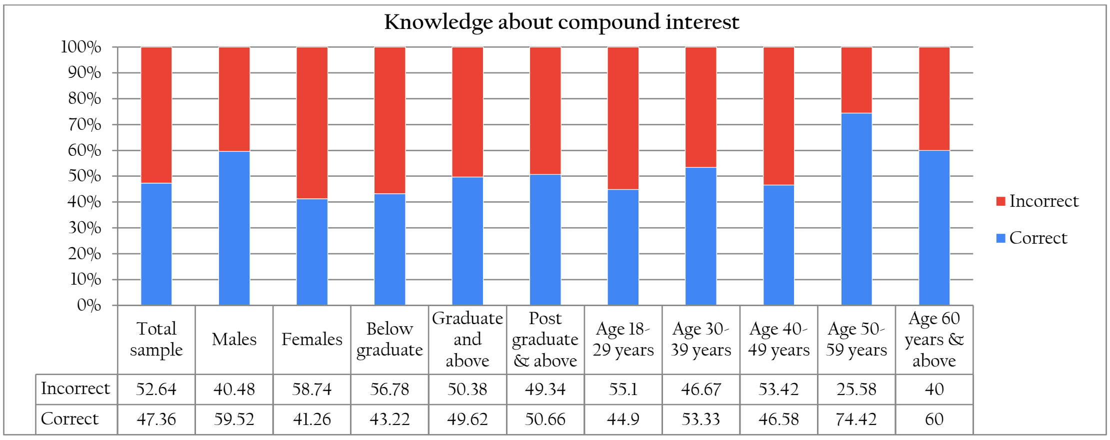
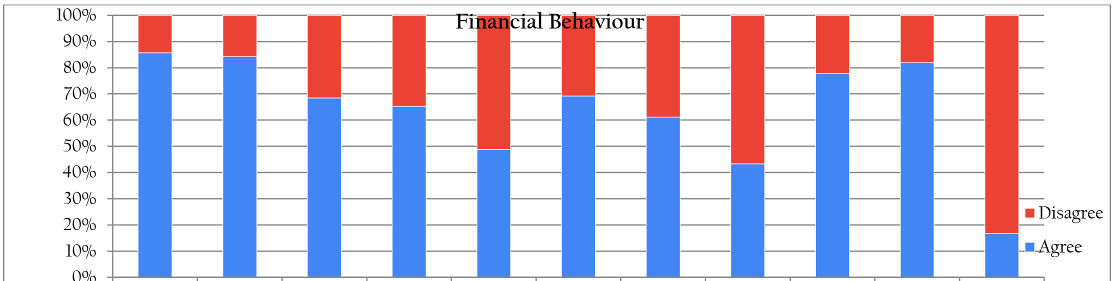


Figure 10: Financial Knowledge with Respect to Compound Interest

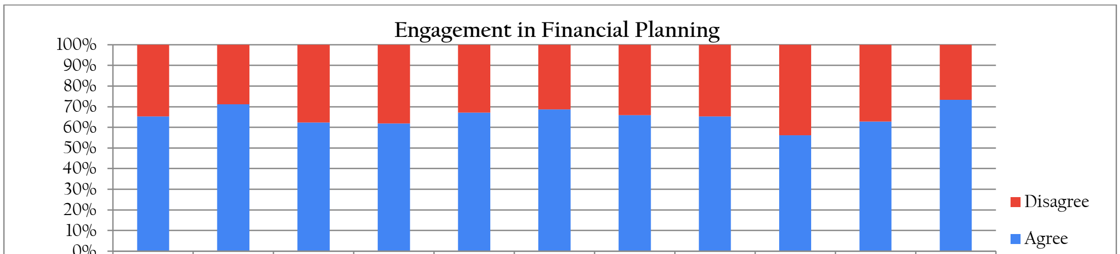
The figure represents responses vis-a-vis various characteristics of respondents, particularly with respect to financial knowledge of compound interest.



	Before buying something, you carefully consider whether you can afford it	Pay bills on time	Keep a close watch on your personal financial affairs	Prefer to set long term goals and strive to achieve them	Consider yourself responsible for having a household budget	Contribute to financial decisions of your family	Maintain a budget	Have you been investing in the past years	Compare financial products before investing	Gather information/ advice for investing in financial products	Use credit to make ends meet
Disagree	14.33	15.82	31.54	34.73	51.24	30.75	38.91	56.72	22.19	18.11	83.38
Agree	85.67	84.18	68.46	65.27	48.76	69.25	61.09	43.28	77.81	81.89	16.62

Figure 11: Responses to Financial Behaviour

The figure represents summary of responses to eleven questions that measure financial behaviour.



	Total sample	Males	Females	Below graduate	Graduate and above	Post graduate & above	Age 18-29 years	Age 30-39 years	Age 40-49 years	Age 50-59 years	Age 60 years & above
Disagree	34.73	28.87	37.67	38.14	32.87	31.28	34.06	34.67	43.84	37.21	26.67
Agree	65.27	71.13	62.33	61.86	67.13	68.72	65.94	65.33	56.16	62.79	73.33

Figure 12: Financial Behaviour with respect to Financial Planning

The figure represents responses vis-a-vis various characteristics of respondents, particularly with respect to financial behaviour regarding financial planning.

Table 2: OLS Regression Results

Explanatory Variables	**Dependent Variables**			
	Financial Literacy	**Financial Attitude**	**Financial Behaviour**	**Financial Knowledge**
GENDER_DUM	-1.4538 (0.000)***	-0.0365 (0.594)	-0.8048 (0.000)***	-0.6165 (0.000)***
EDUC_DUM	0.8828 (0.001)***	0.1764 (0.011)	0.5686 (0.000)***	0.1129 (0.349)
MARITAL_DUM	-0.0217 (0.970)	-0.2539 (0.149)	0.5507 (0.107)	-0.2711 (0.277)

AGE_DUM	1.0668 (0.065)*	0.0574 (0.739)	0.5176 (0.143)	0.4719 (0.050)**
STABILITY_DUM	0.3533 (0.232)	-0.0590 (0.476)	-0.0208 (0.913)	0.4246 (0.003)***
INCOME_DUM	1.0495 (0.000)***	0.1680 (0.046)**	0.3947 (0.0358)**	0.4992 (0.000)***
Constant	17.2039 (0.000)***	3.3159 (0.000)***	7.344 (0.000)***	6.5392 (0.000)***

The figures in parentheses indicate p–values of respective coefficients. (*** indicates significance at 1%, ** indicates significance at 5% and * indicates significance at 10%)

References

1. Agarwalla, S. K., Barua, S. K., Jacob, J., & Varma, J. R. (2015). Financial literacy among working young in urban India. *World Development*, *67*, 101-109.
2. Arora, A. (2016). Assessment of financial literacy among working Indian women. *Business Analyst*, *36*(2), 219-237.
3. Bhushan, P., & Medury, Y. (2013). Financial literacy and its determinants. International Journal of Engineering, Business and Enterprise Applications (IJEBEA) 4(2). March-May, 2013, pp. 155-160
4. Chijwani, M. M., & Vidyapeeth, D. Y. P. (2014). A study of financial literacy among working women in Pune. *International Journal for Scientific Research & Development*, *1*(11), 20-22.
5. Choudhary, K., & Kamboj, S. (2017). A study of Financial Literacy and its Determinants: Evidence from India. *Asian Journal of Accounting Perspectives*, *10*(1), 52-72.
6. Dube, V.S., & Asthana, P.K. (2017). A Comparative Study on Financial Literacy of Uttar Pradesh with Central Zone States in India. *IOSR Journal of Business and Management (IOSR-JBM), 19*(10), 22-27.
7. Hasler, A., & Lusardi, A. (2017). The gender gap in financial literacy: A global perspective. *Global Financial Literacy Excellence Center, The George Washington University School of Business*.
8. Joshi, P. (2013). The way of Financial Capability is through financial literacy: Indian and Global Scenario. *Study Mode Research, Financial Literacy among women in India: The Review of Literature*.
9. Kiliyanni, A. L., & Sivaraman, S. (2018). A predictive model for financial literacy among the educated youth in Kerala, India. *Journal of social service research*, *44*(4), 537-547.
10. Klapper, L., Lusardi, A., & Van Oudheusden, P. (2015). Financial literacy around the world. *World Bank. Washington DC: World Bank*.
11. Mathivathani, V., & Velumani, M. (2014). A study on financial literacy among rural women in Tamil Nadu. *Indian Journal of Applied Research*, *4*(12), 556-557.
12. NFLIS (2019). National Centre for Financial Education (NCFE)'s "Financial Literacy and Inclusion in India- Final Report" available at FLIS coverpage CC - Old version.cdr (ncfe.org.in)
13. NFLIS (2019). National Centre for Financial Education's "Financial Literacy and Inclusion in India- Executive Summary" available at FLIS Executive Summary CC.cdr (ncfe.org.in)
14. OECD INFE (2011).Measuring Financial Literacy: Core Questionnaire in Measuring Financial Literacy: Questionnaire and Guidance Notes for conducting an Internationally Comparable Survey of Financial literacy. Paris: OECD.
15. Available at https://www.oecd.org/finance/financial-education/49319977.pdf
16. OECD (2018). OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion.
17. Available at https://www.oecd.org/financial/education/2018-INFE-FinLit-Measurement-Toolkit.pdf

18. OECD (2020).OECD/INFE 2020 International Survey of Adult Financial Literacy. Available at www.oecd.org/financial/education/launchoftheoecdinfeglobalfinancialliteracysurveyreport.htm

19. National Strategy for Financial Education 2020-2025- Creating A Financially Aware and Empowered India. Available at

20. https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/NSFE202020251BD2A32E39F74D32823 9740D4C93980D.PDF

21. Patel, D. A. (2018). Study of financial literacy among residents of Gujarat. *Pacific Business Review International*, *11*(4), 97-106.

22. Prasad, H., Meghwal, D., & Dayama, V. (2018). Digital financial literacy: a study of households of Udaipur. *Journal of Business and Management*, 5, 23-32.

23. Sinha, S. (2018). Financial Literacy in the State of West Bengal: A Study Into Its Determinants With An Impact Analysis On Financial Inclusion And Investment Decision Making. Vidyasagar *University Journal of Commerce, 23*, 84-95.

24. Xu, L., & Zia, B. (2012). Financial literacy around the world: an overview of the evidence with practical suggestions for the way forward. *World Bank Policy Research Working Paper*, (6107).