The perception-reality gap in financial literacy: Evidence from the most literate state in India

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ABSTRACT

This study measures the level of financial literacy and evaluates the impact of demographic and socio-economic attributes on financial literacy among the educated young adults in Kerala, the most literate state in India, during the year 2015. The study also analyses the perception-reality gap in financial literacy and the attitude of young adults towards financial education. Primary data collected using a structured questionnaire from 736 young adults is used in this study. Statistical techniques such as analysis of variance and chi-square test are employed to analyse the data. The findings reveal that the financial literacy in Kerala is low, with an average young adult answering only 44% of the questions correctly. The study finds that gender, marital status, age, religion, education, the discipline of study, occupation, work experience, income, and parents' education and their occupation influence financial literacy. It is also observed that respondents tend to overrate their financial literacy by around 50%, indicating their over-confidence in the knowledge of matters related to personal finance. However, a majority of the respondents (89%) expressed the need for financial education for young adults. This study, hence calls for initiatives to improve financial literacy among young adults in Kerala and for further research in this direction.

1. Introduction

Financial literacy refers to the capability of individuals and households to effectively manage their personal finance. The present era marks phenomena such as increasing life expectancy, rising costs of living, the complexity of financial products, contributory pension plans, and growth of financial markets. These developments make the knowledge of financial matters necessary to secure one's financial future. However, research from around the world reveal low levels of financial literacy among individuals (Chen and Volpe, 1998; Beal and Delpachitra, 2003; Lusardi and Mitchell, 2007; Mandell, 2008; Atkinson and Messy, 2012), despite evidence of the positive correlation between financial literacy and economic behaviour of people (Lusardi and Mitchell, 2005; Gerardi et al., 2010; Van Rooij et al., 2011; Bruhn et al., 2013; Lusardi and Tufano, 2015). This lapse in financial literacy concerns policymakers in various countries (Van Rooij et al., 2011).

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United Nations Report (2012) identifies 'financial illiteracy' as one of the primary bottlenecks of achieving financial inclusion and development across the world. According to the UNSGSA Report,[1] two billion adults are not included in the formal financial system. These people tend to rely heavily on expensive and often unreliable informal channels of money-lenders, pawnbrokers and savings clubs for their financial needs and thus deprive themselves of the access to a wide range of financial services available in the organised sector. Therefore, from a micro and macro perspective, it is important to educate the financially excluded about the benefits of being part of the mainstream. Governments around the world and international organisations like United Nations (UN), World Bank, and Organisation for Economic Cooperation and Development (OECD)[2] have initiated several programs aimed at improving the financial literacy of the public. Financial crises and economic instabilities have intensified the attention on the subject of financial literacy. Consequently, research in the area of financial literacy has gained momentum, especially in the developed countries. In this context, the present study makes a modest attempt to measure financial literacy in a developing region, Kerala, the most literate state in India.

The paper is organised into seven sections. In Section 2, we briefly review the relevant literature that form the background of this study. In Section 3, we explain the research methodology including data, measuring instrument, sample and methodology for analysis which is followed by the measurement of financial literacy in Section 4. In Section 5, we analyse the gap between the actual financial literacy and the self-assessed financial literacy. In Section 6, we discuss the need for financial education in Kerala and Section 7 concludes.

2. Background

The concept of financial literacy is differently understood by different people based on the stage of life they are in, occupation, the level of income, etc. (Remund, 2010). There is a wide array of definitions to the term 'financial literacy'. These definitions generally imply the ability of individuals to make decisions to ensure their financial wellbeing. OECD International Network on Financial Education (INFE) (2011) defines financial literacy as a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing. Hence, financial literacy comprises basic knowledge of key financial concepts, skills like the ability to calculate interest rates and prepare a family budget, attitude towards money, spending and saving, and behaviour to secure the financial future (Jang et al., 2014). This study focuses on the knowledge, skills and attitude of individuals required to make effective financial decisions.

The pioneering attempts at measuring financial literacy were during early 1990s in the United States (U.S.). Various studies have operationalised alternative instruments to measure financial literacy. Lusardi and Mitchell (2005) developed three questions on the concepts of interest compounding, inflation and risk diversification to assess one's financial literacy. These three questions are widely used in studies conducted in many countries. Recently, OECD INFE (2011, 2012) developed a comprehensive questionnaire to measure financial literacy of adults aged between 18 and 79. Guest (2013) raises a concern about the ability of assessment instruments to provide strong assurance of learning. The absence of a standard measure of financial literacy encourages researchers to develop and deploy new instruments while designing studies to measure financial literacy. Using the OECD INFE questionnaire, Atkinson and Messy (2012) report that a large proportion of the adult population in 14 countries lacks financial knowledge, demonstrates weak financial behaviour and exhibits wide variation in financial attitude. Similar studies measuring the level of financial literacy in India are very limited. Koshal et al. (2008) document the limited economic literacy of Indian MBA students in comparison with adults aged 18 or more in the U.S. Gaurav and Singh (2012) assess the financial literacy and cognitive ability of farmers in the state of Gujarat in India. They conclude that farmers' education and financial experience are highly correlated with their cognitive ability which predicts their financial aptitude and debt literacy. Agarwalla et al. (2015), using the OECD questionnaire, find that the urban youth in India display low financial knowledge, inferior financial attitude and better financial behaviour compared to their counterparts in the study by Atkinson and Messy (2012).

Demographic and socio-economic factors tend to influence the level of financial literacy (Chen and Volpe, 1998, 2002; Lusardi and Mitchell, 2007; Bucher-Koenen et al., 2012; Agarwalla et al., 2015; Lusardi and Tufano, 2015). Lusardi and Mitchell (2014) document a hump-shaped relationship between age and financial literacy. The hump-shaped relationship implies lower levels of financial literacy at young and old ages and higher levels in the middle age of an individual. Among the young people, financial literacy gets better with age at a decreasing rate (Cameron et al., 2014). Studies also show that women have lower levels of financial literacy compared to men (Chen and Volpe, 1998, 2002; Lusardi et al., 2010; Agarwalla et al., 2015). This gender gap is rationalised by the specialisation within the family that men are more involved in financial decisions. As women often outlive men, women tend to develop financial knowledge much later in life than men as they are not often responsible for financial matters until the death of their spouse or divorce (Hsu, 2011; Bucher-Koenen et al., 2012). Chen and Volpe (2002), in a survey among college students in the U.S., observe that female students show less willingness to learn financial topics than male students. Fonseca et al. (2012) propose that women may develop financial literacy differently

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[1] Annual report of the United Nations Secretary-General's Special Advocate for Inclusive Finance for Development (UNSGSA), published in September 2015.

[2] OECD initiatives in the area of financial literacy include the addition of financial literacy in the Programme for International Student Assessment (PISA) in 2012, formation of the OECD International Network on Financial Education (INFE) and the OECD International Gateway for Financial Education in 2008.

from men as men acquire financial knowledge through making more household financial decisions than women while women focus on other household roles. Marital status is found to have a positive influence on financial literacy (Brown and Graf, 2013). This is due to the fact that marriage obligates a couple to manage their finance well and to be prudent in spending money. Grable et al. (2007) suggest that conflicts about money result in less marital satisfaction.

Financial literacy is observed to get better with increasing levels of education (Grohmann et al., 2015). However, there is conflicting evidence on the impact of education beyond a certain level as Agarwalla et al. (2015) observe that education beyond graduation does not have significant influence on financial literacy of working adults in India. Regarding the discipline of study, literature document that pursuing studies in a business major results in relatively higher levels of financial literacy (Chen and Volpe, 1998; Beal and Delpachitra, 2003). Income positively impacts financial literacy as an increase in income enhances the exposure to money (Cole and Shastry, 2009; Lusardi and Tufano, 2015).

Studies have explored the effect of cognitive and behavioural variables such as cognitive ability, numeracy, financial self-efficacy and financial socialisation on financial literacy (Shim et al., 2009; Gaurav and Singh, 2012; Agarwal and Mazumder, 2013; Hira et al., 2013; Grohmann et al., 2015; Farrell et al., 2016). Agarwal and Mazumder (2013) state that those with high math score are less likely to commit financial mistakes while Farrell et al. (2016) establish that financial self-efficacy of women in Australia independently predicts their financial behaviour. Shim et al. (2009) analyse the impact of financial socialisation and find that among the three major financial socialisation channels such as parents, school and work, parental teaching has the largest influence on financial knowledge. However, Grohmann et al. (2015) argue that financial socialisation by both parents and schooling explain adults' financial literacy. It is also found that financial socialisation by the parents has a positive association with regular investment and net worth of households (Hira et al., 2013).

Most of the studies assessing financial literacy are from the developed nations such as Australia, Europe, United Kingdom (U.K.), and the U.S. However, financial literacy of citizens has gained a priority position in the national agenda of many developing nations including India (e.g., RBI, 2012; RFEFLP, 2011; NYFLD and NSM, 2008).[3] India is a federation of 29 States and 7 Union Territories with geographic, ethnic, religious, linguistic, cultural, and climatic diversity. In order to financially educate the large population, national organisations such as Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI), Insurance Regulatory and Development Authority (IRDA), and Provident Fund Regulatory and Development Authority (PFRDA) have taken several initiatives. However, these attempts are far less than what might be sufficient to address the grave consequences of financial illiteracy.[4] This is evident from the limited available literature which points to the low levels of financial literacy. A recent study among working young adults in urban cities in India observed low levels of financial literacy, despite sampling a relatively educated section of the society (Agarwalla et al., 2015).

Kerala is the most literate state in India, as per the Census of India 2011.[5] Kerala state presents a unique model of social and economic development with an educational attainment very similar to that of the developed world (Parayil, 1996). Kerala's standing on the 2011 Human Development Index[6] (HDI) is significantly higher than the national average and comparable to other BRICS countries (Brazil, Russia, China and South Africa). A comparison of Kerala state with India and the rest of the world on selected indicators of human development (Table 1) is intended to contextualise and draw the relevance of this state-specific study.

While Kerala's human development attainments remain notable (Drèze and Khera, 2012), it will be interesting to study if the high educational and social advancement of the state influence financial literacy. Although general literacy helps to develop financial literacy, studies propose that general literacy level is neither a proxy nor an indicator of financial literacy (Chen and Volpe, 2002; Xu and Zia, 2012). Whether this observation holds true in the case of Kerala or not is to be investigated. Therefore, the case of Kerala makes the present study relevant. Moreover, to our knowledge, this study is the first of its kind in Kerala.

In this paper, we empirically examine the level of financial literacy among educated young adults in Kerala and evaluate the influence of demographic and socio-economic variables on financial literacy. Further, we assess the perception-reality gap in financial literacy and analyse the attitude of young adults towards financial education.[7] We also aim to provide inputs for initiatives aimed at improving the financial literacy of individuals.

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[3] Reserve Bank of India (RBI) issued a National Strategy for Financial Education in 2012 with a vision, 'a financially aware and empowered India', and implemented a 'Project Financial Literacy'; Russia Financial Education and Financial Literacy Project (RFEFLP) by the World Bank to improve financial literacy of Russian citizens, during the period 2011–2015; National Youth Financial Literacy Day (NYFLD) and National Savings Month (NSM) observed by Johannesburg Stock Exchange in partnership with South African Reserve Bank (SARB) and other national financial organisations, to improve financial literacy.

[4] Individuals with low financial literacy tend to participate less in financial markets (UNSGSA Annual Report 2015); fail to plan for retirement (Lusardi and Mitchell, 2005; Van Rooij et al., 2011); avail credit on unfavourable terms (Gerardi et al., 2010; Lusardi and Tufano, 2015); etc.

[5] Census data on literacy and demography in Kerala is obtained on June 20, 2015 from http://www.censusindia.-gov.in/2011Census.

[6] Human Development Index (HDI) is a composite measure of average achievement in key dimensions of human development such as health, knowledge and standard of living which are represented by life expectancy at birth, year of education and gross national income per capita indicators. HDI, published by United Nations Development Programme (UNDP) is used to rank countries.

[7] OECD defines financial education as the process by which individuals improve their understanding of financial products and concepts; and through information, instruction and/or objective advice develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being (OECD, 2005).

Table 1

Comparing Kerala on selected Human Development Indicators.

Country/Region	Indicator				
	HDI	Adult literacy rate (%)	Life expectancy at birth (years)	Under 5 mortality rate (per 1000 live births)	Mean years of schooling (years)
Kerala[a]	0.790	93.2	74.5	16	6.9[b]
India	0.547	62.8	65.4	66	4.4
Brazil	0.718	90.0	73.5	21	7.2
Russia	0.755	99.6	68.8	12	9.8
China	0.687	94.0	73.5	19	7.5
South Africa	0.619	88.7	52.8	62	8.5
Arab States	0.641	72.9	70.5	49	5.9
East Asia and the Pacific	0.671	93.5	72.4	26	7.2
Europe and Central Asia	0.751	98.0	71.3	19	9.7
Latin America and the	0.731	91.0	74.4	22	7.8
Caribbean	0.548	62.8	65.9	69	4.6
South Asia	0.463	61.6	54.4	129	4.5
Sub-Saharan Africa	0.682	80.9	69.8	58	7.4
World					

Sources: UNDP Global Human Development Report 2011.

[a] Indices for Kerala is obtained from India Human Development Report 2011: Towards Social Inclusion (UNDP India).

[b] Mean years of schooling for Kerala is obtained from Inequality-adjusted Human Development Index for India's States 2011 (UNDP India).

3. Research design

This section discusses the research design consisting of the data used in this study, the development of the instrument and its validation process, followed by sampling design and the methodology employed to analyse the data.

3.1. Data

The study uses primary data collected through a questionnaire survey among educated young adults in Kerala during the third quarter of 2015. The data pertains to four aspects of financial literacy such as basic knowledge, money management, savings and investments, and risk management as identified from the literature to measure the construct, 'financial literacy' (Huston, 2010). Multiple choice questions are used to ascertain a respondent's knowledge in these four areas. In addition, respondents are asked to self-report their levels of financial literacy and express their opinion about further financial education for themselves and peers. Data also include demographic and socio-economic profiles of the respondents. The development and validation process of the questionnaire used to collect data are detailed in the following subsection.

3.2. Measurement of financial literacy

In order to measure financial literacy of a specific target population of young adults in Kerala, we developed a structured questionnaire containing 34 items. Our measure of financial literacy draws heavily from the analysis of Huston (2010) that analysed 71 field studies from across the world and identified four content areas (basic knowledge, money management, savings and investment, and risk management). Among these studies, only 25% used all the four content areas to measure financial literacy (Chen and Volpe, 1998, 2002; Beal and Delpachitra, 2003; Danes and Haberman, 2007; Mandell,[8] 2008). We make a modest attempt to measure financial literacy using all the four content areas. Moreover, we customised the questionnaire to include some country-specific questions. We believe that knowledge of these country-specific issues may influence one's financial behaviour. There are 18 multiple-choice questions to measure the knowledge of respondents on personal finance, one question to gauge the respondent's self-report of financial literacy, and two questions to evaluate the respondent's opinion on the need for financial education. Out of these 21 questions, 12 are adapted from prior studies and nine are developed exclusively for this study. Additionally, we have employed 13 items to identify the demographic and socio-economic attributes of the respondents (see Table 2).

We tested the instrument in a pilot study and refined it to use in the final survey.[9] Then, a detailed item and test analysis was performed to confirm the reliability and discriminating power of the questionnaire (Ding and Beichner, 2009). Reliability refers to the consistency of a measure under study. An instrument is said to be reliable if similar results are expected when the test is administered to the same respondent at different times. The reliability measures for multiple choice questions are point biserial coefficient (r_{pbi}) and Kuder-Richardson reliability index (r_{test}) which is known as KR-20.

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[8] Mandell (2008) conducted the nationwide survey of students for the Jump$tart Coalition for Personal Financial Literacy in USA.

[9] Pilot study helped us to refine the instrument in three ways: (i) three questions were rephrased to improve clarity; (ii) a question was deleted due to inconsistent response and (iii) the questionnaire was translated into the local language, Malayalam with a view to assist respondents who were not proficient in English. The final study used both English and Malayalam versions.

Table 2
Sources of financial literacy assessment questions.

Construct/Area	No.	Questions	Reference
Basic Knowledge	1	Which statement is not correct about ATM?	Mandell (2008)
	2	How much is the income tax exemption limit for individuals in India?	Present study
	3	If 3 people have the winning number in a lottery, how much will each get?	Lusardi and Mitchell (2007)
	4	Which is beneficial, tax credit or tax deduction?	Present study
	5	Which group will be severely affected by inflation?	Mandell (2008)
Money Management	6	How much will be in the saving account at the end of 2 years?	Lusardi and Mitchell (2007)
	7	How much is the interest rate on credit cards in India?	Present study
	8	Please prepare a budget using the figures to make a saving plan?	Mandell (2008)
	9	Identify the most liquid from the given assets?	Present study
	10	Who pays the highest amount of charges on credit card?	Mandell (2008)
Savings & Investments	11	When should one start to save for retirement?	Present study
	12	What is 80C of Income Tax Act in India related to?	Present study
	13	A high-risk high-return strategy is suitable for?	Chen and Volpe (1998)
	14	Identify who has the highest amount in retirement account?	Mandell (2008)
	15	What is net worth?	Chen and Volpe (1998)
Risk Management	16	How long you can cover your expenses without borrowing?	OECD INFE (2011)
	17	Investment in a stock or a mutual fund provides safer return?	Lusardi and Mitchell (2007)
	18	Which best describes you with respect to risk taking?	Grable and Lytton (1999)
Perception & Opinion	19	Self-reporting of financial literacy	Present study
	20	Need for financial education and training for self	Present study
	21	Need for financial education and training for others	Present study

Note: See Appendix A for the exact question with answer options in the questionnaire.

Point biserial coefficient (r_{pbi}) is a measure of the individual item reliability and is defined as the correlation between the item score and total score. The minimum desired value of the point biserial coefficient (r_{pbi}) is 0.2 (Kline, 1986). The items in the instrument developed for this study have an average point biserial coefficient (r_{pbi}) of 0.40. Kuder-Richardson reliability index (r_{test}) measures the internal consistency of a test or survey questionnaire. A widely accepted standard is that a Kuder-Richardson reliability index of 0.7 or higher is considered reliable for a test (Kuder and Richardson, 1937). The questionnaire developed for this study has an acceptable Kuder-Richardson reliability index of 0.70.

Following the reliability analysis, we examined the discriminating power of the questionnaire. The discriminating power is the ability of a questionnaire to distinctly separate those who have a robust knowledge of the materials tested from those who do not. Item difficulty or ease level (P), discrimination index (D) and Ferguson's delta (δ) are the measures of the discriminating power of a questionnaire. Item difficulty or ease index (P) measures the easiness of an item and is defined as the proportion of correct responses to total number of responses. Difficulty or ease index ranging from 0.3 to 0.9 are accepted (Doran, 1980). The questions used in this study have an average difficulty index of 0.44 which is close to the ideal difficulty level of 0.5. Hence, the items in the questionnaire have good reliability (neither too easy nor too difficult). Discrimination index (D) indicates the power of an item to distinguish between high and low performing respondents. Discrimination index is defined as the difference in percentages of correct responses to an item between the top quartile and the bottom quartile respondents (Oosterhof, 2001). The commonly accepted minimum value of discrimination index is 0.3 (Doran, 1980). The average discrimination index of 0.48 for the items in the instrument used in the study indicates the reasonably good power of the items to discriminate between high and low performers. Ferguson's delta (δ) measures the discriminatory power of the entire test. It indicates how broadly the test scores are distributed over the possible range. A Ferguson's delta (δ) of 0.9 is considered to provide strong discrimination among the respondents (Kline, 1986). A Ferguson's delta (δ) of 0.97 for this test is considered to provide strong discrimination among the respondents. This means that the questionnaire clearly distinguishes the participants based on their knowledge of the financial concepts tested in this study. Table 3 summarises the results of Item and Test Analysis of the questionnaire.

3.3. Sample

The study focuses on the educated young adults in Kerala, a south-west state in India with a population of 33.4 million as per Census of India 2011. 'Educated young adult' is defined for this study as a person between 18 and 34 years of age, with a minimum educational qualification of 10th grade (10 years of schooling). The 14 districts in the state are divided into north, central and south zones. A stratified random sampling method is followed assuming these three zones as each stratum. The number of samples collected from each zones are in proportion to the number of people eligible to participate in this study (sampling frame) in these zones. All the respondents are personally surveyed in face-to-face interviews conducted during the third quarter of 2015. A total of 795 young adults in different districts are surveyed, out of which 59 incomplete responses are excluded from analysis, thus making a sample of 736. The total sample comprises of 65% employed young adults, 30%

Table 3

Results of the analysis of questionnaire.

Test statistics	Desired values	Calculated values
Difficulty index/Ease index (P)	[0.3, 0.9]	Average of 0.44
Discrimination index (D)	≥0.3	Average of 0.48
Point biserial coefficient (r_{pbi})	≥0.2	Average of 0.40
Reliability index (KR-20) (r_{test})	≥0.7	0.70
Ferguson's delta (δ)	≥0.9	0.97

Source: Authors' computation from the primary data.

students and 5% neither working nor students. In accordance with various statistics as per Gender Diversity Index 2011, National Sample Survey Organisation (NSSO, Report 68th Round 2011-12), University Grants Commission Annual Report 2013-14 and Kerala Economic Review 2014, the total number of females constitutes around 41% of the sample. The demographic and socio-economic profile of the sample is presented in Table 4.

3.4. Methodology for analysis

The study uses appropriate descriptive statistics, Analysis of Variance (ANOVA) and Chi-Square test to analyse the data. The level of financial literacy is measured using the total score obtained by the respondent in all the four constructs such as basic knowledge, money management, savings and investments, and risk management. Each correct or desirable answer to a question is given a score of one. Based on the total score, the respondents are classified into five classes or grades from excellent to very poor. Literature indicate that levels of financial literacy differ among subgroups of young adults (Chen and Volpe, 1998; Lusardi and Mitchell, 2014). We employ ANOVA to check if demographic and socio-economic subgroups have significantly different levels of financial literacy. Non-parametric, Chi-square test is used to study the respondents' opinion about the need for financial education. The following section reports the findings of the study.

4. Financial literacy in Kerala

The questionnaire to measure financial literacy of young adults in Kerala covers a respondent's knowledge of the basic financial concepts such as interest rates, time value of money, basic banking services, budgeting, insurance, income tax, inflation, numerical skills, etc. We believe that knowledge of these concepts is key to manage money and make effective intertemporal choices. Fig. 1 summarises the questions and their responses.

It is evident from Fig. 1 that the first question is the best answered question in the survey, which asks the participants to identify the incorrect statement about the Automated Teller Machine (ATM). This question is answered correctly by 90.2% of the respondents. The next best answered question requires the participants to prepare a saving plan using a few income and expense items. The simple saving plan is prepared correctly by 70.5% young adults. The two questions that are answered correctly by least number of respondents (15.8%) are about their knowledge of the range of interest rate on credit cards in India and the concept of tax credit and tax deduction.

The 18 questions in the survey pertain to four areas of financial literacy such as basic knowledge, money management, savings and investments, and risk management. The total scores obtained by the respondent in these four areas indicate his/her overall financial literacy. It will be useful to examine the average scores attained by the respondents across these four areas of financial literacy and the overall score in the test. This is depicted in Fig. 2.

The overall mean percentage of correct responses is 43.9%. This means that the respondents answered less than half of the questions correctly on an average (7.9 out of the 18 questions). The findings reveal that the financial literacy of educated young adults in Kerala is low. Among the four areas of financial literacy, basic knowledge and money management have a relatively higher percentages of correct responses (52.3% and 46.6% respectively) compared to the other two areas. The percentage of correct responses in savings and investments is 37.3% and risk management is 36.2%. The descriptive statistics also show that the median score is 44.4% with a minimum value of 5.6%, a maximum value of 94.4% and standard deviation of 18.6%.

We also have classified the participants in the survey into five grades such as excellent, good, average, poor, and very poor, based on their performance in the test, which is presented in Table 5.

The proportion of respondents who have achieved either an 'excellent' or 'good' grade in the financial literacy test is 23.5% only while 37.1% are either poor or very poor performers in the test. The average grade has the highest number of respondents (39.4%). A state that has recorded the highest literacy rate has resulted in low financial literacy which is an

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[11] Religion is identified as one of the determinants of individual's economic attitude and economic behaviour (Alessie et al., 2011; Renneboog and Spaenjers, 2012; Bönte and Filipiak, 2012; Gaurav and Singh, 2012). India being a multi-ethnic and multi-religious country (Noland, 2005), it will be interesting to explore the influence of religious affiliations on individual's financial literacy. This study assumes that those who claim a religious affiliation are in active practice of that religion.

Table 4
Demographic and socio-economic characteristics of the sample.

Attribute	Number	Percentage
Sample size (n)	736	
Gender		
a) Male	433	58.8
b) Female	303	41.2
Zone		
a) North	280	38.0
b) Central	218	29.6
c) South	238	32.3
Marital Status		
a) Single	432	58.7
b) Married	304	41.3
Age		
a) 18–21	155	21.1
b) 22–25	208	28.3
c) 26–29	174	23.6
d) 30–34	199	27.0
Religious affiliation[11]		
a) Hindu	415	56.4
b) Christian	160	21.7
c) Muslim	127	17.3
d) Undisclosed	34	4.6
Educational level		
a) Less than college	34	4.6
b) Vocational/Trade Diploma	93	12.6
c) Graduation	338	45.9
d) Post-graduation and above	271	36.8
Discipline of study (Highest qualification)		
a) Arts, Humanities & Social Science[a]	78	10.6
b) Commerce, Economics & Management	192	26.1
c) Engineering & Technology	247	33.6
d) Science & Maths	149	20.2
e) Others[b]	70	9.5
Occupation		
a) Academic–Students	220	29.9
b) Academic–Teachers	44	6.0
c) Business & Finance	91	12.4
d) Engineering & Technical Job	87	11.8
e) Medical & Para-medical Job	55	7.5
f) Other Government Job	75	10.2
g) Other Private Job	124	16.8
h) Unemployed	40	5.4
Work Experience		
a) No work experience	242	32.9
b) Less than 2 Years	151	20.5
c) 2–4 Years	128	17.4
d) More than 4 Years	215	29.2
Monthly income (₹[c])		
a) No income	213	28.9
b) Below ₹ 20,000	215	29.2
c) ₹ 20,000– 40,000	208	28.3
d) Above ₹ 40,000	100	13.6
Parents' educational level		
a) Less than college	361	49.0
b) Vocational/Trade Diploma	49	6.7
c) Graduation	184	25.0
d) Post-graduation and above	75	10.2
e) Undisclosed	67	9.1
Parents' occupation		

Table 4 (*Continued*)

Attribute	Number	Percentage
a) Agriculture	104	14.1
b) Business & Finance	128	17.4
c) Government Job	155	21.1
d) Private Job	126	17.1
e) Undisclosed	223	30.3
Parents' combined monthly income (₹[c])		
a) No income/Undisclosed	111	15.1
b) Below ₹ 20,000	239	32.5
c) ₹ 20,000– 40,000	153	20.8
d) Above ₹ 40,000	233	31.7

[a]Arts, humanities & social sciences exclude commerce, economics and management.
[b]Others include 34 respondents with less than college education, 2 respondents from library science, and 16 graduates and 18 post-graduates who opted not to reveal their discipline of study.
[c]The exchange rate of USD 1 = 67.72 as on February 01, 2016, as per www.oanda.com.Source: Authors' computation from the primary data.

interesting matter for further scrutiny. Hence, we proceed with the evaluation of the impact of demographic and socio-economic factors on financial literacy.

4.1. Demographic and socio-economic influences of financial literacy

We explore the relationship between financial literacy and demographic and socio-economic characteristics of the respondents using ANOVA. The mean percentage of correct responses for different subgroups and results of ANOVA are presented in Table 6.

Male respondents score higher (46.7%) than the female respondents (39.8%) in the financial literacy test. All the four areas of financial literacy show the same pattern with respect to the gender. Higher financial literacy among male respondents is consistent with the findings of prior studies (Chen and Volpe, 1998; Mandell, 2008; Agarwalla et al., 2015). We also find that females tend to answer 'I don't know' to financial literacy questions more freely than males (27.1% more than males).
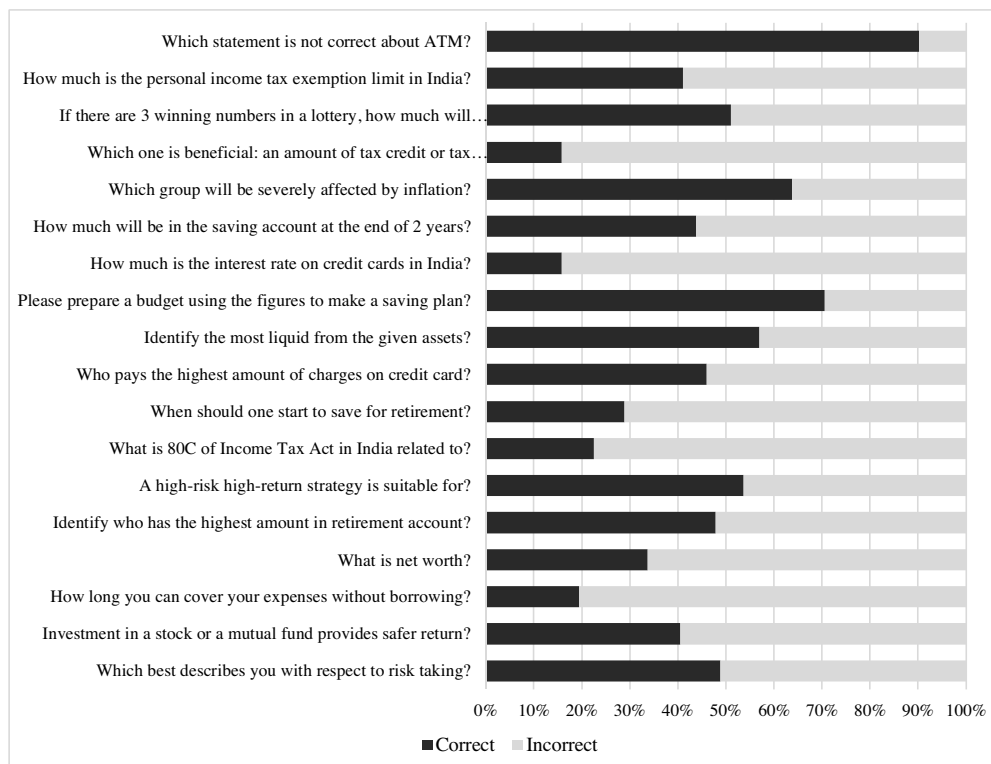

Fig. 1. Percentage of correct responses to financial literacy survey questions. (See Appendix A for the exact question with answer options in the questionnaire).
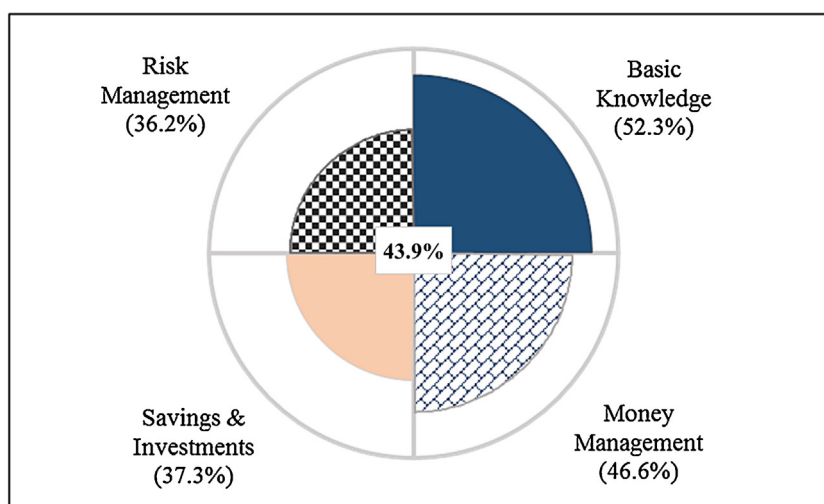
Fig. 2. Proportion of correct responses in four areas of financial literacy.

Table 5
Financial literacy grades of the respondents.

Grade	Range of correct responses	Percentage of respondents
Excellent	15–18	3.13
Good	11–14	20.38
Average	7–10	39.40
Poor	3–6	33.70
Very Poor	0–2	3.40

Source: Authors' computation from the primary data.

Researchers have attempted to explain the gender differences in financial literacy which is observed across studies and countries (Chen and Volpe, 2002; Hsu, 2011; Fonseca et al., 2012). Women may develop financial literacy differently from men as men acquire financial knowledge through making more household financial decisions than women while women focus on other household roles (Hsu, 2011; Fonseca et al., 2012). Married respondents answered 6.9% more questions correctly than the unmarried respondents. Results of ANOVA indicate that the difference in financial literacy between single and married respondents is statistically significant at 0.01 level, except in the risk management area where marital status do not make a significant influence. Age also influences the level of financial literacy. The percentage of correct responses to the financial literacy questions increases with age, up to 26–29 age group, after which the percentage stagnates at around 50%. The variance is not significant in the area of risk management due to mixed responses to risk management questions across different age groups. This points to the risk taking behaviour of lower age individuals and cautious nature of older individuals.

Education and the discipline of study also have a significant influence on levels of financial literacy. However, the *basic knowledge* does not improve significantly beyond the vocational or trade diploma (first level of the college education). Respondents who have studied science and mathematics or arts, humanities and social science disciplines answer fewer questions correctly than those who have studied disciplines such as commerce, economics and management, and engineering and technology. These differences based on the level of education and disciplines of study are statistically significant at 0.01 level.

We also observe that certain occupational classes such as business, finance and teaching demonstrate more financial literacy than others. Those who are unemployed and students are the groups that have the lowest scores in the test. These differences are statistically significant at 0.01 level. This calls for strengthening financial capability of students at undergraduate level. Similarly, years of work experience and personal income show a significant influence on financial literacy of young adults. This indicates that financial literacy improves as exposure to money matters increases.

The results of ANOVA establish varying degrees of influence by the demographic and socio-economic variables on the actual financial literacy of young adults. Literature document disparity between one's actual financial literacy and perceived financial literacy (Lusardi and Mitchell, 2011; Bucher-Koenen et al., 2012; Anderson et al., 2015; Allgood and Walstad, 2016). This disparity influences how individuals take decisions related to acquiring or developing their financial capability to effectively manage money. Hence, we evaluate respondents' perception of their financial literacy and compare it with the actual financial literacy. The following section exhibits the results of the comparison.

Table 6

Percentage of correct responses for demographic and socio-economic subgroups: Results of ANOVA.

Attribute	Basic Knowledge	Money Management	Savings & Investments	Risk Management	Overall Study[j]
Gender					
a) Male	56.8	49.5	39.6	37.1	46.7
b) Female	46.0	42.4	33.9	35.0	39.8
F Statistic	(38.6)**	(13.8)**	(8.8)**	(0.9)	(25.2)**
Zones					
a) North	48.9	41.9	34.1	38.9	41.2
b) Central	53.3	47.8	39.4	36.9	45.2
c) South	55.5	51.0	39.2	32.5	45.9
F Statistic	(6.0)**	(9.2)**	(3.5)*	(3.1)*	(5.3)**
Marital Status					
a) Single	48.4	43.9	34.3	35.3	41.0
b) Married	57.9	50.4	41.6	37.5	47.9
F Statistic	(30.8)**	(11.2)**	(14.6)**	(0.9)	(24.9)**
Age					
a) 18–21	41.5	32.9	24.6	34.4	33.3
b) 22–25	46.4	45.2	32.7	34.0	40.2
c) 26–29	59.7	56.2	44.7	37.0	50.8
d) 30–34	60.5	50.3	45.4	39.4	49.9
F Statistic	(33.7)**	(29.1)**	(31.4)**	(1.3)	(44.2)**
Religious affiliation					
a) Hindu	51.0	44.1	36.1	36.6	42.6
b) Christian	56.8	56.8	43.4	35.6	49.9
c) Muslim	47.6	47.6	30.4	32.3	37.9
d) Undisclosed	65.3	65.3	48.8	49.0	54.1
F Statistic	(6.0)**	(23.4)**	(9.4)**	(1.1)	(16.5)**
Educational level					
a) Less than college	41.8	36.5	28.8	24.5	33.8
b) Voc./Trade Diploma[a]	51.8	41.1	29.7	33.3	39.6
c) Graduation	52.6	45.6	35.1	33.8	42.7
d) Post-Grad. and above	53.5	51.0	43.6	41.7	48.1
F Statistic	(3.3)*	(6.4)**	(11.2)**	(5.8)**	(11.2)**
Discipline of study					
a) Arts, Hum. & Soc.Sci.[b]	54.9	44.6	31.8	29.5	41.4
b) Comm., Eco. & Mgmt.[c]	55.6	52.3	41.4	34.4	47.2
c) Engineering & Tech.[d]	53.0	47.8	38.7	42.1	45.8
d) Science & Maths	47.5	40.9	34.8	35.3	40.1
e) Others	48.3	40.9	32.6	30.0	38.8
F Statistic	(3.4)*	(5.2)**	(3.2)*	(4.6)**	(5.5)**
Occupation					
a) Academics–Students	43.0	36.9	28.2	37.3	36.2
b) Academics–Teachers	57.3	52.7	55.0	56.1	55.2
c) Business & Finance	64.0	65.9	48.8	33.3	55.2
d) Engineering & Tech.	63.2	53.1	52.0	44.1	54.1
e) Medical & Para-med.	52.7	49.8	42.5	39.4	46.9
f) Other Government Job	61.1	46.1	34.7	36.4	45.5
g) Other Private Job	50.8	44.5	32.3	24.5	39.5
h) Unemployed	36.0	37.5	23.0	30.0	31.8
F Statistic	(18.0)**	(15.9)**	(19.3)**	(8.0)**	(26.5)**
Work Experience					
a) No work experience	43.1	36.0	26.5	34.4	35.1
b) Up to 2 Years	47.9	51.0	38.5	36.0	44.2
c) 2–4 Years	58.9	56.4	41.9	31.3	48.9
d) More than 4 Years	61.9	49.6	45.8	41.4	50.6
F Statistic	(34.5)**	(25.6)**	(26.8)**	(3.4)*	(37.9)**
Monthly income					
a) No income	42.3	36.2	26.9	35.1	35.1
b) Below ₹ 20,000	47.6	41.5	32.7	31.8	39.1
c) ₹ 20,000– 40,000	60.6	55.8	42.2	33.3	49.6
d) Above ₹ 40,000	66.8	60.4	59.2	54.3	60.8
F Statistic	(43.8)**	(37.1)**	(48.3)**	(12.5)**	(62.4)**

Table 6 (*Continued*)

Attribute	Basic Knowledge	Money Management	Savings & Investments	Risk Management	Overall Study[†]
Parents' education					
a) Less than college	51.8	44.8	34.3	31.2	41.6
b) Voc./Trade Diploma	47.3	42.0	32.2	45.6	41.4
c) Graduation	53.5	52.4	43.5	40.2	48.2
d) Post-Graduation	54.4	49.1	40.8	45.8	47.7
e) Undisclosed	53.4	40.9	36.1	34.8	42.0
F Statistic	(1.1)	(4.3)[**]	(5.8)[**]	(9.3)[**]	(6.3)[**]
Parents' occupation					
a) Agriculture	55.8	55.2	37.3	29.8	46.2
b) Business & Finance	50.8	47.5	37.5	40.6	44.5
c) Government Jobs	55.7	51.2	40.5	42.6	48.1
d) Private Jobs	46.3	39.8	33.0	33.3	38.7
e) Undisclosed	52.6	42.6	37.3	33.9	42.5
F Statistic	(3.6)[**]	(7.8)[**]	(1.5)	(4.3)[**]	(5.3)[**]
Monthly family income					
a) No income	54.8	42.5	37.5	37.5	43.7
b) Below ₹ 20,000	53.2	45.2	36.0	36.3	43.4
c) ₹ 20,000– 40,000	50.5	47.3	36.5	31.6	42.6
d) Above ₹ 40,000	51.5	49.4	39.1	38.6	45.3
F Statistic	(0.9)	(2.2)	(0.6)	(1.9)	(0.7)

[a] Vocational/trade diploma.
[b] Arts, humanities & social sciences excluding commerce, economics & management.
[c] Commerce, economics & management.
[d] Engineering & technology.
[*] Significant at the 0.05 level.
[**] significant at the 0.01 level.
[†] Wherever homogeneity of variances assumption is not satisfied as per Levene's test, Welch statistic for robust test of equality of means is reported.
Source: Authors' computation from the primary data.

5. Evaluation of actual and self-reported financial literacy in Kerala

Available evidence shows that individuals tend to over-rate their financial literacy level when asked to self-report the same (Agnew and Szykman, 2005; Lusardi and Mitchell, 2011; Lusardi, 2011; Bucher-Koenen et al., 2012; Anderson et al., 2015; Allgood and Walstad, 2016 Bucher-Koenen et al., 2012; Anderson et al., 2015; Allgood and Walstad, 2016). We attempt to test if the same holds true in the case of young adults in Kerala. The difference between actual financial literacy and self-reported financial literacy based on respondents' personal profiles is depicted in Fig. 3.

The radar or spider diagram illustrates the difference between actual financial literacy and self-reported financial literacy of young adults. The average test score is 43.9% compared to the self-reported financial literacy score of 66.8%. This indicates that the self-reported financial literacy of young adults in Kerala is 52.2% higher than the actual financial literacy. A visual examination of the diagram clearly indicates that young adults in Kerala over-rate their levels of financial literacy. The gap between actual and self-reported scores of financial literacy varies across the various subgroups studied. The high income group (above ₹ 40,000), respondents from the 'other religion', and 'engineering and teaching professionals' have the lowest deviations in comparison with others, indicating the nearly realistic nature of these groups in perceiving the levels of their financial literacy. The gap in scores is wide for respondents who are female, belonging to lower age group, are Muslims, have less than college education, are students, are unemployed and have no income. This calls for initiatives to create financial awareness among young adults. Allgood and Walstad (2016) establish that perceived financial literacy is as influential as actual financial literacy on financial behaviour of individuals. Anderson et al. (2015) argue that perceived financial literacy is often a stronger predictor of financial participation than the actual financial literacy. They regard so since respondents with high perceived financial literacy are found more likely to save for emergencies, plan for retirement and prudent in choosing credit cards. These observations prompt us to evaluate the impact of perception-reality gap in financial literacy of young adults in Kerala on their attitude towards financial education.

The current study finds low levels of financial literacy in Kerala. The very high general literacy rate and educational attainment of the state of Kerala seem to have little effect on financial literacy. As low levels of financial literacy often result in poor financial decisions (Gerardi et al., 2010; Lusardi and Mitchell, 2011; Van Rooij et al., 2011; Lusardi and Tufano, 2015), financial education is considered as an antidote (Hastings et al., 2012), despite having mixed response on the effectiveness of financial education programs. Mandell (2008) reports that although financial literacy is positively correlated with better financial behaviour, financial education does not always result in prudent financial behaviour. Cole et al. (2011) find no effect for financial literacy program on opening bank accounts in India and Indonesia. On the other hand, several studies indicate to
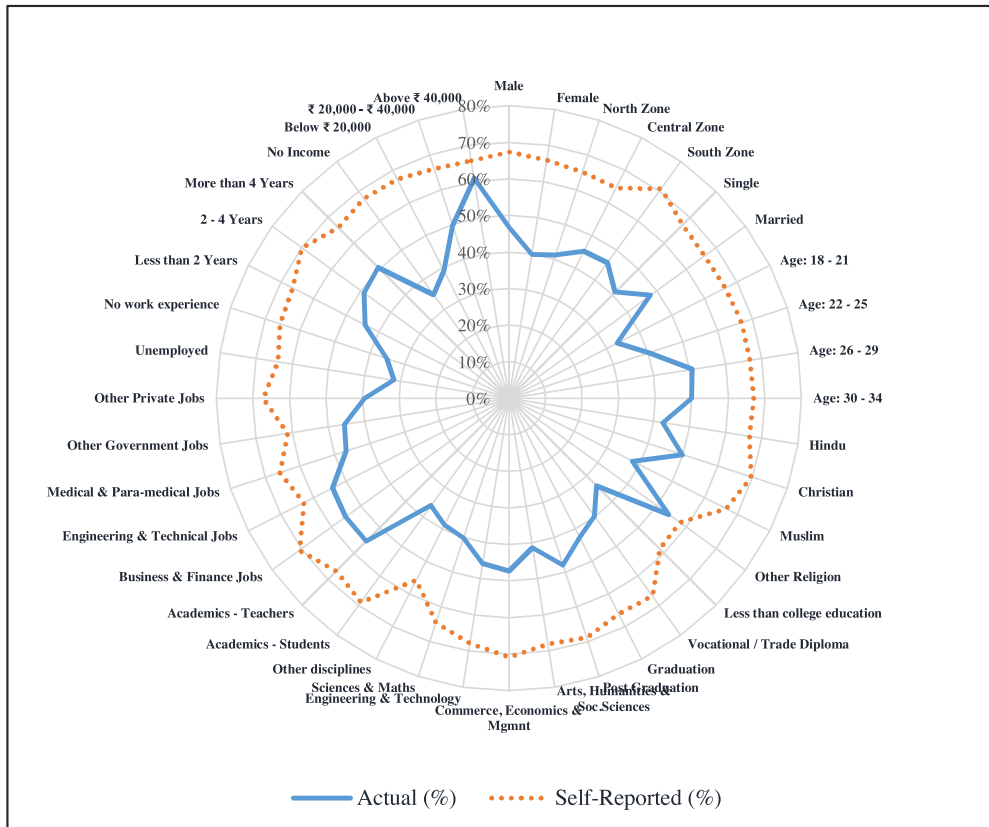
Fig. 3. Actual versus self-reported levels of financial literacy.

the positive effect of financial education on financial knowledge and subsequent financial behaviour (Bernheim and Garrett, 2003; Jappelli, 2010; Carpena et al., 2011; Carlin and Robinson, 2012; Bruhn et al., 2013). Agarwalla et al. (2015) calls for instituting financial literacy programs considering the contextual influences like family and customised to specific target groups. Similarly, Gaurav and Singh (2012) opine that tailored programs such as those addressing the cognitive ability for children, basic financial knowledge for uneducated people and debt literacy for farmers will be effective in India. While the discourse on the effectiveness of financial literacy program continues, it is agreed that the success of such a program depends on the attitude of the target group, among other factors (learning outcome, content, delivery, etc.). In light of this, we examine the attitude of young adults in Kerala towards financial education, in the next section.

6. Attitude of educated young adults towards financial education

The respondents are asked for their opinion on further financial education for themselves and other young adults separately. Respondents are classified into two groups based on their level of actual financial literacy in order to analyse the impact of financial literacy on their opinion. The mean score in the financial literacy test is used as the cut-off point. More than half (51.4%) of the respondents state the need for further financial education for self which is presented in Table 7.

The classification shows that 56.1% of the high literacy group and 46.2% of the low literacy group express the need for further financial education and training for themselves. It is worthy to note that 29.8% and 35% of respondents with high financial literacy and low financial literacy respectively, do not know whether or not they need further education on managing money. The chi-square statistic indicates that both these groups differ significantly. This implies that young adults with high financial literacy recognise the importance of financial literacy and demand further financial education more than those with low financial literacy.

Furthermore, respondents are asked about their opinion on further financial education for other young adults in Kerala. This question is included because of the chance for social desirability bias[10] in response to the prior question on financial education for self. King and Bruner (2000) confirm that the social desirability bias often contaminates the self-reported

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[10] Social desirability bias is a human tendency to portray the self in the best possible manner. This makes the self-reported data to be distorted or biased toward what the respondent thinks 'right' or 'socially-acceptable' (Fisher, 1993).

Table 7
Need for financial education for self.

Number and percentage of respondents who perceive the need for further education on personal finance for themselves as:			
	Either not at all required or not required	I don't know	Either very much required or required	Total
Young adults with high financial literacy	52 14.1%	110 29.8%	207 56.1%	369 100%
Young adults with low financial literacy	62 18.8%	115 35.0%	152 46.2%	329 100%

Chi-Square = 7.146, significant at the 0.0281 level.

Table 8
Need for financial education and training for other young adults.

Number and percentage of respondents who perceive the need for further education on personal finance for young adults as:			
	Either not at all required or not required	I don't know	Either very much required or required	Total
Young adults with high financial literacy	8 2.2%	15 4.1%	340 93.7%	363 100%
Young adults with low financial literacy	29 8.6%	26 7.7%	281 83.6%	336 100%

Chi-Square = 19.462, significant at the 0.0001 level.

measures. The deviation in responses to these two questions corroborated the bias. Although about 76.5% of the respondents obtain either an average or below average score in the financial literacy test, only 51.4% of them express the need for further financial education for self. However, 88.8% of the respondents state that other young adults in Kerala require further financial education. The classification of responses to the question on financial education of other young adults is presented in Table 8.

About 93.7% of respondents with relatively high financial literacy feel that young adults in Kerala require further financial education while the same is 83.6% among respondents with low financial literacy. The difference between groups is statistically significant at 0.0001 level. Despite this difference, an average of 88.8% of the respondents feels that young adults in Kerala require further financial education. It may be noted that only 51.4% of the respondents feels the need for financial education for themselves. We believe that the figure of 88.8%, devoid of the social desirability bias is a more realistic indicator of the demand for further financial education. Thus, the policymakers may treat 88.8% as the indicator of demand for financial education for the educated young adults in Kerala.

7. Conclusion and implications

In this study, we examine the level of financial literacy and its determinants among the educated young adults in Kerala, India, using a new measure of financial literacy. We also evaluate their perception about financial literacy and opinion on financial literacy education. Kerala, the most literate state in India is known for its social and economic development with an educational attainment comparable to that of many developed countries. This calls for studying the impact of Kerala's high social and educational development on levels of financial literacy on different cohorts of the society. Furthermore, this study is perhaps the first of its kind in Kerala. Hence, the study fills a gap in research on financial literacy.

Overall, we find that the level of financial literacy in Kerala is low. Our survey finds that an average respondent answers only less than half (44%) of the financial literacy questions correctly. Analysis of the impact of demographic and socio-economic attributes on financial literacy using ANOVA shows that gender, marital status, age, religion, education, the discipline of study, occupation, work experience, income, and parents' education and their occupation influence financial literacy at varying levels of statistical significance.

The study examines financial literacy with reference to gender and finds lower level of financial literacy among women, which is in line with literature (Chen and Volpe, 1998, 2002; Lusardi and Mitchell, 2007; Agarwalla et al., 2015). The lower levels of financial literacy among women calls for customised financial literacy improvement programs for women as they could play a key role in securing the financial wellbeing of both individuals and households. Financial education programs aimed at women in Kerala may be imparted through various channels such as educational institutions, local bodies, and self-help groups. It is also interesting to note that financial literacy improves with age. This is not surprising due to the fact that as exposure to money increases, people learn the basics of money management either through trial and error or other appropriate ways such as reading published materials and taking advice from friends or colleagues. Addressing the financial skill shortage in the younger age can improve outcomes of financial decisions taken by young also to the levels of senior counterparts considered in this study. Therefore, we recommend *'catch them young'* to be the slogan for financial literacy improvement mission.

The study also finds that the discipline of study has an influence on the level of financial literacy of young adults. This finding corroborates the findings of Chen and Volpe (1998), Beal and Delpachitra (2003) and Koshal et al. (2008). This points to the importance of including commerce, economics and management subjects as core courses in the curriculum for all graduate and post-graduate courses. We also find that the type of occupation impacts financial literacy of young adults. Financial literacy of employees is observed to have a positive impact on worker job productivity (Joo and Garman, 1998). Hence, employers in the organised sector may implement programs to improve financial literacy of employees in the economic interests of both the parties. Similarly, government and non-profit organisations may address this skill deficit of employees in the unorganised sector.

We also observe that young adults in Kerala tend to overrate their financial literacy substantially in contrast to the lower levels of actual financial literacy. This is line with the findings in developed nations by Agnew and Szykman (2005), Lusardi and Mitchell (2011), Bucher-Koenen et al. (2012) and Allgood and Walstad (2016). Thus, we recommend massive financial awareness programs for young adults to understand the importance of financial literacy and motivate them to acquire necessary money management skills. The study finds a massive majority (89%) of young adults in Kerala requiring further financial education. We believe that this provides a clear indication for policy makers to develop an effective strategy to enhance financial capability of young adults in Kerala.

Our study contributes to the empirical evidence that details the levels of financial literacy, its influences among young adults and their attitude towards financial education. The study also strengthens the case for investing in financial education of the young as an antidote to widespread financial illiteracy. We analysed the influence of only demographic and socio-economic factors on financial literacy, which is a limitation of this study. Other variables such as cognitive level, self-efficacy, childhood consumer experience and financial socialisation of an individual may play a significant role in determining the financial literacy and subsequent financial behaviour. Future research focusing on these variables will be worthy and insightful. As this study restricted the unemployed population to a small fraction of the sample, a more robust sampling may be used in further studies. The financial literacy instrument used in this study is developed primarily for young adults in Kerala incorporating specific questions tailored to India. This makes the comparison of results with other studies difficult which is a limitation of the study. We make a modest attempt to assess the attitude of young adults towards financial education. However, we remain cautious about the most effective strategy for improving financial literacy of individuals. Future research may also focus on developing effective strategies and programs to develop financial literacy.

Acknowledgements

Appendix A.

FINANCIAL LITERACY OF YOUNG ADULTS IN KERALA
SURVEY QUESTIONNAIRE

Dear Respondent,

You are kindly requested to participate in a survey as part of the study titled 'Financial Literacy of Young Adults in Kerala'. It will take approximately 15 minutes to complete the survey which will help us to understand the current level of financial literacy among young adults in Kerala. Information provided will be used solely for academic purpose and utmost confidentiality will be maintained.

Thank you.

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Instruction: Please answer the following questions by marking (✓) on the appropriate option provided.

1. Which of the following statements is NOT correct about most ATM (Automated Teller Machine)?
   a) You can generally take cash 24 hours-a-day.
   b) You can get cash anywhere in the world without fee.
   c) You must have a bank account to have an ATM Card.
   d) You can generally obtain information about your bank balance.

2. Suppose you deposit ₹ 5,000 in a savings account which earns 4% interest per year. How much would you have in the account at the end of two years?
   a) ₹ 5,200   c) More than ₹ 5,400
   b) ₹ 5,400   d) I don't know

3. How much is the annual interest rate on credit cards in India generally?
   a) Below 15%   c) Above 25%
   b) 15 – 25%   d) I don't know

4. Please select from below the personal income tax exemption limit for individuals below 60 years of age in India for the financial year 2014-2015?
   a) ₹ 250,000   c) ₹ 150,000
   b) ₹ 200,000   d) I don't know

5. If 3 people have the winning number in a lottery with prize of 6 million dollars, how much will each of them get net of tax (30%)?
   a) $ 2 million   c) $ 1.4 million
   b) $ 4.2 million d) I don't know

6. If you lose your job, how long could you continue to cover living expenses, without borrowing any money?
   a) Less than two months   c) More than four months
   b) Two months to four months   d) I don't know

7. Suppose you started working at the age of 25 and will retire at the age of 60. At what age (from below options) do you think you should start making a financial plan for your retirement?
   a) 25 – 33   c) 43 – 51
   b) 34 – 42   d) 52 – 60

8. Babu gets a job with a monthly take-home pay of ₹ 20,000. He also has a rental income of ₹ 1,000. If his expenses are: rent – ₹ 6,000; food – ₹ 7,000; telephone – ₹ 750; transportation – ₹ 1,250; others – ₹ 2,000, how long will he take to make a saving of ₹ 20,000?
   a) 3 months   c) 5 months
   b) 4 months   d) 6 months

9. The most liquid asset among the below is:
   a) Money in a savings account   c) A house
   b) Gold   d) I don't know

10. Investment in a single company's stock provides a safer return than an equity mutual fund.
   a) True   c) I don't know
   b) False

11. Which of the following is more beneficial to you?
   a) A tax credit of ₹ 2,000   c) Both are same
   b) A tax deduction of ₹ 2,000   d) I don't know

12. What is section 80C of Income Tax Act in India related to?
   a) Definition of gross taxable income and how it's calculated
   b) Deductions per certain investments and payments
   c) Deductions on loan for higher studies
   d) I don't know

13. Which group would be severely affected during periods of high inflation that last several years?
    a) Older, working couples saving for retirement
    b) Young working couples with no children
    c) Older people living on fixed retirement income
    d) I don't know

14. A high-risk and high-return investment strategy would be most suitable for:
    a) An elderly retired couple living on a fixed income
    b) A middle-aged couple needing funds for their children's education in two years
    c) A young married couple without children
    d) A young unmarried person

15. Who among the below credit card users is likely to pay the highest amount in finance charges per year, if they all spend the same amount?
    a) Ajmal, who pays at least the minimum amount each month and more, when he has money.
    b) Bineesh, who generally pays off his credit card in full but, occasionally, will pay the minimum when he is short of cash.
    c) Charles, who always pays off his credit card bill in full shortly after he receives it.
    d) Danish, who only pays the minimum amount each month.

16. Ajit and Deepak are friends of same age. At age 30, Ajit began saving ₹ 2,000 per month while Deepak saved nothing. At age 45, Deepak realized that he needed money for retirement and started saving ₹ 4,000 per month while Ajit continued saving his ₹ 2,000. Now they are both 60 years old. Who has the most money in his retirement account?
    a) They would each have the same amount because they put away exactly the same amount.
    b) Deepak, because he saved more money each year.
    c) Ajit, because his money has grown for longer period at compound interest.
    d) I don't know

17. Which of the following best describes you with respect to taking risks?
    a) I enjoy playing with chances   c) I try to avoid risks at all possible times
    b) I take risks, but after adequate research   d) I don't know

18. Your net worth is:
    a) The difference between your income and expenditure
    b) The difference between your assets and liabilities
    c) The difference between your cash inflow and outflow
    d) I don't know

19. How do you rate your competence in managing your personal finance?

1	2	3	4	5
Very Poor	Poor	Neither Poor nor Good	Good	Very Good

Personal Information

Gender   : ☐ Male   ☐ Female

Zone   : ☐ North   ☐ Central   ☐ South

Marital Status : ☐ Single   ☐ Married   ☐ Other *(Please specify)*

Age   : ☐ 18 – 21   ☐ 22 – 25   ☐ 26 – 29   ☐ 30 – 34

Religion   : ☐ Hindu   ☐ Christian   ☐ Muslim   ☐ Other *(Please specify)*:

Education:	a	Less than college	c	Graduation
	b	Vocational / Trade Diploma	d	Post-Graduation & above

Area of Study:	a	Arts, Humanities & Social Sciences	d	Science & Maths
	b	Commerce, Economics & Management	e	Others (please specify):
	c	Engineering & Technology		

Job / Position / Status :

Years of work experience   : ☐ Less than 2 years ☐ 2 – 4 years ☐ More than 4 years

Monthly Income:	a	No income	c	₹ 20,001 – ₹ 40,000
	b	Below ₹ 20,000	d	Above ₹ 40,000

Parents' Education (highest):	a	Less than college	c	Graduation
	b	Vocational / Trade Diploma	d	Post-Graduation & above

Parents' occupation:	Father	Mother

Parents' Combined Monthly Income:	a	No income	c	₹ 20,001 – ₹ 40,000
	b	Below ₹ 20,000	d	Above ₹ 40,000

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