Financial Literacy among the Tea Garden Labourers in Darjeeling District: An Exploratory Factor Analysis

Pramesh Chettri, PhD Research Scholar, Sikkim University, India.

Professor S.S. Mahapatra, Department of Commerce, Sikkim University, India.

ABSTRACT

‘Financial Literacy’ (FL) is the major challenge faced by majority of countries in the world. According to CRISIL (Credit Rating Information Services of India Limited), the Inclusix Index Scores of Darjeeling district was 42.7% in 2014 measured in terms of basic banking services. The study focuses on financial literacy amongst the tea garden labourers of Darjeeling district and endeavors to examine their capacity to make financial decisions. This study aims to develop the constructs in order to test the validity and reliability of Darjeeling tea garden labourers financial literacy (FL) and its determinants such as Knowledge, Attitude, Behaviour, Skill and Awareness. The data for the study was collected via structured questionnaires distributed to 200 tea garden labourers of Darjeeling District. An exploratory factor analysis using SPSS (SPSS 20.0) programme was used to analyze the data. The results show that only seven items load reliably in FL construct. Specifically, skill in dealing with finance was found to exhibit the highest variance followed by investment behaviour, financial level of awareness, knowledge in dealing with financial situations, financial planning and saving behavior, knowledge of finance and financial attitude. The Cronbach Alpha method of reliability tested has been adapted to measure financial literacy. This paper enables future researchers to expand the knowledge in the area of FL by providing validated constructs to assess FL among tea garden workers in Darjeeling district.

Keywords: Financial Literacy, exploratory factor analysis, Darjeeling Tea Industry, Darjeeling District

INTRODUCTION:

Financial Literacy is the major challenge faced by all countries globally. Financial Literacy is the blend of one’s Knowledge, Attitude, Behavior, Skill and Awareness towards financial matters. In India, the need for financial literacy is getting greater because of low level of literacy and large section of population which remains out of the formal financial set up (Singh, 2014). Finance is the life blood and nerve centre of any nation and it is very essential for smooth running of the economy. Finance plays one of the important role in all dimension of trade, industry and commerce. With the changing structure of an economy, financial literacy has become an essential survival tool for the individuals. In recent years with the advent of globalization and liberalization of financial services industry, wide range of diverse financial products have been introduced through participation of private and foreign entities in addition to the public sector enterprises. These include products such as debit and credit cards by banks, New Pension Plan Service, KisanVikasPatra, open-end and closed-end mutual fund schemes Exchange Traded Funds (ETFs), Systematic Investment Plans (SIP), life and non-life insurance schemes (Unit Linked Investment Plans (ULIPs), Loan Service against Share and securities, shares and debt securities offered by various entities, children education plans, etc. This has led to rising competition among...
clients through introduction of innovative and attractive products. The introduction or innovation of varied products has increased the scope of the financial literacy to a very large extent in the global world. The Organisation for Economic Co-Operation and Development (OECD, 2013) conceptualizes financial literacy as a combination of awareness, knowledge, skill, attitude, and behavior required to make financial decisions and ultimately achieve individual financial well-being. India is labor intensive economy and highly dependent on a large workforce. Tea Industry is the crucial part of Indian economy. Indian tea industry is continuing a long journey since 18th century. India is one of the largest producer, consumer as well as exporter of tea in the world (Kakali Hazarika, 2012)³. Tea industries provide employment for more than 1.1 million laborers in large plantations and provide income for about 2.5 lakh small tea growers and 3.5 billion cups of Tea is consumed in the world (Dr. G. Kavitha and M. Jamuna Rani, 2014)⁴. This study reveals and focuses on financial literacy among tea gardens labourers and to examine how well equipped they are to make financial decisions. Financial Literacy provides people with the opportunity to become more entrepreneurial – to create economic opportunities for themselves, their families and their communities (Ghirmai T. Kefela, 2010)⁵. In Darjeeling Tea Industry, there are 86 running gardens producing “Darjeeling Tea” on a total area of 19,000 hectares of land. The total production ranges from 10 to 11 million kgs annually according to recent statistical report to Darjeeling Tea Plantation. The Darjeeling tea industry at present employs over 52 thousand people on a permanent basis, while a further 15,000 persons are engaged locally known as Bigha workers during the plucking season i.e. from March to November. The turnover of the Darjeeling tea industry is nearly USD 9.5 million, which is acknowledged to be more than the money generated by tourism in the Darjeeling hills and hence the tea industry has played an important role in the life of the hill people. Today, most of the tea gardens people are more deprived of personnel finance management in India due to low level of financial literacy within themselves. Hence financial literacy is a vital part to engage the workers in financial inclusion and to include them in the present economic growth. Many Research Surveys show that the level of financial literacy of Indians is low. It has been estimated that only about five percent of Indians villages have a commercial bank branch. Similarly, over 40 percent of the adult population have no bank account, a number which grows to over 60 percent in rural areas (Thorat, 2007)⁶. In response, the Reserve Bank of India has introduced Financial Literacy and Counselling centers (FLCC) to provide consumers with the tools to make better credit choices (Reserve Bank of India, 2008)⁷. They have also targeted school children to cultivate financial literacy at an early stage via interactive website (Reserve Bank of India, 2007). In the era of globalization, financial knowledge has become not just a convenience but an essential tool for informed consumer choice. The journey from financial literacy to empowerment and protection is highlighted below:

**Figure 1: Journey from Financial Literacy to Empowerment & Protection**

![Diagram showing the journey from Financial Literacy to Empowerment & Protection]

**Source:** Undp Report (2012).

In the wake of rapid development and innovation of technology across the world it also becomes imminent that

---

¹Hazarika, K. (2012). Domestic Consumer Market for India Tea: A Survey Report. *International Journal of Latest Trends in Finance & Economic Sciences*, 2(3), 251-256.

²Kavitha, G., & Rani, M. J. (2014). A Study on Problems and Prospects of Tea Growers with Particular Reference to Nilgiris District (TN) In India. *International Journal of Research in Commerce, It & Management*, 4(01).

³Kefela, G. T. (2010). Promoting Access to Finance by Empowering Customer Financial Literacy in Developing Countries. *Academic Journal Educational Research and Reviews*, 5, 60-74.

⁴Thorat, U. (2007). Financial Inclusion-The Indian Experience. *HMDFD Financial Inclusion* (p. 19). London: London Work Press. [http://www.bis.org/review/r070626f](http://www.bis.org/review/r070626f)

⁵http://rbi.org.in/financial education/home.aspx

⁶http://rbi.org.in/financial education/home.aspx

⁷http://rbi.org.in/financial education/home.aspx
ICT plays an important role in the financial literacy and inclusion growth. Finance plays an important role in our daily life of an individual. So, we can say finance is just like blood for survival the business in changing economic environment. But without having ample financial literacy, finance has become much complicated and complex in the modern changing environment. The US Financial Literacy and Education Commission define financial literacy as “the ability to make informed judgement and to take effective actions regarding the current and future use and management of money” (Basu, 2005). In India Tea Estates labourers play an important role in the growth of local, national and International level of Economy. Darjeeling tea has been our national pride for well over a century. A mere mention of the name “Darjeeling tea” embodies a perception of uniqueness and supremacy of quality for tea connoisseurs all over the world (NK Das, 2001). According to Tea Board technoeconomic survey, the average number of daily employment of labourers in Darjeeling including Kalimpong during the year 1997 was 49,783. Out of this 45,547 worked in field and 4,236 worked in factory. Without their involvement and contribution the society of Darjeeling would never be complete. Therefore, study of FL is essential among the Darjeeling tea gardens workers in India. Financial Literacy is a basic knowledge that people need in order to survive in a modern society” (Kem, 2001). In India the marginal farmers, landless labour, workers in unorganized sector, urban slum dwellers, migrants workers, ethnic minorities and other socially excluded groups are highly excluded from financial inclusion. So the needs of financial literacy becomes inevitable in India. After 70 years of independence the banking and financial services in rural areas of India have not yet produced desired results in terms of the directions, quantum and quality. The present study also highlights to measure and to suggest to increase the level of Financial Literacy among tea labourers in India.

LITERATURE REVIEW:

The concept of Financial literacy and its relevance to the present study are compiled and presented in a logical order. To support and enrich the theoretical orientation of the present study, an attempt was made to review similar and relevant past studies and literature. A number of researchers tried their hands to know about financial literacy among different groups of people.

Desaiand&Surti(2015) ‘A Study on Financial Inclusion and Literacy Rate in India’ observes that many states in India have a higher literacy rate than others but the percentage of households availing banking services is very less. They foundthat states like Manipur have 79.21% literacy rate, but the percentage of households availing banking services is as low as 29.6%, which is a surprisingly low figure. In states like Meghalaya, Mizoram and Nagaland too, there is a vast difference between literacy rate and percentage of households availing banking services which is 36.93%, 36.43% and 44.65% respectively. Finally, the study reveals that there is a moderate correlation between percentage of households availing banking services and literacy level.

Mathivathani and Velumani (2014) conducted a study on financial literacy among rural women in Tamilnadu and identified that the barriers to acquire financial literacy for women are some social and cultural factors, physical barriers, educational barriers and financial barriers. Their findings indicate that Financial literacy of marginalized rural women is abysmally low.

Singh (2014) study indicates that Financial Literacy and Financial Stability are two aspects of Efficient Economy and find that Lower Financial literacy is linked to lower household savings, as well as higher reported over-indebtedness. The Study also reveals that financial literacy substantially increases the demand for banking services.

Chandrasekhar(2014) conducted a financial literacy survey ‘Reading the Tea Leaves on Financial Inclusion: The Case of Rural Labour Households’ examines progress in financial inclusion using information on indebtedness of rural labour households collected by the National Sample Survey office. He found that quantum of borrowings by rural labour households from different sources was Rs. 13,311 crore from formal institution; Rs. 12,026 crore from moneylenders and Rs. 11,035 crore from other non-institutional sources. The findings from the survey indicated that the share of institutional credit agencies in the outstanding debt of the rural households decreased over the period 1991-2002, from 64% to 57%. He found that the proportion of indebted rural labour households has declined from 47.3% in 2001-05 to 33.9% in 2009-10. He also found that the southern states which have a good penetration of banks and microfinance institutions account for such a large proportion of borrowing from moneylenders.

Shethy and Thomas( 2013) surveyed 100 students in the age group of 18 to 23 belonging to different

---

8Basu, S (2005). Financial literacy and the life cycle, Washington, DC: Financial Planning Association.
9Mitra, S. K. (2001). Techno-Economic Survey on Darjeeling Tea Industry. Kolkata: Tea Board of India.
faculties of Science Arts and Commerce students in Mumbai by using Questionnaire based on existing literature on the components of Financial Literacy. Their finding shows that the financial knowledge among students in Mumbai is poor as compared to the global standards.

Marzieh et al. (2013), in the article “Canadian Institute of Chartered Accountants CICA Youth Financial Literacy” revealed that age and education are positively correlated with financial literacy and financial wellbeing. Married people and men are more financially literate than unmarried people. Higher financial literacy leads to greater financial well-being and less financial concerns.

Gupta and Singh (2013) did a research on role of literacy level in financial inclusion in India: empirical evidence with objective to assess the correlation between the usage dimension of financial inclusion index and literacy level in India and they conclude that lower literacy rate is not the main reason for low financial inclusion in states.

Bijle (2012) in his study ‘Financial Literacy: An Essential Tool for Empowerment of Women through Micro-finance’, examines the money management practices of women SHG members, who were users of micro-credit through an MFI called GrameenKoota in Karnataka. The findings show that the women had limited control over money and money management within their households, whereas men were well-versed about financial management but unwilling to discuss with their wives. The findings also show that the members had very poor or negligible knowledge about the management of savings and credit.

Bumcrot and Lusardi (2011) conducted a study on The Geography of Financial Literacy and found that most Americans were not familiar with fundamental concepts that should form a basis for financial decision-making. They also found that there was considerable geographic variation in financial literacy.

Seshan (2011) in his study tested the Financial Literacy Training for migrant workers in home and host countries. The results established that Mean annual income in Qatar corresponded to 313,746 Indian rupees (INR) or $6,175 and average annual remittances touched INR133,967 ($2,637). The mean personal financial savings of the migrant held in Qatar and India corresponded to INR121,687 ($2,395). The study also observed that in India, the household’s annual income (excluding members working abroad) averaged INR5,556 ($109). About 47 per cent of wives stated that they saved regularly. The findings of the study revealed that the workshop led to several changes in financial practices, savings goals, and financial outcomes of the migrants. Lastly, the findings show that there is less evidence that the workshop has an impact on actual financial decisions made by families back home in India.

Kefela (2010) conducted a case study survey on ‘Promoting access to finance by empowering- Financial literacy in developing countries’ and the study found that nearly four billion people live at the base of the economic pyramid, surviving on less than two dollars a day. The finding also shows that the vast majority of people in developing countries are excluded from access to basic financial services and knowledge that are essential for progress.

Turnham (2010) conducted a study ‘Attitudes to Savings and Financial Education Among Low-Income Populations’ to explore how community-based organizations might encourage better financial practices, including higher savings rates, among low-income and vulnerable populations. The focus groups gathered information on saving motives, practices, and attitudes as well as opinions about the timing, content, and form of financial education efforts. Findings suggest that educating low-income and vulnerable population about financial concepts is important. However, efforts focused on behavioral changes, particularly strengthening discipline around savings and spending, may be more effective for promoting long-term financial well-being.

Sages and Grable (2009) in their study identified that the individuals who have the lowest level of financial risk tolerance are the least competent in terms of financial matters, have the lowest subjective evaluation of net worth and are less satisfied with their financial management skills. The level of financial risk tolerance of the individuals determines their financial behavior.

Lusardi and Mitchell (2006) designed the financial literacy test for Health and Retirement Survey (HRS). The test comprised of three questions to assess the respondents understanding of the concept of compound interest, inflation and diversification of risk. The test of Lusardi and Mitchell became very popular with other researchers as well.

Chen and Volp (1998) surveyed 924 students from 13 public and private universities across US to examine college students’ knowledge of personal finance. This study used comprehensive questionnaire designed to cover major aspects of personal finance. There were total of 52 questions which included 36 multiple choice questions, 8 questions on opinions and decisions and 8 questions on demographic data. Results of the survey suggest low level of financial literacy among students. The overall mean of correct answer for the survey was about 53%, which shows that college students were not knowledgeable about personal finance. For each of the area personal finance such as savings and
borrowings, insurance and investments the mean score were not above 65%. The least score was obtained in the area of investments where mean score found to be 40%. The sample used for this study included a high proportions of the students with business majors and these students scored higher than the students in other fields of study.

RESEARCH METHODOLOGY:

For the purpose of the study, Darjeeling district is taken as an area of study. A stratified random sampling method was adopted for selecting the respondents for the purpose of the study. There are total of 86 tea Industries in Darjeeling district. Out of these 10 tea industries with highest and lowest share of productivity namely Makaibari, Phoobsering, Soom, Chamong, Ambootia, Peshok, Poobong, Happy valley, Mission Hill, Lopchu were selected for the purpose of study. The respondents will be almost equally divided among 10 different selected tea industries. The sample respondents being head of the households. All respondents were permanent tea garden workers with 38% of them were female. The data was collected via self-administered questionnaires to 200 respondents from Darjeeling district comprising 20 respondents each from the selected tea gardens. The data collected were analyzed using Statistical Package of Social Sciences (SPSS 20.0). Valid constructs to measure the proposed concepts were developed in this study. The validity of the developed constructs was further examined using an exploratory factor analysis. Similarly, the reliability of the constructs was also verified. The Cronbach Alpha reliability test was applied that resulted with the coefficient of 0.840. The data were collected during December 2016 to May 2017.

Measurement:
To measure Financial Literacy of Darjeeling tea garden workers, the constructs were fully developed by the researchers as unidimensional variable. The socio economic and demographic profile of the sample respondents consisted of 62 percent male and 38 percent female, with majority of them (75.5 percent) in the age group 35-50 years. Of the total respondents, 85 percent were married, 15 per cent were unmarried and live in nuclear families (78%) as against joint families (22%). Majority of the respondents had education upto ME (88%). Content validity was verified through consultation with area and constructs experts as well as further discussion with respondents. All constructs were measured based on five-point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree.”

ANALYSIS AND DISCUSSION:

Financial Literacy of Darjeeling tea industries laboure has been assessed by adopting the holistic approach. Under this approach financial literacy has been measured by combining its five probable dimensions i.e. financial knowledge, financial attitude, financial behavior, financial skill and financial awareness. It is necessary to conduct an exploratory factor analysis in this study to fulfill construct validity. This results in relating to various dimension which has been used to capture financial literacy of the respondents. In order to understand the financial literacy of the respondents’ total of 25 items were used and responses were measured on a 5 point Likert scale assigning 1 to ‘not at all true’ and 5 to ‘very true’. As it was difficult to present the results of all 25 items individually, it was decided to carry out factor analysis on these 25 items measuring financial literacy of the respondents. Factor analysis is an interdependence technique whose primary purpose is to define the underlying structure among the variables in the analysis. Factor analysis can be utilized to examine the underlying patterns or relationships for a large number of variables and to determine whether the information can be condensed or summarized in a smaller set of factors or components.

Reliability of Scale:
The reliability of the scale was tested by performing the Cronbach’s Alpha reliability statistics. A value higher than 0.6 is normally treated as satisfactory in research for the use of a scale (Robinson et al., 1991). In the research the value of Cronbach’s Alpha of all 25 factors is 0.840 which is higher than acceptable level indicating a very good overall consistency.

Adequacy of Data Test:
Barlett’s test of sphericity and the Kaiser-Meyer-Olkin measure of sampling adequacy are the test which can be used to determine the factorability of the matrix as a whole. If Barlett’s test of sphericity is large and significant,
and the Kaiser-Meyer-Olkin measure is greater than 0.6, then factorability is assumed (Hair et al. 2007). Results indicate that KMO measure of sampling adequacy is 0.750 (Table 3) and all KMO values for individual items were >0.5. Barlett’s test of sphericity indicated a significant value (P < 0.001) (Table 3). Therefore, the use of factor analysis is appropriate for this study.

In the table 4, communalities for a variable are explained by the extracted factors. Extraction communalities for a variable give the total amount of variance in the variable. In the given (table 4), 76.6% of the variance in investment with high risk and return is much explained by the extracted factors. The variable has low communality; it means that the extracted factors are not able to explain much variance in that variable. In the above table, the variance in term of buying attitude is 3.34% has low communality is explained by the extracted factors.

The table 5, summarizes the total variance explained by the Factor Analysis solution and gives an indication about the number of useful factors. Looking at the table labelled 5, Total Variance Explained, we see that the eigenvalue for the first factor is quite a bit larger than the eigenvalue for the next factor. Based on Table 5, there are only seven factors with eigenvalues greater than 1 suggesting seven-factor solution. Eigen-value for the seven factor is 5.791, 2.714, 1.658, 1.568, 1.180, 1.129 and 1.076. Specifically, skill in dealing with finance found to exhibit the highest variance followed by investment behavior, financial level of awareness, knowledge in dealing with financial situations, financial planning and saving behavior, knowledge of finance and financial attitude. These seven factors were able to explain 60.471% of total variance.

The scree plot shown in Figure 1 is a way of identifying the number of useful factors. In the given figure 1, it shows for a sharp break in sizes of eigenvalues which results in a change in the slope of the plot from steep to shallow. This suggest that the right choice of factor solution. There are only seven factors with eigen values greater than 1 suggesting seven-factor solution.

The table 6, Principal Component Analysis using Varimax Rotation was operated for extracting the underlying factors. Table 6 depicts the rotated component matrix for financial literacy factors. Rotated component matrix contains the factor loadings for each variable. Factor loadings are the correlation of each factors and the variables. Thus higher the factor loading, the more likely it is that the factor underlies that variables. Factors loadings help in identifying which variables are associated with the particular factors. In the table 6, 18 variables out of the total 25 variables measures failed to load reliably in FL construct.

The seven factors were able to explain 60.471% of total variance given in the column H (Table 6), with factor loading between 0.395 to 0.854. Here $H^2$ is the proportion of the variances of each variables explained by the factors. The interpretation and naming of factors was done by identifying the variables having high loading on individual factors. For this purpose, Rotated Component matrix (Table 6) is used. Seven factors identified in factor analysis are:

**Factor 1 Skill in dealing with finance:**
Six items were loaded on this Factor. Considering the items under factor 1 it was named as Skill in dealing with finance as it includes statements related to borrowing, debit and credit card, life insurance, saving, spending and budgeting skill.

**Factor 2 Investment Behaviours:**
Four items were loaded on this factor. This factor is named as investment behaviors as it includes statements related to savings and investments behaviours.

**Factor 3 Financial Level of Awareness:**
Rotated factor matrix revealed that five items which are loaded on this factor and are related to awareness level of finance in term of newspaper, T.V, Radio and level of knowledge in term of compound interest in savings.

**Factor 4 Knowledge in dealing with financial situations:**
Two items were loaded on this factor. Knowledge related to risk and return in investment are included here.

**Factor 5 Financial Planning and Savings Behaviours:**
Two items were loaded on this factor. Items like financial planning and saving behaviours loaded on this factor.

**Factor 6 Knowledge of Finance:**
Three items were loaded on this factor. Items like inflation, investment and knowledge at the time of financial situations are included here.

---

13 Hair, Anderson, R.L (2007). Multivariable Data Analysis (6th edition). Pearson.
Factor 7 Financial Attitude:
Three items were loaded on this factor. This factor considers the financial planning, saving and risk taking attitude statement.

CONCLUSION:
The result of this study assists the tea garden labourers on the personal financial management and it also indicates that financial literacy programmes can impart sizeable influence on tea garden workers for financial decision making and practices. It should be noted that in Darjeeling district, the plantation workers, marginal farmers, landless labourers, workers in unorganized sectors, migrants workers, ethnic minorities and other socially excluded groups are excluded from financial inclusion. Minimum wages of the tea industry labourers is also one of the reason being financially excluded. Apart from low wages, the workers have also been deprived of many of their statutory rights. The knowledge, Attitude, Behaviour, Skill and Awareness level about finance vary according to the socio-economic status of the respondents. The researcher reached overall conclusion that Darjeeling tea industry labourers were neither skilled nor knowledgeable in financial matters and that this would tend to impact negatively on their future lives through the incompetent financial management. The agents, financial advisor, enumerators, certified financial planners and business correspondents would act as a catalyst to promote financial literacy. This study represents an initial attempt to explore the concept of FL through an exploratory factor analysis. Future research should examine the effect of financial education made available to the plantation workers, marginal farmers, landless labourers and other financially excluded groups.

REFERENCES:
Bijli, H. K. (2012). Financial literacy: An essential tool for empowerment of women through micro -finance. Journal of Financial Service Professionals, 77-85.

Bumcrot, C. B., Lin, J., & Lusardi, A. (2011). The geography of financial literacy. Financial Literacy Center, IV (12), 82-90.

Chandrakekhar, S. (2014). Reading the Tea Leaves on Financial Inclusion: The Case of Rural Labour Households. Indira Gandhi Institute of Development Research.

Chen, H., & Volve, R. (1998). An analysis of personal financial literacy among college students. Financial Services Review, 7, 107-128.

Desai, R. P., & Surti, M. M. (2015). A study on financial inclusion and literacy rate in India. International Journal in Management and Social Science, 03 (04), 532-537.

Gupta, P., & Singh, B. (2013). Role of literacy level in financial inclusion in India. Journal of Economics, Business and Management, 1 (12), 50-62.

Kefela, G. T. (2010). Promoting access to finance by empowering customers financial literacy in developing countries. Acchademic Journal, Educational Research, 68-86.

Mathivathani, V., & Velumani, M. (2014). A study on financial literacy among rural women in Tamilnadu. Indian Journal of Applied Research, 4 (12), 60-72.

Mitchell, O., & Lusardi, A. (2011). Financial literacy around the world. Journal of Financial Economics, 102(2), 449-472.

Rohini, A., & Monika, C. (2015). Role of ultra small branch in accelerating the pace of financial inclusion. Protagonist International Journal of Management and Technology (PIJMT), 2 (1), 271-305.

Robinson, J. P., Shaver, P. R., & Wringhtsman, L. S. (1991). Measures of Personality and Social Psychological Attitude. San Diego, USA: Academic Press.

Sages, R. A., & Grable, J. E. (2010). Financial numeracy, net worth, and financial management skills: Client characteristics that differ based on financial risk tolerance. Journal of Financial Services, 64(6), 57-65.

Seshan, G. K. (2011). Evaluating financial literacy training for migrant workers in the gulf. International Journal of Business and Management, 128-135.

Singh, U. (2014). Financial literacy and financial stability are two aspects of efficient economy. Journal of Finance, Accounting, and Management, 5(2), 59-76.

Shethy, V., & Thomas, B. J. (2013). A study of financial literacy amongst the college students in Mumbai. Tactful Management Research Journal, 11(8), 1-6.

Turnham, J. (2010). Attitudes of savings and financial education among low income populations. Business Economics, 1 (8), 62-70.
TABLES:

Table 1: Cronbach’s alpha

| Cronbach’s alpha | Internal Consistency |
|------------------|----------------------|
| \( \alpha \geq 0.9 \) | Excellent            |
| \( 0.9 > \alpha \geq 0.8 \) | Good                 |
| \( 0.8 > \alpha \geq 0.7 \) | Acceptable           |
| \( 0.7 > \alpha \geq 0.6 \) | Questionable         |
| \( 0.6 > \alpha \geq 0.5 \) | Poor                 |
| \( 0.5 > \alpha \) | Unacceptable         |

Source: www.statisticshowto.com/cronbachs-alpha-spss

Table 2: Cronbach’s Alpha value Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .840             | 25         |

Source: Output from SPSS 20.0

Table 3: KMO and Bartlett’s Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .750 |
|-------------------------------------------------|------|
| Bartlett's Test of Sphericity                    |      |
| Approx. Chi-Square                              | 1621.064 |
| df                                               | 300  |
| Sig.                                             | .000 |

Source: Output from SPSS 20.0

Table 4: Communalities

| Item                                                                 | Initial | Extraction |
|---------------------------------------------------------------------|---------|------------|
| I think if someone offers me the chance to make a lot of money in short time, there is also chance of losing a lot of money | 1.000   | .728       |
| I believe that Investment with a high return is likely to bear high risk | 1.000   | .766       |
| I think that high inflation means that cost of living is going increase rapidly | 1.000   | .651       |
| I put all my money in one kind of investment, then it is likely that I will lose all of my money | 1.000   | .621       |
| I believe that if I keep money in a saving which grows in compounded form | 1.000   | .531       |
it will gives me better return  
I believe that it is important to have a financial plan.  
Before I buy something I carefully consider whether I can afford it.  
I feel putting away money each month for saving or investments is important  
When it comes to financial matters, I think of myself as a bit of a risk taker.  
I find it more satisfying to spend money than to save it for the future.  
I set aside money for special events.  
I save money before I spend.  
I pay my utility bills, loan installments on time every month.  
I evaluate financial products before investing money in them.  
I seek information from all possible sources before making choice regarding investment.  
I use debit and credit card wisely.  
I have Purchase enough insurance protection for my future.  
I have develop good savings habits.  
I evaluate my budget and revise as needed from time to time.  
I regularly compare my estimated expenses to my actual spending.  
Digital Financial Literacy campaign can be a good move to improve upon financial literacy.  
I regularly read the personal finance pages in the newspapers’  
I Watch TV & listen radio which advice in investment.  
I take opinion from many literate friends for investment.  
I attend many programmes which Govt. sponsors in my village, locality for improving saving habit.

**Extraction Method:** Principal Component Analysis.

| Table 5: Total Variance Explained |
|-----------------------------------|
| Component | Initial Eigenvalues | Extraction Sums of Squared Loadings | Rotation Sums of Squared Loadings |
|-----------|---------------------|-------------------------------------|----------------------------------|
|           | Total               | Initial % of Variance               | Cumulative %                     | Total               | Initial % of Variance               | Cumulative % |
| 1         | 5.791               | 23.166                              | 23.166                           | 5.791               | 23.166                              | 23.166       |
| 2         | 2.714               | 10.856                              | 34.022                           | 2.714               | 10.856                              | 34.022       |
| 3         | 1.658               | 6.633                               | 40.655                           | 1.658               | 6.633                               | 40.655       |
| 4         | 1.568               | 6.274                               | 46.929                           | 1.568               | 6.274                               | 46.929       |
| 5         | 1.180               | 4.721                               | 51.650                           | 1.180               | 4.721                               | 51.650       |
| 6         | 1.129               | 4.517                               | 56.167                           | 1.129               | 4.517                               | 56.167       |
| 7         | 1.076               | 4.304                               | 60.471                           | 1.076               | 4.304                               | 60.471       |
| 8         | .964                | 3.855                               | 64.326                           | .96        | 3.855                               | 64.326       |
| 9         | .956                | 3.823                               | 68.149                           | .95        | 3.823                               | 68.149       |
| 10        | .861                | 3.443                               | 71.592                           | .86        | 3.443                               | 71.592       |
| 11        | .808                | 3.230                               | 74.822                           | .80        | 3.230                               | 74.822       |
| 12        | .703                | 2.813                               | 77.635                           | .70        | 2.813                               | 77.635       |
| 13        | .684                | 2.736                               | 80.371                           | .68        | 2.736                               | 80.371       |
| 14        | .617                | 2.467                               | 82.838                           | .61        | 2.467                               | 82.838       |
| 15        | .574                | 2.298                               | 85.136                           | .57        | 2.298                               | 85.136       |
| 16        | .552                | 2.209                               | 87.344                           | .55        | 2.209                               | 87.344       |
| 17        | .527                | 2.107                               | 89.452                           | .52        | 2.107                               | 89.452       |
| 18        | .467                | 1.869                               | 91.321                           | .46        | 1.869                               | 91.321       |
| 19        | .434                | 1.737                               | 93.058                           | .43        | 1.737                               | 93.058       |
| 20        | .386                | 1.543                               | 94.601                           | .38        | 1.543                               | 94.601       |
### Total Variance Explained

| Component | Initial Eigenvalues | Total Variance Explained | Extraction Sums of Squared Loadings | Rotation Sums of Squared Loadings |
|-----------|---------------------|--------------------------|-------------------------------------|----------------------------------|
|           |                     |                          | **Total** | **% of Variance** | **Cumulative %** | **Total** | **% of Variance** | **Cumulative %** |
| 21        | .366                |                          | 1.463 | 21.50 | 96.064 | 1.463 | 21.50 | 96.064 |
| 22        | .294                |                          | 1.177 | 14.77 | 97.241 | 1.177 | 14.77 | 97.241 |
| 23        | .252                |                          | 1.008 | 11.53 | 98.250 | 1.008 | 11.53 | 98.250 |
| 24        | .243                |                          | .970  | 11.05 | 99.220 | .970 | 11.05 | 99.220 |
| 25        | .195                |                          | .780  | 9.37  | 100.000 | .780 | 9.37  | 100.000 |

**Extraction Method:** Principal Component Analysis.

**Source:** Output from SPSS 20.0

### Table 6: Factors Replicate from Component Matrix - Financial Literacy

| Variables                                                                 | Component/Factor |
|---------------------------------------------------------------------------|------------------|
| I pay my utility bills, loan instalments on time every month.             | .551             |
| I use debit and credit card wisely.                                      | .549             |
| I have Purchase enough insurance protection for my future.               | .654             |
| I have develop good savings habits                                       | .733             |
| I evaluate my budget and revise as needed from time to time.             | .626             |
| I regularly compare my estimated expenses to my actual spending.         | .516             |
| I feel putting away money each month for saving or investments is important | .641             |
| I evaluate financial products before investing money in them.            | .770             |
| I seek information from all possible sources before making choice regarding investment. | .571             |
| Digital Financial Literacy Campaign can be a good move to improve upon financial literacy | .597             |
| ‘I believe that if I keep money in a saving which grows in compounded form it will gives me better return.’ | .623             |
| ‘I regularly read the personal finance pages in the newspapers’          | .529             |
| I Watch TV & listen radio which advice in investment.                    | .796             |
| I take opinion from many literate friends for investment.                | .554             |
| I attend programmes which Govt. sponsors in my village, locality for improving saving habit. | .638             |
| I think if someone offers me the chance to make a lot of money in short time, there is also chance of losing a lot of money | .632             |

| H² | H |
|----|---|
| .622 | 60.471 |
| .596 | 59.467 |
| .576 | 55.378 |
| .621 | 59.057 |
| .474 | 44.057 |
| .584 | 55.378 |
| .671 | 63.846 |
| .598 | 54.057 |
| .678 | 63.846 |
| .531 | 50.057 |
| .663 | 62.725 |
| .692 | 62.725 |
| .485 | 45.057 |
| .611 | 57.057 |
| .728 | 70.057 |
| Component/Factor | Variables |
|-----------------|------------|
| 1 | Skill in dealing with finance |
| 2 | Investment Behaviour |
| 3 | Financial level of awareness |
| 4 | Knowledge in dealing with financial situation |
| 5 | Financial planning and savings behaviour |
| 6 | Knowledge of finance |
| 7 | Financial Attitude |

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | H² | H |
|---|---|---|---|---|---|---|---|----|----|
| I believe that Investment with a high return is likely to bear high risk | .854 | | | | | | | .766 | |
| I set aside money for special events | | | | | | .599 | | | 0.590 |
| I save money before I spend. | | | | | | .709 | | | 0.664 |
| I think that high inflation means that cost of living is going increase rapidly | | | | | | | .463 | | 0.651 |
| I put all my money in one kind of investment, then it is likely that I will lose all of my money | | | | | | | .747 | | 0.621 |
| I find it more satisfying to spend money than to save it for the future. | | | | | | | .620 | | 0.574 |
| I believe that it is important to have a financial plan. | | | | | | | | .611 | 0.585 |
| Before I buy something I carefully consider whether I can afford it. | | | | | | | | .395 | 0.334 |
| When it comes to financial matters, I think of myself as a bit of a risk taker. | | | | | | | | .664 | 0.555 |

**Extraction Method:** Principal Component Analysis  
**Rotation Method:** Varimax Rotation  
**Source:** Sample Survey  
**Note:** Loading are values above 0.395.