

An Empirical Analysis Of Financial Literacy And Its Impact On Financial Wellbeing

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ABSTRACT

Financial literacy has become a subject of considerable interest to researchers, policy makers, academicians, international organizations, governments and its agencies and other stakeholders in the context of global financial crisis and need for financial inclusion. Financial literacy facilitates the process of financial planning and inculcates understanding of financial products leading to effective use of financial services like Investing in financial products, saving for household expenses, budgeting, participating in the securities market, obtaining housing loan, engaging in real estate transactions, acquiring insurance, managing credit card, planning for taxes and ensuring pension and retirement security etc. The researcher has clearly proposed a unidimensional variable to quantify the level of Financial Literacy in Sikkim. The overall sample size is decided 200 for the analytical convenience of the research. The primary data has been collected by using a well structured questionnaires amongst the household's of Sikkim. The questionnaires were pre-tested before being administered. To examine the research data, an exploratory factor analysis was conducted using the SPSS (version 20.0) software. The results show that only 5 items load reliably in FL construct. Specifically, Behaviours towards Investment was found to exhibit the highest variance followed by Skill in dealing with finance, Financial Level of Awareness, Knowledge towards finance, Knowledge towards Investment, Behaviour in dealing with financial situations and Attitudes towards Financial Plan. The low level of financial literacy is an obstacle in the path of making Sikkim a digital financial literacy state. For spreading awareness in financial literacy among household, door-to door service is essential. Financial literacy programmes can impart sizeable influence to the household for making good financial decision and adopting healthily financial practices.

Keywords: Financial Literacy, Financial Inclusion, Sikkim

Introduction

Financial literacy is the ability to understand how money works in the world: how individuals manages to earn money or make it, including how individuals acquire and generate income, how individual allocate it through investments, and how that person donates it to help others. More specifically, it refers to the set of skills and knowledge that enables an individual to make well-informed and efficient choices regarding all of their financial assets. Finance is a vital component of every nation and plays a crucial role in ensuring the efficient operation of an economy. Finance is the central component of all aspects of commerce, trade and industry. With the evolving nature, possessing financial literacy has become an essential survival tool for the household. Financial literacy enhances individuals' awareness of frauds and fraudulent services, enabling them to exercise caution and Additionally, it empowers persons to effectively use financial products and services. The progress of any economic endeavour in a country is heavily influenced by the level of financial literacy among individuals, which encompasses their knowledge, attitude, and behavior towards financial concerns. Sages and Grable (2009) in their study found that the individuals with the lowest level of financial risk tolerance exhibit lower financial competence and are less satisfied with their financial management skills. Financial literacy empowers individuals to develop entrepreneurial skills and provide economic possibilities for themselves, their

families, and their communities. The study conducted by Mathivathani and Velumani (2014) identified several obstacles that hinder women from attaining financial literacy. These include social and cultural barriers, physical barriers, educational barriers, and financial barriers. Financial literacy plays significant role for those financially excluded groups such as marginal farmers, landless labour, ethnic minorities, migrants, workers in unorganized sector and other socially excluded groups to understand their financial options, financial opportunities and financial obligations. The primary goal of the Indian Planning Commission is to promote inclusive growth for the nation. This can only be accomplished by ensuring that financially and socially marginalized groups are included in the process of financial inclusion through the promotion of financial literacy. Mitchell and Lusardi (2011) revealed that individuals tend to possess greater awareness on inflation when their country has directly experienced inflation. Financial literacy is important due to the increasing number and complexity of financial products and services. Financial literacy has become a major mechanism for household towards financial inclusion. After 76 years of independence in India, a significant portion of the population remains excluded from the usage of financial services. Exclusionary groups from the usage of financial services typically consist of the rural and urban poor, the deprived or underprivileged, illiterates, individuals with no or low incomes, women, children, migrants etc. A significant barrier to financial inclusion is a deficiency in financial literacy. Shethy and Thomas (2013) founds that the financial knowledge among students in Mumbai is poor as compared to the global standards. Financial literacy promotes the development and expansion of a nation's economy and facilitates the enhancement of financial service quality. Chettri (2018) found that the knowledge, Attitude, Behaviour, Skill and Awareness level about finance vary according to the socio-economic status of the respondents. Due to the increased complexity of financial markets in the modern era and the information disparity between the financial markets and the general public regarding financial literacy, it has become increasingly difficult to make sound financial decisions. Financial literacy gives the necessary knowledge and skill to assess the suitability of various financial products and investments available in the financial market.

2. Objectives

1. To measure the level of financial literacy among the households of Sikkim.
2. To examine the necessity of financial education to improve the financial literacy level of the households.

3. Methodology

To accomplish the specified objectives of the current study, the sample consisted of household residing in Sikkim. The inclusion of household head in the study was due to the fact that they are directly involved with the financial affairs. To measure the degree of financial literacy of households, a questionnaire based on a conceptual model of financial literacy assessment were developed. For the purpose of the study, the sample of 200 households in Sikkim was selected through convenience sampling. The samples are drawn in purposively to be cooperative with the study. Only the initial 200 responses that met the criteria were taken into account for subsequent analysis in the study. Data was collected from the households respondents during the year 2022. Only the initial 200 responses that had no missing values or inconsistent responses were taken into account for the study. The survey questionnaire consisted composed of two sections. The initial portion of the section was specifically developed to encompass the socio-demographic factors of the participants. The second component of the questionnaire aims to assess the financial literacy level of household using 25 factors.

4. Analyses and discussions

The objective of this paper was to assess the extent of composite financial literacy. Financial literacy can be defined as a person 'having the sufficient ability to read, write and understanding financial matters' in their daily life. The overall financial literacy of household has been assessed by adopting a comprehensive approach. Financial literacy is assessed using a comprehensive approach that considers three fundamental aspects: financial knowledge, financial attitude, and financial behavior. Financial literacy is crucial for a developing country like India as it helps involve the population in the financial system and safeguards them against financial malpractices and fraudulent activities. Financial literacy refers to the capacity to understand, track, and efficiently utilize financial assets in order to improve one's own welfare, as well as the economic stability of one's family and business. The researchers constructed a concept and construct to quantify the level of financial literacy of households in Sikkim. In this study financial knowledge, financial attitude and financial behaviour has been considered as unidimensional variables for measuring financial literacy of households in Sikkim. The questionnaires specifically target the knowledge, attitudes, and behaviors related to finance that are linked to the broader concept of financial literacy. The statement is specially designed to be applicable amongst the households.

The statement is specifically tailored to be appropriate within homes. To assess the financial literacy of households, a set of 25 statements was utilized. Participants were asked to rate their agreement with each statement on a five-point Likert scale, with a score of 5 indicating strongly agree and a score of 1 indicating significant disagreement. The 25 statements are divided into five sets of five questions each, based on five

financial literacy parameters: knowledge of finance, attitude towards finance, and behavior towards finance. As it was difficult to show the results of all twenty five statements individually and it was decided to carry out factor analysis tool on these 25 items for measuring composite financial literacy of the households.

4.1. Adequacy of Data Test:

The Kaiser-Meyer-Olkin (KMO) measure of sample adequacy and the Bartlett's test of sphericity are used to determine the factorability of the matrix as a whole. The KMO measure of sample adequacy is accepted at a value of 0.786, and Bartlett's test of Sphericity is highly significant with a p-value of less than 0.001 (Table 1). Hence, employing factor analysis is more suitable and significant for the intended objective of this investigation.

Table 1 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.786
Approx. Chi-Square		3074.644
Bartlett's Test of Sphericity	Df	300
	Sig.	.000

4.2 Total Variance Explained by the Factor Analysis Solution

Table 2 provides an indication about the number of useful factors. Upon examining Table 2, it is evident that the Eigen value associated with the first component is significantly greater than the Eigen value associated with the subsequent factor. According to Table 2, there are only seven components that have Eigen values greater than the threshold, indicating a five-factor solution. The factors in Table 2 are presented in descending order, indicating the percentage of variance for each. The Table 2 also presents the cumulative variances of all valid components combined. Factor 1 has an eigenvalue of 5.66 and a variance of 22.652. Factor 2 has an eigenvalue of 2.71 and a variance of 10.850. Factor 3 has an eigenvalue of 1.67 and a variance of 6.678. Factor 4 has an eigenvalue of 1.55 and a variance of 6.216. Factor 5 has an eigenvalue of 1.17 and a variance of 4.713. Factor 6 has an eigenvalue of 1.10 and a variance of 4.409. Factor 7 has an eigenvalue of 1.04 and a variance of 4.176. The total amount of variability accounted for by these seven components in the extracted solution is approximately 59.694%. These seven factors accounted for 59.694% of the total variation. Table 2, specifically the second section labeled "Extraction Sums of Squared Loadings," provides information on factors that have Eigen values exceeding 1. Table 2, specifically the final section labeled "Rotated Sums of Squared Loadings," provides data on the extracted factors following rotation.

Table 2: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.663	22.652	22.652	5.663	22.652	22.652	3.045	12.179	12.179
2	2.713	10.850	33.502	2.713	10.850	33.502	2.567	10.269	22.448
3	1.670	6.678	40.180	1.670	6.678	40.180	2.484	9.936	32.384
4	1.554	6.216	46.396	1.554	6.216	46.396	1.873	7.493	39.877
5	1.178	4.713	51.109	1.178	4.713	51.109	1.684	6.737	46.614
6	1.102	4.409	55.518	1.102	4.409	55.518	1.683	6.732	53.346

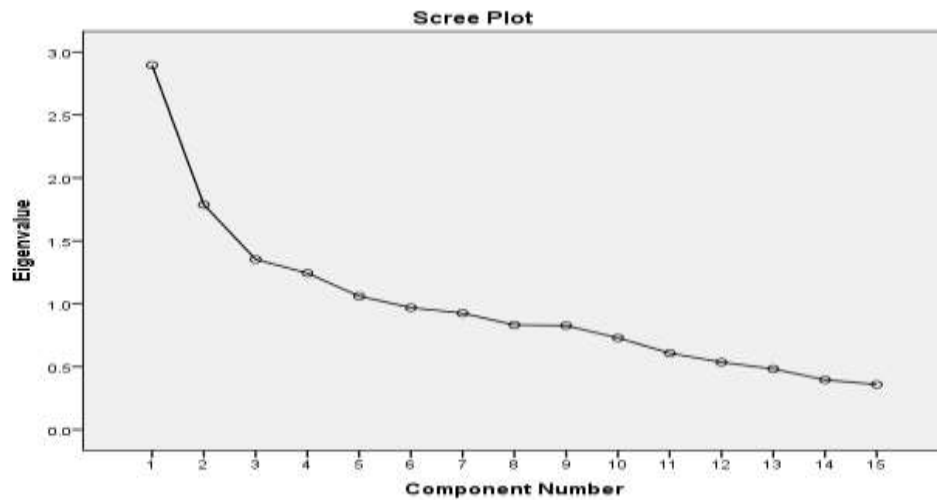
7	1.0 44	4.176	59.694	1.0 44	4.176	59.694	1.5 87	6.348	59.694
8	.99 4	3.976	63.670						
9	.95 6	3.825	67.495						
10	.83 0	3.318	70.813						
11	.79 3	3.171	73.985						
12	.71 5	2.862	76.846						
13	.66 1	2.644	79.490						
14	.60 4	2.416	81.906						
15	.57 3	2.290	84.197						
16	.54 3	2.171	86.368						
17	.52 1	2.086	88.454						
18	.47 1	1.885	90.339						
19	.45 6	1.823	92.162						
20	.42 6	1.703	93.866						
21	.39 1	1.563	95.428						
22	.34 5	1.382	96.810						
23	.28 5	1.138	97.949						
24	.26 8	1.072	99.021						
25	.24 5	.979	100.00 0						

Extraction Method: Principal Component Analysis.

4.3. Scree Plot

Figure 1, shows for a sharp break in sizes of Eigen values which results in a change in the slope of the plot from steep to shallow. The screen plot above indicates that there are seven elements with Eigen values exceeding 1. This implies that selecting the appropriate seven -factor solution is crucial for doing additional research on the financial literacy of households as a whole.

Figure 1 : Scree Plot of Eigenvalues.
Eigenvalues>1 determine number of relevant dimensions



4.4. Principal Component Analysis

Table 3 displays the results of the Principal Component Analysis (PCA) conducted using the Varimax Rotation method to extract the underlying variables. PCA is a computationally simplified version of a general class of dimension reduction analyses. Table 3 displays the rotated component matrix representing the financial literacy aspects of the households.

Table 3 Principal Component Analysis

Sl. No.		Component/Factor								
	Variables	1	2	3	4	5	6	7	h^2	H
1.	I believe that regularly setting aside funds each month for the purpose of saving or investing is crucial.	.555							0.591	59.694
2.	I consistently make timely payments for my utility bills and loan installments each month.	.585							0.575	
3.	I evaluate financial products before investing money in them.	.789							0.675	

4.	I diligently gather information from a wide range of sources prior to making an investing decision.	.564							0.620
5.	I use debit and credit card wisely.	.611							0.555
6.	Implementing a Digital Financial Literacy campaign has the potential to effectively enhance financial literacy.	0.605							0.634
7.	I have Purchase enough insurance protection for my future.		0.567						0.542
8.	I have develop good savings habits.		0.665						0.570
9.	I periodically assess and modify my budget as necessary.		0.783						0.685
10.	I regularly compare my estimated expenses to my actual spending.		0.650						0.516
11.	I believe that if I keep money in a saving which grows in compounded form it will gives me better return.			0.590					0.580

12.	I frequently peruse the personal finance sections of newspapers, where I gather information about the shares, bonds, and commodity market services offered by different financial institutions.			0.621					0.609	
13.	I engage in the activities of watching television and listening to the radio, specifically seeking advice on investment opportunities related to social securities.			0.789					0.670	
14.	I seek input from numerous well-educated acquaintances regarding investing opportunities in diverse financial products.			0.570					0.407	
15.	I often participate in several government-sponsored programs in my village and local area aimed at enhancing saving habits.			0.670					0.589	

16	In my opinion, if someone presents me with an opportunity to generate substantial wealth within a little period, there is also the possibility of incurring significant financial losses.				0.614				0.710	
17	I believe that Investment with a high return is likely to bear high risk				0.852				0.762	
18	High inflation signifies a rapid escalation in the expense of living.				0.553				0.648	
19	If I concentrate all my funds on a single investment, there is a high probability that I may incur a complete loss of my capital.					0.686			0.580	
20	I derive greater gratification from spending money rather than saving it for future purposes.					0.672			0.599	
21	I set aside money for special events.						0.503		0.550	
22	I save money before I spend.						0.704		0.609	

23	I believe that it is important to have a financial plan.							0.577	0.600	
24	Before I buy something I carefully consider whether I can afford it.							0.456	0.441	
25	Regarding financial matters, I consider myself something of a daring individual.							0.720	0.587	

Table 3 displays the communalities values (h^2) of the variables. The named communalities (h^2) provide the initial and extraction communalities, representing the proportion of variations explained by the extracted variables for each variable in the scale. The variance of the "attitude towards financial plan" value in Table 3 is 0.456, indicating a low level of communality, which is explained by the extracted components. In column H of Table 3, the seven factors accounted for 59.694% of the total variance. The factor loading ranged from 0.456 to 0.852.

4.5. Extracted Factors

The factors were named and interpreted by evaluating the variables that had a high loading on the extracted individual factors. To achieve this objective, the Rotated Component Matrix (Table 3) has been applied. Upon careful examination of the provided statement, it was observed that seven elements were assigned different titles to represent the financial literacy of households.

Factor 1

Behaviours towards Investment: In factor 1, six *items* were loaded. After considering the elements inside factor 1, it was named as "Behaviour towards investment." This factor encompasses statements that pertain to attitudes towards saving, behaviors connected to borrowing, investing behaviors, and financial responsibility.

Factor 2

Skill in dealing with finance: Four items were included in this factor.. Considering the various items under factor four it was named as skill in dealing with finance as it comprises the statements related to budgeting and insurance.

Factor 3

Financial Level of Awareness: Table 5, indicates that three components are associated with this factor and are connected to the awareness of different investment opportunities.

Factor 4

Financial Knowledge: Three *items* were loaded on this factor, which includes financial knowledge towards time values of money, risk and return.

Factor 5

Knowledge towards Financial Investment: Two *items* are loaded on this factor. This factor considers the financial risk and situations.

Factor 6: Behaviour in dealing with financial situations: Two Items are loaded on this factor. This factor includes savings and expenditures.

Factor 7: Attitudes towards Financial Plan: Two Items are loaded on the factor. This factor includes attitudes towards financial planning and spending literacy.

5. Conclusion

For a growing nation like India ,it is a great challenge to include all the financially excluded people in financial inclusion. Developing countries like India have been taken numerous financial literacy initiatives to include the financially excluded people. The level of financial literacy in households was shown to vary according to differences in socio-economic characteristics such as family status, parental income, and geography. The findings indicate that just seven items consistently load in the FL construct. The study revealed that Behaviours towards Investment had the biggest variance, followed by Skill in dealing with finance, Financial Level of Awareness, Knowledge towards finance, Knowledge towards Investment, Behaviours in dealing with financial difficulties, and Attitudes towards Financial Plan. Financial literacy programs can have a significant impact on household , helping them make informed financial decisions and adopt healthy financial practices. Based on thorough analysis and interpretation, the findings indicate that families need to be adequately informed about both new and existing financial products in the global market. This will enable them to take advantage of the opportunity to earn greater returns. Perhaps, they will not become victims of frauds and somebody else will not take credits for whatever is entitled to them. Future research should examine the effect of financial literacy initiatives and its impact in the various parts of the country.

Reference:

1. Chettri, P., & Mahapatra, S. S. (2018). Financial Literacy among the Tea Garden Labourers in Darjeeling District: An Exploratory Factor Analysis. *Sciences*, 2(3), 251-256.
2. Mathivathani, V., & Velumani, M. (2014). A study on financial literacy among rural women in tamilnadu. *Indian Journal of Applied Research*, 4 (12), 60-72.
3. Mitchell, O., & Lusardi, A. (2011). Financial literacy around the world. *Journal of Financial Economics*, 102(2), 449-472.
4. 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.
5. Shethy, V., & Thomas, B. J. (2013). A study of financial literacy amongst the college students in mumbai. *Tactful Management Research Journal*, II(8), 1-6.