

MEASUREMENT AND ANALYSIS OF FINANCIAL LITERACY: A STUDY OF KINNAUR DISTRICT OF HIMACHAL PRADESH

Dr Anil Kumar

Associate Professor

Shri Ram College of Commerce, University of Delhi, Delhi-110007

Mr Ashwani Kumar

Assistant Professor

Shri Ram College of Commerce, University of Delhi, Delhi-110007

Mr T. Varun Reddy

Project Head (Intern)

Shri Ram College of Commerce, University of Delhi, Delhi-110007

ABSTRACT

Although 'National Mission for Financial Inclusion' launched in August 2014 has achieved a remarkable success in India, 'Financial Illiteracy' remains a major bottleneck in financial inclusion. This paper measures the financial literacy level of Kinnaur district of Himachal Pradesh, a north Indian state situated in the Western Himalayas. Investigating the socio-economic and demographic determinants of financial literacy, the study reveals low level of financial literacy despite relatively better social indicators of the district and explains the factors causing such levels. 'Education' and 'Income' are found to be significant explanatory variables of financial literacy.

Keywords: Financial Literacy, Financial Literacy Index, Financial Inclusion, Kinnaur

1. INTRODUCTION

Financial Literacy refers to an individual's knowledge and skills to make informed and sound financial decisions. It is "a combination of financial knowledge, skills, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial well-being"¹. Financial literacy is *sine qua non* of 'financial inclusion' which ensures availability, affordability and adoption of useful financial products to all the sections of the society, especially the vulnerable and marginalised communities. Financial inclusion, "universal access to a wide range of financial services at a reasonable cost"², includes banking, insurance and other financial services. The reach of financial products and services can be broadened to the remote regions and marginalised communities through 'implementation of tailored existing and innovative approaches including financial awareness and education'³. Three broad components of financial literacy are: financial knowledge, financial attitude and financial

¹ OECD (International Network on Financial Education, 2010)

² Raghuram Rajan Committee on Financial Sector Reforms (2007)

³ OECD (International Network on Financial Education, 2010)

behaviour. Whereas ‘financial knowledge’ enables an individual to make sound financial decisions about the employment of finances, ‘financial attitude is orientation towards the adoption of financial resources. Individual’s choice of optimal financial products is what is referred as ‘financial behaviour’.

The relevance of financial literacy has increased post the Economic Reforms of 1991 in India. As markets are widening and the financial products are becoming complex, the need for possessing relevant skills to make apt financial decisions by the financial consumer has become more pressing. Empowering financial consumers has become a “necessity in an evolving societal and financial context given the low level of financial literacy among consumers in an increasingly risky, broader and complex financial landscape”⁴.

Advances have been made in reducing the rural and gender gap in the access of financial products in India through a consistent push to financial inclusion including spread of financial literacy by the financial institutions and banks led by Reserve Bank of India and National Bank of Agriculture and Rural Development (NABARD). Despite having high account ownership, India claims the second largest share of unbanked population with more than 190 million adults still not having bank accounts in absolute terms. The growth of banked population remains skewed towards men and thus, financial inclusion has become a major socio-economic challenge on the agenda of policy makers, governments, central banks and financial institutions.

Lack of financial awareness among the excluded population makes them disconnected from the formal system and bereft them from the benefits of financial services. In India, there is a wide disparity in literacy levels, socio-economic development, cultural and linguistic practices across regions. It is therefore, important to recognize financial literacy as a vital step to take the goal of financial inclusion ahead.

Reserve Bank of India has taken several steps in promoting financial literacy. ‘Project Financial Literacy’ aims at making the target group, namely, rural/urban poor and school and college going children aware about the central bank and general banking concepts. As part of the Jan Dhan-Aadhaar-Mobile trinity unleashed in 2014, financial inclusion schemes *viz.* PM Jan Dhan Yojna, PM Jeevan Suraksha Yojna, Atal Pension Scheme, MUDRA Yojna have been launched with the objective of ensuring access to various financial services like basic savings bank account, need based credit, remittances facility, insurance and pension to the excluded sections *i.e.* weaker sections and low income groups. Financial literacy programmes are the integral part of these schemes which have been a huge success⁵.

The present study attempts to measure and analyse the levels of financial literacy in the remote villages across Kinnaur District of Himachal Pradesh. Kinnaur District is one of the twelve districts of Himachal Pradesh, characterised by a large proportion of tribal population (more than 50% of its population belongs to the Scheduled Tribes as per Census 2011). It has 660 villages, accounting for 3.19% of total villages of Himachal Pradesh, as per the data of the Office of the Registrar General and Census Commission. The entire district is deemed to be ‘rural’, by the Census criterion. It has one of the lowest population densities: 13 per square kilometre. Such low population density is a characteristic of its distinctly remote geography. It has one of the lowest poverty ratios *i.e.* below 7% based on Tendulkar Methodology⁶. Its

⁴ OECD, 2013

⁵ <https://financialservices.gov.in/financial-inclusion>

⁶ Source: Lok Sabha Unstarred question no. 289, dated 11.07.2014

literacy rate is amongst the highest: 80% (Male: 87.27 and Female: 70.96 as per Census 2011). Himachal Pradesh ranks 4th in India in terms of HDI⁷. Kinnaur is a relatively well-off district, is abundant with energy resources and a majority of its population is based on agriculture and allied activities. Majority of the farmers have apple orchards in their fields.

2. Review of Empirical Studies

A number of empirical studies have been conducted on financial literacy on varied groups of respondents ranging from college students to young employees to retired employees, to the households in urban and rural regions. Noteworthy among these is a study of 63,000 households on their financial behaviour conducted by Max New York Life and National Council for Applied Research (NCAER) in 2007. The survey reported that 96% of households have a meagre savings not lasting for more than a year in case of loss of major source of household income; and the Indian households don't save for long-term objective. The study found low level of financial literacy and lack of long-term financial planning comprised financial insecurity in India.

Prusty, Sadananda (2011) examined the saving behaviour of Indian households in regards to individual's self-progress of financial security post-retirement. The study found that only 26.3% of individuals of the age 50-55 years plan for retirement. 'Financial Literacy' was reported to be low among Indian individuals, even among the educated and in particular, the female category. 72.6% individuals, as per the study lacked knowledge of basic calculation of compound interest. 29.8% individuals did not know whether they were covered under Public Provident Fund (PPF) or Pension Plan. The study concluded that low financial literacy and lack of information about the available financial products affect the saving ability of individuals and in securing their life financially post retirement.

Agarwalla *et al* (2012) study using a sample of 2,967, indicated that high financial knowledge was not widespread among Indians. They found that (i) Basic principles of money and household financial planning like risk and return trade-off, inflation and interest rate are not well understood; (ii) Financial Behaviour of Indians was found positive; (iii) Saving attitude of Indians showed positive financial attitude; (iv) Male category was more financially knowledgeable than female category; (v) Financial Behaviour and attitude were marginally better for women; (vi) Financial knowledge was very poor in comparison with the global standards. Poor numeracy scores were a major cause for such low scores. In another study on financial literacy, Agarwalla *et al* (2013) investigated the influence of socio-demographic factors (namely gender, age, level of education, marital status and family income) on different dimensions of financial literacy viz. financial knowledge, financial attitude and financial behaviour, among the working urban youth in six cities in India using multi-nominal logistic regression. Gender and family income were found to be statistically significant influencer of financial knowledge. The study affirmed a significant relationship between financial knowledge and financial attitude.

There are a few financial literacy studies with special reference to Himachal Pradesh. Gupta and Kaur (2014), study on financial literacy was based on a sample of 87 micro entrepreneurs of Kangra district. The study found low financial skills of the respondents and lack of awareness of financial institutions (other than banks). Similarly, the study of Bhushan and Medury (2013) reported low financial literacy especially among the females. The survey based on a sample size of 516 salaried individuals of Himachal

⁷ UNDP Global Data Lab, 2017

Pradesh to measure the level of financial literacy, identified the broad determinants of financial literacy as level of education, income, nature of employment and place of work. The survey ruled out the influence of geographical region on financial literacy.

The most cited study is OECD (2016) International Survey of Financial Literacy among 51,650 adults belonging to 30 countries which was conducted through a questionnaire. Focussing on three aspects of financial literacy, namely financial knowledge, attitude and behaviour, key findings of the survey were: (i) Overall financial literacy levels, obtained by aggregating the scores on financial knowledge, attitude and behaviour, were found to be relatively low; (ii) Average financial knowledge levels showed wide variations between countries; (iii) Gender differences in financial knowledge were found to be significant; (iv) Self-assessed financial knowledge was comparatively realistic; and (v) Long term financial goal setting and planning were found to be uncommon in many countries.

3. Objective of the Study

The present study attempts to measure and analyse the levels of financial literacy in villages across Kinnaur District of Himachal Pradesh. The paper investigates the impact of certain socio-economic and demographic variables in analysing the financial literacy level of the individuals. The study specifically considers the following variables: Gender, Annual Household Income, Level of Education and Occupation. For the purpose of the study, 'Financial Literacy' is considered to deal with basic financial concepts, principles, skills and the ability to understand the basic financial products and services to enable the individual to make sound financial decisions.

4. Hypotheses

To study the determinants of Financial Literacy, the following hypotheses were conceptualised:

H1 H_0 : There's no significant relationship between an individual's gender and the level of financial literacy

H_a : There is a significant relationship between an individual's gender and the level of financial literacy

H2 H_0 : There's no significant relationship between an individual's level of education and the level of financial literacy

H_a : There is a significant relationship between an individual's level of education and the level of financial literacy

H3 H_0 : There's no significant relationship between an individual's occupation and the level of financial literacy

H_a : There is a significant relationship between an individual's occupation and the level of financial literacy

H4 H_0 : There's no significant relationship between an individual's annual household income and the level of financial literacy

H_a : There is a significant relationship between an individual's annual household income and the level of financial literacy

5. Research Methodology and Data

To assess the level of financial literacy in Kinnaur, the following villages of Kinnaur District: Duni, Reckong Peo, Moorang, Sangla, Rakchham and Chhitkul, located in lower and middle regions of Kinnaur district, wherein the majority of its population resides were selected for the study. A sample of households of each of these villages was selected by random stratified sampling based on income criterion. The selection of the sample was based on non-probability convenient sampling. This was done primarily keeping in view the flexibility and freedom in the selection of sampling units as per the researcher's convenience. The sample size for the present study was 90 individuals of Kinnaur District, Himachal Pradesh out of which, 82 surveys were found to be useable for statistical and econometric analysis.

The appropriate research instrument used for the study was a comprehensive structured questionnaire through that contains questions on the demographic details and the three components of financial literacy, namely financial attitude, financial behaviour and financial knowledge. The survey was undertaken in the months of May and June of 2019. The respondents were asked the questions in their local language and responses were filled accordingly. To get further insights into secondary sources of data were used from online repositories and databanks.

For the measurement of financial literacy of the individuals, questions were prepared in line with the International Survey of Financial Literacy (OECD 2016) and NABARD Financial Inclusion Survey (NAFIS 2017) but excluding the questions based on self-assessment. Three questions were asked each on financial attitude and financial knowledge whereas thirteen questions were asked on financial behaviour. The responses to each of these questions were in turn assigned certain points (see Appendix) and the overall score was calculated for each individual (each correct response got 1 point whereas an incorrect or 'Don't Know' responses got 0 point). Thereafter, each individual's financial literacy score was calculated as a percentage of correct responses over the total correct responses. Each individual's relative financial literacy level was obtained by comparing it with the median financial literacy score of the individuals (which was obtained as 48.0769%). Those scoring higher than the median were considered to have relatively high financial literacy level and those below the median were considered to have relatively low financial literacy level.

The following explanatory variables were considered to determine the Financial Literacy Score of the individual respondents : (i) Individual's Gender; (ii) Individual's Level of Education; (iii) Individual's Annual Household Income; and (iv) Individual's Occupation.

Table 1 shows the description of the explanatory variables considered in constructing the model:

Table 1: Description of Variables and their Source

Variable	Measurement Type	Measurement Scale	Source
Individual's Gender	Multiple Choice Question	Dichotomous	Agarwalla, SK et al (2013)
Individual's Level of Education	Single Answer	Nominal	MNYL-NCAER Report (2007):
Individual's Annual Household Income	Single Answer	Continuous	NCAER (2007) and SEBI (2011) Agarwalla, <i>et al</i> (2013)
Individual's Occupation	Multiple Choice Question	Nominal	Hussein A. <i>et al</i> (2009)

This study focusses on the measurement of financial literacy and relationship of socio-economic and demographic factors with the level of financial literacy. To test the hypotheses of the study, t-tests and Chi-Square tests were performed. Additionally, an OLS linear regression model was run for the data.

6 Analysis and Results

Description of the Data

The geographical distribution of the respondents is tabulated in Table 2; the gender profile of the respondents in Table 3; level of education of the respondents in Table 4; and Occupation profile of the respondents is tabulated as under in Table 5:

Table 2: Area-wise Geographical Distribution of Respondents

Village	No. of Respondents	Percentage
Chhitkul	5	6.1
Dooni	16	19.5
Moorang	16	19.5
Rakchham	6	7.32
Reckong Peo	15	18.3
Sangla	24	29.3
Total	82	100

Table 3: Gender Profile

of the Respondents

Gender	Freq.	Percent	Cum.
Female	68	82.93	82.93
Male	14	17.07	100
Total	82	100	

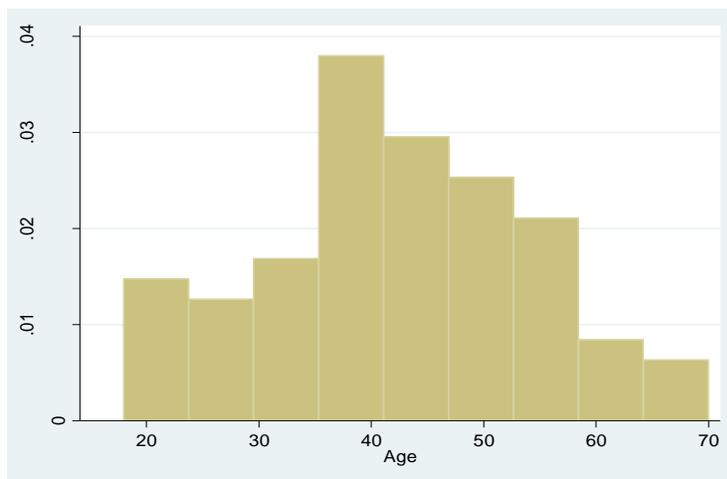
Table 4: Educational Qualifications of the Respondents

Education	Freq.	Percent	Cum.
Below Class 5	12	14.63	14.63
Class 11-12	17	20.73	35.37
Class 6-10	15	18.29	53.66
Graduate & above	17	20.73	74.39
Illiterate	21	25.61	100
Total	82	100	

Table 5: Occupation of the Respondents

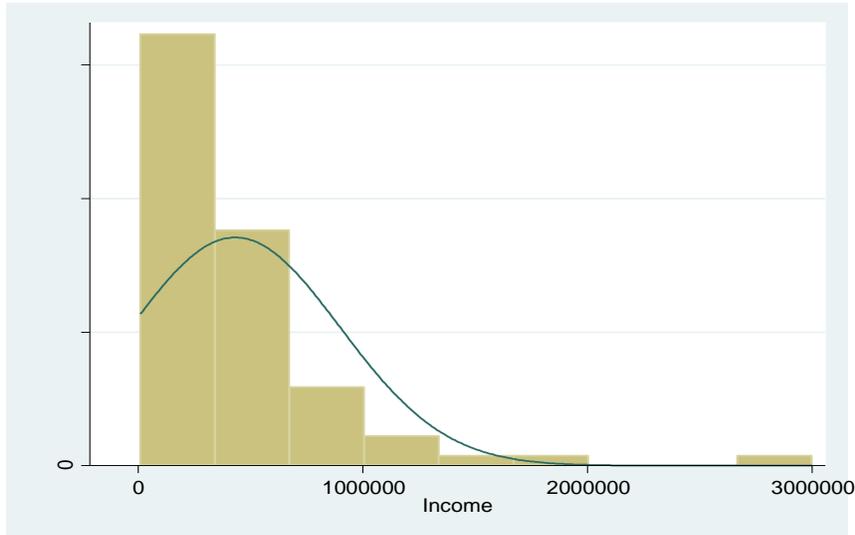
Occupation	Freq	Percent	Cum.
Agricultural Worker	25	30.49	30.49
Daily wage worker	14	17.07	47.56
Domestic worker	13	15.85	63.41
Government Employee	8	9.76	73.17
Other	4	4.88	78.05
Self-employed	4	4.88	82.93
Student	5	6.10	89.02
Unemployed	9	10.98	100
Total	82	100.00	

Age is an indicator for the level of maturity, cognitive abilities and financial knowledge of the individual. Age of the respondents is shown in the density histogram plotted in Figure 1:



Income of the household (see the definition laid out by NSSO) directly impacts an individual’s lifestyle and the economic conditions. The Annual Income of the respondents in Kinnaur District is represented in the following bar graph of Figure 2:

Figure 2: Annual Household Income of the Respondents



The outlier observed here in the Income gives us valuable insights, as explained in the conclusion.

Financial Literacy Scores

The Financial Literacy Scores of the respondents were calculated (in percentage terms) as per the procedure followed by Lyons, A *et al* (2006). The summary statistics of the Scores are presented in the table below:

Table 6: Descriptive Statistics for Financial Literacy Score (in %)

Mean	48.89774859
Median	48.07692308
Mode	44.23076923
Standard Deviation	11.02460775
Sample Variance	121.541976
Minimum	25
Maximum	86.53846154
Sum	4009.615385
Count	82

Results

The result indicates that on an average, respondent answered 49% of the questions correctly. The median percentage of correct responses was 48. This median percentage is considered to find out the relative level of financial literacy of the individuals.

A simple OLS linear regression model was run for the primary data collected from 82 respondents. The following are the results of the regression (from Stata version 13):

Source	SS	df	MS	Number of obs	=	82
Model	3445.58024	7	492.225748	F(7, 74)	=	5.69
Residual	6399.31982	74	86.4772949	Prob > F	=	0.0000
				R-squared	=	0.3500
				Adj R-squared	=	0.2885
Total	9844.90006	81	121.541976	Root MSE	=	9.2993

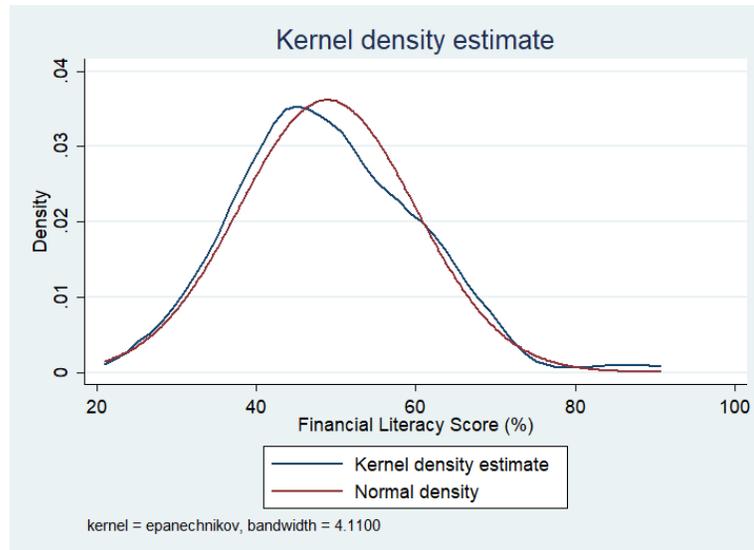
FinLitScore	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
Gender1	-3.110374	3.234899	-0.96	0.339	-9.556051 3.335303
Education1	2.406257	3.436841	0.70	0.486	-4.441799 9.254312
Education2	7.364259	2.76207	2.67	0.009	1.860715 12.8678
Education3	10.65603	3.587955	2.97	0.004	3.506872 17.80518
Occupation1	3.506153	2.442629	1.44	0.155	-1.360891 8.373197
Occupation2	-.5686322	3.114082	-0.18	0.856	-6.773576 5.636312
logIncome	3.103559	1.000701	3.10	0.003	1.109618 5.0975
_cons	6.364491	12.16611	0.52	0.602	-17.87702 30.606

In the model, Financial Literacy Score (%) is regressed on the logarithm of Income, Gender Dummy Variable (Gender1=1 for female and =0 otherwise), Education Dummy variables (Education1=1 for 'Below Class 5', Education2=1 for 'Class 6 to 12', Education3=1 for 'Graduate or above', Base Category=Illiterate) and Occupation Dummy Variable (Occupation1=1 for 'Agricultural Worker' and =0 otherwise, Occupation2=1 for 'Daily Wage Worker' and =0 otherwise).

The model explains 35% of variation in the mean percentage scores of financial literacy level of individuals on average. It is observed that at 1% level of significance, log(Income), Education2, Education3 are statistically significant and all other coefficients are statistically insignificant.

Additionally, to check for model misspecification, Ramsey's Regression Specification Error Test (RESET) was performed. It confirmed that the model has no omitted variables, indicating appropriateness of the model. Also, there seems to be no problem of high multicollinearity among the explanatory variables as the variance inflation factors (VIF) are small. The Breusch-Pagan test for heteroskedasticity confirms that the fitted model doesn't suffer from the problem of heteroskedasticity i.e. the variance of the error term is constant throughout. In Figure 3, a plot of the residuals against the fitted values of the model confirms that the residuals follow approximately normal distribution.

Figure 3: Kernel Density Plot of Financial Literacy Score



As noted above, log(Income), Education2, Education3 are statistically significant and the other coefficients are statistically insignificant at 1% level of significance. To analyse simultaneous relationship of two variables, a cross-tabulation of each explanatory variable against Financial Literacy Level of the individual (High or Low) was performed and a Chi-square test was done.

The overall results show that 45% of the respondents had given percentage of correct responses above the median percentage of correct responses (48) and hence had relatively higher level of financial literacy while 55% scored below the median had relatively lower level of financial literacy.

To assess the relationship between an individual's gender and the level of financial literacy (H1 of the study), Cross Tabulation of Individual's Gender and Financial Literacy Level of the Individual along with Chi-Square Tests were conducted whose result is as follows:

FinLitLeve l	Gender		Total
	Female	Male	
High	29	8	37
Low	39	6	45
Total	68	14	82

Pearson chi2 (1) = 0.9852 Pr = 0.321
 likelihood-ratio chi2 (1) = 0.9809 Pr = 0.322
 Cramér's V = -0.1096
 Fisher's exact = 0.384
 1-sided Fisher's exact = 0.242

With Pearson's Chi-Square significance value of 0.321, the null hypotheses is not rejected, establishing that there is no significant association between individual's Gender and the individual's Financial Literacy Level.

To examine the relationship between an individual's level of education and level of financial literacy (H2 of the study), Cross Tabulation of Individual's level of education and Financial Literacy Level of the Individual along with Chi-Square Tests were conducted whose result is as follows:

```

Pearson chi2(4) = 18.9890    Pr = 0.001
likelihood-ratio chi2(4) = 20.1279    Pr = 0.000
Cramér's V = 0.4812
Fisher's exact = 0.001

```

Pearson's Chi-Square significance value of 0.001 rejects the null hypothesis at 5% level of significance. Hence, there seems to be a statistically significant association between individual's Education level and the individual's Financial Literacy Level. Since Chi-Square test only shows the statistical significance, we performed the Cremer's V test, which measures the strength of the association. It can be seen that the degree of association between these variables is 48.12% which is quite high.

For establishing the relationship between an individual's occupation and level of financial literacy (H3 of the study), Cross Tabulation of Individual's occupation and Financial Literacy Level of the Individual along with Chi-Square Tests were conducted whose result is as follows:

```

Pearson chi2(7) = 13.8632    Pr = 0.054
likelihood-ratio chi2(7) = 14.8368    Pr = 0.038
Cramér's V = 0.4112
Fisher's exact = 0.041

```

The null hypotheses is rejected at 10% level of significance since Pearson's Chi-Square significance value was 0.054. It establishes a statistically significant association between individual's Occupation and the individual's Financial Literacy Level. It can be seen that the degree of association between these variables is 41.12% from Cramer's V test.

Similarly, to test H4 of the study (relationship between an individual's annual household income and level of financial literacy), Cross Tabulation along with Chi-Square Tests were conducted whose result is as follows:

```

Pearson chi2(28) = 31.5580    Pr = 0.293
likelihood-ratio chi2(28) = 41.0492    Pr = 0.053
Cramér's V = 0.6204
Fisher's exact = 0.269

```

Pearson's Chi-Square significance value of 0.293 leads rejected the null hypothesis, establishing no significant association between individual's Annual Household Income and the individual's Financial Literacy Level.

7 Observations and Conclusion

This study was conducted to examine the relationship between the level of Financial Literacy of the people of Kinnaur with that of their Gender, Educational Levels, Occupation, and Annual Household Income. Of these variables, the study found that Education level (Class 11 and above) and Occupation have a statistically significant impact on the Financial Literacy Level of the individuals.

Kinnaur district has high literacy rates. Higher education gives an edge to the individuals over others in that, the financial aptitude of those would be higher. These individuals also receive a higher score in financial knowledge as their aptitude levels are generally high. The understanding of those who have education level of 11th class and above of concepts such as inflation, interest rate and risk diversification would be better than those attaining only elementary education. This explains why Education level bears a statistically significant relationship with the Financial Literacy level of the individuals. Almost all the prior studies have established a strong relationship with education level and financial literacy of individuals. Agarwal *et al* (2010); Joseph (2012) Madhulata (2016); Berry and Chandan (2019) to name a few studies.

Occupation level had a statistically significant relationship with the Financial Literacy Level of the individuals, and is consistent with earlier studies (Bhushan and Medury, 2013; Madhulata, 2016 and Berry and Chandan, 2019). Those occupations that give relatively higher and stable income will lead to better financial prudence, financial behaviour and attitude of the individuals. A majority of residents of Kinnaur district depend on agriculture and allied activities, in particular on Apple production. Kinnaur apples fetch the best prices and the income generated is consequently high. Therefore, farmers are better off in terms of their financial literacy levels than daily wage workers or the unemployed, for example, in Kinnaur district, who have irregular stream of income receipts.

However, unlike other empirical studies⁸, we have obtained a statistically insignificant relationship of financial literacy level with gender and (log)income. These peculiar results should be viewed alongside the specificity of the characteristics of Kinnaur district. It was observed during the survey that both female and male household members participate in the family's economic activities. Unemployment rate was low and almost all households had at least one member receiving the benefit of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). Certain households had all of its working-age members holding NREGA Job Cards despite having stable and/or high agricultural income. There is a near gender parity and insignificant gender pay gap in Kinnaur district and this leads to a similar level of financial literacy between Males and Females. Age differential does not seem to have an impact on financial literacy level, primarily because Himachal Pradesh has been a comparatively well-off state since the initial decades of its inception in 1971. It ranks 4th amongst 29 Indian states in terms of HDI as per UNDP Report, 2017. The state level policies aimed at creating self-sufficiency in agricultural production and energy generation (even has a surplus). These potentially mean a wipe-out of the age differential over time.

⁸ To name a few, Baluja (2016), Madhulata (2016).

There was a good saving behaviour amongst individuals and this is consistent with the high deposit to credit ratio in Kinnaur as per Statement No. 4A of the RBI Annual Report, 2018-19. It has been observed that Kinnaur residents don't save for the long term. The short-term nature of their savings is because a majority of their savings and agricultural surplus is reinvested for the next harvest of Apple crop.

Financial inclusion has been given a thrust by the Central Government, especially after the launch of 'National Mission for Financial Inclusion'. As pointed out earlier, these schemes have phenomenon success in opening of bank accounts, issuance of debit cards, penetration of insurance and pension schemes across the country. However, the survey conducted as part of the present study in six villages of Kinnaur district presents a gloomy picture of the penetration of these schemes, despite large amount of expenditure incurred by the Central Government on advertisement and publicity. The following table shows the number and percentage of individuals having heard of the schemes and those amongst these having availed it:

Table 8: Awareness and Availing of Financial Inclusion Schemes

Scheme	No. of Respondents Heard of the scheme	Percentage Heard	No. of Respondents availing the scheme	Percentage Availed
PM Jan Dhan Yojana	71	86.59%	22	26.83%
PM MUDRA Yojana	26	31.71%	3	3.659%
PM Suraksha Bima Yojana	51	62.2%	21	25.61%
PM Jeevan Jyoti Bima Yojana	49	59.76%	20	24.39%
Atal Pension Yojana	30	36.59%	7	8.537%
Sukanya Samridhhi Yojana	36	43.9%	13	15.85%
PM Fasal Bima Yojana	45	54.88%	4	4.878%
PM Jan Aarogya Yojana (Ayushman Bharat)	21	25.61%	11	13.41%
PM Shram Yogi Mandhan Yojana	6	7.31%	1	1.22%

These numbers reveal why there is a low financial literacy level, on average, in Kinnaur district despite being a well-off district. Financial Inclusion can happen only when there is sufficient level of financial literacy. The success of any financial inclusion programme largely relies not just on the number of beneficiaries of such financial products and services but also on the access to credit, insurance, investment and pension schemes and other facilities offered by the formal financial institutions. The state should invest higher amount of finances and resources towards the provisioning and access of such financial products to the marginalised and vulnerable groups.

In conclusion, financial inclusion is a necessary condition to realise the economic gains of the country. Sustained growth and development of the country largely hinges on the 'universal access to financial services' and 'universal financial literacy'. The case of Kinnaur district provides ample insights into where the efforts should be driven towards.

Acknowledgment

This study was undertaken by 12 interns of Project Khushshali of Vittshalla, The Financial Literacy Cell of Shri Ram College of Commerce, University of Delhi. It was conducted in May-June 2019 in Kinnaur district in association with the NABARD, Shimla. We would like to thankfully acknowledge the efforts and work of each team members and officials of NABARD.

References

- [1] Agarwal, Sumit , Amromin, Gene, and Douglas D Evan (2010). 'Financial Literacy and Financial Planning: Evidence from India' , *SSRN Electronic Journal* · December
- [2] Agarwalla, S. K., Barua Samir, Jacob Joshy and Varma Jayanth R. (2012), A Survey of Financial Literacy among Students, Young Employees and the Retired in India, IIM Ahmedabad.
- [3] Agarwalla, S. K., Barua Samir, Jacob Joshy and Varma Jayanth R. (2013),” Financial Literacy among Working Young in Urban India.” IIM Ahmedabad India, W.P. No. 2013-10- 02 October
- [4] Baluja, Garima (2016). 'Financial Literacy among Women in India – A Review', *Pacific Business Review International*, Vol. 9 Issue 4.
- [5] Berry, Rahul and Chandan, C.L. (2019). 'Financial literacy and financial inclusion: A review of earlier studies' *International Journal of Applied Research*; 5(2): 15-18
- [6] Bhushan, Puneet and Medury, Yajulu (2013), Financial Literacy and its Determinants, *International Journal of Engineering, Business and Enterprise Applications*, Vol. 4, Issue -2 , May2013, PP. 155-160
- [7] CRISIL Inclusix Report (2017). February, Vol. 4
- [8] Department of Financial Services, Ministry of Finance
<https://financialservices.gov.in/financial-inclusion>
- [9] Government of India (2007). Raghuram Rajan Committee on Financial Sector Reforms, New Delhi
- [10] Government of India (2008). A Hundred Small Steps. Report of the Committee on Financial Sector Reforms. Planning Commission of India, New Delhi.
- [11] Gupta, Kamal and Kaur, Jatinder (2014). 'A study of Financial Literacy among Micro Entrepreneurs in District Kangra', *International Journal of Research in Business & Management*, Vol-2, Issue-2, February, PP. 63-70
- [12] Government of India (2019). Policy for Homo Sapiens, not Homo Economicus, Ch. 2, *Economic Survey 2018-19*, Vol. 1, pp. 51-53.
- [13] Hussein A. Hassan Al-Tamimi & Al Anood Bin Kalli. (2009). 'Financial literacy and investment decisions of UAE investors'. *Journal of Risk Finance*, Emerald Group Publishing, vol. 10(5), pages 500-516, November.
- [14] Joseph, Job (2012). 'Financial literacy of Economically Marginalised people in Kerela'. A Thesis Report for School of Gandhian Thought and Development Studies, Mahatma Gandhi University, Kottayam, Kerala, India. <http://hdl.handle.net/10603/19632>

- [15] Lyons, A. C., L. Palmer, K. S. U. Jayaratne, and Scherpf E. (2006). ‘Are We Making the Grade? A National Overview of Financial Education and Program Evaluation’. *The Journal of Consumer Affairs*, 40(2): 208- 235.
- [16] Madhulata (2016). ‘Assessment of financial literacy in rural areas of Sonapat district of Haryana’. *International Journal of Research in Finance and Marketing*. 6(11):154-165
- [17] Max New York Life Insurance Company Ltd. & National Council for Applied Economic Research. (2007). How India Earns, Spends and Saves: India Financial Protection Survey. Delhi: Max New York Life Insurance Company Ltd and National Council for Applied Economic Research: Research Report.
- [18] NABARD (2009). Financial Inclusion-An Overview, Department of Economic Analysis and Research, Occasional Paper No. 48, Mumbai.
- [19] NABARD (2017) NABARD All India Rural Financial Inclusion Survey, Mumbai.
- [20] OECD (2010). International Network on Financial Education.
- [21] OECD (2013). Developing National Strategies for Financial Education: “OECD/INFE High Level Principles” at the OECD/WB/RBI Conference on Financial Education, 4-5 Mar 2013, New Delhi, Online <http://www.finlitedu.org/news/23/>
- [22] OECD (2016): <https://www.oecd.org/daf/fin/financial-education/OECD-INFE-International-Survey-of-Adult-Financial-Literacy-Competencies.pdf>
- [23] Prusty, Sadananda (2011), Household Saving Behaviour: Role of Financial Literacy and Saving plans. *The Journal of World Economic Review*; Vol. 6, No. 1 (January-June) pp. 75-86.
- [24] Rangarajan, C (2008). Report of the Committee on Financial Inclusion. RBI Publication.
- [25] Rao, Nageswara (2010). Financial Inclusion-Banker’s Perspective, *Journal of Indian Institute of Banking & Finance* (Bank Quest), Vol. 81, no. 4, October-December, pp20-26.
- [26] RBI Annual Report, 2008, 2012, 2017, 2018.
- [27] RBI (2012). National Strategy for Financial Inclusion. Draft available at <https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/NSFE016072012.pdf>
- [28] RBI (2003). RBI Handbook of Statistics.
- [29] Subbarao, D. (2010), *RBI Bulletin*, January.
- [30] UNDP, 2012, 2017
- [31] World Bank (2008). Finance for All? Policies and Pitfalls in Expanding Access, World Bank Policy Research Paper, pp. 1121-1126, World Bank, Washington DC.
- [32] World Bank (2018). Global Findex Database 2018: Measuring Financial Inclusion and the Fintech Revolution. https://globalfindex.worldbank.org/sites/globalfindex/files/2018-04/2017%20Findex%20full%20report_0.pdf

APPENDIX

Measurement of Financial Literacy - Distribution of Scores

Component	Question	Responses (Score)
Financial Attitude (Likert Scale)	Please provide your opinion on the statement: "I tend to live for today and let tomorrow take care of itself"	Strongly Agree (1 Point) Agree (2 Points) Neutral (3 Points) Disagree (4 Points) Strongly Disagree (5 Points)

	Please provide your opinion on the statement: "I think that money is there to be spent"	Strongly Agree (1 Point) Agree (2 Points) Neutral (3 Points) Disagree (4 Points) Strongly Disagree (5 Points)
	Please provide your opinion on the statement: "I find it more satisfying to spend money than to save it for the long term"	Strongly Agree (1 Point) Agree (2 Points) Neutral (3 Points) Disagree (4 Points) Strongly Disagree (5 Points)
Financial Knowledge	"If someone offers you a chance to make a lot of money, there is also a chance that you will lose a lot of money"	Yes (1 Point) No (0 Point)
	"High inflation means that the cost of living is increasing rapidly"	Yes (1 Point) No (0 Point)
	"It is less likely that you will lose all your money if you save it in more than one place"	Yes (1 Point) No (0 Point)
Financial Behaviour	Does your household have a budget?	Yes (1 Point) No (0 Point)
	Who is responsible for the management of your household finances?	Yourself (1 Point) Yourself and your spouse (1 Point) Yourself and other member (1 point) Another family member (0 point) Others (0 Point)
	Did you ever face a situation wherein your income was less than your expenditure?	Yes (0 Point) No (1 Point)
	If yes above, then which of the following was done to meet the ends?	Borrowed from family members/relatives (0 Point) Borrowed from Employer (0 Point) Drew money out of savings/investments (1 point) Sold items (1 point) Availed loan/finance/mortgage (1 Point) Missed payments (0 Point)
	Do you have a bank account?	Yes (1 Point) No (0 Point)

How frequently do you visit bank?	Daily (1 Point) Weekly (1 Point) Monthly (1 Point) Very rarely (0 Point)
What bank services have you availed?	Deposits/withdrawals (1 Point) Loan (1 Point) Cheque (1 Point) ATM (1 Point) Remittances (RTGS/NEFT) (1 Point) Direct Benefit Transfer (1 Point) Net Banking (1 Point)
Where do you pool savings?	Bank (1 Point) Home (0 Point)
Do you use digital mode of payments?	Yes (1 Point) No (0 Point)
What mode of digital payments have you availed?	Debit/Credit Card (1 Point) RuPay Card (1 Point) Net Banking (1 Point) BHIM (1 Point) PayTM/Tez/PhonePe (1 Point) Other (1 Point) Not availed (0 Point)
What mode of remittances have you availed?	Bank (1 Point) Post Office (1 Point) Informal Sources (0 point) None (0 Point)
Do you have Life Insurance?	Yes (1 point) No (0 Point)
