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## Financial Literacy and its Determinants

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**Abstract** - Financial literacy is the ability to make informed judgments and to take effective decisions regarding the use and management of money. Financial literacy enables individuals to improve their overall well-being. Research has shown that levels of financial literacy worldwide are unacceptably low. People find it difficult to take decisions regarding personal finance issues confidently and often make mistakes. In India also the levels of financial literacy are very low. An attempt has been made through this paper to determine financial literacy level of salaried individuals based on various demographic and socio-economic factors. Findings of the study suggest that overall financial literacy level of respondents is not very high. Financial literacy level gets affected by gender, education, income, nature of employment and place of work whereas it does not get affected by age and geographic region. Findings of this study will help policy makers and regulators to devise appropriate strategies in order to increase the level of financial literacy amongst the population.

**Keywords:** Financial Literacy, Financial Education, Salaried individuals.

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### I. INTRODUCTION

The Organization for Economic Co-operation and Development (OECD) has defined financial literacy as “a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual well being”. Financial literacy helps individuals to improve their level of understanding of financial matters which enables them to process financial information and make informed decisions about personal finance. Financial literacy is directly related to the well being of individuals. Previous research suggests that those with low levels of financial literacy, faces problems with issues relating to personal finance such as savings, borrowings, investments, retirement planning etc.

Over the recent years, financial landscape has changed considerably in our country. Financial landscape has become complex over the past few years with the introduction of many new financial products. In order to understand risk and return associated with these products, a minimum level of financial literacy is a must. Financially literate individuals can make effective use of financial products and services; will not get cheated by people selling financial products not suited for them. Financial literacy aids in improving the quality of financial services and contribute to economic growth and development of a country.

Financial literacy is important for several reasons. Financially literate consumers are able to sail through tough financial times because of the fact that they might have accumulated savings, purchased insurance and diversified their investments. Financial literacy is also directly correlated with positive financial behaviour such as timely payment of bills and loan instalments, saving before spending and using credit card judiciously.

Research has shown that levels of financial literacy worldwide are unacceptably low. Developing countries have much less financially literate population as compared to developed countries. People find it difficult to take decisions regarding personal finance issues confidently and often make mistakes. In India also the levels of financial literacy are very low. The governments and various organizations such as Economic Co-operation and Development (OECD), the U.K. Department of International Development (DFID), and the World Bank are promoting financial literacy in developing countries by imparting financial education. Financial education empowers individuals to take their financial decisions in a better way. Financial education programs cover topics such as savings, borrowings, budgeting and making use of financial services.

A big improvement in financial knowledge of individuals is necessary. This is possible with appropriate financial education programs targeted at right people at right time. For financial education to be effective we must know the level of financial knowledge, attitudes and behaviour. Present study will make an attempt to assess financial literacy and its determinants, which will help policy makers and regulators to devise appropriate strategies in order to increase the level of financial literacy among population.

## II. LITERATURE REVIEW

Danes and Hira (1987) surveyed 323 college students from Iowa State University using a questionnaire of 51 items to measure their knowledge of credit cards, insurance, personal loans, record keeping, and overall financial management. Their findings indicate that males know more than females in most areas, married students know more than unmarried students, and upper class man know more than lower class man. Their overall finding was that college students have low financial knowledge. Volpe, Chen, & Pavlicko (1996) surveyed 454 undergraduate business students from only one university using an instrument of 23 items that focused primarily on investment knowledge. Findings show a low average literacy score of 44%, with those who majored in business being more knowledgeable on investments than those who did not major in business. Markovich and DeVaney (1997) surveyed 236 randomly selected undergraduate seniors from Purdue University to measure financial knowledge and behaviour using an instrument with 34 items. Although their study included financial behavior, they only measured the level of students' knowledge and behaviour, with no measure to determine whether knowledge impacted or correlated with behaviour.

Hogarth (2002) explored the financial literacy of adults in the U.S using 28 true/false type questions on topics related to personal finance. The study showed that, in general, less financially knowledgeable respondents were more likely to be single, relatively uneducated, relatively low income, minority, and either young or old (not middle aged). Beal and Delpachitra (2002) measured financial literacy of Australian students and found that university students were neither skilled nor knowledgeable in financial matters. It was found that students with higher financial literacy scores were more likely to be male, have greater work experience and have a higher income. Volpe et al. (2002) examined investment literacy of 530 online investors. They found that level of investment literacy varied with people's education, experience, age, income and gender. Women had much lower investment literacy than men and older participants performed better than young participants.

Worthington (2006) used logit regression models to predict financial literacy of Australian adults. Results of the study suggests that financial literacy is found to be highest for persons aged between 50 and 60 years, professionals, business and farm owners. Financial literacy is lowest for unemployed, females and those from non-English speaking background. Al-Tamimi and Kalli (2009) assessed the financial literacy of the UAE investors. The results indicate that the financial literacy of UAE investors is far from the needed level. The financial literacy is found to be effected by income level, education level and workplace activity.

Cole et al. (2008) measured the level and predictors of financial literacy, and its relationship to demand for financial services in India and Indonesia. They found strong relationships between financial literacy and financial behavior. Survey data from Indonesia and India demonstrates that financial literacy is an important correlate of household financial behavior and household well being. Agarwal et al. (2010) evaluated financial literacy of online Indian investors of Hyderabad city. The findings suggest that participants are generally financially literate. Variations in financial literacy level were observed across demographic and socio-economic groups.

Almenberg and Soderbergh (2011) examined the relationship between financial literacy and retirement planning of Swedish adults. They found significant differences in financial literacy between planners and non-planners. Financial literacy levels were found lower among older people, women and those with low education or earnings. Klapper and Panos (2011) investigated the impact of financial literacy on the retirement saving in Russia. They found that higher literacy is positively related to retirement planning and investigating in private pension funds.

On reviewing the existing literature on financial literacy, a number of salient points emerge. Most of the work is done in US, Australia, UK and other developed nations. Very few research studies have been carried out in developing countries like India. Target population in most of the studies is college students rather than adult population. Very few studies used all the areas of personal finance in order to measure the level of financial literacy. My study aims at bridging this gap.

## III. OBJECTIVES

The following are the objectives of this present study-

- To determine the level of financial literacy among salaried individuals.
- To find out the relationship between financial literacy and various demographic and socio-economic factors.

#### IV. HYPOTHESES

For the purpose of this study following hypotheses have been proposed:

**Hypothesis 1:**

H<sub>0</sub>: There is no association between gender and financial literacy level of salaried individuals

H<sub>1</sub>: There is an association between gender and financial literacy level of salaried individuals.

**Hypothesis 2:**

H<sub>0</sub>: There is no association between age and financial literacy level of salaried individuals

H<sub>1</sub>: There is an association between age and financial literacy level of salaried individuals.

**Hypothesis 3:**

H<sub>0</sub>: There is no association between education and financial literacy level of salaried individuals

H<sub>1</sub>: There is an association between education and financial literacy level of salaried individuals.

**Hypothesis 4:**

H<sub>0</sub>: There is no association between income and financial literacy level of salaried individuals

H<sub>1</sub>: There is an association between income and financial literacy level of salaried individuals.

**Hypothesis 5:**

H<sub>0</sub>: There is no association between nature of employment and financial literacy level of salaried individuals

H<sub>1</sub>: There is an association between nature of employment and financial literacy level of salaried individuals.

**Hypothesis 6:**

H<sub>0</sub>: There is no association between place of work and financial literacy level of salaried individuals

H<sub>1</sub>: There is an association between place of work and financial literacy level of salaried individuals.

**Hypothesis 7:**

H<sub>0</sub>: There is no association between geographic region and financial literacy level of salaried individuals

H<sub>1</sub>: There is an association between geographic region and financial literacy level of salaried individuals.

#### V. METHODOLOGY

For the purpose of the study a survey was conducted amongst salaried individuals of Himachal Pradesh. Multistage sampling has been used in order to get representative sample of the population. Out of total twelve districts of Himachal Pradesh, three districts namely Shimla, Solan and Kangra were selected randomly (first stage). The selected districts were divided into sub-divisions and two sub-divisions per district were selected randomly (second stage). From each selected sub-division, respondents were selected conveniently using some common criteria like place of work (urban or rural), occupational status (government or non-government employee) so as to get representative sample of the population. Primary data from the respondents was collected by using a structured questionnaire. A total of 516 respondents constitute a sample for this study.

To check the financial literacy level, thirteen questions about personal finance were asked from the respondents. The questions were asked in order to measure respondent's knowledge in the areas of financial numeracy, savings and investments, borrowings, insurance, risk and return. Total score for each respondent is calculated by giving one mark for each correct answer and for incorrect answer no negative marking was done. The total for each respondent was further converted into their percentage score. The hypothesis of this study has been tested with the help of ANOVA. The hypothesis has been tested at 5% significance level. The results of ANOVA are displayed in Table 2. Table 2 shows the Mean score, F value and significance level of financial literacy level based on various demographic and socio-economic factors.

#### VI. RESULTS AND DISCUSSION

Table 1 gives the summary of the demographic and socio-economic characteristics of the respondents. A look at demographic and socio-economic detail shows that percentage of male respondents is 68.8% and female respondents is 31.2%. 29.7% of the respondents fall in the age group of 31-40 years and 30.6% fall in the age group of 41-50 years. Majority of the respondents i.e. 45.95% in our sample are graduates followed by 42.6% having post graduate degree. The respondents also constitutes government (46.7%) and non-government (53.3%) employees. 61% of the respondents have an annual income between Rs. 2-5 lacs followed by 34.3% respondents who earn between Rs. 5-10 lacs annually. The proportion of respondents from Shimla, Solan and Kangra districts is 36.2%, 34.5% and 29.3% respectively.

##### Association between gender and financial literacy level

Table 2 shows the mean score of financial literacy level of males and females. The results indicate that financial literacy of males is more than females. The mean score of males was found to be 61.41% and that of females was found to be 51.46%. From Table 2 it can be seen that F value is significant at 5% significance level, hence H<sub>0</sub> of hypothesis 1 – there is no association between gender and financial literacy level is rejected. Thus it can be concluded that there is a significant difference between male and female respondents in terms of financial literacy level.

**Table 1. Demographic and Socioeconomic Details of the Respondents**

		Frequency	Percentage
GENDER	Male	355	68.8
	Female	161	31.2
AGE (Years)	20-30	101	19.6
	31-40	153	29.7
	41-50	158	30.6
	51-60	90	17.4
	More than 60	14	2.7
EDUCATION	10+2	39	7.6
	Graduation	237	45.9
	Post Graduation	220	42.6
	PhD	20	3.9
INCOME PER ANNUM (In Rs.)	2-5 lacs	315	61.0
	5-10 lacs	177	34.3
	10-15 lacs	24	4.7
NATURE OF EMPLOYMENT	Government	241	46.7
	Non-Government	275	53.3
PLACE OF WORK	Urban	280	54.3
	Rural	236	45.7
GEOGRAPHIC REGION	Shimla	187	36.2
	Solan	178	34.5
	Kangra	151	29.3

Source: Primary Data

**Association between age and financial literacy level**

Table 2 shows the mean score of financial literacy level for different age groups. It can be observed from the table that as age progresses financial literacy level also increases. Maximum financial literacy level of 65.38% is shown by respondents falling in age group of more than 60 years followed by 59.66% for age group of 51-60 years. In order to see statistical difference in mean scores based on age, hypothesis 2 is tested using ANOVA and F value is calculated. From the table, it can be seen that F value is not significant at 5% significance level, hence  $H_0$  of hypothesis 2-There is no association between age and financial literacy level is not rejected. Thus it can be concluded that financial literacy level does not depends on age.

**Table 2. Mean and F values of Financial Literacy Level**

		Mean	F Value	Significance
GENDER	Male	61.46	55.708	.000
	Female	51.46		
AGE (Years)	20-30	56.59	1.350	.250
	31-40	58.22		
	41-50	58.08		
	51-60	59.66		
	More than 60	65.38		
EDUCATION	10+2	49.90	12.107	.000
	Graduation	56.09		
	Post Graduation	61.43		
	PhD	66.54		
INCOME PER ANNUM (In Rs.)	2-5 lacs	54.63	31.946	.000
	5-10 lacs	63.06		
	10-15 lacs	71.47		
NATURE OF EMPLOYMENT	Government	56.24	8.977	.003
	Non-Government	60.11		
PLACE OF WORK	Urban	60.60	15.293	0.000
	Rural	55.57		
GEOGRAPHIC REGION	Shimla	58.04	0.808	0.446
	Solan	59.38		
	Kangra	57.36		

Source: Primary Data

**Association between education and financial literacy level**

Table 2 shows that financial literacy level is correlated with the level of education. More the education level more is the level of financial literacy. Table 2 shows that financial literacy level is highest for respondents who have PhD degree (66.54%) followed by those respondents who have post graduate degree (61.43%). From the table it can be seen that F value is significant- at 5% significance level. Hence  $H_0$  of hypothesis 3-There is no

association between education level and financial literacy level is rejected. Thus it can be concluded that financial literacy level depends on the education level.

#### **Association between Income and financial literacy level**

The results of the Table 2 indicates that more the income, more will the level of financial literacy. Table 2 shows that financial literacy level is highest for respondents having income level between Rs 10-15 lacs (71.47%) per annum followed by those who earn between Rs. 5-10 lacs (63.06%) per annum. From the table it can be seen that F value is significant- at 5% significance level. Hence  $H_0$  of hypothesis 4 - There is no association between income and financial literacy level is rejected. Thus it can be concluded that financial literacy level depends on the income of a person.

#### **Association between nature of employment and financial literacy level**

On the basis of nature of employment we have divided the respondents into two categories i.e. government and non-government employees. Table 2 shows that non-government employees have higher financial literacy level as compared to government employees. From the table it can be seen that F value is significant- at 5% significance level. Hence  $H_0$  of hypothesis 5-There is no association between nature of employment and financial literacy level is rejected. Thus it can be concluded that nature of employment influences financial literacy level.

#### **Association between place of work and financial literacy level**

According to place of work, employees have been categorized into two parts namely urban and rural depending upon whether the place of employment of the employee is urban area or rural area. From the results it is clear that employees working in urban areas are more financial literate as compared to those working in rural areas. The mean score of employees working in urban area is 60.60% as compared to mean score of employees working in rural area (55.57%). From the table it can be seen that F value is significant- at 5% significance level, hence  $H_0$  of hypothesis 6-There is no association between place of work and financial literacy level is rejected. Thus it can be concluded that financial literacy level depends on the place where employee works.

#### **Association between geographic region and financial literacy level**

From Table 2, it can be seen that financial literacy level of respondents is almost same for all the three districts. Also from the table it can be seen that F value is not significant- at 5% significance level, hence  $H_0$  of hypothesis 7-There is no association between geographic region and financial literacy level is not rejected. Thus it can be concluded that financial literacy level does not depend on geographic region.

### **VII. FINDINGS**

- Overall financial literacy level of 58.30% among salaried individuals is not very encouraging.
- Financial literacy level of males is higher than that of females. The difference is also statistically significant.
- Financial literacy is highest for those who are more than 60 years of age followed by those who fall in the age group of 51-60 years. Level of financial literacy is lowest for young respondents i.e. who are in the age group of 20-30 years. The results of ANOVA show that difference in respondent's financial literacy level based on age is not statistically significant.
- Level of financial literacy is positively related to education and income level i.e. our results indicate that financial literacy level increases with increase in education and income level. The results are statistically significant.
- Employees working in urban areas are more financially literate as compared to those working rural areas.
- The employees working in non-government jobs are more financially literate as compared to those in government jobs and the difference is statistically significant.
- Geographic region does not affect the level of financial literacy significantly.

### **VIII. CONCLUSION**

From the above analysis it can be concluded that overall financial literacy level of 58.30% among all respondents is not encouraging. This shows that in our country people are still not much aware about their finance related issues. The results suggest that level of financial literacy varies significantly among respondents based on various demographic and socio-economic factors. It can be concluded that financial literacy level gets affected by gender, education, income, nature of employment and place of work whereas it does not get affected by age and geographic region.

Overall it can be concluded that financial literacy level is low in our country and necessary measures should be taken by government to increase awareness about financial related matters.

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