Impact of Demography on Financial Literacy#

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Abstract

The concept of financial literacy is gaining importance across the globe to achieve financial wellbeing. The governments worldwide are involved in finding effective approaches to enhance the financial literacy level for reducing poverty and sustainable development. The review of literature clearly depicts a lower level of financial literacy across the globe is low. Further, the demographics factors influence the level of financial literacy of an individual. Hence, an attempt has been made to study the impact of demographic factors like age, gender, caste, marital status, education level, profession, income level, saving percentage, family size and number of dependants on financial literacy has been analysed using Chi-square test. A sample of 385 is collected using Multistage Random Sampling Method from north part of Karnataka, India to achieve the objectives of the study. It is concluded that the demographic factors like education level, profession, income level, saving percentage, family size have an association with the level of financial literacy.

Keywords: Financial Education, Financial Literacy, Personal Finance

1. 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 wellbeing".

Financial literacy among investors is essential to achieve adequate levels of investor's protection. The recent developments in financial markets and dynamic business environment have substantially leaded to increase in the need of financial literacy. Financial literacy empowers an individual to achieve a better understanding of financial markets and the risk and return associated with various investment avenues. The financial literacy enables to deal with the problems associated to personal financial planning.

Research has shown that level of financial literacy across the globe is low. Further, the financial literacy level in developing countries is less than that of the developed countries. In India, the governments, Reserve Bank of India (RBI), Small Industries Development Bank of India (SIDBI), National Payments Corporation of India (NPCI), National Institute of Securities Markets (NISM), and various organizations such as World Bank, Organization for Economic Co-operation and Development (OECD), and the U.K. Department of International Development (DFID), are promoting financial literacy.

Financial education programs are conducted by NCFE like Money Smart School Program for schools, Financial Awareness and Consumer Training for undergraduate and postgraduate students, Financial Education Training Programme for school teachers, and Financial Education Program for Adults. Similarly

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IRDAI is conducting seminars, awareness campaigns, Metro Rail campaigns, quizzes, etc. in the area of financial literacy. A website called "Pension Sanchay" has been launched in 2018 by PFRDA. NABARD is conducting Financial Literacy Awareness Programmes for School Children, Adults, Senior Citizens, Farmers, SHGs and Entrepreneurs.

The level of financial literacy of an individualis influenced by demographics factors. In this study an attempt has been made to study the impact of demographic factors like age, caste, gender, and marital status, number of dependants, family size, education level, profession, income level, and saving percentage on financial literacy. Hence the objective of the study is to find the association between financial literacy and demographic factors.

2. Literature Review

Chen and Volpe (2002) made a comprehensive study to identify participants personal finance knowledge and to investigate how numerous parameters impact participants level of knowledge in personal finance. Primary data was collected using a multiple-choice survey. Logistic regression analysis was conducted to identify if the independent parameter has a different effect on their financial literacy. ANOVA was used to show the gender variance in financial literacy. It was found that women know less than men. Further financial literacy is related to age, experience and education related factors.

Ansong and Gyensare (2012) explored the determinants financial literacy among the working-students of the university. A sample of 250 undergraduate and postgraduate students of a public university in Ghana was taken through random sampling. A structured questionnaire with 20 multiple choice questions was constituted to collect data from the respondents. The relationship between the variables was examined using a correlation research design. ANOVA and t-test were used for data analysis. It was found that work experience, age, and mother's education were positively related to financial literacy. The financial literacy has no correlation with the factors like level

of study, source of education on money, work location, access to media and father's education.

Xu and Zia (2012) surveyed the evidence on financial literacy levels around the world and indicated that the multiple comparable surveys have helped identify that financial literacy is low everywhere; though extremely lower in low-income countries.

Bhushan et al., (2013) made an attempt to study the level of financial literacy based on various demographic and socio-economic factors of salaried individuals in India. A sample size constitute of 516 respondents using multistage sampling. Primary data was collected from salaried individuals of Himachal Pradesh through a structured questionnaire. Financial literacy level was measured using thirteen questions about personal finance were asked from the respondents. The overall level of financial literacy is 58.30%. It was found that demographic factors like age and geographic region have no impact on financial literacy level and factors like education, gender, nature of employment income, and place of work have an impact on financial literacy.

Grohmann (2016) studied the factors resulting the gender gap in financial literacy as most of the previous studies proved that men have a higher financial literacy level than women. Financial literacy was measured as test inflation, knowledge of interest, and diversification. The gender gap is partially explained by the differences in experiences with financial matters and the difference in socio-demographic characteristics. The cultural factors measured using country-specific characteristics play an important role. It was found that the gender gap in financial literacy is profound and difficult to close. The study concludes that the policymakers should take appropriate measures to improve financial literacyof women.

Aksoylu et al., (2017) conducted a study to determine relationship between financial literacy and the demographic characteristics of the respondents in Kayseri province. Secondary data was collected through a structured questionnaire from 400 respondents. The financial literacy levels of participants were classified into three categories: low, medium and high based on

correct responses and it was found that 25.5%, 44.5% and 30% of the respondents have high, medium and low financial literacy level respectively. Chi-square analysis was used to test the hypothesis, and it was found that there was a relationship between financial literacy success status and the demographic characteristics.

Vig (2017) opined that income, education, workplace and gender affect Financial Literacy the most. The study attempts to establish the relationship between financial literacy and investment decisions. The study can be useful for policy makers to work out strategies in order to improve financial literacy level. The varied characteristics of diverse investment avenue require high levels of financial literacy. The past studies revealed that the financial literacy levels of Indian investors are very low which is influenced by variety of demographic and socioeconomic factors i.e., gender, age, educational qualification, marital status, region, occupation, and family size. Many households are unfamiliar with even the most basic economic concepts needed to make saving and investment decisions. Female investors, rural people, youngsters require special consideration in this matter. There is an imperative need to frame strategies for improvement in financial literacy levels of investors so that the financial wellbeing of individuals as well as of the economy can be achieved.

Arif et al., (2019) made the study with an aim of evaluating the impact of knowledge related and demographic variables on the use of financial services in Pakistan. The data was analyzed with the help logistic regression and with help of Nvivo-10. The financial knowledge and information, trust level and income level have positive impact on the decision of using financial services and products in the country. On the contrary, general level of education, numeric financial literacy, although have an insignificant impact on the decision of using financial services and products. Results of the study highlight the importance of knowledge and information about financial services and products in the decision regarding the usage of financial services and products. The study proved that numeric and mathematical literacy, is of lesser importance in promoting financial inclusion. The

other control variables showed mixed results. Whereas people residing in rural areas are discouraged to use financial services while people in urban areas more frequently use basic financial services.

Baker et al., (2019) reveals the presence of different behavioural biases among Indian investors. The biases studied were the disposition effect, anchoring bias, overconfidence and self-attribution, mental accounting emotional biases, representativeness, and herding. The study reveals that individual investors do not always act rationally. The results also show that financial literacy has a negative association with the herding bias and disposition effect, and a positive relation with mental accounting bias. Further financial literacy has no significant relation with overconfidence and emotional biases. Demographic factors like age, occupation and investment experience relates to the behavioral biases of individual investors in the sample.

Jain et al., (2020) showed that in various instances of investing money, not everyone had any sort of appropriate financial knowledge. It also showed that comparatively men had more financial knowledge. The study definitively answers the question regarding literacy levels and how it affects the financial behaviour of a person. However, further studies are needed to establish causal relationships and develop methods to make financial literacy more accessible. From our research we found out about the financial behaviour among various demographics like age and gender**.**

Meenakshi and Rekha (2020) have found the financial literacy level of retail investors of Gurugram and also verify the relationship of demographic variables and financial literacy. From this study it was established that the financial literacy level of retail investors is still very low as per the necessity of the economy and some of the demographic variables have a relationship with financial literacy level.

Bhatia et al., (2021) felt that Young adults need to acquire good financial literacy formaking informed choices and long-term financial decisions. A review of literacy reveals about a poor financial literacy among the general peopleacting as a hindrance for making

importance decisions of savings, investment, and retirement planning. The objective of the study is to identify the factors determining the level of financial literacy of young adults of management program in India. It was found that financial literacy is more for male respondents and for those having a finance specialization or those with more educated mother.

Choudhary (2021) examines the link between investment behaviour and financial literacy is interlinked and determines the impact of socio-demographic factors on the level of financial literacy and investment behaviour. The study uses a questionnaire to measure and understand the level of financial literacy and investment behaviour of 477 respondents in India. Multinomial logistic regression is used for the analysis of data. The findings show that only one third of the respondents show a higher level of financial literacy. The evidence also shows that financial literacy has a significant positive association with the age and income of the respondents.

Akpene Akakpo et al., (2022) examine the impact of financial literacy and financial inclusion on stock market participation in Ghana. It employs a sample of 1,966 respondents across the 10 regions of Ghana for the year 2018. The influence of financial literacy on financial inclusion was estimated using biprobit models, and to independently analyse the effect of financial literacy and financial inclusion on stock market participation robust probit models was used. The results of the study revealed that, financial inclusion is positively influenced by financial literacy.

Prakash et al., (2022) found that while financial literacy and financial behaviour have a significant positive impact on financial wellbeing, financial stress has a significant negative impact. Financial behaviour and financial stress were found to have a mediating role in the relationship between financial literacy and financial wellbeing. The demographic variables significantly moderate the relationship between the factors leading to financial wellbeing.

Objectives of the Study

• To find the association between financial literacy and demographic factors.

Hypotheses

Null Hypothesis (H01): Age has an influence on the financial literacy.

Alternate Hypothesis (H11): Age has an influence on the financial literacy.

Null Hypothesis (H02): Gender has an influence on the financial literacy.

Alternate Hypothesis (H12): Gender has an influence on the financial literacy.

Null Hypothesis (H03): Caste group has an influence on the financial literacy.

Alternate Hypothesis (H13): Caste group has an influence on the financial literacy.

Null Hypothesis (H04): Marital status has an influence on the financial literacy.

Alternate Hypothesis (H14): Marital status has an influence on the financial literacy.

Null Hypothesis (H05): Education level has an influence on the financial literacy.

Alternate Hypothesis (H15): Education level has an influence on the financial literacy.

Null Hypothesis (H06): Profession has an influence on the financial literacy.

Alternate Hypothesis (H16): Profession has an influence on the financial literacy.

Null Hypothesis (H07): Annual income has an influence on the financial literacy.

Alternate Hypothesis (H17): Annual income has an influence on the financial literacy.

Null Hypothesis (H08): Saving percentage has an influence on the financial literacy.

Alternate Hypothesis (H18): Saving percentage has an influence on the financial literacy.

Null Hypothesis (H09): Family size has an influence on the financial literacy.

Alternate Hypothesis (H19): Family size has an influence on the financial literacy.

Null Hypothesis (H010): Number of dependents has an influence on the financial literacy.

Alternate Hypothesis (H110): Number of dependents has an influence on the financial literacy.

3. Research Methodology

The study explores the impact of demographic factors on financial literacy using a structured questionnaire from 385 respondents using Multistage Random Sampling Method. The individuals in the age group 21 to 65 years from the selected districts (Dharwad, Belagavi, Vijayapur and Bagalkot) of North Karnataka, having saving bank account were considered and statistical technique like Chi-Squared test. A chi-square test also known as Pearson chi-square test is used to compare observed results with expected results and a relationship between the variables. The test is performed at 5% level of significance.

The financial literacy score is computed as the number of correct responses. It ranges between 0 and 5. The responses with the range of 0 to 2 were categorized as the lower level of financial literacy and the responses with the range of 3 to 5 as a higher level of financial literacy. The purpose of this research paper is to study the impact of various demographic factors like age, gender, caste, marital status, education level, profession, income level, saving percentage, family size and number of dependants on financial literacy.

4. Results and Discussions

4.1 Association between Age and Financial Literacy

The Association between the age and financial literacy is analysed by using chi-square analysis as given in Table 2.

Table 1. Cross tabulation of respondents age and their financial literacy level

			Age category					Total
			21 to 30	31 to 40	41 to 50	51 to 60	61 and above	
Final Financial Literacy	Low	Count	98	55	31	19	3	206
		% within Age category	50.8%	49.5%	59.6%	76.0%	75.0%	53.5%
	High	Count	95	56	21	6	1	179
		% within Age category	49.2%	50.5%	40.4%	24.0%	25.0%	46.5%
Total % within Age category		Count	193	111	52	25	4	385
		% within Age category	100.0%	100.0%	100.0%	100.0%	100.0%	

Table 2. Chi-square tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.884[a]	4	.096
Likelihood Ratio	8.246	4	.083
Linear-by-Linear Association	5.451	1	.020
N of Valid Cases	385		

[a]: 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.86.

Table 1 shows the financial literacy level for different age groups. It depicts that as age progresses the level of financial literacy decreases. The percentage of financial literates is approximately the same for the respondents in the age group of 21 to 30 and 31 to 40, and then it starts decreasing with increase in age. Further, it is seen that the 76% of respondents in the age group of 51 to 60 years have low financial literacy.

In order to see the association between the respondent's age and level of financial literacy chi-square test was used as a statistical test. The value of the test statistic is 7.884. Since the p-value is more than significance level $\alpha = 0.05$, it can be concluded that there is no association between respondents age group and financial literacy. This is similar to the findings of Bhushan et al., (2013) and unlike to the findings of Chen and Volpe (2002), Ansong and Gyensare (2012), Vig (2017), Baker et al., (2019), Jain et al.,(2020), and Choudhary (2021).

4.2 Association between Gender and Financial Literacy

The association between the respondents' gender and financial literacy is analysed by using chi-square analysis as in Table 4.

Table 3 shows the level of financial literacy for males and females. The result indicates that the financial literacy of males is slightly more than that of females. It is seen that 46.8% of the male respondents are having high financial literacy when compared to 45% of female respondents.

The output of the Chi-square test is as presented in Table 4. The Chi-square significance value is 0.534. Since the p-value is more than significance level $\alpha = 0.05$, it can be concluded that there is no association between respondents' gender and financial literacy. Therefore, the null hypothesis is accepted. This is unlike the findings of Chen and Volpe (2002), Bhushan et al., (2013), Grohmann (2016), Vig (2017), Baker et al., (2019), Jain et al., (2020), and Choudhary (2021).

4.3 Association between Caste Group and Level of Financial Literacy

The association between the caste group and financial literacy is analysed by using chi-square analysis as given in Table 6.

Table 5 shows the level of financial literacy for different caste groups. It can be observed that 51% of the general category respondents have high financial literacy, followed by OBC (47.6%), SC (44.4%) and ST (29.2%). Hence the highest percentage (70.8%) of respondents in the ST category has a low level of financial literacy.

In order to see the association between the respondent's caste group and level of financial literacy chi-square test was used as a statistical test. The value of the test statistic is 7.364. Since the p-value is more than significance level $\alpha = 0.05$, it can be concluded that there is no association between respondents caste group and financial literacy level.

4.4 Association between Marital Status and Level of Financial Literacy

The Association between the marital status and financial literacy is analysed by using chi-square analysis as given in Table 8.

Table 7 shows the level of financial literacy for respondents with different marital status. It can be seen that ahigher percentage of respondents under separated/divorced and widow/widower have low financial literacy.

The output of the Chi-square test is as presented in Table 8. The Pearson Chi-square significance value is 0.273 and degree of freedom is 4. Since the p-value is more than significance level $\alpha = 0.05$, it can be concluded that there is no association between respondents marital status and financial literacy. Therefore, the null hypothesis is accepted. It might also be concluded these two variables are not significantly associated. The findings are similar to the findings of Vig (2017).

Table 3. Cross tabulation of respondents gender and their financial literacy level

			Gender			Total
			Male	Female	Others	
Final Financial Literacy	Low	Count	151	55	0	206
		% within Gender	53.2%	55.0%	0.0%	53.5%
	High	Count	133	45	1	179
		% within Gender	46.8%	45.0%	100.0%	46.5%
Total		Count	284	100	1	385
		% within Gender	100.0%	100.0%	100.0%	100.0%

Table 4. Chi-square tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.254[a]	2	.534
Likelihood Ratio	1.635	2	.442
Linear-by-Linear Association	.009	1	.923
N of Valid Cases	385		

[a]: 2 cells (33.3%) have expected count less than 5. The minimum expected count is .46.

Table 5. Cross tabulation of respondents caste group and their financial literacy level

			Caste Group				Total
			SC	ST	OBC	General	
Financial Literacy	Low	Count	20	34	75	77	206
		% within Caste Group	55.6%	70.8%	52.4%	48.7%	53.5%
	High	Count	16	14	68	81	179
		% within Caste Group	44.4%	29.2%	47.6%	51.3%	46.5%
Total		Count	36	48	143	158	385
		% within Caste Group	100.0%	100.0%	100.0%	100.0%	100.0%

Table 6. Chi-square tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.364[a]	3	.061
Likelihood Ratio	7.587	3	.055
Linear-by-Linear Association	3.479	1	.062
N of Valid Cases	385		

[a]: 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.74.

Table 7. Cross tabulation of respondents marital status and their financial literacy level

			Marital status					Total
			Married	Single	Separated/ divorced	Widow/ widower	Refuse to answer	
Final Financial Literacy	Low	Count	137	64	3	2	0	206
		% within Marital status	53.1%	53.8%	100.0%	66.7%	0.0%	53.5%
	High	Count	121	55	0	1	2	179
		% within Marital status	46.9%	46.2%	0.0%	33.3%	100.0%	46.5%
Total		Count	258	119	3	3	2	385
		% within Marital status	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

4.5 Association between Respondents Education and Level of Financial Literacy

The association between the education level and financial literacy is analysed by using chi-square analysis as given in Table 10.

Table 9 shows the level of financial literacy for respondents at various educational levels. It can be seen that greater percentage of respondents in the category of graduates (53.5%) followed by primary (50%), Postgraduate (49%), Higher education (40%) undergraduates (39.1%), Illiterates (28.6%), and secondary school education (15.4%) have high level of financial literacy.

The output of the Chi-square test is as presented in Table 10. The Pearson Chi-square significance value is 0.042 and has a degree of freedom is 6. Therefore, the null hypothesis is rejected and hence, it is found that there is a significant association between the respondentseducation and their level of financial literacy. The findings are similar to the findings of Chen and Volpe (2002), Bhushan et al., (2013), Vig (2017), and Arif et al., (2019).

4.6 Association between Respondents Profession and Level of Financial Literacy

The association between the profession and financial literacy is analysed by using chi-square analysis as given in Table 12.

Table 11 shows the level of financial literacy for respondents of various professions. It can be seen that the highest percentage of respondents in the category of looking for work (100%) followed by service (61.2%), retired (50%), students (46.7%), business (40.1%), housewives (34.6%), and others (28.2%) have a high level of financial literacy.

In order to see the association between the respondent's profession and level of financial literacy chi-square test was used as a statistical test. The value of the test statistic is 22.864. Since the p-value is less than significance level $\alpha = 0.05$, it can be concluded that there is an association between respondents profession

and level of financial literacy. Hence the null hypothesis is rejected. The findings are similar to the findings of Chen and Volpe (2002), Ansong and Gyensare (2012), Bhushan et al., (2013), Vig (2017), Baker et al., (2019), and Choudhary (2021).

4.7 Association between Respondents Annual Income and Financial Literacy

The association between the annual income and financial literacy is analysed by using chi-square analysis as given in Table 14.

Table 13 shows the level of financial literacy for respondents at various income levels. It can be seen that highest percentage of respondents in the category of 250001 to 500000 (68.1%) followed by 500001 to 1000000 (44.6%), less than 250000 (35.9%), and Above 10000000 (25.7%) have a high level of financial literacy. Hence the respondents in the highest income category have the lowest level of financial literacy when compared to other income category groups.

In order to see the association between the respondent's income level and level of financial literacy chi-square test was used as a statistical test. The value of the test statistic is 34.087. The Pearson Chi-square significance value is 0.000, and the degree of freedom is 3. Since the p-value is less than significance level $\alpha = 0.05$, it can be concluded that there is an association between respondents income level and level of financial literacy. Hence the null hypothesis is rejected. The findings are similar to the study of Choudhary (2021).

4.8 Association between Respondents Saving Percentage and their Financial Literacy Level

The association between the saving percentage and financial literacy is analysed by using chi-square analysis as given in Table 16.

Table 15 shows the level of financial literacy for respondents with the various saving percentage. It can be seen that highest percentage of respondents in the category of above 35% (100%) followed by 31 to 35% (66.7%), 16 to 20% (59.4%), 26 to 30% (57.1%), 11 to

Table 8. Chi-square tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.138[a]	4	.273
Likelihood Ratio	7.050	4	.133
Linear-by-Linear Association	.010	1	.921
N of Valid Cases	385		

[a]: 6 cells (60.0%) have expected count less than 5. The minimum expected count is .93.

Table 9. Cross tabulation of respondents education and their financial literacy level

			Education level							Total
			Illiterate	Primary	Secondary	Higher education	Undergraduate	Graduate	Post Graduate	
FL	Low	Count	10	5	11	15	53	87	25	206
		% within Education level	71.4%	50.0%	84.6%	60.0%	60.9%	46.5%	51.0%	53.5%
	High	Count	4	5	2	10	34	100	24	179
		% within Education level	28.6%	50.0%	15.4%	40.0%	39.1%	53.5%	49.0%	46.5%
Total		Count	14	10	13	25	87	187	49	385
		% within Education level	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10. Chi-square tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.046[a]	6	.042
Likelihood Ratio	13.736	6	.033
Linear-by-Linear Association	6.535	1	.011
N of Valid Cases	385		

[a]: 1 cell (7.1%) have expected count less than 5. The minimum expected count is 4.65.

Table 11. Cross tabulation of respondents profession and their financial literacy level

			Profession							Total
			Business	Service	Student	Housewife	Looking for work	Retired	Others	
Final Financial Literacy	Low	Count	94	50	16	17	0	1	28	206
		% within Profession	59.9	38.8	53.3	65.4	0.0	50.0	71.8	53.5
	High	Count	63	79	14	9	2	1	11	179
		% within Profession	40.1	61.2	46.7	34.6	100.0	50.0	28.2	46.5
Total		Count	157	129	30	26	2	2	39	385
		% within Profession	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0%

Table 12. Chi-square tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.864ᵃ	6	.001
Likelihood Ratio	23.915	6	.001
Linear-by-Linear Association	2.530	1	.112
N of Valid Cases	385		

a: 4 cells (28.6%) have expected count less than 5. The minimum expected count is .93.

Table 13. Cross tabulation of respondents annual income and their financial literacy level

			Annual income				Total
			Less than 250000	250001 to 500000	500001 to 1000000	Above 1000000	
Final Financial Literacy	Low	Count	93	36	51	26	206
		% within Annual income	64.1%	31.9%	55.4%	74.3%	53.5%
	High	Count	52	77	41	9	179
		% within Annual income	35.9%	68.1%	44.6%	25.7%	46.5%
Total		Count	145	113	92	35	385
		% within Annual income	100.0%	100.0%	100.0%	100.0%	100.0%

Table 14. Chi-square tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.087ᵃ	3	.000
Likelihood Ratio	34.785	3	.000
Linear-by-Linear Association	.009	1	.926
N of Valid Cases	385		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.27.

Table 15. Cross tabulation of respondents saving percentage and their financial literacy level

			Savings percentage								Total
			0-5	6-10	11-15	16-20	21-25	26-30	31-35	Above 35	
Financial Literacy	Low	Count	36	56	84	13	12	3	2	0	206
		% within Savings percentage	64.3%	71.8%	44.9%	40.6%	80.0%	42.9%	33.3%	0.0%	53.5%
	High	Count	20	22	103	19	3	4	4	4	179
		% within Savings percentage	35.7%	28.2%	55.1%	59.4%	20.0%	57.1%	66.7%	100.0%	46.5%
Total		Count	56	78	187	32	15	7	6	4	385
		% within Savings percentage	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 16. Chi-square test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30.915[a]	7	.000
Likelihood Ratio	33.286	7	.000
Linear-by-Linear Association	10.127	1	.001
N of Valid Cases	385		

a. 6 cells (37.5%) have expected count less than 5. The minimum expected count is 1.86.

Table 17. Cross tabulation of respondents family size and their financial literacy level

			Family size				Total
			Single	2-4 members	5-7 members	More than 7	
Financial Literacy	Low	Count	11	88	102	5	206
		% within Family size	64.7%	43.3%	65.8%	50.0%	53.5%
	High	Count	6	115	53	5	179
		% within Family size	35.3%	56.7%	34.2%	50.0%	46.5%
Total		Count	17	203	155	10	385
		% within Family size	100.0%	100.0%	100.0%	100.0%	100.0%

Table 18. Chi-square test

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.751[a]	3	.000
Likelihood Ratio	18.959	3	.000
Linear-by-Linear Association	7.381	1	.007
N of Valid Cases	385		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.65.

Table 19. Cross tabulation of number of dependents of the respondents and their financial literacy level

			Dependents					Total
			1	2	3	4	More than 4	
Financial Literacy	Low	Count	32	114	24	23	13	206
		% within Dependents	56.1%	51.6%	46.2%	62.2%	72.2%	53.5%
	High	Count	25	107	28	14	5	179
		% within Dependents	43.9%	48.4%	53.8%	37.8%	27.8%	46.5%
Total		Count	57	221	52	37	18	385
		% within Dependents	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 20. Chi-square test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.266[a]	4	.261
Likelihood Ratio	5.391	4	.249
Linear-by-Linear Association	1.321	1	.250
N of Valid Cases	385		

[a]: 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.37.

15% (55.1%), 0 to 5% (35.7%), 6 to 10% (28.2%) and 21 to 25% (20%) have high level of financial literacy. Hence it clearly depicts that the respondents with high financial literacy also save more when compared to the respondents with lower financial literacy.

In order to see the association between the respondents saving percentage and level of financial literacy chi-square test was used as a statistical test. The value of the test statistic is 30.915. The Pearson Chi-square significance value is 0.000, and the degree of freedom is 7. Since the p-value is less than significance level $\alpha = 0.05$, it can be concluded that there is an association between respondents saving percentage and level of financial literacy. Hence the null hypothesis is rejected.

4.9 Association between Respondents Family Size and their Financial Literacy Level

The association between the family size and level of financial literacy is analysed by using chi-square analysis as given in Table 18.

Table 17 shows the level of financial literacy of the respondents for various family sizes. It can be seen that highest percentage of respondents in with the family size of 2 to 4 members (56.7%) followed by more than 7 members (50%), single (35.3%), and 5 to 7 members (34.2%) have a high level of financial literacy.

In order to see the association between the respondent's family size and level of financial literacy chi-square test was used as a statistical test. The value of the test statistic is 18.751. The Pearson Chi-square significance value is 0.000, and the degree of freedom is 3. Since the p-value is less than significance level $\alpha = 0.05$, it

can be concluded that there is an association between respondents family size and level of financial literacy. Hence the null hypothesis is rejected. This is like the findings of Vig (2017).

4.10 Association between Respondents' Number of Dependents and their Financial Literacy Level

The association between the respondent's number of dependents and financial literacy is analysed by using chi-square analysis as given in Table 20.

Table 19 shows the number of dependents of the respondents and their financial literacy level. It can be seen that highest percentage of respondents with a number of dependents of 3 (53.8%) followed by 2 dependents (48.4%), 1 dependent (43.9%), 4 dependents (37.8%), and more than 4 dependents (27.8%) have high level of financial literacy. It shows that the percentage of respondents with high financial literacy initially increases with the increase inindependents and then decreases.

The output of the Chi-square test is as presented in Table 4.36. The Pearson Chi-square significance value is 5.266 and degree of freedom is 4. Since the p-value is more than significance level $\alpha = 0.05$, it can be concluded that there is no association between the number of dependents of the respondents and their financial literacy level. Therefore, the null hypothesis is accepted. It might also be concluded that the number of dependents of the respondents and their financial literacy level is independent of each other. In other words, these two variables are not significantly associated.

5. Conclusion

The study aimed to analyse the impact of demographic factors on financial literacy. A sample of 385 is collected using Multistage Random Sampling Method from north part of Karnataka, India and Chi-square test was used to achieve the objectives of the study. It was found that the level of financial literacy is low among the respondents. Further, the results depicts that level of financial literacy varies significantly among respondents based on various demographic factors. It can be concluded that the demographic factors like education level, profession, income level, saving percentage, family size have an association with the level of financial literacy and the demographic factors like age, gender, caste, marital status, and a number of dependents have no association with the level of financial literacy. There is enough scope to perform the research by examining the impact of financial literacy on various other investment related attributes like stock market participation, portfolio diversification, Investors' behaviour, Investor's saving and spending behaviour, retirement planning and many others. Similarly, a comparative study on responses obtained from rural investors and urban investors or individuals of different Indian states can also be performed.

6. Reference

Akpene Akakpo, A., Amidu, M., Coffie, W., and Abor, J. Y. (2022). Financial literacy, financial inclusion and participation of individual on the Ghana stock market. Cogent Economics and Finance. 10(1), 2023955. https://doi.org/10.1080/23322039.2021.2023955

Aksoylu, S., Boztosun, D., Altınışık, F., and Baraz, E. H. (2017). A baseline investigation of financial literacy levels: The case of Kayseri province. The Journal of Accounting and Finance. 229-246. https://doi.org/10.25095/mufad.399911

Ansong, A., Gyensare, M., A., (2012). Determinants of university working-students' financial literacy at the university of cape coast, Ghana". International Journal of Business and Management. 7(9): 126-133. https://doi.org/10.5539/ijbm.v7n9p126

Arif, M., et al.. (2019). Financial knowledge and Literacy or Demographics: What determines the use of financial services in Pakistan? Indian Journal of Science and Technology. 12(4):1-11. https://doi.org/10.17485/ijst/2019/v12i4/140213

ANZ Bank. (2011). ANZ survey of adult financial literacy in Australia. The social research centre, department of financial inclusion and capability. The Australia and New Zealand Banking Group Limited (ANZ), Australia.

Baker, H. K., Kumar, S., Goyal, N., and Gaur, V. (2019). How financial literacy and demographic variables relate to behavioral biases. Managerial Finance. https://doi.org/10.1108/MF-01-2018-0003

Bhatia, S., Chawla, D., and Singh, S. (2021). Determinants of financial literacy of young adults: Testing the influence of parents and socio-demographic variables. International Journal of Indian Culture and Business Management. 22(2): 256-271. https://doi.org/10.1504/IJICBM.2021.113010

Bhushan, P., et al., (2013). Financial literacy and its determinants. International Journal of Engineering, Business and Enterprise Applications. 4(2): 155-160

Chen, H., and Volpe, R. P. (2002). Gender differences in personal financial literacy among college students. Financial Services Review. 1: 289-307

Choudhary, K., Kamboj, S., and Mehta, S. (2021). Financial literacy, investment behaviour and socio-demographic variables: evidence from India. International Journal of Behavioural Accounting and Finance. 6(3): 243-261. https://doi.org/10.1504/IJBAF.2021.116167

Grohmann, A. (2016). The gender gap in financial literacy: income, education, and experience offer only partial explanations. DIW Economic Bulletin. 6(46/47): 531-537.

Jain, N., Sanghani, M., Surana, N., Sohal, N., and Barath, P. (2020). To understand the level of financial literacy among adults in Mumbai. International Journal of Creative Research Thoughts. 8(6): 309-340.

Klapper, L., Lusardi, A., and Van Oudheusden, P. (2015). Financial literacy around the world. Standard and Poor's Ratings Services Global Financial Literacy Survey., Access mode: http://media. mhfi. com/documents/2015-Finlit_paper_17_F3_SINGLES. pdf.

Meenakshi and Rekha Dhingra. (2020). Financial literacy of investors and its relation with demographic variables. DME Journal of Management. 1(1): 36-51.

Prakash, N., Alagarsamy, S. and Hawaldar, A. (2022). Demographic characteristics influencing financial well being: A multigroup analysis. Managerial Finance. https://doi.org/10.1108/MF-09-2021-0466. https://doi.org/10.1108/MF-09-2021-0466

Retrieved from: http://money.usnews.com/money/blogs/alpha-consumer/2014/06/20/how-to-measureyour-financial-literacy 10

Retrieved from: https://www.google.co.in/?gws_rd=ssl#q=oecd%20financial%20literacy%20definition

Retrieved from: https://www.rbi.org.in/Scripts/Publication ReportDetails.aspx?UrlPage=andID=1156#AN

Vig, S., (2017). Assessment of factors affecting financial literacy levels of indian investors. Journal of Advanced Computing and Communication Technologies, 5(3).

Xu, L., and Zia, B. (2012). Financial literacy around the World- An overview of the evidence with practical suggestions for the way forward. Policy Research Working Papers 6107. Retrieved from: http://econ.worldbank.org. https://doi.org/10.1596/1813-9450-6107

Appendix

Section A: Demographic Profile

1. Name: _____
   Email id : _____
   Mobile No: _____
2. District:
3. Age (years): _____
   Please tick (✓) the appropriate answer
4. Gender

a. Male		b. Female		c. others	

5. Caste Group:

a. SC	
b. ST	
c. OBC	
d. General	
e. Others(Specify)	

6. Please, could you tell me your marital status?

a. Married	
b. Single	
c. Separated/divorced	
d. Living with a partner	
e. Widower	
f. Refused to answer	

7. Educational Level:

a. Illiterate	
b. Primary	
c. Secondary	
d. Higher Secondary	
e. Undergraduate	
f. Graduate	
g. Post Graduate	

8. Profession:

a. Business	
b. Service	
c. Student	
d. Housewife	
e. Looking for work	
f. Retired	
g. Others	

9. Annual Income (Rs.)**:** _____

10. State the percentage of your money you would allocate for monthly saving/investment out of the total monthly income:

a. 0-5		b. 6-10	
c. 11-15		d. 16-20	
e. 21-25		f. 25-30	
g. 31-35		h. Above 36	

11. Size of the family:

a. Single		b. 2-4 members	
c. 5-7 members		d. More than 7 members	

12. A number of dependents in the family:

a. 1	
b. 2	
c. 3	
d. 4	
e. More than 4	

Section B: Financial Literacy

*Please tick (✓) the appropriate answer

1. Suppose you need to borrow Rs 100 for 1 year. Which is the lower amount to pay back:

a. Rs 105	
b. Rs 100 plus interest 3% p.a.	
c. don't know	
d. refuse to answer	

2. Suppose you have some money. Is it safer to put your money into one business/investment, or to put your money into multiple businesses or investments?

a. one business/investment	
b. multiple businesses/investments	
c. don't know	
d. refuse to answer	

3. Suppose over the next 10 years the price of the things you buy double. If your income ALSO doubles, you will be able to buy:

a. Less than you can buy today	
b. More than you can buy today	
c. The same as you can buy today	
d. don't know	
e. refuse to answer	

4. Suppose you put money in the bank for two years and the bank agrees to add 15% per year to your account. The bank will add:

a. SAME amount of money both years	
b. MORE money in the second year than the first year	
c. don't know	
d. refuse to answer	

5. Suppose you had Rs 100 in a saving account and the bank adds 10% per year to the account. How much money would you have in the account after 5 years if you did not remove any money from the account?

a. Less than Rs 150	
b. More than Rs 150	
c. Exactly Rs 150	
d. don't know	
e. refuse to answer	