Original Research Article

A Study of Financial Literacy of Rajkot District

ABSTRACT

Since the independence of our country, there has been major focus on policy development and financial reforms. Financial inclusion has become a priority for both the central government and the RBI. For a nation to achieve financial inclusion effectively, the population should be financially literate. A review of existing literature in this field reveals that most studies have focused on three key variables, viz., financial literacy, financial development and economic growth. To contribute to this existing body of research, this paper explores the distinction between 'financial literacy' and 'financial awareness' to better understand what can truly drive 'financial inclusion' in the country. Primary data was collected from the district of Rajkot, Gujarat, followed by statistical analysis of the data. The study concludes that age, gender and education of the people makes a significant impact of financial literacy of the population, which in turn, will lead to financial inclusion. There do exist a marginal correlation between financial awareness and financial literacy.

Keywords – *Financial Literacy, Financial Inclusion, Investments, Savings, Financial Awareness.*

1. INTRODUCTION

Economic development simply means the economic well-being of a country. While it's often thought that a higher GDP indicates economic development, a broader understanding includes policies that focus on impactful development, microfinance interventions, enhancing financial literacy, improving infrastructure, reducing poverty, and advancing healthcare standards. Therefore, financial literacy can be considered a key component in achieving economic development for a nation.

India has recently emerged as one of the world's leading economies, with the current Central government collaborating with the Reserve Bank of India, the Securities & Exchange Board of India, and the Insurance Regulatory and Development Authority of India on a major goal of 'financial inclusion.' However, achieving financial inclusion for everyone requires addressing several other important factors.

1.1. Financial Awareness

Very often people confuse ‘Financial awareness’ with ‘financial literacy’. While financial awareness involves gathering the basic information and knowledge about the different areas of finance, financial literacy goes a step further and deep dives to understand the consequences of use of the knowledge base. For instance, an individual may know/ heard of company annual reports from where he can gather financial and other strategically important information about a company. This indicates that he is *financially aware* about the source from where he can gather the required information. However, his ability to read the correct portions of the report to dig the correct data (from financial statements and other narrative reports) before taking his investment decision into the stock of the company, would determine whether he is *financially literate* or not.

In yet another case, people purchase financial products/ services based on the recommendation made by the provider. However, in large number of cases it has been observed that people who are in charge of selling these products themselves lack the adequate knowledge to explain the outcomes of investing in those products/ services. In such instances, the onus must be on the investor to be able to take the correct investment decision and ask correct questions. Often when individuals are in their working age, they tend to overlook the importance of making appropriate investment and savings decisions. However, poor investment and savings decisions are not visible, but carry significant negative implications on the financial wellbeing of individuals in the long term. Inability to understand the financial products/ services and the repercussions of wrong financial decisions can reduce an individual’s ability to cope up with economic shocks and times of financial turmoil.

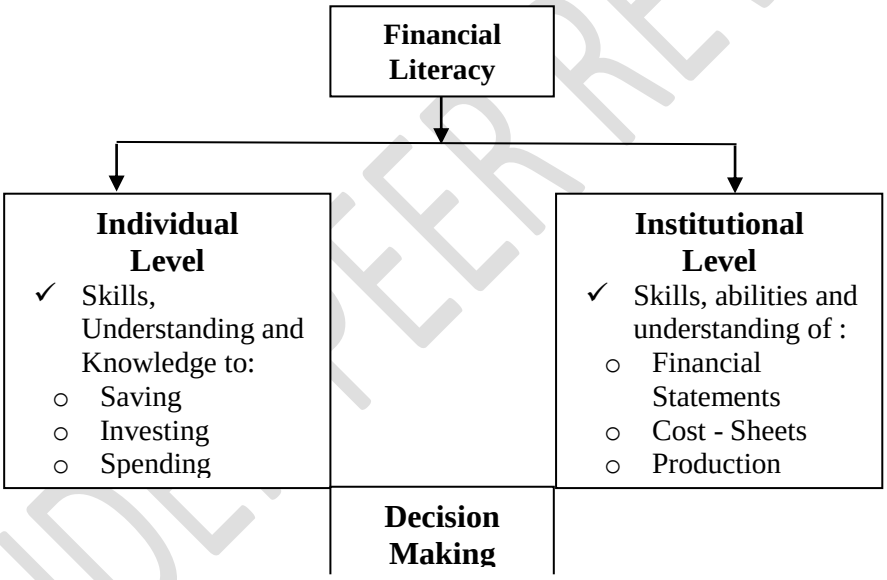
Thus, the government believes that adequate financial awareness backed by appropriate government policies and education would lead the citizens of the nation to become financially literate. With adequate financial knowledge and literacy, they would be in a state to ensure that their participation and inclusion in the financial system of the nation. This would ultimately lead to financial development and economic growth and stability of the nation.

1.2. Financial Literacy

In simple terms, financial literacy refers to having knowledge and understanding of various financial aspects such as personal finance, investments, and money management. It ensures that individuals not only grasp financial concepts but also use this understanding to make informed decisions about their investments, savings, and spending.

With technology putting a wealth of information at our fingertips, investors are inundated with data. To make sound financial decisions, it is crucial for investors to discern which sources of information are reliable and verify their authenticity. Therefore, financial literacy is best understood as the ability to access, comprehend, and assess relevant financial information to make decisions with an awareness of their potential impact on one's financial situation and future.

1.1. Fig 1 : Components of Financial Literacy



Source: Compiled by Prof. Devang Mehta (author)

1.2. Financial Inclusion

It is very logical to relate the fact that if a nation is financially literate, it acts as a stepping stone towards ensuring financial inclusivity of the country. Dating back a few years, it was based on the recommendations of the Rangarajan Committee in the year 2005, that the idea of financial inclusion had been officially making news in the banking and financial system. Over the years, various definitions of financial inclusion have evolved. Some of the most succinct and precise definitions are:

1) According to Rangarajan Committee (2008), "Financial inclusion is the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as the weaker sections and low income groups at an affordable cost."

2) According to Chakraborty (2011), “Financial inclusion is the process of ensuring access to appropriate financial products and services needed by all sections of society including vulnerable groups such as weaker sections and low income groups at an affordable cost in a fair and transparent manner by mainstream institutional players.”
3) One of the World Bank reports defines financial inclusion as – “broad access to financial services in such a way that there is absence of price or non-price barriers in the use of financial services.”

In simple words, financial inclusion aims to provide financial services (including adequate credit and insurance facilities) to all the sections of the society at an affordable cost. The idea is to steer the virtuous cycle of mobilization of savings from households into the financial system that can lead to capital formation and economic growth.

2. REVIEW OF THE LITERATURE

In *Conceptualizing Financial Literacy* (2000), Carolynne L. J. Mason and Richard M. S. Wilson define financial literacy and outline its various dimensions, emphasizing the differences between general literacy and financial literacy. The paper guides readers to understand how financial literacy influences better decision-making, distinguishing it from financial awareness. In another study, *Index of Financial Inclusion* (2008), M. Sarma introduces an index to measure financial inclusion, assessing banking penetration, service availability, and the overall banking system. While the index is comprehensive, it lacks parameters like affordability and timeliness, suggesting areas for further research.

In *Financial Literacy Around the World: An Overview* (2011), Lusardi and Mitchell explore the link between financial literacy and retirement planning, revealing that financial illiteracy is widespread even in developed markets. The study also highlights the significant impact of gender on financial literacy and underscores its importance for retirement readiness. In *The Effect of Literacy and Bank Penetration on Financial Inclusion in India* (2011), Dutta and Dutta analyze data from 35 Indian states and territories, finding that bank penetration has a more substantial impact on financial inclusion than literacy rates. They conclude that financial literacy improves inclusion mainly in regions already ranking high in financial inclusion.

In *Financial Literacy: An Essential Tool for Empowerment of Women through Microfinance* (2012), Bijli examines models empowering women in Self-Help Groups (SHGs) through microfinance, highlighting it as a powerful tool for financial inclusivity. The paper identifies a lack of financial knowledge as a primary issue in SHGs and proposes financial literacy modules focused on budgeting, saving, debt management, and banking. Xu and Zia’s *Financial Literacy Around the World: An Overview of the Evidence with Practical Suggestions for the Way Forward* (2012) analyzes financial literacy levels globally across different income countries, including the USA, Russia, and India, as well as insights from FinScope surveys in Sub-Saharan Africa and Pakistan. They further discuss how financial education programs can be enhanced for consumers and entrepreneurs alike.

In *Income-Related Inequality in Financial Inclusion and Role of Banks: Evidence on Financial Exclusion in India* (2014), Pal and Pal examine financial exclusion in India, noting that income-related inequality in financial inclusion is distinct from income inequality. Their analysis highlights that even some affluent households are financially excluded, and they explore how banking services impact financial access. In *Financial Inclusion in India: An Overview* (2014), Dr. S. Rajamohan and K. Subha discuss the significance of financial inclusion in combating poverty and exclusion, detailing government initiatives like no-frills accounts and rural bank branches to enhance access. Subha and Priya's *The Emerging Role of Financial Literacy and Financial Planning* (2014) argues that financial literacy is crucial for avoiding economic stagnation and sustaining national growth. They identify low financial literacy as stemming from factors like complex jargon and poor solution choices, stressing its importance for long-term financial empowerment.

In *Measuring Financial Inclusion of Indian States* (2016), Ambarkhane, A.S., and Venkatramani develop an index to assess financial inclusion across 21 Indian states, focusing on banking, pensions, insurance, and remittances. This index, built on supply, demand, and infrastructure dimensions, aligns with financial inclusion definitions from the Rangarajan Committee (2008) and Planning Commission (2009). In *India's Policies on Leveraging Financial Inclusion* (2017), Mathew and Kurian highlight the role of financial institutions and government bodies like the Central Government and RBI in driving financial inclusivity for economic growth. They review various initiatives and stakeholder participation, concluding that India has made significant progress toward financial inclusion.

In *Financial Literacy and Financial Inclusion in Rajasthan, India: An Empirical Study* (2018), Vijayvargy and Bakhshi assess financial literacy and awareness among Rajasthan residents, analyzing socioeconomic variables to determine their relationship with demand for financial products. This data-driven study identifies gaps in financial product access across various demographic groups. In *A Study on Status of Financial Inclusion in India* (2018), Sujlana and Kiran review India's financial inclusion from 2011 to 2015, noting that India led 11 nations in financial inclusivity per IMF data. However, RBI reports reveal low financial inclusion in northeastern India. Rashid and Surisetti's *Financial Literacy of Women in Hyderabad: An Exploratory Study* (2018) identifies six key factors—endurance, family safety net, knowledge update, self-efficacy, focused orientation, and agency—affecting financial wellbeing among Hyderabad women, emphasizing that financial literacy serves as an enabler rather than a predictor of financial health.

The literature review indicates that certain demographic factors do affect individuals' levels of financial literacy, though not all demographic variables have been explored. Beyond gender, education, and (briefly) age, additional variables could be examined to better understand their influence on financial literacy. Furthermore, most of the studies have been conducted in foreign countries, with limited research in India, especially in Rajkot district, Gujarat. As one of India's wealthiest districts, assessing the financial literacy of Rajkot district residents could provide valuable insights and foster new perspectives on financial literacy. It would also be insightful to investigate whether the district has integrated financial knowledge or literacy into school and college curricula. Additionally, comparing

the financial literacy of various districts in Gujarat with suburban regions could offer a deeper understanding of financial literacy, financial behavior, and financial attitudes.

3. RATIONALE OF STUDY

Former RBI Governor Dr. Subbarao remarked in a 2010 speech that "In the Reserve Bank, we view financial inclusion and financial literacy as twin pillars. Financial literacy drives the demand side—educating people on what they can and should ask for. Financial inclusion addresses the supply side—providing what people demand in the financial market." One key objective of financial inclusion is to ensure that money circulates through formal channels, thereby reducing reliance on informal sources like private moneylenders. This aims to protect vulnerable groups from exploitation and support their financial well-being.

Despite various initiatives aimed at promoting financial inclusion, the Planning Commission of India's report on Financial Sector Reforms highlights mixed results. Although the strategy emphasized expanding rural banking outreach, it struggled with profitability. Concerns emerged about the practicality of employing highly skilled urban professionals in rural branches to offer low-cost financial services, particularly in credit disbursement. Additionally, doubts were raised about whether these urban professionals were truly financially literate and capable of making sound financial decisions, mobilizing savings, and influencing the broader economic cycle.

The literature review reveals a common confusion between financial awareness and financial literacy, which may undermine the effectiveness of financial inclusion programs. While there is substantial research on financial literacy, development, and economic growth, there is limited direct analysis connecting financial literacy to financial inclusion. Thus, the research aims to clarify the distinction between financial literacy and financial awareness, and also does financial awareness creates an impact on financial literacy or not, as many believe.

4. OBJECTIVES OF THE STUDY

1) To identify the factors contributing to financial literacy and financial awareness, distinguishing between the two and examining their relationship
2) To assess the impact of various demographic factors on financial literacy in Rajkot District.

5. RESEARCH METHOD

5.1. Data: Type and Size

Primary data was gathered to assess financial literacy by administering structured questionnaires in Rajkot district. This data will be analyzed to determine if the population shares a similar level of financial literacy. Using convenience sampling, questionnaires were distributed to 130 respondents across the district, and data from 100 respondents was used for the final analysis.

5.2. Statistical Tests

To evaluate the quality of the data and empirically validate the research objectives, a series of statistical techniques were employed. The data analysis included the following methods:

a) **Two Sample t-test** This parametric test provides inferences about the means of the parent population. It was used to compare samples from the populations of two cities in Gujarat. Since the respondents were randomly selected from both cities, they represent independent samples. The two-sample t-test was conducted using Excel.

b) **Analysis of Variance (ANOVA)** The study aimed to determine whether age, gender, and education levels influence financial literacy levels among respondents. Therefore, an ANOVA test was performed using Excel.

c) **Factor Analysis** Factor analysis, a data reduction technique, examines interdependent relationships. Using SPSS software, factor analysis was conducted on 18 variables from the questionnaire, measured with a Likert scale, to assess financial literacy and awareness.

d) **Reliability Analysis** To check the internal consistency of the variables grouped into components via factor analysis, the Reliability Statistics command was used in SPSS to calculate the Cronbach's Alpha value, thus validating the reliability of the measures.

e) **Bivariate Correlation Analysis** This statistical technique determines the relationship between two variables, X and Y, indicating how much Y changes with a change in X. In this research, correlation analysis (using SPSS software) was employed to examine the relationship between financial literacy and financial awareness.

5.3. Hypothesis

List 1 : List of hypothesis

H_1	There is no significant difference in level of financial literacy among gender.
H_2	There is no significant difference in level of financial literacy and age of respondents.
H_3	Education of population does not create a difference in level and extent of financial literacy.
H_4	There exist no relation/association between financial awareness and financial literacy

5.4. Scope of Study

As discussed before, more often than not, financial literacy is required at two levels – individual as well as institutional level, the present study focuses to check the degree of financial literacy at the individual level. The primary data has been collected from Rajkot district.

5.5. Limitations of the Study

1) The study is restricted to only Rajkot district of Gujarat. So what may be true for the Rajkot district may not hold true for other district or urban cities of Gujarat; rural areas of Gujarat and even the other states.
2) Out of the total population of Rajkot district, the sample size of only 100 is taken into consideration which leaves out many from the population. Again, what holds true for the sample will not necessarily hold true for the entire population.
3) Accuracy of the analysis and results entirely depends on the honesty of the respondents in filling out the questionnaires.
4) The questionnaire does not consist of an exhaustive list of questions. This could have probably left out further topics of interest and study relating to financial literacy as well financial awareness.

6. DATA ANALYSIS

6.1. Identify the variables that contribute to – 'financial literacy' and 'financial awareness'; thereby distinguish the both.

- The following statistics associated with factor analysis have been analyzed and studied:

A. Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity

Table 1 : KMO and Bartlett's Test (Financial Literacy)		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.579
Bartlett's Test of Sphericity	Approx. Chi-Square	329.208
	df	136
	Sig.	<.001

Source: Results from running Factor Analysis Test on SPSS software Version 26

The KMO measure of sampling adequacy is an index used to examine the appropriateness of factor analysis. High values (between 0.5 and 1.0) indicate factor analysis is appropriate whereas values lower than 0.5 imply that factor analysis may not be appropriate.

As evident in this case, the KMO measure is 0.579 (which is greater than 0.5). This leads to the conclusion that Factor Analysis is an appropriate technique. Also, a value of greater than 0.5 indicates that the sample size selected for the study is adequate. The Significance measure suggests that the study being carried does have two significant questions or aspects that are correlated. As the value of the measure is nearer to 0.05, it is considered to be "significant" for the test.

B. Rotated Component Matrix

Table 2 : Rotated Component Matrix[a] (Financial Literacy)		
	Component	
	1	2
Insurance is a reliable savings option for a rationale investor	.638	
When there are several products to buy from, I tend to buy the one that is recommended as the "most selling product"	.616	
An emergency fund of money is same as any savings that an individual will have.	.605	
The best investments avenues are those where majority of the people are investing at any given point of time.	.556	
It is an appealing idea for me to spend the income that I earn rather than save it.	.485	
Whenever I receive a cash gift/ bonus/ incentive, I spend it to fund my vacation or to purchase a luxury product.	.480	
While investing in the equity capital market, I have a habit of reading the annual reports.	.474	
A portfolio manager is the best person to manage my investment portfolio.	.429	
Whenever I make an investment decision, I make a mental calculation of the costs associated with that investment option.		
I have a habit of preparing a monthly budget to plan my expenses		
Choice of savings option is dependent on how long does an individual want to save.		
I keep a close watch on my investments even if it is handled by professionals.		.774
Money kept in the form of cash, depreciates over time.		.551
I always verify the authenticity of the savings schemes offered to me.		.531
My investment decisions are greatly influenced by my understanding of risk.		.497
I prefer to spend money on life-style products when I have no urgent expense in near future.		
It is a good idea to incur all expenditures first and then save from the corpus that is left.		
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		
Source: Results from running Factor Analysis Test on SPSS software		

To determine the minimum number of factors that will account for maximum variance in the data for the component – Financial Literacy, Principal Component Analysis is used. The factors thus obtained are called principal components. Through the Principal Component Analysis and based on Eigenvalues, I tried to extract two components with loading value more than 0.4, to get to know which variable contributes to which component as suggested by Eigenvalue table. There are 6 variables out of initial 17 having the Eigen values greater than one, and two variables with Eigenvalue more than 2. This indicates the seventeen variables that are used to study in this research could be reduced to two components. By suppressing the small coefficients for a value of below 0.4, we get the following bifurcation of variables into two components:

Table 3 : Financial awareness and financial literacy

Component – 1 1. It is an appealing idea for me to spend the income that I earn rather than save it. 2. When there are several products to buy from, I tend to buy the one that is recommended as the 'most selling product'. 3. Whenever I receive a cash / gift / bonus, I spend it to fund my vacation or to purchase a luxury product. 4. Insurance is a reliable savings option for a rationale investor. 5. An emergency fund of money is same as any savings that an individual will have. 6. A portfolio manager is the best person to manage my investment portfolio. 7. The best investments avenues are those where majority of the people are investing at any given point of time. 8. While investing in the equity capital market, I have a habit of reading the annual reports	**Financial Awareness**
Component – 2 1. I always verify the authenticity of the savings schemes offered to me 2. Money kept in the form of cash, depreciates over time. 3. My investment decisions are greatly influenced by my understanding of risk. 4. I keep a close watch on my investments even if it is handled by professionals	**Financial Literacy**
Rejected due to low factor loadings (less than 0.4) 1. I have a habit of preparing a monthly budget to plan my expenses 2. I prefer to spend money on life-style products when I have no urgent expense in near future. 3. It is a good idea to incur all expenditures first and then save from the corpus that is left. 4. Choice of savings option is dependent on how long does an individual want to save. 5. Whenever I make an investment decision, I make a mental calculation of the costs associated with that investment option.	

C. Reliability Analysis

To ensure the reliability of measurement scale, Cronbach's Alpha was used to measure internal consistency. Following is the result of the test:

Table 4 : Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.694	0704	33

Source: Results from running Reliability Test on SPSS software Version 26

Cronbach's Alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability. The acceptable range of value for Cronbach's alpha is more than 0.70. The results shows Cronbach's Alpha near to the threshold value (0.7) that reaches to 0.694 and thus supports internal consistency. During this process, inclusion of certain variables were negatively affecting the overall reliability score. Upon detailed analysis, following variables had a low item-total correlation, indicating that it was not aligning well with the other items in the scale:

- It is a good idea to incur all expenditures first and then save from the corpus that is left.
- Money kept in the form of cash, depreciates over time.
- I have a habit of saving 20% or more from my income regularly

The Cronbach's Alpha, when this variables were included, was **0.694**, suggesting suboptimal internal consistency.

To improve the overall reliability, these variables were **excluded** from the measurement. By excluding these variables, the Cronbach's Alpha increased to **(0.728)**, demonstrating a more consistent and reliable scale.

Table 5 : Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.728	.730	30

Source: Results from running Reliability Test on SPSS software Version 26

6.2. Gender and Financial Literacy

H_2 There is no significant difference in level of financial literacy among gender

To test the presence of any differential effect of gender on Financial Literacy, independent samples t-test is appropriate in these circumstances. This statistical test is applicable when dependent variable is metric and independent variable is categorical with two categories. In doing so, the assumption of equality of variance is very critical which is tested through t-test. Gender is used as independent variable.

Table 6 : Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
V-1 Financial Literacy	1	64	59.72	6.423	.803
	2	36	55.75	6.759	1.126

Table 7 : Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
V-1 Financial Literacy	Equal variances assumed	.008	.931	2.911	98	.004	3.969	1.363	1.263	6.675
	Equal variances not assumed			2.869	69.612	.005	3.969	1.383	1.210	6.728

The above table showed that financial literacy was found to be significant for gender. ($t = 0.004 < 2.911$; $p<0.05$). This means, gender of the sample does create a difference in the level of financial literacy. Moreover, Males (Variable/Group 1) has comparatively higher financial literacy (Mean 59.72) than females (Variable/Group 2) (Mean 55.75) which is clearly visible through the mean difference 3.969.

6.3. Age and Financial Literacy

H_3 There is no significant difference in level of financial literacy and age of respondents.

To test the presence of any differential effect of age on financial literacy among the population, analysis of variance (ANOVA) test is appropriate in these circumstances. This statistical test is applicable when dependent variable is metric and independent variable is categorical with more than two categories. The financial literacy is used as dependent variable and age was used as independent variable.

Table 8 : ANOVA

V-1 Financial Literacy					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	544.622	3	181.541	4.340	.007
Within Groups	4015.968	96	41.833		
Total	4560.590	99			

(Note: *Significant at p<0.05 level)

ANOVA revealed that age is significant with the level of financial literacy. In other words, age does create a difference when it comes to level of financial literacy among people. (F=4.340 > 2.4790, p<0.05).

Given that the ANOVA test indicates significant differences between the groups means, post-hoc tests (such as Tukey's HSD) was performed to determine which specific groups' means differ from each other.

Table 9 : Multiple Comparisons						
Dependent Variable: V-1 Financial Literacy						
Tukey HSD						
(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
2	3	-2.352	1.892	.601	-7.30	2.59
	4	3.051	2.097	.469	-2.43	8.53
	5	-2.833	3.124	.801	-11.00	5.34
3	2	2.352	1.892	.601	-2.59	7.30
	4	**5.403***	**1.549**	**.004**	**1.35**	**9.45**
	5	-.481	2.786	.998	-7.77	6.80
4	2	-3.051	2.097	.469	-8.53	2.43
	3	**-5.403***	**1.549**	**.004**	**-9.45**	**-1.35**
	5	-5.885	2.929	.192	-13.54	1.77
5	2	2.833	3.124	.801	-5.34	11.00
	3	.481	2.786	.998	-6.80	7.77
	4	5.885	2.929	.192	-1.77	13.54
*. The mean difference is significant at the 0.05 level.						

The above results shows a post-hoc Tukey HSD (Honestly Significant Difference) test, which is typically used to compare the means of different groups after conducting an ANOVA, particularly when you have more than two groups to compare.

Age group 3 (30 – 39 years) vs. Age group 4 (40 – 59 years): The comparison between Age group 3 and Age group 4 shows a statistically significant mean difference (p = .004). The negative mean difference (-5.403) suggests that Age group 30-39 years has a lower mean score in financial literacy compared to Age group 40-59 years.

Other Comparisons: The other comparisons do not show statistically significant differences, as their p-values are greater than 0.05. This means the differences in financial literacy between these groups could be due to random variation rather than a true difference in the population.

The post-hoc test reveals that financial literacy scores significantly differ between Age group 30 – 39 years and Age group 40 – 59 years, with Age group 40 – 59 years scoring higher. In other words, age group 40 – 59 years have higher financial literacy than other age groups.

6.4. Education and Financial Literacy

H_4 Education of population does not create a difference in level and extent of financial literacy.

To test the presence of any differential effect of Education on level and extent of financial literacy among the population, analysis of variance (ANOVA) test is appropriate in these circumstances. This statistical test is applicable when dependent variable is metric and independent variable is categorical with more than two categories. The financial literacy is used as dependent variable and education was used as independent variable.

Table 10 : ANOVA

Financial Literacy					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	497.807	4	124.452	2.910	.026
Within Groups	4062.783	95	42.766		
Total	4560.590	99			

(**Note**: *Significant at p<0.05 level)

ANOVA revealed that Education of a person significant to the level of financial literacy. In other words, education of a person creates difference in the level of financial literacy of a person. (F=2.910 > 2.47), P = 0.026 (p<0.05)

Given that the ANOVA test indicates significant differences between the groups means, post-hoc tests (such as Tukey's HSD) was performed to determine which specific groups' means differ from each other.

Table 11 : Multiple Comparisons						
Dependent Variable: Financial Literacy						
Tukey HSD						
(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.353	3.132	1.000	-9.06	8.36
	3	1.564	3.106	.987	-7.07	10.20
	4	5.000	3.377	.578	-4.39	14.39
	5	6.714	3.829	.407	-3.93	17.36
2	1	.353	3.132	1.000	-8.36	9.06
	3	1.917	1.534	.722	-2.35	6.18
	4	5.353	2.027	.071	-.28	10.99
	5	7.067	2.714	.078	-.48	14.62
3	1	-1.564	3.106	.987	-10.20	7.07
	2	-1.917	1.534	.722	-6.18	2.35
	4	3.436	1.987	.421	-2.09	8.96
	5	5.150	2.684	.315	-2.31	12.62
4	1	-5.000	3.377	.578	-14.39	4.39
	2	-5.353	2.027	.071	-10.99	.28
	3	-3.436	1.987	.421	-8.96	2.09
	5	1.714	2.993	.979	-6.61	10.04
5	1	-6.714	3.829	.407	-17.36	3.93
	2	-7.067	2.714	.078	-14.62	.48
	3	-5.150	2.684	.315	-12.62	2.31
	4	-1.714	2.993	.979	-10.04	6.61

The above table shows the results of a Tukey HSD (Honestly Significant Difference) post-hoc test, which compares the means of different education levels after an ANOVA has indicated significant differences among the groups.

The Tukey HSD test results indicate that there are no statistically significant differences between any of the education levels with respect to the dependent variable. This suggests that the differences could be due to random variation rather than actual differences in the population.

6.5. Financial Literacy and Financial Awareness

H_5 There exist no relation between financial awareness and financial literacy

By performing factor analysis, two principal components were identified, *financial literacy and financial awareness*, out of the 18 components under the study. In order to test the presence of any differential effect between financial awareness and financial literacy, correlation was employed, as both variables were metric. Bivariate Correlation is a technique used to determine the existence of relationships between two variables. Financial awareness is assumed as independent variable while financial literacy as dependent variable. Following are the results:

Table 12 :Correlations

		Financial Awareness	Financial Literacy
Financial Awareness	Pearson Correlation	1	.054
	Sig. (2-tailed)		.595
	N	100	100
Financial Literacy	Pearson Correlation	.054	1
	Sig. (2-tailed)	.595	
	N	100	100

The Pearson's *r* data analysis revealed that there is a **no significant linear relationship** between financial awareness and financial literacy (r = 0.054). The weak positive correlation of 0.054 suggests that these two variables are nearly independent of each other within the sample studied. In other words, people who are financially aware regarding various financial aspects, **may or may not** tend to be more financially literate.

7. RESULTS AND DISCUSSIONS

This section of the paper provides an overview of the findings regarding financial literacy levels, derived from hypothesis testing

Factor Analysis

More often than not, the concept of financial literacy is confused with that of financial awareness. Through this research study, an attempt has been made to identify and bifurcate some of the basic variables that can be grouped to either reflect as financial literacy or as financial awareness. Results from Factor Analysis run on SPSS software, in fact, help to identify and distinguish 08 variables (out of 17), as contributing towards "Financial Awareness" and 04 variables standing for "Financial Literacy". This aids in concluding that financial literacy and financial awareness are indeed different and mostly wrongly interpreted as being the same.

Testing of Hypothesis

In order to test the hypothesis and justify presumptions, Two-sample T-test and ANOVA were majorly used to find out and test the significance of the relationship between the variable concerned. Based on hypothesis, following are the results:

- **Gender and Financial Literacy**

  To test the presence of any differential effect of gender on financial literacy, independent samples t-test was found appropriate and was employed. Gender was used as independent variable while level of financial literacy was dependent variable. Results showed that level of financial literacy was found to be **significant** for gender ($t = 0.004 < 2.911$; $p<0.05$). Gender does create a difference in level of financial literacy. Males (Variable/Group 1) has comparatively higher financial literacy (Mean 59.72) than females (Variable/Group 2) (Mean 55.75) which is clearly visible through the mean difference 3.969. Thus, the hypothesis, '*there is no significant difference in level of financial literacy among gender*' is **rejected.**

- **Age and Financial Literacy**

  To test the presence of any differential effect of age on level of financial literacy, analysis of variance (ANOVA) was found appropriate and hence used. Age was used as independent variable while level of financial literacy was used as dependent variable. The ANOVA results revealed that level of financial literacy is **significant** to the age of a person ($F=4.340>2.4790$, $p<0.05$). Age does not create difference in level of financial literacy. Thus, the hypothesis, '*there is no significant difference in level of financial literacy and age of respondent*', is **rejected**.

- **Education and Financial Literacy**

  To test the presence of any differential effect of education on study variables, analysis of variance (ANOVA) was found appropriate and hence employed. Level of financial literacy was

used as dependent variable while education was independent. The ANOVA results showed that level of financial literacy is **significant** with education of the respondent ($F=2.910>2.47$, $p<0.05$). Thus, the hypothesis, '*Education of population does not create a difference in level and extent of financial literacy*' is **rejected**.

- **Financial Awareness and Financial Literacy**

  To test the presence of any differential effect between financial awareness and financial literacy, correlation was employed. This technique was used to know the relationship between two variables, financial awareness and financial literacy. The results showed that there exist no significant linear correlation between financial awareness and financial literacy ($r = 0.054$). The weak positive correlation of 0.054 suggests that these two variables are nearly independent of each other within the sample studied. Thus, the hypothesis, '*there exist no relation between financial awareness and financial literacy*', is **accepted**.

  Table 13 : Hypothesis for Financial Awareness

Sr. No.	Hypothesis	Result/Decision
H_1	There is no significant difference in level of financial literacy among gender.	**Rejected**
H_2	There is no significant difference in level of financial literacy and age of respondents.	**Rejected**
H_3	Education of population does not create a difference in level and extent of financial literacy.	**Rejected**
H_4	There exist no relation between financial awareness and financial literacy.	**Accepted**

8. CONCLUSION

The Government of India along with the Reserve Bank has been undertaking various initiatives to ensure financial inclusion in the nation for more than 10 years now. It, thus, becomes important to act as a catalyst in initiating the virtuous cycle of achieving maximum financial inclusivity in the nation by undertaking financial awareness campaigns/ programmes that can lead to increased financial literacy levels.

Speaking of financial literacy, age, gender and education plays a vital, primary and logical role in this aspect. All the three components has a bearing on financial literacy of the population.

These results safely suggest that if the government intends to further strengthen the base of financial inclusion in the nation, it may have to focus on upgrading the education levels of the citizens. Also females should be given a priority in obtaining basic education in order to build financial literacy and awareness. This input holds more prominence when the goal is to heighten the financial inclusivity levels in the rural areas. The education levels in the rural regions of the state, as well as the nation at large, are bound to be lower than the urban regions and thus calls for more efforts for spreading financial awareness and subsequently provide for financial literacy. Through proper financial awareness programs and significantly high financial literacy levels, one can target for financial inclusion for all in the nation.

REFERENCES

1) Ambarkhane, D., Singh, A. S., & Venkataramani, B. (2016). Measuring financial inclusion of Indian states. *International Journal of Rural Management*, *12*(1), 72-100.
2) Bijli, H. K. (2012). Financial Literacy: An Essential Tool for Empowerment of Women through Micro-finance. *Studies on Home and Community Science*, *6*(2), 77-85.
3) Chakraborty, L. (2008). Analysing the Raghuram Rajan Committee Report on financial sector reforms. *Economic and Political Weekly*, 11-14.
4) Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution*. The World Bank.
5) Dutta, S., & Dutta, P. (2011). The effect of literacy and bank penetration on financial inclusion in India: A statistical analysis. *Tezpur University, Napaam.[Google Scholar]*.
6) Gupte, R., Venkataramani, B., & Gupta, D. (2012). Computation of financial inclusion index for India. *Procedia-Social and Behavioral Sciences*, *37*, 133-149.
7) Lusardi, A., & Mitchell, O. S. (2011). Financial literacy around the world: an overview. *Journal of pension economics & finance*, *10*(4), 497-508.
8) Malhotra, N. K. (2010). Marketing research: an applied orientation/Naresh K. Malhotra.
9) Mason, C. L., & Wilson, R. (2000). *Conceptualising financial literacy*. © Loughborough University.
10) Mathew, J., & Kurian, R. (2017). India's policies on leveraging financial inclusion in the country. *The Journal of Developing Areas*, *51*(4), 433-443.
11) Pal, R., & Pal, R. (2014). Income related inequality in financial inclusion and role of banks: evidence on financial exclusion in India.
12) Rashid, K. F. M., & Surisetti, S. (2018). Financial Literacy of Women in Hyderabad: An Exploratory Study. *ASCI Journal of Management*, *47*.
13) Sarma, M. (2008). *Index of financial inclusion* (No. 215). Working paper.
14) Subha, M. V., & Priya, P. S. (2014). The emerging role of financial literacy financial planning. *Int. J. Innovat. Sci. Eng. Technol*, *1*(5), 400-408.
15) Sujlana, P., & Kiran, C. (2018). A Study on Status of Financial Inclusion in India. *International Journal of Management Studies*, *2*(3), 96-104.
16) Vijayvargy, L., & Bakhshi, P. (2018). Financial Literacy and Financial Inclusion in Rajasthan, India: An Empirical Study. *IUP Journal of Applied Finance*, *24*(3), 35-53.
17) Xu, L., & Zia, B. (2012). *Financial literacy around the world: an overview of the evidence with practical suggestions for the way forward*. The World Bank.