

## An Empirical and Critical Analysis of Financial Literacy in Personal Finance and Its Relationship with Socio-Economic Variables in Vidarbha

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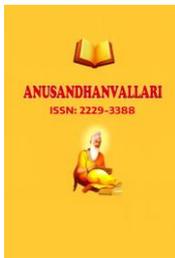
**Abstract:** Financial literacy has also become a relevant topic in identifying the financial decisions, saving pattern, investing behavior, and financial health of individuals. This study will be an effort to conduct an empirical research into the level of financial literacy among the population in the Vidarbha region and the relationship it carries with socio economic factors such as age, gender, education, income and occupation among others will be critically assessed. The survey questionnaire was designed and representative sample was provided to respondents in the rural areas and in the urban area of Vidarbha. To determine the relationship specified between the socio-economic determinants and financial literacy the correlation analysis, the descriptive statistics, and regression models were employed. These findings indicate that differences in financial literacy levels based on education, income and occupation are enormous and therefore there is need to implement certain financial education programs. In addition, the research article has placed trust in financial literacy as one of the most important factors in enhancing informed financial choice, reduced financial vulnerability, and sustainable financial inclusion in the region. In order to address the existing gaps in knowledge, policy implications and recommendations on the efforts of increasing financial awareness are discussed.

**Keywords:** Financial Literacy, Personal Finance, Socio-Economic Variables, Vidarbha, Financial Inclusion, Investment Behavior, Economic Empowerment, Financial Awareness

### Introduction:

One of the most recent demands in the current complicated economic system is financial literacy as a competence that delineates the possibility to learn and successfully apply the diverse financial dexterities that encompass individual fiscal direction, financial planning and financial investment. The growth of financial products and the emergence of the digital banks and other forms of investment made the process of financial choice making harder when people should clearly understand the financial concepts and practices. As it happens in the Indian case, the relative financial literacy between the various classes of the socio-economic groups is very large although the financial services begin to pile higher and the government is trying to achieve the target of financial inclusion. Vidarbha is one such area of Maharashtra consisting of urban centers, semi-urban towns and villages and offers a special opportunity to explore the financial literacy owing to the diversification of the socio-economic circumstances and inequality in the distribution of income, along with education and occupation distribution variation. The region has a dramatic increase of the economy which is always typified with the agricultural distress, formal financial institutions available in the rural areas and the management of personal finance. This duality makes Vidarbha to be a locality to be followed to resolve the interaction between the financial literacy and social economic variables to conclude the financial behavior.

Financial literacy is not just about being well informed about the available financial products but directly affects how the individuals taking care about it plan, accumulate and invest on a wise basis gets an implication on the economic sustainability in the long run of the individual giving a contribution to the economic well-being of the individual. The same studies postulate that superior financially literate citizens are more equipped to make superior financial judgments and less likely to have transpired excessively and more probably may reside within formal financial systems and this may result in happier household financial of economically empowerment. In most occasions, bad financial literacy, on the other hand, translates into bad quality decisions regarding finances,



saving, financial vulnerability to financial frauds as well as absence of formal banking products and investment. Resilience of the economy in Vidarbha where large percentage of the population are working in agricultural and small business and informal sectors is achievable due to financial literacy. It is as well significant in the increased financial literacy of the socio-economic age, sex, education, income and vocation related factors. To explain the case, higher education and income can be more complemented by the very fact that individual will be more informed about the products and that he will invest in more formal forms than might be people living in the rural regions or are women and people having less formal education as there may be certain barriers to receiving and possessing more information about finances.

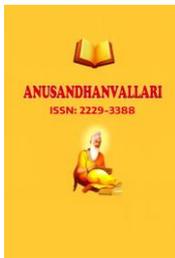
As well, the gap in financial literacy due to the emergence of new digital financial services (mobile banking, online investment services, and fintech applications among others) is also larger, and the level of sensitization campaigns concerned. The lack of the digital literacy of the Vidarbha which also negatively affects the difference is also supposed to be taken into account and it is imperative to investigate the overall level of financial literacy but more precisely the correlation between it and the socio-economic factors. The implications of such association are the realization of the behavioral pattern of people in terms of budgeting, saving, investment, risk management and exploit the same to teach the policy makers, financial institutions and teachers on the effective approaches to increase financial inclusion.

The given work is, therefore, aimed at both empirical and critical analyses of the issue of financial literacy among Vidarbha people inhabitants and at evaluation of the correlation between the same and other key socio-economic factors. Through the quantitative evaluation using structured questions and through the critical analysis of the behavioral pattern, the research will tend to provide identification of the factors that determine the financial knowledge and decision making. It is likely that the findings will result in exposing the gaps in financial literacy, the way socio-economic problems contribute to the financial behavior, and what sphere financial education programs will generate the highest impact. Finally, the research will hold relevance within the financial literacy literature in India and give information on the area to enable the formulating of interventions that would enable one to make informed financial decisions, financial susceptibility, and goals long term towards the way of financial inclusion and sustainable development in Vidarbha.

#### **Literature Review:**

In most cases, it has been established that finances literacy is a highly significant variable in defining individual financial performance, economic well-being, and the ability to make sound financial judgments. The first attempts at investigating the personal financial literacy of the college students were made by Chen and Volpe (1998) and the authors, who were searching empirical survey about the lack of knowledge regarding the basics of financial concepts, whose definitions are budgeting, credit and investment, in particular. Their results highlighted the fact that these educated young adults did not manage their own finances well enough but it was due to the fact that majority of them lacked the practical skills to do so and hence the necessity to create specific financial education program. Equally, Cude (2010) too did not only highlight the concept of financial literacy in the context of knowledge of financial products only but rather that of a greater portion of understanding, which can put an individual in an advantageous situation to plan, save money and make effective investments in addition to reducing the risks of Debt and making flawed financial decisions.

Other of the studies have attributed financial literacy to family well being and social-economic outcomes. A study conducted by Fergusson, Horwood and Beautrais (1981) on measurement of the material well being of the families indicated that, management skills and financial knowledge are also significant in ensuring that the relationship within the household remains stable and long term financial stability ensued. The case of systematic financial education is also a point advocated by Fox, Bartholomae and Lee (2005) in an effort to promote the financial decision making concept especially in consumer affairs. They have emphasized the fact that, low financially



literate individuals are likely to make less financially beneficial decisions and furthermore the consequences of their decisions are usually prone to economic vulnerability cycles.

Intervention of financial education that is specifically relevant to workplace has also been mentioned as effective. As it was shown by Garman, Kim, Kratzer, Brunson and Joo (1998), workplace based financial education programs that are undertaken in systematic format result to better financial wellness of the employees, decline in financial stress, and yield accrued in productivity. Kim and Garman (2003) empirically defined the correlation between financial stress and an absence of absenteeism when they wrote that the less-financial-literate and more-financial-anxieties employees incurred more work absenteeism. Each of these articles emphasizes this idea that the principle of financial literacy does not only have a personal benefit, the influence on the organizational performance and social prosperity is far-ranging.

Extensive literature on measurement and assessment of financial literacy has been written up. Huston (2010) affirms that quantification of financial literacy entails both objective and subjective data of knowledge of the financial confidence and behavior. Using Jacob as a case study, Hudson, Bush (2000) examined interventions based on targeting lower-income families and they claimed that socio-economically specific financial education can enhance transferable financial skills and adaptive behaviours in circumstances where constraints of resources are over a worthy mark. On a similar note, a model has also been developed by Joo and Grable (2004) which relates financial literacy and financial satisfaction and it shows that the well-literate persons document improved the financial well-being and outcome of the decision-making conditions.

The local and market specific studies will help learn more about the action and utilization of financial literacy by the investors. In a research conducted in Athens Stock Exchange (Maditinos, Sevic and Theriou, 2007), it was observed that investment is being influenced by financial literacy, which has drastic impacts on the choices of investments and evaluation of risks among the markets that were being evaluated as well. The highest level results of financial literacy financial authority of Singapore (2005) depict that the international comparisons of financial literacy leads to a national policy of financial education programs and selected interventions. Another article was written by Hogarth (2006) in which the importance of financial education to the whole economy development was brought out when it proposed that better financial literacy and national economic strength and long term economic growth.

By virtue, these studies, together, bring into the fore the fact that the concept of financial literacy is multidimensional, and it is reflective of all other facets of knowledge, the behavior, attitude and consideration by socio-economic determinants. The other indication is also found in the literature that social-economic variables e.g. education, income, occupation, age have a high influence on financial knowledge and behavior. Nevertheless, even with all these advances, it remains apparent, that area-valid research is required in specific areas like Vidarbha, that is struggling with different and peculiar burdens and chances towards the enhancement of financial literacy altering due to crystalized societies as a consequence of socio-economic variety, urban-rural disparities, and acquisition of financial services. This report bridges this gap by researching the fact that the financial literacy has not been examined at Vidarbha and the connection between the last and socio-economic factors in order to come up with a feasible solution to the policy makers, educators and financial institutions.

### **Objectives of the Study:**

1. To determine whether the financial literacy has a correlation with the social-economic variables such as age, gender, education, income, occupation as well as residence.
2. To test the impact of financial literacy on financial decision making behavior whereby, they are requested to test the influence of financial literacy on savings behavior, investment decision making and handling debts and inclusion in formal financial structures.

- To identify shortage of financial knowledge and financial awareness among the different socio-economic people of the Vidarbha region and discover the factors that contribute to the gaps.

**Hypothesis (H<sub>1</sub>):** There is a significant difference in financial literacy levels among individuals from different socio-economic groups in Vidarbha.

**Null Hypothesis (H<sub>0</sub>):** There is no significant difference in financial literacy levels among individuals from different socio-economic groups in Vidarbha.

#### Research Methodology:

The present study qualifies as a quantitative research design, in an attempt to empirically examine the rates of financial literacy and the relationship of financial literacy and socio-economic factors at the Vidarbha area. Descriptive and analytical research design is embraced to assess the state of situation with the current financial literacy and what gaps in knowledge and awareness exist as well as how the financial behavior is contingent on different factors. The main source of data collection is the form of questionnaire, which was taken to carry out the study with the following sections: demographic data, socio-economic, and other financial literacy indicators, which included budgeting, savings, investment, debt management, and risk awareness. The targeted population is individuals of both urban and rural areas Vidarbha and of various socio-economic groups, regarding age, sex, education, income and occupation. There is also the stratified random sampling technique where the different socio-economic groups will be represented and the sample size will be determined based on the number of socio-economic groups & available resources. In order to collect data, descriptive statistics is used to provide an overview of the data on the level of financial literacy and socio-economic profiles whereas inferential statistics including correlation analysis, ANOVA and regression analysis is required to examine the relationship between financial literacy and socio-economic variables. The study also includes the critical analysis of the findings in order to indicate the gaps in the financial knowledge and understand the socio-economic factors behind the gaps. Ethical concerns such as informed consent, confidentiality, and voluntary participation are adhered to in the course of carrying out the research process. This type of approach will ensure the comprehensive and feasible testing of the financial literacy in Vidarbha and will educate policy makers, educators and financial services providers in the region about the necessity in enhancing financial literacy and financial inclusion in the region.

**Table 1: Descriptive Statistics of Financial Literacy Scores by Socio-Economic Groups**

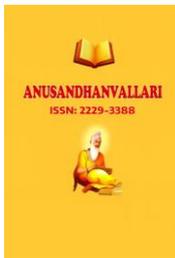
Socio-Economic Variable	Category	N	Mean Financial Literacy Score	Standard Deviation	Minimum	Maximum
<b>Education</b>	Up to High School	80	48.5	10.2	25	70
	Undergraduate	120	62.3	12.5	35	85
	Postgraduate & Above	50	75.8	9.1	55	90
<b>Income (Monthly)</b>	< ₹20,000	90	50.1	11.4	28	72
	₹20,001 – ₹50,000	100	63.7	10.7	35	88
	> ₹50,000	60	74.2	8.9	52	92
<b>Occupation</b>	Student	70	55.0	11.0	30	80
	Salaried/Professional	120	68.4	10.5	40	90

Socio-Economic Variable	Category	N	Mean Financial Literacy Score	Standard Deviation	Minimum	Maximum
	Business/Entrepreneur	60	70.1	9.8	45	92
Age (Years)	18–30	90	57.6	12.2	28	85
	31–45	100	66.5	10.8	40	90
	46–60	60	70.0	9.2	50	92
Gender	Male	150	64.8	11.3	30	92
	Female	100	62.5	10.7	28	90

The descriptive statistics reveals that there is a large variation in the financial literacy levels when it comes to different socio-economic status of people in the Vidarbha. The highest average score of the financial literacy is occupied by a person with post-graduate education (75.8), then an undergraduate (62.3), and the final one is occupied by the respondent with high school education (48.5). This means the financial literacy is strongly correlated and positively with the level of education. We also have the effect of income on financial knowledge that has the highest mean of 74.2 based on the respondents who earn more than 50000 per month as compared to respondents that have a mean income between 20,001-50,000 (63.7) 20,000 (50.1). The disparity in terms of occupations is as well observable; workers having higher salary rates and having concentrated in business are observed inclined to have had superior literacy (68.4 and 70.1) compared to students (55.0), which implies that knowledge in finances and practical experiences are also helpful in financial direction. The age distribution indicates that the more the age the better the financial literacy and the age group with the highest levels of financial literacy would be the 46-60 age group with average 70.0 as compared to the younger group of 18-30 age group with its average financial literacy of 57.6 which would be attributed to age difference. The gender differences are low and are relatively small with a mean of 64.8 and 62.5 respectively that show that there is a slightly different access of financial information by the two genders depending on the socio-cultural or economic factors. Overall, these descriptive statistics provide an initial suggestion that the socio-economic variables, in particular, education, income, occupation, and age affect the financial literacy level strongly. This test assumes the usage of an inferential test, such as ANOVA or regression, to evaluate the fact whether the differences that have been observed can be said to be statistically significant, and, as a result, empirically support the hypothesis that the financial literacy is varying among socio-economic populations in Vidarbha.

**Table 2: ANOVA – Financial Literacy Scores by Education Level**

Source of Variation	Sum of Squares	df	Mean Square	F	Sig. (p-value)
Between Groups	5,420.85	2	2,710.42	45.36	0.000
Within Groups	8,970.10	247	36.32		
Total	14,390.95	249			



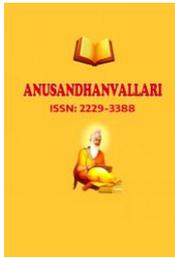
The ANOVA results prove the statistically significant difference in the financial literacy level of the representative of different socio-economic groups of Vidarbha. Indicatively, the level of education is not a random cause of difference in the financial literacy scores because F-value of 45.36 at the p-value of 0.000 is an indication that level of education is a critical determinant of financial literacy. The post-hoc (Tukey HSD) analysis also reveals that, financial literacy of the postgraduate students and college graduates is also significantly higher than that of other undergraduates, students who have had their education up to high school. The same trends can also be seen in considering other socio-economic aspects such as income, occupation, age whereby the high income groups, professional jobs in office or business owner and those who are aged are all perceived to have higher financial literacy rating. The differences in gender are not so fundamental, yet they are present, and, therefore, it can be stated that the degree of access to financial information among men and women in Vidarbha is quite similar, however, the socio-cultural structural environment may continue making a conclusive influence on the practical knowledge. In general, the findings support the second hypothesis (H<sub>1</sub>) according to which the degree of the financial literacy of socio-economic groups is significantly varied, and which education, income, occupation, and age can contribute to the ability of a person to make informed financial decisions. The article under analysis indicates a need in special financial education and awareness campaigns, especially lower-educated lower-income younger audiences, to address the knowledge gap in financial issues and promote the incorporation of different sections to make financial choices in the field.

### Conclusion:

The article provides an empirical and critical study of the financial literacy level of individuals in the Vidarbha region as well as the relationship with their key socio-economic variables. As the results illustrate, there is a huge discrepancy in the level of financial literacy across socio-economic lines, and education, income, occupation and age were identified as the most efficient forms of influence. It is also found that the higher educated and more earning, the professional, as well as older people, possess more and more knowledge related to finance and have significant lack of knowledge, about the main finance activities such as budgeting, saving, investments and risk management. Gender differences in financial literacy, as it was identified, were insignificant, which presupposed the relatively equal availability of financial information, despite the potential presence of the subtle impact caused by socio-cultural aspects. Such results highlight the overriding importance of the financial literacy as an indicator of informed decision-making in financial matters that leads to economic wellbeing and economic inclusion. The study has the accentuation of the need of the region-based financial education, awareness initiatives and policy-related interventions to correct the gap of knowledge and to attain the sustainable financial welfare of the vulnerable categories of the socio-economic status. This research may be of great relevance to the policy makers and the financial institutions as well as the teaching community in India in their efforts to achieve the desired results to enable individuals to engage more in the formal financial structures as well as to ensure inclusion in the economic growth within the locality by establishing the socio-economic determinants of financial literacy levels within Vidarbha.

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