Financial Literacy and Investment Decisions: A case study on Teaching Professionals

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Introduction

Financial Literacy is the ability and the understanding of various financial products and services as to how they function in order to take an informed and efficient financial decisions. Financial Literacy plays a very important role as it determines the way an individual will respond to under a particular circumstance and what kind of financial choices he will make.

Financial literacy basically has three major components namely Financial Knowledge, Financial Behavior and Financial Attitude. Financial Knowledge refers to the understanding of the individuals about the key components of managing finance like risk-return relationship, the importance of diversification in investments, the working behind compound interest, understanding inflation etc. which ultimately decides how aware an individual is, related to Financial aspects. The second aspect of financial literacy is that of financial behavior. Financial behavior reflects an individual's habits when it comes to financial management. It reflects the behavior of individuals in terms of spending habits, saving habits, recording transactions etc. This gives a glimpse about their general behavior while managing their finances which could be further explored in the analysis. The next part of Financial Literacy is Financial Attitude. Financial Attitude refers to the attitude of the people regarding their financial management. It involves the outlook of the respondents towards life and whether they treat their money on a short term basis or whether they consider the long term implications of their actions. Financial Attitude is an important component of the overall measure of the financial literacy as it is important to have a long term horizon in the decisions related to money management. Financial literacy improves people's ability to have a safe and financially secure future. In India, there is an urgent need to reach out to lesser income groups and financially weaker sections. But at the same time, it is also necessary to reach out to the millennials who are very well verse with technologies and therefore require customized financial products which suit their requirements but they are not fully aware of the probable financial solutions. The millennials are financially more active as compared to their ancestors but are also more delicate in dealing with personal finances and tend to make more mistakes while making such decisions.

Literature Review: –

(Mudzingiri, 2018) wanted to find out if the financial behavior, investment confidence, risk preferences and the financial literacy perception of the students, varied because of Financial Literacy of the students. The results showed that the students with lower literacy level were more overconfident in their investment decisions and were taking high risks with a very low patience level. (Gauri Prabhu, 2016) studied the financial literacy of the youths employed in the Information Technology sector in Pune region. The results of the study showed that the population taken for the study has above average financial literacy levels however, they didn't quite understand the key concepts like inflation, and diversification and that efforts need to be put in order to bridge the gap between the current state and desired state of Financial Literacy. (V. Ashwinprabha, 2016) analyzed the relationship between the financial behavior and the investment decisions taken by the individuals. According to the author, in order to make an efficient investment decision, it important to understand the financial risk of that particular product. In order to do so, the minimum level of financial literacy is required. (Sabri, 2016) aimed to study and provide an understanding about the impact of financial literacy on investment decisions taken by the Millennials in country of Malaysia. The study found that millennials are highly literate in numeracy, however, their overall financial literacy was less. Therefore, the author tries to convey that it is important to target this population segment and correct the slight problems in their financial literacy as the generation is going to help the future generation have even better financial literacy. (Amisi, 2012) aimed to find out the impact of financial literacy on the investment decisions taken by the pension fund managers in Kenya. The result of the study showed that the Financial Literacy does affect investment decisions and thus better financial literacy should be targeted at by the country. (Mustabsar Awais, 2016) aimed at finding the impact of

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higher financial financial literacy on the investing decision by the people of Pakistan. The author concludes that having a literacy does have a positive impact on the investment decisions. (Ajay Singh, 2016) had an objective of finding the impact of financial behavior on financial planning. The results were positive to researcher's assumption stating it does have an impact but more research was required to fully prove it. (Kasalirwe, 2018) wanted to see the relationship between financial literacy and household investment decisions. The main findings of the study revealed that financial literacy directly influences the Investment Choices made by the households in the country. (Charlotta Bay, 2014) published this conceptual paper stating that the idea of investment decisions going up along with the financial literacy is not apt and that itself is leading to a lot of problems. The author concludes that the previous research in this field has all overlooked the way in which financial literacy is related to financialization of the society which is the need of the hour. (Naidu, 2017) aimed at finding the financial literacy levels in India by collecting the data from various secondary data sources. The researcher in his study, found that the financial literacy levels in India are very low. The youth population and the women population of the country is struggling to take such decisions because the lack of financial literacy. Even though, the RBI has taken initiatives to improve financial literacy of the country, it is not proving to be efficient and therefore, new initiatives are needed in order to improve the overall financial literacy of the country and improve the conditions of the capital markets. (Mahdzan, 2017) aimed to see the impact of the Financial Literacy, risk aversion and the market expectations of the investors on the retirement planning and b) to check the impact of these factors on the allocation of the portfolio of an investor. The results of the study showed that most of the people preferred to have to low risk in their retirement portfolio. Only the people with a very high financial literacy had an inclusion of risky securities in their portfolio. (Prasad, 2017) aimed at analyzing the impact between the financial literacy and the behavior of small borrowers. The study found out that there is a statistically significant relationship between the financial behavior, attitude and the financial literacy of individuals. So, in order to bring a change in the behavior of people towards investment, they need to be financially literate and thus financial literacy can improve the overall approach of the person towards investment decisions. (Kasman, 2018) conducted the study to find out the gap in the financial literacy levels of American youths and to recommend various practices. The author finds through various reviews that the majority of American youth does not have sufficient financial literacy and they would not know how to take major financial decisions in the future course of their life. The author wants the government to treat financial literacy as a complex subject and introduce it earlier than that in 11th or 12th. (Rachna Gangwar, 2018) The author considers financial literacy as an important factor for making key financial decisions related to investing, borrowing and lending of money and aimed at finding the impact of Financial Literacy on the Investment Behavior. It was found that the financial literacy was significantly poor among the respondents. However, the result showed no relationship between the Financial Literacy and the investment behavior. (Nyoman Trisna Herawati, 2018) The authors of study wanted to find out the factors that affect or influence the financial behavior among the students. The researchers found that there is a positive impact of financial literacy, financial self-efficacy, socio-economic status on the financial behavior. The researchers also found out that the socio-economic status have the most significant impact on the financial behavior.

Objective of the study –

- The primary objective of the study is to find out and analyze the impact of Financial Literacy on the Investment Decisions made by individuals. For the purpose of the same, the population for the study was selected as the teaching professionals.
- The secondary objective of the study is to find out whether there is an impact of financial literacy on the financial self-efficacy of an Investor. Financial Self-efficacy refers to the confidence of an investor on the financial decisions taken by him and the secondary objective of the research is to find out the relationship between financial literacy and financial self-efficacy.
- The third objective of the study is to find out the current level of financial literacy among teachers so that corrective actions may be taken to bring the levels up to date with the need and the requirements of today's market, so that the benefit of this could be trickled down to thousands of students thus triggering a chain reaction.

- The fourth objective was to find if the monthly salary of an individual has an impact on the monthly investment done by him.
- The fifth objective of the research was to find if the monthly salary has any impact on the investment decisions.

Research Methodology –

The data was collected through a structured questionnaire which involved different demographic and socio-graphic questions like age, gender, marital status, income levels etc. which will be used for the data analysis for the demographics. The main variables, that is, Investment Decisions and Financial Literacy are found out by asking a series of questions. The method of collecting the data was through a well-structured questionnaire which was forwarded to the teaching professionals across various institutions and across various departments in Bangalore. The research questionnaire was sent to a total of 120 teachers out of which 71 of them gave their consent to share their personal information. However, 7 responses had to be removed from the consideration as the responses were incomplete and therefore, the final sample size for the study was that of 64. The statistical design of the research is based on the guidelines of the OECD research for Financial Literacy which was conducted in more than 25 countries. The questionnaire designed by the OECD was to find out the financial literacy levels of the respondents in different countries as their research objective was to conduct a comparative study of the level of financial literacy in different countries.For this purpose, the questionnaire was divided into three categories namely Financial Behavior, Financial Knowledge and Financial Attitude. Financial Knowledge involved asking questions to the respondents about concepts like simple interest, compound interest, diversification, inflation, risk-return relationship, shares concept etc. to determine their knowledge levels about different aspects of financial decisions. The next few questions asked were pertaining to their financial behavior. The questionnaire included questions pertaining to decisions like spending habits, money management, and recording income and expenses etc. which determines their behavior when it comes to managing finances. The next set of questions asked were related to the attitude of the customers when it comes to the matters related to finance. The questionnaire included questions like – purpose of earning money is to spend it, I tend to live in today and let tomorrow take care of itself. Different questions had different ranges for answers and the responses closest to the optimum and efficient financial literacy responses were awarded the highest score. For example, in an idealistic scenario the best advisable way to use the savings left at the end of the month is to invest is it capital markets. The respondents who selected this were assigned a score of 5 and the next answer close to this was to not withdraw it from bank account at all which was assigned a value of 4 and the least advisable answer which was spending it on consumer goods and thus they were given just 1. Like that all the questions were coded in a similar manner and the questions involving yes or no and True or False were coded in 1s and 0s with 1 being coded for the right answer and 0 for the wrong answer. Like this, the maximum possible financial literacy score that was possible under the designed questionnaire was 58. The desirable score out of this for an individual was kept at 42.

The same goes with the investment decisions. In order to formulate a score for the investment decisions, each response was coded. The overall investment decision was calculated on the basis of the questions like awareness about the financial products, knowledge about the features of such products like tax incentive, perception about the financial product giving the best return and on the basis of that were they invest their money. For example, when the respondents were asked which product they thought gave the best return, then the coding was done on the basis of actual historic average returns of the financial product in the past three years and the answers were coded from 1 to 8 based on the increasing order of their average return. Like that, the combination of all the questions leads to the aggregate investment decision score. The maximum investment decision score achievable was 15.

Limitations of the Study

The sample size can prove to be insignificant when the results of the study are generalized and applied to a greater population as a total of 64 respondents might not be accurate for generalization of the results on the entire teaching community in Bangalore, let alone defining it for all the teachers across the different parts of the country.

The unwillingness of the people and lack of interest in filling the questionnaire may act as hurdles. The researcher has made his best efforts to remove those responses which were incomplete, but it might be possible that some of the responses may have been filled by the respondents without carefully reading the questions.

The study is limited to only the scenario in India and in no other country, however the study is limited to the demographics of the teachers teaching in Bangalore and the results and the interpretations from the study can be applied only to this particular demographic.

It is being undertaken in context of teachers and there might be variation if some other population is taken into consideration for the study. As the results might vary if the researcher conducts a similar kind of research considering IT professionals as the respondent population or maybe some other category of respondents.

Data Analysis –

The first test which the researcher wanted to conduct was One- way Anova to check if monthly salary affects the investment decisions or not.

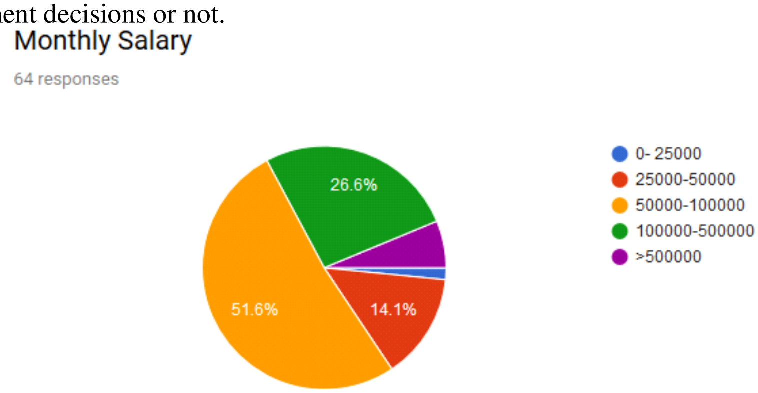

Figure 1 : Monthly salary responses

51% of the respondents fell under the monthly income category of 50000 -100000. (33 out of 64). The second largest category of earnings was 100000 -500000 with 17 respondents earning between the said amount. 14.1% of the respondents earned between 25000 -50000 monthly. Further analysis based on income and investment is done in the later part of the project report.

Monthly Salary & Investment Decision –

H0 – There is no impact of monthly salary on the investment decisions taken by the respondents.

H1- There is no impact of monthly salary on the investment decisions taken by the respondents.

Table 1

ANOVA

- Invsest_decision

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	35.683	4	8.921	3.401	.014
Within Groups	154.764	59	2.623		
Total	190.446	63			

Interpretation –

The above table (Table 1) of Anova shows the impact of monthly salary on the investment decisions of the respondents. However, when looking at the average levels of significance in the Anova table, it can be seen that the significance value is 0.014 which is lesser than 0.05, so the researcher rejects the null hypothesis and conclude that the monthly salary of the respondents does have any impact on the investment Decisions.

Monthly salary & Monthly investments

The second test was again one way Anova to check if monthly income affected the monthly investments of individuals.

H0 – There is no impact of monthly salary on the monthly investments made by the respondents.

H1 - There is an impact of monthly salary on the monthly investments made by the respondents.

Table 2

ANOVA

How_much_do_you_invest_monthly

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.137	4	3.534	4.881	.002
Within Groups	42.723	59	.724		
Total	56.859	63			

Interpretation –

The above table (Table 2) of Anova shows the impact of monthly salary on the investment decisions of the respondents. However, when looking at the average levels of significance in the Anova table, it can be seen that the significance value is 0.014 which is lesser than 0.05, so the researcher rejects the null hypothesis and conclude that the monthly salary of the respondents does a have any impact on the investment Decisions.

Impact of Financial Literacy on Investment Decisions –

Table 3

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.153[a]	.023	.008	.41254	1.802

- Predictors: (Constant), Financial_Literacy.
- Dependent Variable: Invest_Decision

From the above table (Table 3) it can be seen that only 2.3% of the deviation in the dependent variable, i.e., Investment Decision can be explain by the Independent Variable of Financial Literacy. The rest 97.7 % of the deviation is caused by other factors which are not taken into consideration in this study. Thus, the model developed for the study is not accurate enough and more factors are needed to be taken into consideration for the study.

Table 4

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	.253	1	.253	1.487	.227[b]
1	Residual	10.552	62	.170		
	Total	10.805	63			

- Dependent Variable: Invest_Decision
- Predictors: (Constant), Financial_Literacy

H0 – There is no significant impact of Financial Literacy on the investment decisions taken by teachers

H1 – There is a significant impact of Financial Literacy on the investment decisions taken by teachers.

Interpretation –

The above Anova table (Table 4) has a significance value of .227 at 95% level of confidence. Since, the significance value > 0.05, the researcher accepts the null hypothesis and conclude that there is no significant impact of Financial Literacy on the Investment Decisions taken by the teachers.

Table 5 :

Coefficients[a]

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.

	B	Std. Error	Beta		
(Constant)	.533	.368		1.449	.152
1			.153		
Financial_Literacy	.011	.009		1.219	.227

a. Dependent Variable: ID

Now the above table (Table 5) of coefficients can be used to derive the regression equation. The value for constant is .533 and that of Financial Literacy is 0.11.

So the regression equation goes like – Investment Decision = .533 + .011*Financial Literacy

Impact of Financial Literacy on Financial Self-efficacy

Financial Self-efficacy refers to the confidence on the financial decisions taken by an individual. Through this research, the researcher has tried to find out the correlation between financial literacy and the financial self-efficacy.

H0 – There is no impact of Financial Literacy on the financial self-efficacy. H1- There is an impact of Financial Literacy on the financial self-efficacy.

Table 6:

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.122[a]	.015	-.001	1.039	2.053

- Predictors: (Constant), Financial_Literacy_Score
- Dependent Variable: Confidence_on_Investments

The above table (Table 6) gives a result of R^2 as 0.015, which means only 1.5% of the deviations in the dependent variables can be explained by the independent variables which is very less and thus the model may not be efficient. The rest 98.5% deviations in the dependent variable is due to other factors which is not taken into consideration in the study.

Table 7

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	1.019	1	1.019	.943	.335[b]
1	Residual	66.965	62	1.080		
	Total	67.984	63			

- Dependent Variable: Confidence_on_Investments
- Predictors: (Constant), Financial_Literacy_Score

Interpretation –

The p value from the above table (Table 7) is .335 >0.05 which means the researcher has to accept the null hypothesis and thus accepting that there is no significant impact of the financial literacy levels on the financial self-efficacy.

Findings –

There were a lot of findings in the study which the researcher felt was important to be reflected upon. The first of these being the finding that Investment Decisions are not affected by the financial literacy significantly as the researcher thought it would be. Same was found out about the impact of financial literacy on the financial Self-efficacy. The researcher was earlier of the view that a high financial literacy would have a positive impact on the self-efficacy of the teachers, however, the results of the analysis were completely opposite. It might be interpreted that these results were found out because there are a lot of factors like the past experience of investors, current trends in Indian markets, Risk-aversion of the investor which might affect the Investment decisions of an individual and has more effect than what Financial Literacy can have.

Other findings involved the impact of the monthly salary of respondents on their investment decisions and their monthly investments. The researcher in his literature reviews came across the claims that monthly income of an individual plays a huge role on how much he invests monthly and what decisions he takes while investing as the objective of the investment change with change in the income levels. The same was corroborated through the analysis which resulted in the monthly income having positive impact on both of the abovementioned factors.

Suggestions & Conclusions

The suggestions that the author has is that there should be a promotion of financial education for teachers in order to update their financial understanding at regular intervals which will keep them up-to-date with the current scenarios in the economy. Also, the UGC should make the course of financial literacy mandatory across all the universities and all the course regardless of the field of study in order to promote the understanding about the financial markets and its working to individuals on a larger level which might see a larger involvement of public. Also a lot of studies have stressed on the importance of treating financial literacy as much more complex subject and to include it at a level of study as low as the secondary school and building up the students understanding about different aspects of the same like any other discipline. For example, it should be treated and taught to students how mathematics and Science are taught in schools which might lead to better understanding of complex modules among students in much easier way. Also, the teachers should be having regular workshops to keep their understanding in level with the emerging necessities of the market as a few hundreds of teachers are responsible to teach thousands of students and the teachers being up to date with the requirements of financial management is going to have a positive impact on students as the benefit of such would trickle down to students in the form of a chain reaction thereby reaching millions and thereby changing the forthcoming scenario altogether. The researcher feels that all the previous researchers had a bias in common. That is, they assumed that a higher financial literacy would lead to better investment decisions. But the mere assumption that a higher level of Financial Literacy leads to improved investment decisions is faulty. Other factors, such as behavioral biases, past experience, market trends, self-control problems, family, peer, economic, community and institutional influences, can determine the nature of the individual decisions.

It's high time for us to identify the knowledge gaps and do our best to support and strengthen the individual's ability to manage their personal finances. Only then will we able to manage and improve the conditions of both the money market and capital markets and derive the benefit of high volume transactions in the country with a greater participation from retail investors like you and me. That, I believe, is a challenge that ultimately will benefit us all.

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