Financial Literacy and Its Impact on Household Savings - A Study of Hyderabad Metropolitan City

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Abstract

A country's economic development greatly depends on the availability of funds for its production purposes. Savings are the primary source of funds for economic activities. Savings are beneficial to both individuals and the economy as a whole. Financial literacy is the understanding of sound financial planning principles and skills of budgeting imparted to individuals ensuring their overall financial well-being. Hence, an attempt is made in this paper to investigate the relationship between individual household savings and financial literacy by selecting a sample of 536 respondents of Hyderabad. Chi-Square test, Correlation, and Regression analysis are used to investigate the association between household savings and financial literacy.

The Chi-Square test findings of monthly expenditure to monthly income and financial literacy levels, saving to monthly income and financial literacy levels of selected respondents reveal values 53.232 and 54.871 which is less than (0.05). The findings suggest that there is a statistically significant relationship between select respondents' financial literacy levels and their monthly saving to monthly income and expenditure ratios. The study results reveal a positive association between financial literacy and variables affecting household savings decisions. A simple regression between financial literacy level and variables impacting household savings decision demonstrates that his or her financial literacy level can predict 18% of the variance in his or her household saving decision. As a result, it is concluded that financial literacy has statistically significant impact on individuals' household saving decisions.
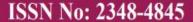
Key Words: Financial Literacy Level, Household Savings, Know Your Customer, Fixed Deposit, Mutual funds, National Savings Certificates, Public Provident Fund, Variables Affecting Household Savings Decision.

I. Introduction

The most important determinant for the development of any nation is savings. A country to develop continuously needs an increased rate of savings. Savings are the source of funds for many welfare and development programs. Domestic savings provide the funds for productive purposes.

India is a fast-growing economy that needs a great m for its development. The level of savings is influenced by many factors like demographics, cultural factors, interest rates, distribution of income, wealth and credit availability. Apart from the listed factors, financial literacy is also one such important factor influencing savings. Financial literacy has become increasingly important for the government and citizens. Major components of financial literacy are earning, spending, saving and investing, borrowing and protecting. Hence, it is simply developing a confident understanding about earning, spending savings and investing, borrowing and protecting. Individuals make use of these concepts to arrive at financial decisions.

OECD defines financial literacy as "Financial Literacy "as a combination of financial awareness, knowledge, skills, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial well-being".[4]

Savings are funds derived after deducting the expenditure. Individuals save with different motives for motives like children education, social ceremonies, purchasing the house, planning for retirement, meeting unexpected emergencies.

Financial literacy and savings have been found to be closely linked.The level of financial literacy that an individual possesses has an impact on their decision-making.
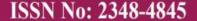
II. Objectives of the study:

The study attempts to know association between financial literacy with that of monthly expenditure and monthly savings. Further, an attempt is made to determine the impact of financial literacy on the household savings decisions. The study is being conducted with the following objectives:

1. To know the significant association between respondents' financial literacy level and their monthly expenditure to monthly income ratio.

2. To investigate the relationship between respondents' financial literacy level and their monthly saving to monthly income ratio

3. To study significant influence of the respondents' level of financial literacy on their household saving decisions.

III. Review of literature:

Pangestu&Karnadi,Bramana (2020) studied the impact of financial literacy and materialism on the saving decision of 430 Indonesian university students to measure financial literacy, materialism and the rate of savings of each respondent. The study highlighted that decision to save is strongly influenced by the financial education, which shows a positive influence. On the contrary, to this degree of materialism negatively influenced the savings decision. Further, age and gender determined the financial literacy score of the respondents. Imparting financial education by including it in the school curriculum compulsorily was suggested to the policymakers.

Mohammed Ahmar Uddin (2020) through his study investigated the impact of financial literacy on savings of individuals in Oman. Financial literacy was studied by considering the variables like education, age, and gender. From the analysis, it was clear that individual

savings were greatly influenced by their levels of financial literacy. The variable like gender showed no influence but factors like level of education and age had a significant positive relationship with that of savings. Further individuals with higher financial literacy scores saved more. Hence the study recommended improving the financial literacy levels of individuals as it would result in increased savings and investment.

Pankaj Mishra (2018) investigated the impact of demographic factors on the saving and investment behavior of Gwalior City residents. The study's findings revealed that demographic factors had a significant impact on people's saving and investment awareness levels. Further men were more knowledgeable about money matters. Respondents and also respondents over the age of 30, those with higher incomes had a better understanding of savings and investment options. Men were also risk takers, opting for a mix of traditional and modern instruments. Women, on the other hand, were risk averse and preferred traditional instruments, with gold being their best investment option. Results clearly depict that respondents' savings and investment patterns were influenced by factors such as age and income.

Poongodi and Gowri (2016) studied the saving/investment behavior and financial literacy of women working in private and public organizations in Erode city by selecting of sample 100 respondents. Different savings options like mutual funds bonds, equities, deposits, insurance, gold and silver, real estate were considered in the study. Factors like high returns, low risk, capital safety, maturity amount were considered as the crucial factors

by women while making their investment decisions. Women mostly saved with motive of earning good returns, creating wealth, reducing the tax liability through savings. Analysis revealed that women exhibited greater financial awareness towards traditional saving/investment alternatives but has chosen the modern investment avenues which fetch them good returns with some amount of risk.

Taofik Hidajat(2015) studied the personal financial literacy of fishermen in Indonesia and also the relationship between household saving and financial literacy. The study was taken up by considering the respondents falling in the age group between 25-50 years. Majority of the fishermen were illiterate as they come from poor family .The illiteracy among fishermen lead to no interest of them in saving. Hence, low financial literacy level of the person leads to borrowing more money at increased interest rates. It is recommended that the policy makers should design financial education programs improving the financial literacy levels of Indonesian fishermen and also expand financial inclusion through geographical penetration of banks and ensuring easy availability of credit.

Patryk Babiarz &Cliff A (2014) in their study analyzed the correlations between objectively and subjectively assessed measures of financial knowledge. Also, savings probability to cover three months expenses was analyzed. Results revealed that financial literacy initiatives were taken up targeting teen, children and young adults but other demographic groups were ignored. Low income, low educational qualifications are the major causes for holding low emergency funds. Further, having more number of

children is depicting negative influence on holding emergency savings. Increasing the consumer awareness education programs as a part of public policy was suggested.

Elisabeth Beckmann (2013) attempted to study the financial literacy levels of people of Romania through the survey conducted by Austrian Central Bank covering various European countries but special focus only on Romania. The relationship between household savings and financial literacy was also analyzed. Findings of study revealed that low level of financial literacy was exhibited by women, people in older age group and people holding lower educational qualifications. Positive relationship exists between the variables financial literacy, savings and investment. Individuals who were financially literate, particularly those who had a strong understanding of inflation, saved more by investing in several interest-bearing savings instruments and also by investing in pension funds.

Nurul Shanaz Mahdzanand Saleh Tabiani (2013) studied 200 people in Malaysia's Klang Valley to see how financial literacy affected their savings. According to the study, financial literacy had a favourable impact on individual savings, implying that financial literacy was the most important factor influencing individual savings. Positive relationship exists between savings and demographic factors as respondents from older age category exhibited positive saving behaviour, other factors remaining same. Variables like gender, income, level of education, saving regularity were also positively associated with the savings. To increase the savings among households, it is advised that government must

implement basic education programmes that expose people to financial problems in order to enhance their financial literacy levels, converting them into financial literates who can make wise financial decisions that affect their savings.

Ananthapadhmanabha Achar(2012) investigated teachers' saving and investment patterns in the Udupi District of Karnataka state. Analysis revealed that saving and investment behavior of respondents was greatly determined by the variables like gender, age, marital status and life style. In addition, family monthly income, family life cycle phase and upbringing were found as major variables. According to the peer-reviewed studies individual savings are influenced by financial literacy,
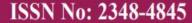
IV. Methodology:

Primary data is collected for the selected study by administering a structured questionnaire to the respondents of Hyderabad. 536 respondents of Hyderabad are selected as sample residing in different areas of Hyderabad.

Questions on basic and advanced financial concepts such as simple interest, money's time worth compound interest, diversification, inflation, KYC, risk, and return, FDs, NSCs, PPF, Shares, Debentures and Bonds, MFs, POMIS, Insurance Policy, Precious Metals, Chit Funds, Real Estate were asked to assess the respondents' financial literacy.

The following hypotheses are developed:

Ho_1: No relationship exists between the respondents' financial literacy and their

monthly expenditure to monthly income ratio.

Ho₂: No relationship exists between the respondents' financial literacy and their monthly saving to monthly income ratio.

Ho₃: No significant influence of the respondents' financial literacy on their household savings decisions.

V. Data Interpretation

The total mean scores of each individual were calculated. Based on the mean scores the respondents are divided into three categories. Hence, the respondents were categorized into low, moderate and high financial literacy literates. Those respondents whose mean score are between 24-56 are categorized as low financial literates, those whose mean scores are between 57-88 are categorized as moderate financial literates and those falling in between 89-120 are classified as high financial literates. The table below shows the distribution of respondents.

Table -1: Distribution of Respondents' based on Financial Literacy Level

Financial Literacy level	No. of Respondents	% of Respondents
Low	50	9.3
Moderate	377	70.3
High	109	20.4
Total	536	100.0

(Source: Primary data)

Table-2: Respondents' Profile

Gender	No. of Respondents	% of Respondents
Male	316	59.0
Female	s220	41.0
Age Group		
20-30 Years	138	25.7
30-40 years	186	34.7
40-50years	160	29.9
Above 50 years	52	9.7
Area		
L.B.Nagar	98	18.3
Charminar	82	15.3
Khairathabad	94	17.5
Secunderabad	96	17.9
Serilingampally	76	14.2
Kukatpally	90	16.8
Education Qualification		
Below Graduation	140	26.1
Graduation	266	49.6
Post Graduation	106	19.8
Others	24	4.5
Occupation		
Government Employee	23	4.3
Private Employee	285	53.2
Professional	36	6.7
Self Employed/Business	110	20.5
Home maker	65	12.1
Retired	17	3.2
Monthly Income		
Below Rs.20,000	210	39.2
Rs.20,001- 40,000	213	39.7
Rs.40,001- 60,000	72	13.4
Rs.60,001- 80,000	20	3.7
Rs.81,000- 1,00,000	10	1.9
Above Rs.1,00,000	11	2.1
Stage of Family Life Cycle		
Single	95	17.7
Married	80	14.9

Married with dependent children	327	61.0
Married with no dependent children	34	6.3
Working in Banking/Financial sector		
Yes	58	10.8
No	478	89.2
Years of Investment experience		
Less than 1year	154	28.7
1-5years	238	44.4
5-10years	65	12.1
Above 10 years	79	14.7
Total	**536**	**100.0**

(Source: Primary Data)

Table- 3: Monthly Expenditure to Monthly Income Ratio Vs Financial Literacy Level

Financial Literacy level		Percentage of Monthly Expenditure to Monthly Income						Total
		1 to 40%	41-50%	51-60%	61-70%	71- 80%	More than 80%	
Low	F	6	0	4	13	7	20	50
	%	12.0%	0.0%	8.0%	26.0%	14.0%	40.0%	100.0%
Moderate	F	5	15	68	93	85	111	377
	%	1.3%	4.0%	18.0%	24.7%	22.5%	29.4%	100.0%
High	F	1	5	33	38	17	15	109
	%	.9%	4.6%	30.3%	34.9%	15.6%	13.8%	100.0%
Total	F	12	20	105	144	109	146	536
	%	2.2%	3.7%	19.6%	26.9%	20.3%	27.2%	100.0%

(Source: Primary Data)

Table- 4 Chi Square: M. Expenditure to M. Income Ratio and Financial Literacy Level

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	53.232	10	.000
Likelihood Ratio	45.993	10	.000
Linear-by-Linear Association	9.105	1	.003
N of Valid Cases	536		

(Source: Compiled from Primary Data)

Table 4 depicts the relationship between monthly expenditure to monthly income and financial literacy levels of the select respondents. With 10degrees of freedom, the Chi Squrae value is 53.232, and the p value is .000, which is less than(=0.05). The findings show that there is a statistically significant relationship between the financial literacy levels of select respondents and their monthly expenditure to monthly income ratio. Hence, **Alternate hypothesis** is accepted stating that there exists association between monthly expenditure to monthly income and financial literacy levels of the respondents.

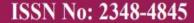### Table-5: Financial Literacy Level and Monthly Saving to Monthly Income Ratio

Financial Literacy level		Percentage of Monthly Savings to Monthly Income						Total
		1-20%	20%-30%	30%-40%	40%-50%	50%-60%	Above 60%	
Low	F	20	8	12	4	1	5	50
	%	40.0%	16.0%	24.0%	8.0%	2.0%	10.0%	100.0%
Moderate	F	113	91	82	72	17	2	377
	%	30.0%	24.1%	21.8%	19.1%	4.5%	.5%	100.0%
High	F	16	17	38	30	7	1	109
	%	14.7%	15.6%	34.9%	27.5%	6.4%	.9%	100.0%
Total	F	149	116	132	106	25	8	536
	%	27.8%	21.6%	24.6%	19.8%	4.7%	1.5%	100.0%

(Source: Compiled from Primary Data)

Table -6 Chi Square: Monthly Saving to Monthly Income Ratio Vs FLL

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	54.871	10	.000
Likelihood Ratio	43.586	10	.000
Linear-by-Linear Association	10.180	1	.001
N of Valid Cases	536		

(Source: Compiled from Primary Data)

Table 6 shows the relationship between monthly savings and monthly income, as well as the respondents' financial literacy levels. With 10 degrees of freedom, the value of Chi Square is 54.871, and the p value is .000, which is less than(=0.05). The results reveal that there is a statistically significant association between financial literacy levels and monthly saving to monthly income ratio of the select respondents. Hence, **Alternate hypothesis** is accepted stating that there exists association between monthly saving to monthly income and financial literacy levels.

Variables Affecting Household Savings Decision

Household saving decisions are predominantly affected by certain variables. For the purpose of the study, eight variables are considered. They are Household Income(HI), Number of Dependents(NOD), Cost of Living(COL), Interest Rates offered on Savings(IRS), Standard of Living(SOL), Habitual Saving(HS), Future Financial Needs(FFN),Unforeseen Emergencies(UE) are taken into consideration

Table-7: Responses on Variables Affecting Household Savings Decision

Variables	Strongly Disagree-1		Disagree-2		Neutral-3		Agree-4		Strongly Agree-5		Total
	F	%	F	%	F	%	F	%	F	%	F
HI	17	3.2%	10	1.9%	41	7.6%	292	54.5%	176	32.8%	536
NOD	10	1.9%	38	7.1%	97	18.1%	252	47.0%	139	25.9%	536
COL	13	2.4%	10	1.9%	41	7.6%	284	53.0%	188	35.1%	536
IRS	10	1.9%	45	8.4%	184	34.3%	230	42.9%	67	12.5%	536
SOL	21	3.9%	9	1.7%	73	13.6%	285	53.2%	148	27.6%	536
HS	6	1.1%	32	6.0%	93	17.4%	312	58.2%	93	17.4%	536
FFN	9	1.7%	3	.6%	59	11.0%	323	60.3%	142	26.5%	536
UE	7	1.3%	9	1.7%	38	7.1%	284	53.0%	198	36.9%	536

(Source: Primary Data)

Table-8: Variables Affecting Household Savings Decision: Descriptive Statistics

Variables	N Valid	Mean	Std. Deviation
Household Income(HI)	536	4.12	.867
Number of dependents(NOD)	536	3.88	.938
Cost of Living(COL)	536	4.16	.833
Interest rates offered on savings(IRS)	536	3.56	.882
Standard of living(SOL)	536	3.99	.913
Habitual Saving(HS)	536	3.85	.815
Future financial needs(FFN)	536	4.09	.735
Unforeseen emergencies (UE)	536	4.23	.758

(Source: Compiled from Primary Data)

Table -9: Relationship between FLL & VAHSD

Financial Literacy Level	Pearson Correlation	1	.427**
	Sig. (2-tailed)		.000
	N	536	536
Variables Affecting Household Savings Decision	Pearson Correlation	.426**	1
	Sig. (2-tailed)	.000	
	N	536	536

(**Correlation is significant at the 0.01 level (2-tailed).

The correlation test is used to determine relationship between the two variables, financial literacy and the factors that influence household savings decisions. The result of r 0.427 in table 8 indicates a positive linear association. Since positive linear relationship exists between financial literacy and factors that influence household savings decisions, the method employed is simple regression. Below are the findings of the regression analysis performed on these variables.

Table-10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.426[a]	.182	.180	.45366

a. Predictors: (Constant), Financial Literacy Level

Table-11: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	24.412	1	24.412	118.618	.000[b]
	Residual	109.899	534	.206		
	Total	134.311	535			

a. Dependent Variable : Overall Variables
b. Predictors: (Constant),Financial Literacy

Table -12: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.646	.126		21.050	.000
	Financial Literacy	.399	.037	.426	10.891	.000

a. Dependent Variable: Variables Affecting Household Saving Decision

The following is the suggested relationship between financial literacy and household saving decisions.

$$HS= α + βE + έ$$

Where variable HS is referred to as the "dependent" variable (HS= Household Savings Decision), and E(Financial Literacy Level) is the "independent" or "explanatory" variable, and α is the "constant term" and β is the " coefficient" of the variable E(Financial Literacy Level)

The table generates the following regression equation:
Household Saving=2.646+.399(FLL)

The coefficient of determination, denoted by $R2$, is a measure of the strength of association in regression analysis. Table 9 reveals an $R2$ value of.182, indicating that his or her level of financial literacy can predict 18.2% of the variance in household saving decisions. The t-test value for individual independent variable significance indicates significance at a 95% confidence level. Table 11 reveals that with a value of 0.000, which is less than 0.05, the financial literacy level is statistically significant. Table 11 shows that with a value of 0.000, the F-test result is also significant. Results reveal that financial literacy is found to have a statistically significant impact on household savings decisions.

VI. Conclusions:
The Chi-Square test of monthly expenditure to monthly income and financial literacy levels of the selected respondents shows with 10 degrees of freedom and a p value of .000 less than 0.05, reveals a Chi-Square value of 53.232. As a result, the null hypothesis is rejected and the alternate hypothesis of a significant association between financial literacy and respondents' monthly expenditure to monthly income ratio is accepted.

The Chi-Square test findings of monthly saving to monthly income and financial literacy levels of selected respondents reveal a 54.871 Chi-Square value with 10 degrees of freedom and a p value of .000, which is less than (0.05).The findings suggest that there is a statistically significant relationship between select respondents' financial literacy levels and their monthly saving to monthly income ratio. As a result, the alternate hypothesis, which states that monthly savings and monthly

income, as well as financial literacy levels, have a strong relationship is accepted.

The study results reveal a positive association between financial literacy and variables affecting household savings decisions. A simple regression between financial literacy level and variables impacting household savings decision demonstrates that his or her financial literacy level can predict 18% of the variance in his or her household saving decision. As a result, it is concluded that financial literacy has a statistically impact on individuals' household saving decisions.

VII. Suggestions:

Following suggestions are made to improve the savings among individuals:

1. People can be converted into learned decision- makers provided they are taught the basic as well as the advanced financial concepts right from the very school age.

2. Basically there is a wrong notion in the minds of people about savings .They always think that savings mean they have to forego their comforts, postpone their needs and desires so as to save the money. This mindset of the people is to be changed by bringing awareness among them that savings does not always mean foregoing their present comforts and needs rather setting aside funds in a possible manner for future.

3. Further, there is a misconception that low income groups do not save. But, it is not true they save in informal avenues that expose them to high risks leading to high costs. So more awareness must be brought among these income groups about modern avenues that fetch them good returns.

4. Parents must discuss financial matters with their children. This type of family discussion about money matters helps children in developing a better grasp of various financial issues. They should also be taught the importance of saving from a young age, and the habit of saving should be instilled in them.

5. The government should implement more initiatives like the Pradhan Mantri Jan Dhan Yojana (PMJDY), which can help low-income people to deposit their savings through formal channels.

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