

An Analysis of Financial Knowledge and Financial Behaviour of Teachers Working in Higher Learning Institutions in Hyderabad

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Abstract

In today's complex and fast-changing economy, financial literacy is an essential skill, especially for the economically deprived. Due to the recent pandemic Covid - 19, the importance of financial knowledge and behaviour occupied a prominent place in India and worldwide. Many individuals suffered during this pandemic period since they do not have sufficient savings and investment to use critical situations and do not have regular earnings. But financial education is not the only skill needed to have appropriate economic behaviour. The study's objective is to analyse and understand teachers' financial knowledge and behaviour working in higher learning institutions in Hyderabad since they are instrumental in moulding their student community to uplift the economy. Adopted a structured questionnaire for this study, which contains two sections: section 1 contains Socio-demographic variables, and section 2 consists of variables relating to financial numeracy, knowledge, attitude and behaviour. Descriptive analysis has been used to analyse the data and found that only 21% of the teachers possess a higher level of financial numeracy skills, 23% have a higher level of knowledge in finance. Concerning financial behaviour, 48.5% of teachers working in higher learning institutions in Hyderabad have high financial behaviour. This study can help different stakeholders such as policymakers, academic institutions, and corporate entities enhance literacy levels in finance in general and teachers working in higher learning institutions to improve individuals' economic wellness.

Key-words: Financial Numeracy, Financial Knowledge, Financial Attitude, Financial Behaviour and Higher Learning Institution.

1. Introduction

1.1. Background

Financial literacy is a pre-requisite for the achievement of financial goals by any individual. Due to economic liberalisation, finance is not limited to national boundaries and is across the globe's length and breadth. One can invest and borrow from anywhere in the world. After the opening up of economic gates, complex financial products are made available to investors and borrowers. To invest or borrow based on those versatile financial instruments, the person needs to have a specific financial knowledge level. Due to a lack of knowledge about financial products and financial services available to financial consumers, they cannot gain an advantage. Particularly in pandemic situation Covid-19, which runs over months where the public suffered financially due to lack of savings and investments to use in those critical situations. Financial illiteracy makes people suffer financially. One of the prime causes of financial exclusion is financial illiteracy. To create successful use of financial products and services, people need to know enough to understand the basics of managing money. Financial literacy refers to a set of skills that allow people to manage their money wisely and understand essential financial concepts and an appreciation of the trade-off between risk and return. It is a combination of awareness, knowledge, skill, attitude, and behaviour necessary to make sound financial decisions for a lifetime of economic wellbeing. Financial literacy entails knowing about financial products and services and having the right skills for healthy financial practices. Financial literacy can reduce or eliminate poverty levels. Removing poverty and achieving gender equality is impossible when two-thirds of adults worldwide remain financially illiterate and 75% of Indians are financially illiterate. Women continue to trail men in financial literacy levels and making a financial decision. Financial literacy and understanding the subtle nuances of finance have become increasingly important for governments and citizens. Failing to understand finance can have broad implications for the economic health and stability of countries. Hence the importance of financial literacy is increasing day by day due to complex financial products and services. Universal financial concepts that apply to every context and economic environment are financial numeracy concepts such as calculating simple interest, compounding interest, inflation, and risk diversification.

Due to their lack of financial literacy, people buy financial products and insurance policies without adequate planning and give up midway because they do not have money left to pay the instalment or premium. Aggressive pushing of products by financial service providers without adequately assessing buyers' financial profile can mean more harm to those from economically

weaker sections. Financial behaviour change should start from an early stage of an individual's life. Therefore, understanding financial concepts need to be given as early as possible because financial habits will be carried and built by children into adulthood. While individuals are increasingly being called upon to make complex financial decisions, a significant fraction of households has only a rudimentary understanding of basic concepts. Moreover, participation in financial markets is far from universal, and individuals with low levels of education and financial literacy are the least likely to participate in these markets.

Financial knowledge refers to a person's comprehension of and understanding the principles of finance, procedures, and application of that knowledge to solve financial difficulties. Financial attitude can be explained as a personal feeling towards financial matters. It is the individual features that take the form of tendencies towards an economic action. Financial literacy involves understanding financial concepts such as money management, financial planning, savings, investment and budgeting, etc. and applying those concepts in real life for economic advantage. Integration of concepts and application is a difficult job in the real world. As the awareness and experience grow, there will be a change in the individual's financial behaviour.

Financial literacy is a broad word, and it includes knowledge about finance, attitude and decisions (financial behaviour). Many people have explained financial literacy in different dimensions; however, the OECD's definition in 2011 is considered more appropriate. It has described as "A combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial well being".

1.2.Need for the Study

Literacy in finance is a common concern. It is critical due to complicated financial concepts, and a lack of understanding and knowledge about financial matters leads to the financial discrepancy. Young workers now have more responsibility for planning and deciding their future financial needs due to India's economic reforms. Their financial behaviour is highly influenced by high job insecurity, wage differentials, easy access to consumer credit etc. A country like India, which has an extensive teaching community in various higher learning institutions, should study this subject.

1.3.Problem specification

The lack of financial skills and knowledge has become a global concern that is also noticeable in developing countries. Those who do not have financial literacy have not been encouraged to accept creative financial items, do sound financial planning, and implement their plans with serious commitment (Amer Jamel et al. 2015). Therefore, knowledge of finance leads to better planning for future financial needs. This knowledge with numeracy skills can help to make better decisions for their better financial future. The teachers are the influencing community in our society to influence the students at large, who are the creators of wealth for the future. They are in a position to control many aspects of an individuals life. Earlier studies have shown that financial knowledge positively impacts personal management in finance. Any person with good economic understanding can plan better for his/her finance; specifically, teachers are the sources of knowledge for society's growth and development. An effort is being made to study the teaching community's financial knowledge and their behaviour working in higher learning institutions in Hyderabad.

1.4.Study's scope

The study exclusively concentrates on understanding financial knowledge levels and their decision-making skills towards teachers future financial needs who are working in higher learning institutions.

1.5.Importance of the study

The study's importance is to identify teachers' financial numerical skills, knowledge and behaviour levels working in higher learning institutions to fulfil their future financial needs.

1.6.Study's objective

The study's objectives consist of the following:

1. To measure the financial knowledge levels of teachers
2. To assess the financial behaviour of teachers
3. To provide suggestions to improve the teachers' behaviour in finance.

1.7. Study limitations

The study limitations are:

1. It is restricted to the teachers working in higher learning institutions in Hyderabad.
2. The method of convenience sampling method has been chosen for this study
3. There may be a possibility that some respondents might not give the actual situation that applies to them
4. The sample chosen may not ensure a proportionate representation of the entire population
5. The conclusions drawn may not be generalised

2. Review of Literature

Financial numeracy can be defined as processing basic numerical concepts, quantitative estimations, probability and ratios (Peters et al., 2006); Cokely et al., 2012). Financial numeracy directly affects financial management outcomes related to borrowing, savings and investments. These numeracy skills need to be implemented in real-time financial transactions without a third party's assistance (Brett Budson Mathews 2019). Financial numeracy is a part of financial knowledge (Lusardi 2012), and this knowledge with financial attitude and behaviour becomes financial literacy. Therefore, knowledge, attitude and behaviour lead to literacy.

Financial knowledge is the awareness and understanding of the financial concepts and procedures and the use of this understanding to solve financial problems. It encompasses conceptual, procedural, and applied financial knowledge.

Financial attitude is defined as a state of mind, opinion and judgment of a period about finances. It is the individual characteristics that take the form of tendencies towards a financial practice or action. It shows the inclination or likelihood of a person to undertake a behaviour (IGI Global). The attitude is the response in the form of a statement of like or dislikes or helpful or unuseful related to the individual financial behaviour (Potraich et al., 2016). Financial attitude will shape the way someone spends, hoards, and spend money wastefully (Furnham, 1984)

Financial behaviour is the application of financial knowledge in financial decision making relevant to money management. Common financial behaviours include cash, credit and saving management.

The Standard and Poor's 2014 survey showed that India's literacy level in finance is low (25 per cent), and out of 28 nations in the study undertaken by Visa in the year 2012, India is ranked 23rd position.

Gutti R.K.P (2020), in his study, found that the levels of literacy in finance of students of post-graduate management studies in Hyderabad are low (33%), and male students are more financially literate than female.

Kalyani and Kavya Reddy (2018) found that the employees are digitally literate but not financially literate.

In their study, **Saurabh Sharma (2015)** found that young employees' financial literacy is not encouraging. Male literacy is more than female, and it is positively related to education and income levels.

Sumit Agarwal et al. (2015) assessed literacy in finance of a small cluster of Indian inhabitants who use an online investment service. The participants were found to be financially literate in general. Male respondents have a higher chance of getting the correct responses, which rises with education and the investor's aggressiveness.

Agarwala et al. (2013) surveyed 3,000 people in India and concluded that Indian financial awareness is lower than international standards. However, the workers' and pensioners' financial conduct and attitude continue to be optimistic.

Bhushan and Medury (2013) found that gender, levels of education, levels of earnings, nature of jobs, and workplace all affect literacy in finance; according to them, the geographic area does not involve financial literacy. In urban India, the young working people's financial literacy level is comparable with similar groups in other nations.

According to **Hsu-Tong Deng et al. (2013)**, school teachers at the elementary level have a high level of medium literacy level in finance and education.

Marzieh et al. (2013) found that factors like education and age are genuinely related to Literacy in Finance and wellbeing. Married individuals are more literate than a single person, and women are less literate in finance than men. Through greater financial literacy, higher financial stability and less financial concern are possible. Eventually, financial stability results in little financial worry.

Mwangi's (2012) study found that in Kenya, literacy levels in financial remains low. The findings show that individual access to financial facilities is not founded on levels of knowledge in finance but on features such as earning levels, banks proximity, gender, age group, civil status, size of households, and levels of general education. The research, however, found that financially illiterate individuals are possibly financially excluding. The study advises creating a financial education curriculum and its administration in local, middle and higher education institutions.

In his paper, **Ramakrishnan R. (2012)** concluded that individuals and society need financial education to advance the economy. Consumers who can make better decisions about themselves will improve overall welfare.

Abraham and Gyensare (2012) study among 250 Cape Coast University undergraduate and post-graduate students found that literacy in finance is positively related to age, work experience, and mothers' education. However, the levels of study, job area, parents education, media access, education, and money does not influence financial literacy

According to **Jason West (2012)**, financially literate people's acts do not always imply that they will behave responsibly with their money.

In comparison to people of nine other nations, **the ING Group (2011)** carried a global survey and identified that in managing finance, most Indian customers have exhibited good skills and are more optimistic in meeting any future economic obstacles. They also discovered that literacy in finance is impacted by an individual's age level, income level, and level of education. Financial literacy was higher among high-income respondents than among low-income respondents.

Lusardi, Mitchell, and Curto (2010) investigated literacy in finance among persons and found that only one-third of young adults have a basic understanding of interest rates, inflation, and risk diversification. Financial literacy was found to be closely linked to socioeconomic status and family financial sophistication.

Remund (2010) and Huston (2010) have identified that while funding is increasing for literacy in finance and education in finance, there are still significant setbacks to reduce commonly distributed measures of financial literacy established by comprehensive psychometric analysis.

Ronald and Grable (2009), individuals with low financial risk tolerance levels are the least financially capable and have the most inadequate subjective net worth assessment. They are still less pleased with their financial management capabilities.

According to **Wendy and Karen (2009)**, teachers understand the importance of financial education, but few trainers coaching literacy in finance are not fully equipped to teach personal finance. They also discovered that unique finance education opportunities for teachers are in high demand.

Those who got training in personal financial management do better in their financial matters (**Lewis and Linda 2009**). People with a low literacy level in finance have fewer chances to plan for superannuation, borrow at a high cost, and partake in the economic system (**Shawn Cole et al. 2009**). Literacy levels vary significantly between countries and are dependent on educational success and societal connections (**Tullio Jappelli 2009**).

According to Jane Schuchardt et al. (2009), financial education results in improved financial literacy and more positive financial behaviours, motivation, and planned behaviour.

Teachers in higher education have been studied in terms of financial literacy and expertise. Financial literacy and expertise can help everyone to increase their financial resources. In this regard, an attempt is being made to assess financial literacy (numeracy) skills and attitude among teachers in Hyderabad's higher education institutions.

3. The Methodology Adopted for the Study

Research Design: Adopted a descriptive research method by the survey through a structured questionnaire for the present study.

Data: Both primary and secondary sources have been used to collect data for the study.

Questionnaire: A structured questionnaire has been prepared on literacy elements in finance such as financial learning, financial numeracy, financial knowledge, financial attitude and financial behaviour apart from socio-demographic variables and has been used to collect primary data from the teachers of higher learning institutions in Hyderabad.

Sample Description: The sampling unit used in this study is 130 teachers of higher learning institutions in Hyderabad in the age group above 25 years.

4. Data Presentation and Analysis

4.1 Analysis of Socio-demographic features

As per **Table 1**, out of the total 130 respondents, 42 (32.3%) are female, and 88 (67.7%) are male. The age group mostly ranges between 25 years to 65, and the majority are ranging from 35 years to 45 years (42.3%). 54 (41.5%) teachers are brought up from semi-urban areas, 37 (28.5%) are from urban, and the remaining 39 (30%) are from rural areas. Out of the job experience, 6 to 10 years of experience are 32 teachers, 28 teachers have 11 to 15 years, and 21 have 16 to 20 years, and 20 teachers have 0 to 5 years experience. About master's degree qualification stream, 44.6% (58) teachers are from the engineering stream, followed by business administration 21.5% (28), 10% (13) are from science and 6.2% (8) are from commerce and the remaining from arts, architecture and others. All the teachers have regular income from salaries, and their income ranges between Rs.25,000 to Rs.1,50,000 and above. 42.3% (55) of teachers are having income ranges between

Rs.50,000 to Rs.75,000, 35.4% (46) are having income between Rs.25,000 to Rs.50,000, 13.8% (18) teachers are earnings in the range of Rs.1,00,000 to Rs.1,50,000, very few (3) are there earning more than Rs.1,50,000 and also earning less than Rs. 25,000.

Table 1 - Socio-demographic profile of the respondents

Particulars	Details (categories)	Breakup Total	%
Gender	Female	42	32.3
	Male	88	67.7
	Total	130	100.0
Age group	Less than 25 years	1	.8
	Years 25 to 35	43	33.1
	Years 35 to 45	55	42.3
	Years 45 to 55	24	18.5
	Years 55 to 65	7	5.4
	Total	130	100.0
Brought up	Urban (city)	37	28.5
	Semi Urban	54	41.5
	Rural	39	30.0
	Total	130	100.0
Experience	0 to 10 yrs	52	40
	11 to 20 yrs	49	37.7
	21 to 30 yrs	22	16.9
	31 to 40 yrs	7	5.4
	Total	130	100.0
Qualifications (Masters Degree)	Commerce	8	6.2
	Arts	7	5.4
	Business Administration	28	21.5
	Engineering & Technology	66	50.8
	Science	13	10.0
	Architecture	1	.8
	Others	7	5.4
	Total	130	100.0
Income levels	<Rs.25,000	2	1.5
	Rs.25,000 - 50,000	46	35.4
	Rs. 50,000 – 75000	55	42.3
	Rs.75,000 - 1,00,000	6	4.6
	Rs. 1,00,000 - 1,50,000	18	13.8
	More than Rs.1,50,000	3	2.3
	Total	130	100.0

4.2. Reliability Analysis of Variables

The reliability test has been performed through the latest version of SPSS software, and values are indicated in **Table -2**. Cronbach Alpha value for financial knowledge 0.928, 0.854 for

financial attitude, and 0.664 for financial numeracy. All the deals have more than 0.60; hence, the reliability of variables is high.

Table 2 – Reliability of variables

Particulars	Cronbach Alpha	No. of items
Financial Numeracy	0.664	10
Financial Knowledge (1+2)	0.928	13
Financial Attitude	0.854	10

4.3. Financial Literacy (numeracy) levels of teachers

Based on **Table -3**, 21% (27) of teachers working in higher learning institutions at Hyderabad are equipped with a high level of financial literacy, 58% (76) is having a medium level of financial literacy, and 21% (27) is having a low level of financial literacy. Therefore, teachers in these institutions are highly moderately financially literate.

Table 3 - Financial Literacy levels (Numeracy)					
		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	High level	27	20.8	20.8	20.8
	Medium level	76	58.5	58.5	79.2
	Low level	27	20.8	20.8	100.0
	Total	130	100.0	100.0	

4.4 Analysis of financial knowledge levels

On analysing **Table -4**, one can understand that only 23% (30) of teachers have high-level financial knowledge, and 50.8% and 26.2% have medium and low financial understanding, respectively. Therefore, the study clearly showed that most teachers (51%) in higher learning institutions are moderately financially knowledgeable; this indicates that teachers have an average financial knowledge level. The reasons may be that they have working experience; they directly involved in managing their money matters; they have different financial accounts. They deal with

banks and other financial institutions on routine matters for their money matters, whether to deposit or withdraw and investment somewhere else to earn a higher return.

Table 4 - Analysis of financial knowledge levels

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Low financial knowledge	34	26.2	26.2	26.2
	Medium financial knowledge	66	50.8	50.8	76.9
	High financial Knowledge	30	23.1	23.1	100.0
	Total	130	100.0	100.0	

4.5 Analysis of financial behaviour:

A) Analysis of the importance of financial accounts:

Based on Table 5A, it can be understood that around 51% of teaches felt that savings and deposit accounts are essential for them. Only 3% felt that these accounts are not necessary for them too. 14.6% expressed that they are not sure of the importance, and 27% thought these accounts are essential. Overall 77% felt the significance of these accounts. It shows the recognition of the importance of savings and deposit accounts in their regular life.

Table 5A - Analysis of the importance of financial accounts

Q No	Particulars/ questions	Responses				
		1- Not important	2- Some-what not important	3- Not sure	4- Some-what important	5- Important
1	Savings / deposit account	4(3.1%)	6(4.6%)	19(14.6%)	35(26.9%)	66(50.8%)
2	Mutual fund account	15(11.5%)	17(13.1%)	26(20%)	47(36.2%)	25(19.2%)
3	Stocks / Bonds account	25(19.2%)	25(19.2%)	39(30%)	23(17.7%)	18(13.8%)
4	Insurance products	12(9.2%)	17(13.1%)	23(17.7%)	40(30.8%)	38(29.2%)
5	Pension account	5(3.8%)	9(6.9%)	20(15.4%)	44(33.8%)	52(40%)

When it comes to mutual fund accounts, 19.2% of teachers felt the importance since mutual funds usually account for tax savings purposes, and those who are in the high tax bracket are not paying any attention to the mutual fund. 36% felt that mutual funds are somewhat significant. One

fifth felt that they are not sure of the importance of these fund accounts. Roughly 12% felt that these accounts are not essential for them too.

Regarding stock/ bonds accounts closely, 14% of them only felt they are essential, and 19% thought they were unnecessary. 30% expressed about not sure of the importance of these accounts. The majority of teachers are not interested in stock market accounts due to high risk involved in these types of accounts, even though some times return also might sometimes be high.

When it relates to insurance products, 29% of respondents felt the importance of insurance products, and 31% felt somewhat crucial since the risk is increasing on all fronts, whether asset wise, healthwise, general life etc. Still, 17% of teachers are not sure of insurance products. Roughly 9% did not felt the importance of insurance products. Overall, insurance product awareness needs to be improved to reduce the risk that might occur from different angles.

About the pension account, 40% of respondents felt the importance of these accounts. Nowadays, individuals have started taking care of their future retirement life by taking one or the other pension plans. Particularly, those working in private institutions have shown more interest in taking care of their pension needs to ensure peaceful financial life after retirement. A negligible section of respondents, i.e., closely 4%, have not felt the importance of pension account.

B) Analysis of trueness of certain financial matters to assess the financial behaviour

Table 5B - Analysis of trueness of certain financial matters

Q. No	Particulars/ questions	Responses				
		1- Not at all true	2- Some-what not true	3- Not sure	4- Some-what true	5- Very true
1	I prepare budget and track spending	17(13.1%)	19(14.6%)	27(20.8%)	45(34.6%)	22(16.9%)
2	I compare prices when I am shopping for purchases	9(6.9%)	12(9.2%)	24(18.5%)	38(29.2%)	47(36.2%)
3	I read to increase my financial Knowledge	15(11.5%)	12(9.2%)	35(26.9%)	33(25.4%)	35(26.9%)
4	I compare purchase bills with my monthly statement	14(10.8%)	22(16.9%)	31(23.8%)	36(27.7%)	27(20.8%)
5	I use my money carefully	10(7.7%)	15(11.5%)	28(21.5%)	38(29.2%)	39(30%)
6	I contribute to savings account regularly	8(6.2%)	21(16.2%)	29(22.3%)	33(25.4%)	39(39%)
7	I regularly make investments	22(16.9%)	22(16.9%)	29(22.3%)	30(23.1%)	27(20.8%)

As per Table -5B, only 17% of respondents have felt the trueness of preparing budgets and track their spending to keep their expenses within limits. Roughly 36% of respondents felt the comparison of prices before they shop for purchases. Closely 7% did not felt the trueness of

comparison of costs before they go shopping. 30% of respondents felt the trueness of increasing their financial knowledge, and 25% also thought it somewhat factual. 11.5% did not feel to improve their financial ability to enhance their economic behaviour.

21% of teachers feel the trueness of comparison of purchase bills with monthly statements to find any discrepancy and resolve it.

30% of respondents felt the trueness, and 29% felt somewhat true of spending money carefully. Careful sending cash is one of the good financial behaviour that everyone should exhibit but follow in spirit to enhance economic wellbeing.

39% of teachers felt the trueness of regular contributions to the savings account, and another 25% also felt somewhat true about the statement. Only eight respondents do not regularly contribute to the savings account. It shows that some teachers might withdraw the salary amount deposited to the savings account without maintaining the balance to convert the savings account to a deposit account.

Only 21% of respondents felt the trueness of making a regular investment, 23% to some extent felt true and 22% not sure of making any investment. Closely 17% of teachers do not think to make regular investments in some accounts to enhance their future wealth.

4.6 Analysis of Financial behaviour levels

Table 6 - Analysis of financial behaviour levels					
		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Low financial knowledge	67	51.5	51.5	51.5
	High financial Knowledge	63	48.5	48.5	100.0
	Total	130	100.0	100.0	

Based on Table 6 -analysis of teachers' financial behaviour, one can find that on average, 49% of teachers exhibit a high level of financial behaviour working in higher learning institutions and 51.5% exhibit a low level of financial behaviour. The reason for displaying a high level of financial behaviour is having a high level of general education. Simultaneously, these teachers also have working experience ranging from 5 to 30 years, which might have provided some cultured financial behaviour to improve their financial wellbeing.

5. Conclusions and Suggestions

From the analysis, it can be found that only 21% of the teachers' possess a higher level of financial numeracy skills, 23% have a higher level of knowledge in finance. Concerning financial behaviour, 48.5% of teachers working in higher learning institutions in Hyderabad have high financial behaviour.

Concerning the importance of financial products, many felt the need to have savings and deposit accounts. Few are interested in having stock and bonds accounts. Many also felt the need to have pension accounts.

Government and non-government agencies and authorities can pay specific attention to improve the financial literacy levels in general and, in particular, for teachers working in higher learning institutions. These teachers can act as role models to teach the financial discipline among their student community to improve the individual and society's economic stability and wellbeing in the long run.

References

- Abraham Ansong, & Michael Asiedu Gyensare (2012). Determinants of University Working-Students' Financial Literacy at the University of Cape Coast, Ghana, *International Journal of Business and Management*, 7 (9): 126-135.
- Agarwal Sumit, Gene, A., Ben, I. D, Souphala, C & Evanoff, D. D. (2015). Financial Literacy and Financial Planning: Evidence from India. *Journal of Housing Economics*.
- Agarwala, SK, Barua, S., Jacob, J. & Verma, J. R. (2013). Financial Literacy among working young in urban India, Working Paper, IIM-Ahmedabad.
- Amer, A.A.J, Ramlan, W.K., Karim,M.R. A., Mohidin, R., and Osman, Z. (2015). The Effects of Social Influence and Financial Literacy on Savings Behavior: A Study on Students of Higher Learning Institutions in Kota Kinabalu, Sabah. *International Journal of Business and Social Science*, 6, 11(1). https://ijbssnet.com/journals/Vol_6_No_11_1_November_2015/12.pdf.
- Cokely, E. T., Galesic, M., Schulz, E., Ghazal, S., & Garcia-Retamero, R. (2012). Measuring risk literacy: The Berlin Numeracy Test. *Judgment and Decision Making*, 7(1), 25–47.
- Furnham, A. (1984). Many Sides Of The Coin: The Psychology Of Money Usage. *Person Individ Diff*, 5(5), 501-509.
- Gutti, R. K. Prasad. (2020), An Analysis of Financial Literacy and Financial Behaviour among Management graduate students in Hyderabad. *PalArch's Journal of Archaeology of Egypt / Egyptology*, 17(9), 3949 – 3965.
- Hsu-Tong, D, Li-Chiu Chi, Nai-Yung, T, Tseng-Chung, T., & Chun-Lin Chen. (2013). Influence of Financial Literacy of Teachers on Financial Education Teaching in Elementary Schools. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 3(1).

- ING Group. (2011). ING-International Financial literacy and Consumer Resourcefulness study, ING Group, Corporate Communications. Amsterdam, Netherlands.
- Jason West. (2012). Financial Literacy Education And Behaviour Unhinged: Combating Bias And Poor Product Design, Discussion Paper, No. 2012-01
- Kalyani PALNS and Kavya Reddy. (2018). A study of Financial Literacy of employees at Engineering Colleges, Hyderabad. *Inspira- Journal of Modern Management & Entrepreneurship*, 08(1), 40-46.
- Lewis, M., & Linda S. K. (2009). The Impact of Financial Literacy Education on Subsequent Financial Behaviour, *Journal of Financial Counselling and Planning*, 20(1).
- Lusardi, A., Mitchell, O.S., & Curto, V. (2010). Financial Literacy among the Young. *Journal of Consumer Affairs*, 44(2): 358–380.
- Lusardi, A (2012). Numeracy, Financial Literacy, and Financial Decision-Making, *Numeracy*. 5(1)
- Matthews, Brett. (2019). Hidden constraints to digital financial inclusion: the oral-literate divide. *Development in Practice*. 29. 1-15. 10.1080/09614524.2019.1654979.
- Potrich, A. C. G., Vieira, K. M., & Silva, W. M. D. (2016). Development Of A Financial Literacy Model For University Students. *Management Research Review*, 39(3)
- OECD INFE (2011). Measuring financial Literacy: Core Questionnaire in Measuring Financial Literacy: Questionnaire and guidance note for conducting Internationally Compatible Survey of Financial Literacy. Paris. OECD
- Peters E, Västfjäll D, Slovic P, Mertz CK, Mazzocco K, Dickert S. Numeracy and decision making. *Psychological Science*. 2006 May;17(5):407-13. doi: 10.1111/j.1467-9280.2006.01720.x. PMID: 16683928.
- Puneet Bushan, & Medury, Y. (2013). Financial literacy and its determinants. *International Journal of Engineering, Business and Enterprise Applications*, 4(2): 155-160.
- Ramakrishnan, R. (2012). Financial Literacy and Financial Inclusion, 29th SKOCH Summit 2012, Refueling Growth 8th & 9th June, Mumbai, India.
- Ronald, A. S, John, E. G. (2010). Financial Numeracy, Net Worth, and Financial Management Skills: Client Characteristics That Differ Based on Financial Risk Tolerance. *Journal of Financial Service Professionals*, 57-65.
- Saurabh Sharma. (2015). A Study on Financial Literacy among Young Employees of Private Sector in Jaipur City. *International Journal of Marketing and Financial Management*, 3(5), 11-18.
- Schuchardt, J., Sherman, D., Hanna, Tahira K. H., Angela, C. L., Palmer, L, & Xiao, J.J. (2009). Financial Literacy and Education Research Priorities. *Journal of Financial Counseling and Planning*, 20(2009).
- Shawn, C, Thomas, S. & Bilal, Z. (2009). Financial Literacy, Financial Decisions, and the Demand for Financial Services: Evidence from India and Indonesia. Working Paper 09-117, Harvard Business School.
- The Standard & Poor's Ratings Services Global Financial Literacy Survey (2014) retrieved from https://gflec.org/wp-content/uploads/2015/11/3313-Finlit_Report_FINAL-5.11.16.pdf?x46739
- Tullio, J. (2009). Financial Literacy. Discussion Paper 09/2010-06.
- Wendy L. W. & Karen, H. (2009). *Teachers' Background and Capacity to Teach Personal Finance: Results of a National Study*. National Endowment for Financial Education.