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Impact of Financial Education and Literacy on Investment Behaviour

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Abstract: ***Economists are beginning to investigate the causes and consequences of financial illiteracy to better understand why investment and retirement planning is lacking and why so many households arrive close to retirement with little or no wealth. This study reveals that many households are unfamiliar with the most basic financial and economic concepts needed to make saving and investment planning. Such financial illiteracy is widespread: young and older people in many countries appear miserably under-informed about basic financial computations, with serious implications for saving, investment planning, and other financial investment decisions. Governments and several non-profit organizations have undertaken initiatives to enhance financial literacy.***

This study estimates how financial education affects a person's financial literacy score, short-term and long-term financial behaviours from collected data. There are three financial education categories: at school level, college level and learning with additional courses. These courses detail has not been studied current literature about financial education. An essential indicator of people's capability to make financial and investment decisions is their level of financial literacy.

Results are found to be robust across different measurements of financial knowledge and behaviour, and the issues were specifically addressed. This study provides a comprehensive insight for policymakers as well as financial individual investors.

Keywords: Financial literacy, Financial education, Financial Behaviour, Investment Planning

I. INTRODUCTION

The Organization for Economic Cooperation and Development (OECD, 2005) defines "financial education" as: "The process by which financial consumers/investors improve their understanding of financial products and concepts and, through information, instruction, and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being." Building upon this definition, discuss the state of financial literacy and financial education programs, and deliberate whether investors give the impression of possessing the financial literacy to process financial evidence and articulate adequate saving plans.

II. LINKING FINANCIAL LITERACY AND ECONOMIC BEHAVIOUR

While the low levels of financial literacy are troubling in and of themselves, policymakers are most concerned because of the potential implications of financial illiteracy for economic behaviour. One example is offered by Hogarth, Anguelov, and Lee (2005), who demonstrate that low educated consumers are extremely represented amongst the "unbanked," those lacking any transaction account. The financial literacy definitions used by Lusardi and Mitchell (2014) and Remund (2010) closely match the ideas of being financially literate for this research. This includes understanding financial concepts and using that knowledge to make sound financial decisions. Other research has cited in their literature reviews that long-term and short-term decisions are an important component of financial literacy (Fernandes, Lynch, and Netemeyer, 2014). This study focuses on how financial education increases financial knowledge and the likelihood of engaging in different financial behaviours. It also incorporates the time dimension from previous studies by studying behaviours that are considered short-term and long-term.

III. INDIA'S GROWING FINANCIAL LITERACY

Financial literacy is the ability to worthily be able to possess many financial skills, such as personal finance management, budgeting, and investing. Financial investments and services have recently become widespread among people of all economic backgrounds. India's financial literacy rate among its young and adult population has been growing due to various factors, including recent technological advancements and media coverage. The Government of India and various regulators are constantly working towards growth by implementing financial literacy courses, workshops and schemes.

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From mobile banking to online payments and insurance; the country has a huge number of online financial services users. This helped improve India's financial literacy as the awareness and ease of insurance and banking increased.

Number of transactions concerning digital payments in India grew 5x from 1,004 crores (10.04 billion) in 2016-17 to 5,554 crores (55.54 billion) in 2020-21. Furthermore, the value of fintech transactions is expected to rise at a CAGR of 20% to US$ 138 billion in 2023 from US$ 66 billion in 2019.

IV. GOVERNMENT INITIATIVE TOWARDS FINANCIAL LITERACY

Strengthening financial inclusion in India has been an important agenda of the government and the various regulatory bodies. Efforts have also been taken to spread awareness and increase financial literacy among small businesses. Listed below are few such initiatives taken by respective regulatory authority: Reserve Bank of India (RBI); Securities and Exchange Board of India (SEBI); Insurance Regulatory and Development Authority of India (IRDAI) and Pension Fund Regulatory and Development Authority (PFRDA)

V. PURPOSE OF THIS STUDY

The target population of this study were Students, Employees, research scholars and of educational institutions employed and residing from selected cities of Tamilnadu. It was a cross-sectional quantitative research study. By using a detailed questionnaire, primary data were obtained. The sample size was 293; through convenience sampling. Descriptive analysis, parametric test, reliability test, and correlational examination with the aid of SPSS are knowledge investigation techniques used in this examination study to infer outcomes.

VI. RESEARCH OBJECTIVES

1) To discover the intervening impact of financial literacy and financial behaviour of target group of education institutions.

2) To understand the several investment behaviour with the financial literacy and education.

The main goal of this study is to identify the effectiveness of financial education offered in college, and other financial education certification courses. Financial education is studied various ways. Namely, whether financial education increases an investment and person's planning knowledge about various financial topics.

VII. OUTLOOK FOR FINANCIAL LITERACY

Financial literacy is defined as "people's ability to process economic information and make informed decisions about financial planning, wealth accumulation, debt, and pensions" (Lusardi and Mitchell, 2014). It is also the case that communities and a national economy with informed and financially literate consumers will have more stable and efficient markets (Braunstein and Welch, 2002; Bernanke, 2006). Annamarie Lusardi, a prominent economist conducting research in financial literacy, notes that "…just as it was not possible to live in an industrialized society without print literacy…so it is not possible to live in today's world without being financially literate." Economists are interested in studying financial literacy and financial education. Informed consumers are more equipped to make better financial decisions that can positively affect households. Even short-term effects of financial education courses (such as increased short-term saving) can have long-term impacts on a person's lifetime consumption. Previous research suggests four traditional approaches to financial education—employer-based, school-based, credit counselling, or community-based—all of which do not have clear results about their effectiveness (Gale and Levine, 2010). The higher levels of objective financial knowledge have been positively associated with earning positive investment returns (Chu et al. 2017), engaging in long-term financial behaviours related to saving and investing (Henager and Cude 2016), and reducing the odds of using high-cost alternative financial services such as pawn shops and tax refund anticipation loans (Robb et al. 2015). Financial education should increase financial knowledge and also help people behave differently, to make better financial decisions for themselves or their households. The financial behaviours may be hierarchal and that some behaviours may be more affected by financial knowledge (Hilgert, Hogarth, and Beverly 2003).

A. Findings and Analysis

The research says that being financial literacy should not only include an understanding of key financial concepts but also include the ability to manage personal finances through short-term decisions and long-range planning and investment behaviours.

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B. Socio-Demographic Profile

Out of 293 respondents, 152 were male respondents.181 respondents were married. 124 and 121 respondents responded from the age of 26 to 35 and 35 to 50, respectively. From the data, 171 many respondents have maximum qualifications as post-graduates and respondents were from academic research backgrounds. When the researcher reviewed the data, the type of fund used by the respondents for their investments, it was found that 283 respondents out of 293 were using their savings. 139 and 137 respondents gained investment knowledge at their college level and by taking additional courses, respectively.

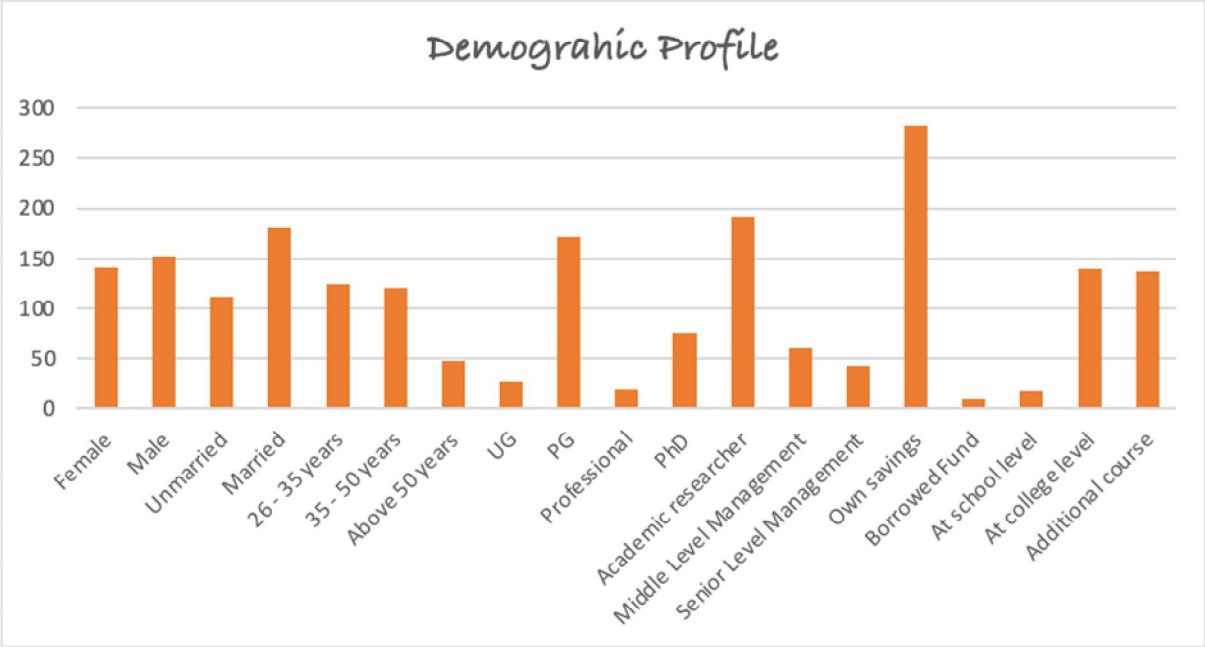

Figure-1

C. Rank Analysis

From the below table the order of investment preference answered by the respondents were Fixed deposit, Mutual funds, Gold, Shares and Real estate. Most of the respondents having the first priority for safety for principal and steady and standard return on Investment. Moreover, the respondents are having the basic awareness about the fixed Deposits than other form of investments.

Table-1

	Order of Preference						
Investment Nature	1	2	3	4	5	Weighted average	Rank
Fixed Deposits	102	65	35	33	58	2.59	1
Mutual Funds	75	82	39	64	33	2.65	2
Gold	99	74	25	19	76	2.66	3
Shares/Bonds/Debentures	75	76	52	30	60	2.74	4
Real Estate	54	88	51	65	35	2.79	5

1) Financial Literacy and Investment Knowledge

Financial illiteracy is particularly acute in some demographic groups. A survey conducted by the ANZ Banking Group in Australia found a correlation between low levels of financial literacy and low levels of education and income. A survey conducted by the Financial Services Authority in the UK found that younger people, those in low social classes, and those with lower incomes are the least sophisticated financial consumers. The Korean survey also shows a correlation between family income and education on students' performance on the financial literacy test (OECD, 2005).

Financial literacy is defined by five broad principles, the overarching goal of financial literacy is to teach people how to earn, spend, save, borrow, and protect their money. Financial literacy applications on the capacity to properly manage one's personal finances,

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which necessitates experience in making sensible financial decisions including savings, insurance, real estate, college payments, budgeting, retirement, and tax preparation.

Evidence from other surveys shows that survey respondents are often more confident in their performance than basic tests of financial literacy would warrant. The OECD reports that survey conducted in Germany by Commerzbank AG found that 80 percent of respondents felt confident about their understanding of financial issues, while only 42 percent were able to correctly answer half of the pertinent survey questions. Similarly, while 67 percent of respondents in the Australian survey indicated that they had an understanding of the concept of interest compounding, only 28 percent were able to correctly answer a question testing that concept. Overconfidence in one's financial knowledge may be a deterrent to seeking out professional advice, widening the 'knowledge gap'.

The researcher framed the following hypotheses to identify the respondents interest and desirability of time to learn about the financial aspects and how to manage such investments with respective of their gender, marital status, age, educational qualification and professional status.

2) Gender

H_0: Respondents Gender and their time of exposure to learn about how to manage and plan investments are independent.

H_A: Respondents Gender and their time of exposure to learn about how to manage and plan investments are not independent.

Table-2

Chi-Square Tests			
	Value	**df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	35.358[a]	2	0.000
Likelihood Ratio	42.215	2	0.000
Linear-by-Linear Association	33.690	1	0.000

Table-3

Crosstab					
		At school level	At college level	Additional course	Total
Gender	Female	17	79	45	141
	Male	0	60	92	152
Total		17	139	137	293

The chi square value of 35.358 with asymptotic significance value 0.000, indicates that the null hypothesis is rejected. Hence, respondents gender and their time of exposure to learn about how to manage and plan investments are not independent. From the crosstabs table it is found that most of female respondents learn about how to manage and plan investments at college level where as male learn through additional courses.

3) Marital Status

H_0: Respondents marital status and their time of exposure to learn about how to manage and plan investments are independent.

H_A: Respondents marital status and their time of exposure to learn about how to manage and plan investments are not independent.

Table-4

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	27.687	2	0.000
Likelihood Ratio	33.377	2	0.000
Linear-by-Linear Association	27.482	1	0.000

Table-5

Crosstab					
		At school level	At college level	Additional course	Total
Marital Status	Unmarried	0	40	72	112
	Married	17	99	65	181
Total		17	139	137	293

The chi square value of 27.687 with asymptotic significance value 0.000, indicates that the null hypothesis is rejected. Hence, respondents marital status and their time of exposure to learn about how to manage and plan investments are not independent. From the crosstabs table it is found that most of the married respondents learn about how to manage and plan investments at college level where as countable number of unmarried respondents learn through additional courses.

4) Age Group

H_0: Respondents age group and their time of exposure to learn about how to manage and plan investments are independent.

H_A: Respondents age group and their time of exposure to learn about how to manage and plan investments are not independent.

Table-6

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21.480[a]	4	0.000
Likelihood Ratio	27.511	4	0.000
Linear-by-Linear Association	18.578	1	0.000

Table-7

Crosstab					
		At school level	At college level	Additional course	Total
Age group:	26 - 35 years	0	52	72	124
	35 - 50 years	11	60	50	121
	Above 50 years	6	27	15	48
Total		17	139	137	293

The chi square value of 21.480 with asymptotic significance value 0.000, indicates that the null hypothesis is rejected. Hence, respondents with different age group and their time of exposure to learn about how to manage and plan investments are not independent. From the crosstabs table it is found that 30-50 years of age groups learn about how to manage and plan investments at college level where in the age group of 26 to 35 years of age group learn through additional courses.

5) Education Qualification

H_0: Respondents education qualification and their time of exposure to learn about how to manage and plan investments are independent.

H_A: Respondents education qualification and their time of exposure to learn about how to manage and plan investments are not independent.

Table-8

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.508[a]	6	0.147
Likelihood Ratio	12.047	6	0.061
Linear-by-Linear Association	2.546	1	0.111

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Table-9

Crosstab					
		At school level	At college level	Additional course	Total
Educational Qualification	UG	0	13	14	27
	PG	11	74	86	171
	Professional	0	14	5	19
	PhD	6	38	32	76
Total		17	139	137	293

The chi square value of 9.508 with asymptotic significance value 0.147, indicates that the null hypothesis is accepted. Hence, respondents with different education background and their time of exposure to learn about how to manage and plan investments are independent. From the crosstabs table it is found that most of the group of respondents from PG as educational back ground having the management and planning of investment at college level and as well additional courses.

6) Professional Status

H_0: Respondents professional category and their time of exposure to learn about how to manage and plan investments are independent.

H_A: Respondents professional category and their time of exposure to learn about how to manage and plan investments are not independent.

Table-10

Crosstab					
		At school level	At college level	Additional course	Total
Profession Group	Academic researcher	14	91	86	191
	Middle Level Management	0	42	18	60
	Senior Level Management	3	6	33	42
Total		17	139	137	293

Table-11

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	33.367[a]	4	0.000
Likelihood Ratio	38.637	4	0.000
Linear-by-Linear Association	6.410	1	0.011

The chi square value of 33.367 with asymptotic significance value 0.000, indicates that the null hypothesis is rejected. Hence, respondents with professional category and their time of exposure to learn about how to manage and plan investments are not independent. From the crosstabs table it is found that academic researchers groups learn about how to manage and plan investments at college level and with the additional course.

7) Financial Education

Many employers, particularly those offering Defined Contributions (DC) pensions to their workers, have increasingly offered some form of financial education in the workplace.

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By providing information and improving financial literacy, seminars should reduce planning costs. If these factors play a role in saving decisions, the analysis of these programs provides a useful way to evaluate the effects of information and financial literacy on savings.

Another approach to evaluate the effects of financial education programs is to run experiments where a randomly chosen group of participants is exposed to education and their behaviour is then compared to an otherwise similar group which was not exposed to the program, Duflo and Saez (2003). A random group of non-faculty employees at a large university were given financial incentives to participate in a benefit fair. Participation in pension plans and pension contributions of this group were then compared to those who were not induced to participate. According to the authors (Duflo and Saez, 2003 and 2004), the effects of this program were found to be mixed and overall pretty small. Attending the benefit fair induced more employees to participate in pension plans but the increase in contributions was negligible.

Other authors have argued that even after households become aware they should change their saving behaviour via information sessions or other incentives, they fail to follow through on their realizations with their subsequent actions (Choi, Laibson, Madrian and Metrick (2004)). Thus, the fact that participants attend retirement seminars and state they would like to change their saving behaviour, as reported for example by Clark and D'Ambrosio (2002) and Clark, D'Ambosio, McDermed and Sawant (2003), does not necessarily mean that these programs are effective. In fact, Madrian and Shea (2001) show that after being exposed to financial education, many participants expressed plans to start contributing to pensions or to increase their contributions but, at least in the short-run, failed to do so.

The different financial terms been structured in the questionnaire, questions like Thinking about college level, have you heard of or learned about the following terms, Interest, Return on Investment, Dividend, EBIT and Income tax. From the above observation it is found that many of the respondents learned about these terms during their school and college level only.

Table-12

		Heard about it	Learned about it	Never heard of it
Interest	Count	21	267	5
	Percentage	7%	91%	2%
Return on Investments	Count	82	166	45
	Percentage	28%	57%	15%
Dividend	Count	109	139	45
	Percentage	37%	47%	15%
Income Tax]	Count	69	202	22
	Percentage	24%	69%	8%
EBIT	Count	91	119	83
	Percentage	31%	41%	28%

The following postulation been formed to observe the financial education and literacy level among the respondents with their gender, marital status, age, educational qualification and professional status. The Cross tabulation and chi-square test been assessed.

8) Interest

Null Hypothesis: Respondents demographic profile and financial terms literacy on interest are independent.

Alternate Hypothesis: Respondents demographic profile and financial terms literacy on interest are not independent.

Table-13

Chi-Square Tests			
Interest			
	Value	df	Asymptotic Significance (2-sided)

Gender			
Pearson Chi-Square	4.735[a]	2	0.094
Likelihood Ratio	6.66	2	0.036
Linear-by-Linear Association	0.841	1	0.359
Marital Status			
Pearson Chi-Square	3.852[a]	2	0.146
Likelihood Ratio	3.799	2	0.15
Linear-by-Linear Association	1.841	1	0.175
Age Group			
Pearson Chi-Square	37.712[a]	4	0.000
Likelihood Ratio	29.998	4	0
Linear-by-Linear Association	0.62	1	0.431
Edu Qualification			
Pearson Chi-Square	80.608[a]	6	0.000
Likelihood Ratio	35.997	6	0
Linear-by-Linear Association	5.858	1	0.016
Profession Group			
Pearson Chi-Square	60.366[a]	4	0.000
Likelihood Ratio	47.464	4	0
Linear-by-Linear Association	1.95	1	0.163
N of Valid Cases	293		

9) Interference

The chi square value of 4.735 and 3.852 with asymptotic significance value 0.094 and 0.146, indicates that the null hypothesis is accepted from the gender and marital status of the respondents. The common term Interest been learned by male and married respondents. Hence, respondents with gender and marital status and their financial literacy on Interest independent. From the cross-table it is found that male and married respondents have learned about the term interest at their school and college level.

10) Return on Investment

Null Hypothesis: Respondents demographic profile and financial terms literacy on Return on investment are independent.

Alternate Hypothesis: Respondents demographic profile and financial terms literacy on Return on investment are not independent.

Table-14

Chi-Square Tests			
	RoI		
	Value	df	Asymptotic Significance (2-sided)
Gender			
Pearson Chi-Square	25.553[a]	2	0.000
Likelihood Ratio	27.195	2	0
Linear-by-Linear Association	24.134	1	0
Marital Status			
Pearson Chi-Square	803[a]	2	0.669
Likelihood Ratio	0.811	2	0.667
Linear-by-Linear	0.592	1	0.442

Association			
Age Group			
Pearson Chi-Square	2.570[a]	4	0.632
Likelihood Ratio	2.495	4	0.646
Linear-by-Linear Association	0.006	1	0.94
Edu Qualification			
Pearson Chi-Square	59.264[a]	6	0.00
Likelihood Ratio	67.493	6	0
Linear-by-Linear Association	40.918	1	0
Profession Group			
Pearson Chi-Square	40.559[a]	4	0.000
Likelihood Ratio	41.839	4	0
Linear-by-Linear Association	7.472	1	0.006
N of Valid Cases	293		

Interference:
The chi square value of 803 and 2.570 with asymptotic significance value 0.669 and 0.632, indicates that the null hypothesis is accepted from the marital status and by the different age group of the respondents. The common tern RoI been learned by married and by the different age group respondents. Hence, respondents with gender and marital status and their financial literacy on RoI are independent. From the cross-table it is found that married and respondents from 26-35 and 35-50 years have learned about the term RoI at their school and college level.

Dividend:
Null Hypothesis: Respondents demographic profile and financial terms literacy on Dividend are independent.
Alternate Hypothesis: Respondents demographic profile and financial terms literacy on Dividend are not independent.

Table-15

Chi-Square Tests			
	Dividend		
	Value	df	Asymptotic Significance (2-sided)
Gender			
Pearson Chi-Square	29.928[a]	2	0.000
Likelihood Ratio	31.621	2	0
Linear-by-Linear Association	29.563	1	0
Marital Status			
Pearson Chi-Square	13.054[a]	2	0.001
Likelihood Ratio	13.122	2	0.001
Linear-by-Linear Association	4.737	1	0.03
Age Group			
Pearson Chi-Square	15.531[a]	4	0.004
Likelihood Ratio	15.42	4	0.004

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Linear-by-Linear Association	6.871	1	0.009
Edu Qualification			
Pearson Chi-Square	75.425[a]	6	0.000
Likelihood Ratio	102.723	6	0
Linear-by-Linear Association	66.63	1	0
Profession Group			
Pearson Chi-Square	40.775[a]	4	0.000
Likelihood Ratio	42.375	4	0
Linear-by-Linear Association	9.282	1	0.002
N of Valid Cases	293		

The chi square value of all demographic group with above mentioned asymptotic significance value 0.000, indicates that the null hypothesis is rejected. Hence, respondents with different demographic profile and financial terms literacy on Dividend are not independent.

EBIT:

Null Hypothesis: Respondents demographic profile and financial terms literacy on EBIT are independent.

Alternate Hypothesis: Respondents demographic profile and financial terms literacy on EBIT are not independent.

Table-16

Chi-Square Tests			
	EBIT		
	Value	df	Asymptotic Significance (2-sided)
Gender			
Pearson Chi-Square	59.855[a]	2	0.000
Likelihood Ratio	65.426	2	0
Linear-by-Linear Association	53.257	1	0
	Marital Status		
Pearson Chi-Square	7.967[a]	2	0.019
Likelihood Ratio	8.055	2	0.018
Linear-by-Linear Association	1.17	1	0.279
Age Group			
Pearson Chi-Square	15.622[a]	4	0.004
Likelihood Ratio	16.022	4	0.003
Linear-by-Linear Association	0.17	1	0.68
Edu Qualification			
Pearson Chi-Square	6.932[a]	4	0.14
Likelihood Ratio	7.037	4	0.134
Linear-by-Linear Association	1.065	1	0.302
Profession Group			
Pearson Chi-Square	15.280[a]	4	0.004
Likelihood Ratio	16.935	4	0.002

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Linear-by-Linear Association	0.04	1	0.842
N of Valid Cases	293		

The chi square value of 6.932 with asymptotic significance value 0.14, indicates that the null hypothesis is accepted from the different education qualification of the respondents. The EBIT been learned by the different age group of respondents at their school and college level. Hence, respondents with age group and their financial literacy on EBIT are independent.

Income Tax:

Null Hypothesis: Respondents demographic profile and financial terms literacy on Income Tax are independent.

Alternate Hypothesis: Respondents demographic profile and financial terms literacy on Income Tax are not independent.

Table-17

Chi-Square Tests			
	Income Tax		
	Value	df	Asymptotic Significance (2-sided)
Gender			
Pearson Chi-Square	9.320[a]	2	0.009
Likelihood Ratio	9.403	2	0.009
Linear-by-Linear Association	8.566	1	0.003
Marital Status			
Pearson Chi-Square	3.852[a]	2	0.146
Likelihood Ratio	3.799	2	0.15
Linear-by-Linear Association	1.841	1	0.175
	Age Group		
Pearson Chi-Square	6.932[a]	4	0.14
Likelihood Ratio	7.037	4	0.134
Linear-by-Linear Association	1.065	1	0.302
Edu Qualification			
Pearson Chi-Square	71.670[a]	6	0.000
Likelihood Ratio	75.923	6	0
Linear-by-Linear Association	10.61	1	0.001
Profession Group			
Pearson Chi-Square	55.262[a]	4	0.000
Likelihood Ratio	53.532	4	0
Linear-by-Linear Association	13.798	1	0
N of Valid Cases	293		

The chi square value of 3.852 and 6.932 with asymptotic significance value 0.146 and 0.14, indicates that the null hypothesis is accepted from the marital status and by the different age group of the respondents. The Income tax been learned by married and by the different age group respondents.

Hence, respondents with gender and marital status and their financial literacy on Income Tax are independent. From the cross-table it is found that married and respondents from 26-35 years have learned about the term Income tax at their school and college level.

VIII. FINANCIAL AND INVESTMENT BEHAVIOUR

In addition to objective financial knowledge, a number of studies have investigated the effect of subjective financial knowledge on financial behaviours. Perceived financial knowledge has typically been measured through self-assessment questions such as "how would you assess your overall financial knowledge?" (Lusardi and Mitchell 2017) and has been found to explain as much variation in financial behaviours as objective financial knowledge. For instance, Allgood and Walstad (2016) found that perceived financial knowledge was associated with investment behaviours, no matter the level of objective financial knowledge, and that objective financial knowledge was only positively related to good debt behaviours when perceived financial knowledge was low. Further, Henager and Cude (2016) suggested that perceived financial knowledge had a stronger relationship than objective knowledge with short-term financial behaviours related to spending and emergency saving. Finally, Montford and Goldsmith (2016) found that financial self-efficacy, or an individual's belief in their capability to reach their financial goals, was positively related to investment risk taking.

Although some research has found positive association between perceived financial knowledge and financial behaviours, other research has identified the presence of an overconfidence effect.

Overconfidence in financial knowledge occurs when an individual's perceived financial knowledge is greater than their objective financial knowledge (Chu et al. 2017; Robb et al. 2015). Robb et al. (2015) found that higher levels of overconfidence in financial knowledge was associated with greater odds of high-cost alternative financial services use, even when controlling for objective need for these services. Moreover, Chu et al. (2017) suggested that financially overconfident households were more likely to directly invest in stocks than to diversify with mutual funds, potentially an indication of risky financial behaviour.

Financial education appears to have a positive effect on long-term behaviours. These behaviours do not have immediate feedback. For example, retiring happens many years in the future and if a person incorrectly estimates how much they need or does not save at all, there is no way to fix this mistake. The long-term behaviours are less susceptible to learning through experience and therefore may be influenced with formal instruction.

Then the effects of financial education on different short-term financial behaviours such as being able to cover their bills each month, having a checking account, and paying their credit card in full each month. As well helps to estimates the effects of financial education on different long-term financial behaviours. Those behaviours include having an emergency fund, having a savings account, having non-retirement investments, figuring out how much they need for retirement, and having non-employer retirement accounts.

Factor analysis

Table-18

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.809
Bartlett's Test of Sphericity	Approx. Chi-Square	5885.513
	df	153
	Sig.	0.000

KMO and Bartlett's test indicates sample adequacy and non-existence of multi-collinearity in the data. The communalities table indicates that all the variables give significant information to form the factors (extraction > 0.6).

Table-19

Communalities		
	Initial	Extraction
I am sure that I can make the correct investment decision.	1.000	0.689
I am confident of my ability to do better than others in investment decision.	1.000	0.759
I believe I can master the future trend for my investment.	1.000	0.725
I control and am fully responsible for the results of my investment Decisions.	1.000	0.724

I think market trend is often consistent with my guess.	1.000	0.680
My past investment successes were due to my specific skills.	1.000	0.672
I always consider that profit made is due to my successful investment strategy.	1.000	0.776
I rely on my previous experiences in the market for my next investment.	1.000	0.652
I forecast the changes in future Investment scenario based on the recent trends.	1.000	0.644
I change my opinion immediately if I get to know the views from an analyst.	1.000	0.643
I believe I have greater control over my investment.	1.000	0.742
I can influence the market by high volume investment	1.000	0.735
I can predict the market in a more logical manner.	1.000	0.842
I tend to invest more when I am successful in previous investment.	1.000	0.630
Other investors' decisions of choosing investment types have impact in my investment decisions.	1.000	0.899
Other investors' decisions on the volume of investment have impact in my investment decisions.	1.000	0.870
Other investors' decisions of buying and selling investment pattern have impact in my investment decisions.	1.000	0.909
I usually react quickly to the changes of other investors' decisions and follow their reactions.	1.000	0.710
Extraction Method: Principal Component Analysis.		

Extraction Sums of Square Table-20

Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings	
% of Variance	Cumulative %	Total	% of Variance	Cumulative %
54.725	54.725	4.766	26.479	26.479
12.058	66.783	4.420	24.557	51.036
7.118	73.902	4.116	22.866	73.902

From the total variance explained table it is found that 73.90% of variances (information) are extracted from the variables and three factors are formed.

Component Matrix-Table-21

	Component		
	1	2	3
I believe I can master the future trend for my investment.	0.851	0.023	-0.007
I can predict the market in a more logical manner.	0.826	0.232	-0.326
My past investment successes were due to my specific skills.	0.799	0.135	0.125
I forecast the changes in future Investment scenario based on the recent trends.	0.799	-0.019	-0.074
I can influence the market by high volume investment	0.795	-0.057	-0.316
I tend to invest more when I am successful in previous investment.	0.785	-0.079	-0.092
I rely on my previous experiences in the market for my next investment.	0.773	0.202	0.118
Other investors' decisions of choosing investment types have impact in my investment decisions.	0.757	-0.570	0.028

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Other investors' decisions of buying and selling investment pattern have impact in my investment decisions.	0.751	-0.587	0.031
I am confident of my ability to do better than others in investment decision.	0.750	-0.057	0.439
I always consider that profit made is due to my successful investment strategy.	0.734	0.486	-0.017
Other investors' decisions on the volume of investment have impact in my investment decisions.	0.719	-0.593	0.038
I think market trend is often consistent with my guess.	0.705	0.286	-0.318
I believe I have greater control over my investment.	0.703	0.498	-0.009
I usually react quickly to the changes of other investors' decisions and follow their reactions.	0.686	-0.473	0.125
I control and am fully responsible for the results of my investment Decisions.	0.643	0.443	0.338
I am sure that I can make the correct investment decision.	0.590	0.193	0.552
I change my opinion immediately if I get to know the views from an analyst.	0.586	0.008	-0.547
Extraction Method: Principal Component Analysis.			
a. 3 components extracted.			

Rotated Component Matrix-Table-22

	Component			
	1	2	3	
Other investors' decisions of buying and selling investment pattern have impact in my investment decisions	0.913	0.235	0.143	Herd Behaviour
Other investors' decisions of choosing investment types have impact in my investment decisions.	0.903	0.246	0.153	
Other investors' decisions on the volume of investment have impact in my investment decisions.	0.900	0.209	0.127	
I usually react quickly to the changes of other investors' decisions and follow their reactions.	0.795	0.163	0.227	
I can predict the market in a more logical manner.	0.256	0.807	0.354	Illusion of control
I change my opinion immediately if I get to know the views from an analyst.	0.271	0.754	-0.038	
I think market trend is often consistent with my guess.	0.144	0.746	0.320	
I can influence the market by high volume investment	0.471	0.688	0.199	
I forecast the changes in future Investment scenario based on the recent trends.	0.472	0.524	0.382	
I believe I can master the future trend for my investment.	0.476	0.520	0.477	
I tend to invest more when I am successful in previous investment.	0.510	0.510	0.332	
I control and am fully responsible for the results of my investment Decisions.	0.059	0.279	0.802	Over Confidence
I am sure that I can make the correct investment decision.	0.253	0.009	0.791	
I am confident of my ability to do better than others in investment decision.	0.535	0.106	0.680	
I always consider that profit made is due to my successful investment strategy.	0.035	0.608	0.637	
I believe I have greater control over my investment.	0.008	0.587	0.631	
I rely on my previous experiences in the market for my next investment.	0.302	0.439	0.607	

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My past investment successes were due to my specific skills.	0.372	0.428	0.592	
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 7 iterations.				

Component Transformation Matrix-Table-23

Component	1	2	3
Herd Behaviour	0.583	0.596	0.552
Illusion of control	-0.804	0.324	0.498
Over Confidence	0.118	-0.734	0.668

Correlation Analysis-Table-24

	Mean	Std. Deviation	Level
Herd Behaviour	12.7679	3.13193	Medium
Illusion of control	21.5973	5.5073	Medium
Over Confidence	24.0137	4.86951	Medium

Correlations				
		Herd Behaviour	Illusion of control	Over Confidence
Herd Behaviour	Pearson Correlation	1	.663**	.712**
	Sig. (2-tailed)		<.001	<.001
	N	293	293	293
Illusion of control	Pearson Correlation	.663**	1	.813**
	Sig. (2-tailed)	<.001		<.001
	N	293	293	293
Over Confidence	Pearson Correlation	.712**	.813**	1
	Sig. (2-tailed)	<.001	<.001	
	N	293	293	293
** Correlation is significant at the 0.01 level (2-tailed).				

There is significant correlation (r>=0.6, sig <=0.000) between all the factors. All the factors influence each other significantly

IX. FINANCIAL BEHAVIOUR ANALYSIS WITH THE DEMOGRAPHIC PROFILE

Gender:

Null hypothesis: Both male and female have on average same opinion towards Herd Behaviour, Illusion of control and over Confidence behaviour.

Alternate hypothesis: Both male and female do not have on average same opinion towards Herd Behaviour, Illusion of control and over Confidence behaviour.

T-Test-Table-25

Group Statistics									
Gender		N	Mean	Std. Deviation	Std. Error Mean	T statistics	DF	Sig	Inference

Herd Behaviour	Female	141	12.5319	3.13632	0.26413	-1.243	291	0.215	Accept Ho
	Male	152	12.9868	3.12221	0.25324				
Illusion of control	Female	141	22.0213	5.05041	0.42532	1.271	291	0.205	Accept Ho
	Male	152	21.2039	5.88897	0.47766				
Over Confidence	Female	141	23.5532	5.25007	0.44214	-1.563	291	0.119	Accept Ho
	Male	152	24.4408	4.46285	0.36198				

Inference:
The t-statistics -1.243 with sig value (0.215 >0.05),1.271 with (0.205 >0.05), and -1.563 and (0.119 >0.05), indicates that the null hypothesis is accepted. Hence, Both male and female have on average same opinion towards Herd Behaviour, Illusion of control and over Confidence behaviour.

Marital Status:
Null hypothesis: Both married and unmarried have on average same opinion towards Herd Behaviour, Illusion of control and over Confidence behaviour.
Alternate hypothesis: Both married and unmarried do not have on average same opinion towards Herd Behaviour, Illusion of control and over Confidence behaviour.

T-Test-Table-26

Marital Status		N	Mean	Std. Deviation	Std. Error Mean	t statistics	df	sig	Inference
Herd Behaviour	Unmarried	112	11.8036	3.18736	0.30118	-4.266	291	0.000	Reject Ho
	Married	181	13.3646	2.95140	0.21938				
Illusion of control	Unmarried	112	20.8750	5.98064	0.56512	-1.772	291	0.077	Accept Ho
	Married	181	22.0442	5.15948	0.38350				
Over Confidence	Unmarried	112	22.3036	5.48682	0.51846	-4.912	291	0.000	Reject Ho
	Married	181	25.0718	4.11776	0.30607				

Inference:
The t-statistics (-4.266) with sig value (0.000 <0.05) and -4.912 with sig value (0.000 <0.05) and indicates that the null hypothesis is rejected. Hence, Both married and unmarried respondents do not have on an average same opinion towards Herd Behaviour and over Confidence behaviour. From the mean values it is found that married respondents have higher opinion from heard, illusion of control and overconfidence behaviour than the unmarried respondents. The married respondents having different approach towards their financial education and investments plans.

Age Group:
Null hypothesis: All age group have on average same opinion towards Herd Behaviour, Illusion of control and over Confidence behaviour.
Alternate hypothesis: All age group do not have on average same opinion towards Herd Behaviour, Illusion of control and over Confidence behaviour.

Inference:
From the below data, the F-statistics 13.354 with sig value 0.000 <0.05,6.253 with sig value 0.000 <0.05 and 13.691 sig value 0.000 <0.05 indicates that the null hypothesis is rejected. Hence, all age group respondents do not have on average same opinion towards Herd Behaviour, Illusion of control and over Confidence behaviour. From the mean values it is found that respondent's with age group above 50 years have higher opinion, than other age group respondents.

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Test-Table-27

Factor	Age Group	N	Mean	Std. Deviation	F	Sig.	Inferences
Herd Behaviour	26 - 35 years	124	11.8710	3.04697	13.354	0.000	Reject Ho
	35 - 50 years	121	13.0248	2.72171			
	Above 50 years	48	14.4375	3.54849			
	Total	293	12.7679	3.13193			
Illusion of control	26 - 35 years	124	20.9597	5.78672	6.253	0.002	Reject Ho
	35 - 50 years	121	21.2562	4.07744			
	Above 50 years	48	24.1042	7.11079			
	Total	293	21.5973	5.50730			
Over Confidence	26 - 35 years	124	22.6129	5.39604	13.961	0.000	Reject Ho
	35 - 50 years	121	24.3802	3.19702			
	Above 50 years	48	26.7083	5.66422			
	Total	293	24.0137	4.86951			

Education Qualification:

Null hypothesis: All education group have on average same opinion towards Herd Behaviour, Illusion of control and over Confidence behaviour.

Alternate hypothesis: All education group do not have on average same opinion towards Herd Behaviour, Illusion of control and over Confidence behaviour.

Test-Table-28

Factor	Education Qualification	N	Mean	Std. Deviation	F	Sig.	Inferences
Herd Behaviour	UG	27	14.5185	5.56341	5.788	0.001	Reject Ho
	PG	171	12.2047	2.07766			
	Professional	19	13.3158	2.05623			
	PhD	76	13.2763	3.80736			
	Total	293	12.7679	3.13193			
Illusion of control	UG	27	25.8889	9.15815	6.807	0.000	Reject Ho
	PG	171	21.4386	3.98682			
	Professional	19	20.6842	2.35826			
	PhD	76	20.6579	6.62229			
	Total	293	21.5973	5.50730			

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Over Confidence	UG	27	29.5926	5.49307	16.039	0.000	Reject Ho
	PG	171	23.1228	4.05145			
	Professional	19	23.3158	3.14559			
	PhD	76	24.2105	5.39460			
	Total	293	24.0137	4.86951			

Inference:

The F-statistics 5.788),6.807 and 16.039 with sig value (0.000 <0.05indicates that the null hypothesis is rejected. Hence, all education group respondents do not have on average same opinion towards Herd Behaviour, Illusion of control and over Confidence behaviour. From the mean values it is found that respondent's with Professional group have higher opinion Herd Behaviour and Illusion behaviour, than other group respondents. Whereas Overconfidence more observed from PhD group of respondents, this maybe they have more financial literacy over a period of time.

Professional group:

Null hypothesis: All professional group have on average same opinion towards Herd behaviour, Illusion of control and over Confidence behaviour.

Alternate hypothesis: All professional group do not have on average same opinion towards Herd behaviour, Illusion of control and over Confidence behaviour.

Test-Table-29

Factor	Professional Group	N	Mean	Std. Deviation	F	Sig.	Inferences
Herd Behaviour	Academic researcher	191	13.1780	3.23626	8.230	0.000	Reject Ho
	Middle Level Management	60	11.3500	2.66697			
	Senior Level Management	42	12.9286	2.70855			
	Total	293	12.7679	3.13193			
Illusion of control	Academic researcher	191	22.1885	6.26486	5.446	0.005	Reject Ho
	Middle Level Management	60	19.5500	3.03329			
	Senior Level Management	42	21.8333	3.61512			
	Total	293	21.5973	5.50730			
Over Confidence	Academic researcher	191	24.2827	5.37476	4.740	0.009	Reject Ho
	Middle Level Management	60	22.4000	3.02644			
	Senior Level Management	42	25.0952	4.05937			
	Total	293	24.0137	4.86951			

Inference:

The F-statistics 8.230,5.466 and 4.740 with sig value (0.000 <0.05) indicates that the null hypothesis is rejected. Hence, all profession group respondents do not have on average same opinion towards Herd Behaviour, Illusion of control and over Confidence behaviour.

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From the mean values it is found that respondent's with senior management level have higher opinion heard and over confidence behaviour than other group respondents. The respondents from Academic researcher group have higher opinion illusion of control behaviour than other group respondents

X. SUMMARY AND CONCLUSION

The order of investment preference answered by the respondents were Fixed deposit, Mutual funds, Gold, Shares and Real estate. The respondents with different education background and their time of exposure to learn about how to manage and plan investments are independent. The learning about the investment and planning can be as part of curriculum.

The respondent's with age group above 50 years have higher opinion and Professional group have higher opinion Herd behaviour and Illusion behaviour, than other group respondents. Whereas Overconfidence is observed in respondents with PhD qualification; the possible reason for this may be because of the higher level of financial literacy in them. From the mean values it is found that respondent's with senior management level have higher opinion herd and over confidence behaviour than other group respondents. The respondents from Academic researcher group have higher opinion illusion of control behaviour than other groups respondents.

The importance of financial literacy entails having a basic understanding of finances is essential. With any educational plan, the continuous learning process of the personal finances. Before you spend money, you must understand how it functions. This requires time and careful application. Too many of us have discovered the importance of money too late in life or what it means to be drowning in debt.

Suggestions for educating Financial Well-being from School level:

1) Begin early. Evidence suggests that by the age of seven, children's attitudes toward money are well developed. So, beginning with pre-school, incorporate learning about the world of money into your curriculum.

2) Put what you've learned into action. It has been demonstrated that combining in-class and experiential learning is the most effective and starting a school savings bank, encourage student groups to open bank accounts or teach children how to manage a budget.

3) Make the most of everyday occurrences. Financial education can be especially effective when combined with a chance for the young person to put it into practice.

4) Include parents and caregivers. School-based financial education, like other areas of learning, will be most successful when parents participate as well.

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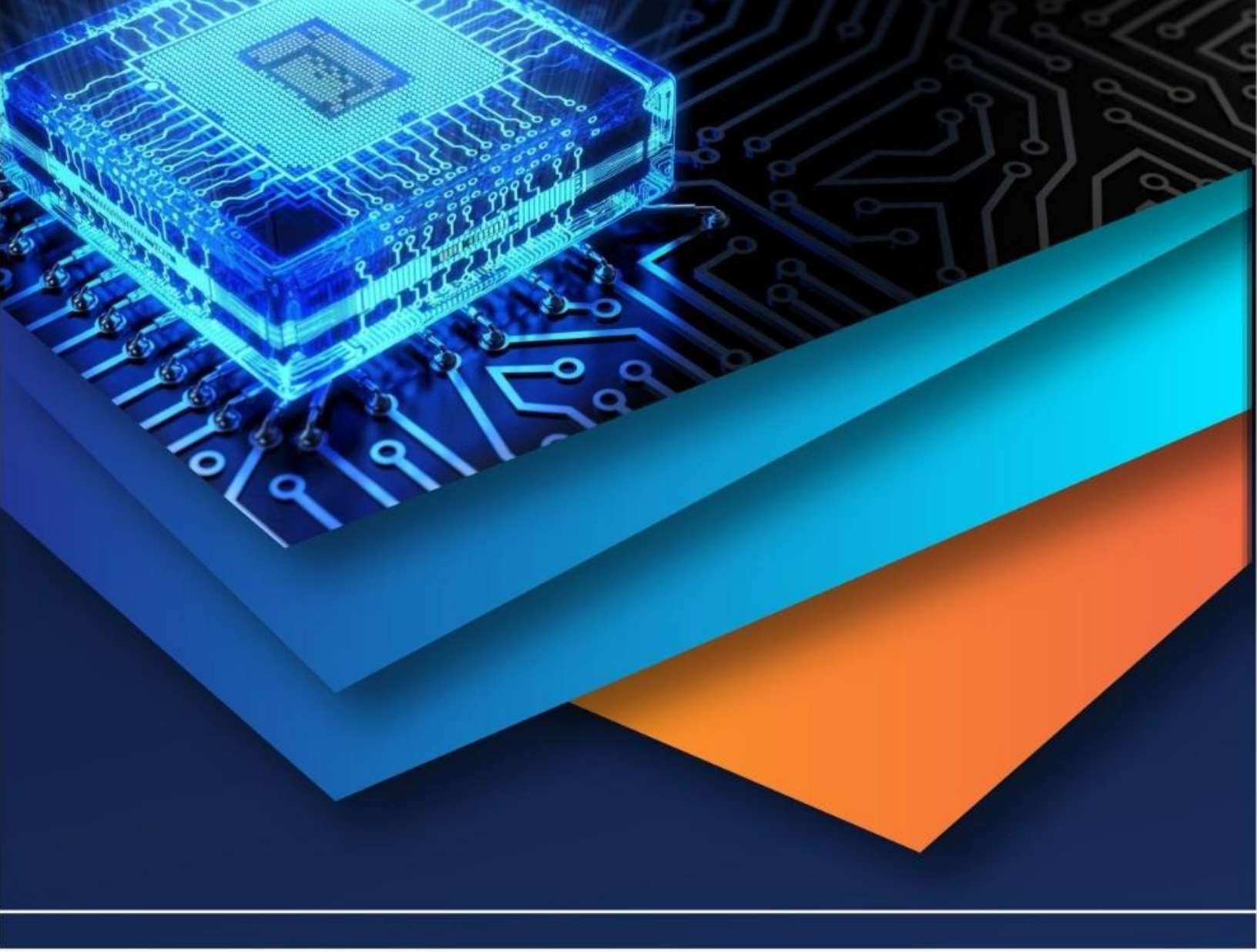

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