Financial literacy for Mutual Fund Investment: An extensive study on investors of Bangladesh

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Abstract— Peoples are always intending to invest their savings for several security purposes, but the crucial matter of concern is that where they are investing. Thinking of such investment options, capital market is a superior alternative all the time. Panic due to lack of financial knowledge about that market acts as crucial parameter in becoming the people's choice of investment. After went over a myriad of investment choices, mutual fund would be a secure platform to invest. The main purpose of this study is to get an overview about the financial literacy level of Bangladeshi investors who invest in mutual fund and trying to assess the implication of financial literacy on investment intension. Data were collected with the help of online survey method from primary sources on the basis of a well-structured questionnaire where convenient sampling is applicable due to focus on mutual fund investors. Respondents' financial knowledge level is evaluated by asking eleven specific questions on varied financial concepts following the G20 survey of OECD and investment intention is measured by Ajzen's conceptual and methodological framework. Based on the descriptive statistics, Correlation is used to analyze the collected primary data. Some significant findings are uncovered like Bangladeshi investors belong to low literacy level. Study also indicates a negligible inverse relationship between financial literacy level and investment intention of investors which in turn stimulate existing investors to recommend others to invest in mutual fund due to low literacy level. So it is profound that low literate investors can be a vital key to promote mutual fund and enrich financial market of Bangladesh.

Keywords— Financial knowledge, Literacy, Mutual Fund, Investment intention, Bangladesh.

I. INTRODUCTION

"Do not save, what is left after spending but spend what is left after savings" and this is exactly what lead to the success of the banking business overnight. Declining bank interest on the other hand, rising inflation as well as dramatically increase of commodity prices, the mass people can no longer rely on savings only. On the contrary investment along with regular earnings can be a direction of new light. Among the lots of investment alternatives, mutual fund can be a best option due to its portfolio investment concept. Even though every investment is related with risks but long term investment provides income facility at a compound rate. The people who are confused about their profitable investment, in this case

investing in mutual fund are the most convenient for themselves. Mutual Fund will invest directly on behalf of the investors. That is why there are fund managers in different mutual fund companies based on their educational experience and skill decide where the investor will benefit the most. From the concept of mutual fund, can't we say that the financial literacy of the investor is not always crucial in this case? Investigating such scenarios is the main purpose of our paper, where trying to assess the implication of financial literacy on investment intension. Though mutual fund started in 1980, but still now the market is small compared to the time duration. Mutual fund in Bangladesh is suffering from lack of publicity among the retail investors, whether it is a standard

platform to gain well financial control. Industry experts are predicting that whole market has that potentiality of becoming 10 times bigger than the current portfolio of 15000 crores. As a pooled investment, mutual funds in Bangladesh open a new door of investment eventually investors are feeling attracted due to the popularization of this sector nowadays. Here the success of an investment always based on the positive attitude of the investors and consistent risk adjusted performance by professional fund managers. Fund performance along with regulatory bodies monitoring will definitely bring a boom in mutual fund sector of Bangladesh. In this sector professional portfolio manager deals with investment in stock, bond or capital market, so individual investors are very aware due to the experience of previous catastrophe in capital markets. Mutual fund authorities have to build a trustworthy relationship with the retail investors because people are looking for safe investment in banks but the return rate is even lower than the inflation rate. So it's high time to promote and bring them in.

II.   BACKGROUND OF THE STUDY

For wealth maximization you need to know how to make the right financial decision. And this decision making power is created only when there is financial literacy. On the other hand, professionals or marketers also need to know the financial literacy level due to make marketing strategy. Financial awareness influence to choose the investment avenue. Depending on the literacy level of investors' present study attempts to find out the actual scenario of Bangladeshi mutual fund investors' and to assess the implication of financial literacy on investment intension.

III.   LITERATURE REVIEW

Like us, several researchers have tried to explore the necessity of financial literacy on respective investment area. Some previous scholarly findings try to include in here due to relating with our mutual fund as a profitable investment arena. Jinglin Jiang et al (2020) studied the relationship of financial literacy with the mutual fund investment outcome in China. The welfare of retail investors can't be ensured through basic literacy, rather advanced financial literacy is needed for evolved market in China. Study found that financial literacy differs on the basis of gender, education, experience and other demographic issues. Advanced literacy of increasing one point is helping in decreasing 1.9% chance of major loss. Beside researcher extracted higher fee and charge related issues, where in future more study is needed on that.

Nasrullah Hamza & ImtiazArif (2019) used the Big five personality traits theory to understand the impact of financial literacy on the investment decision. Here 235 samples were collected from Karachi and analyzed through five point Likert scale in Smart PLS software. For agreeableness, conscientiousness and extraversion part, financial literacy has no such effect but it shows highly negative effect for openness to experience. On the other hand financial literacy depicts a positive relationship with neuroticism. The study emphasized on the use of personality traits for understanding the investor's psychology and decision making process.

K Koti (2019) tried to find out the impact of financial literacy on the decision making of working women. Study shows that women are lack of awareness specifically about the complex financial product. The participation in capital market is very low rather they prefer bank deposits and gold market. In that study 100 working women of India was taken as sample and factor analysis, one way Anova& T-test were performed for the analysis. Further study will help financial institutions to enhance women participation. Dr. Sangeetha R et al (2019) have done that study with 444 Indian middle class families to see the impact of financial literacy on the investment & consumption behavior. Confirmatory factor analysis was used in this study by applying structure equation model. The result showed that financial literacy has positive impact on both of them but investment or consumption behavior has no influence on each other.

Evans Oteng (2019) studied about the influence of financial literacy on the 150 Ghanaian trader's investment decision making. Hence there is strong impact of financial literacy on the investment decision but the traders are not aware about the investment in the market. Financial knowledge helped traders to increase the investment outcome. For that reason study suggested that, government must take proper initiative for uphold financial literacy among traders.

Dr. Saloni Raheja & Gurinder Singh (2019) found that there is a positive relationship in between financial literacy and investment behavior among individuals. In that descriptive study, they also suggested financial knowledge can be acquired by practicing or studying fundamental theories.

Alimpiya Bordoloi (2019) studied on the working women of unorganized sector from India to know the impact of financial literacy. 100 CasualLaborers, Day to Day Vendors, Domestic Vendors, Maids Etc. were taken as sample from this arena, where the financial literacy level is very low. The study concluded that age, income, marital

status has an impact on literacy level but education or occupation barely has such.

Gianni Nicolin & Marlene Haupt (2019) have done that research on the various parts of Germany, France, Italy, Sweden & UK, specially to know the relationship between financial literacy and financial behaviors. Using the well-established Lusardi–Mitchell questions, result showed that positive relationship but for deeper understanding they proposed further study on some taken measures.

Penina Chepkorir Langat et al (2019) studied 231 Kenyan secondary school teachers to see the effect of financial literacy on the decision making process of individual investors stock market participation. After stratified random sampling, analysis was done with the aid of SPSS. Study showed positive relationship in between financial literacy and stock market participation. In conclusion study suggested government to promote campaigns and awareness program among this community.

Farah Margaretha Leon & Dewi Pringganingrum (2018) explored the influence of financial literacy, risk attitude & saving motive to the bias disposition of Indonesian stock exchange investors. 321 persons participated on this research & logistic regression used for data analysis. Results showed that financial knowledge about mutual fund has an influence on the bias disposition but the market knowledge, risk attitude & motive to savings don't support. Financial literacy can help investors for avoiding bias behavior, even financial service provider must be aware of investor's biasness.

Rachna Gangwar & Ritvik Singh (2018) studied the factors associated with the financial literacy & impact on investment behavior of 309 adults in India. For data processing, ordinary least square (OLS) regression & T test were used. Study suggested that among the adult investors, the level of financial literacy is very low, though it generally differs against the socio-demographic factors & economic factors. Researchers found no such effects of financial literacy on the investment behavior in this study.

Ummy Kalsum et al (2018) have done the study on 395 small enterprise holders of Southeast Sulawesi. Here researchers tried to see the influence of financial literacy and investment experiences on access to finance & investment decision. PLS was used for analysis and the result projects a positive and significant relationship in between them even access to finance has significantly positive impact on the investment decision.

A Firli (2017) emphasized on developing a framework on the factors affecting financial literacy. Researcher primarily focused on various factors like socio-demographic, financial knowledge, financial behavior, financial attitude & training. On the basis of these

variables, author developed a comprehensive framework to measure financial literacy and associated factors. This study will leads future research on this theoretical approach.

Jeetendra Dangol & Rohi Shakya (2017) studied the investment pattern of 314 financially literate investors of Nepal. Taken sample was analyzed through mean, ANOVA & logistic regression. In the study investors literacy was highly affected by age, income & education. Investment pattern, preferences, objectives & even investment tenure differ from high to low level of financial literacy level. Investors aged from 20-30 shows highest financial literacy level.

Zhong Chu et al (2017) investigated choice of portfolio, investment return, financial wellbeing on the basis of financial literacy. Here they have taken consumers finance survey to measure the household choices of stock & mutual fund products. Result shows overconfident investors prefer stocks over mutual fund. Study concluded in the support of financial literacy, where being an indicator of wellbeing it can ensures better return.

Milo Bianchi (2017) explored that portfolio choices varied as on the basis of different level of financial literacy. Financially literate investors ensure more return due to the knowledge of distinct portfolio dynamics. Higher literacy holders want to own higher risk to get more return as well as they design their portfolio to ensure such outcome.

Malgit Amos Akims & Ambrose Jagongo (2017) tried to see the influence of financial literacy on the investment decision of Nigerian investors. In this paper gender, age, income and financial advisors play as crucial factors in financial literacy level. Authors used decision theory, prospect theory and theory of mental accounting for analysis. The study found positive relationship between financial literacy and investment decision.

Oscar A. Stolper & Andreas Walter (2017) used previous household surveys of German banks and participated with prior research on that. Study found that financial literacy, financial behavior & financial advice are interrelated with each other. Factors like income, education, economic condition and other demographic factors have some impact on the financial literacy, to some extent researcher advised financial advice or assessment can be an alternative for financial literacy.

Amari Mouna & Jarboui Anis (2017) studied determinants of financial literacy and implication on the investment behavior of Tunisian households. Study showed that financial literacy is highly affected with age, education and income like demographic factors. Financial literacy always reflects the investment behavior. Authors found that

investors with low level financial literacy are not such interested for stock market.

IV. RESEARCH METHODOLOGY

Questionnaire design: It is assumed that answering a structured questionnaire will help to explore the actual scenario of mutual fund investors' and their investment intention. So that, a structured questionnaire was designed this was divided into three parts with consisting 21 questions. First part covers demographics and socio-economic variables; second part is followed by OECD approach to measure the financial literacy level and third part covers the intention variables. The statements were consisted on Five-point scale measuring four main items influencing investment intension.

Sampling and data collection: The study was conducted on the open ended mutual fund investors of Bangladesh. A convenient sampling was used. Online survey method was preferable and the questionnaire was distributed by fund managers.150 respondents were considered based on their willingness and availability.

V. DATA ANALYSIS AND RESULT

Table 1 shows the selected respondents' socio-demographic status for the study. In this study out of 150 respondents, female (37) participants are one third of the male (113). 63% of the participants belong to the (41 - 50) age, followed by 19% of (31-40) age, 11% of (51-60) age and 7% of above 60 ages. In that study, major portions (43%) of participants are earning 35001-45000, 37%belongs to above 45000 and 17% were less than 5000. From the participant's profile, it shows that most of the participants acquire post graduate degree followed by 25% college graduate, 13% school goers and 11% are professional. During occupational analysis, study showed 34% are professional is the highest among all, nearest 31% are service holder, followed by 17% for both business person and home maker and 1% retired. Out of all almost fifty percent are associated with finance/banking/investment related workplace and remaining belongs to other category. 73% are investing monthly where as 21% are investing regularly.

1. Financial literacy level:

Financial awareness: 27.3% respondents were fully unknown about the higher return comes with higher return but at the same time only 23% believed this, 22.7% refused to answer & 26.7% believed its wrong. In this survey major portion (44%) of respondents don't know about the safety of buying single stock rather stock mutual fund even 36% are not agreed with that statement. On the

time frame dependency of investment return, 41% don't know about it and 34% refused to answer. Half of the respondents are not known about risk of long term investment in mutual fund and 26.7% refused to answer. Among all the respondents 55% are well aware about NAV, 74% understand entry or exit load & 76% knows time value of money very well. All of the respondents have clear understanding about the IPO of mutual fund industry even the normal calculations of return after 5 years also. But in case of interest and inflation calculations at a time, most of the participants (37.3%) are confused though. 44% of respondents agreed that, bond price will fall with the fall of interest rate where 21% refused to answer the question.

Financial Knowledge Score: Respondents were being asked eleven questions in this survey to understand their financial knowhow and understanding. In this survey questionnaire was based on some notable concepts like risk return, inflation, simple mathematics, prices with effect of interest or inflation, diversification to analyze their numerical competence and proficiency on basic financial understanding, through that process we reached to a acute status about our respondents.

In every question, equal weight was distributed with that to explore the depth of financial know how. The financial knowledge scoring followed the recommendations of OECD and some Indian studies (Atkinson and Messy, 20121; Agarwalla, Barua, Jacob and Varma, 20122). For each correct answer, it will bear one score and ultimately highest level can be a total of eleven. In this scoring process, only correct answers were taken to clarify financial awareness specially. The categories were set to identify the level of knowledge, such respondents with scores below 60 is marked as low level financial literacy, for 60-80 scores it is moderate level financial literacy and the respondents are scoring more than 80 are considered to be as high level financial literacy who are expert about uncertainties of financial market. Here respondent's level of financial understanding is portrayed as the nature of gathered primary data.

2. Gender:

Gender plays a vital role to assess the financial literacy level of respondents. Research suggests that men and women response differently in financial decision making due to belong in different financial knowledge. The output of cross tabulation showing the inter association between gender and different level of financial literacy in annexure. To evaluate the statistical significance of the association between gender and financial literacy level of respondents, a chi-square test was attempted, with the following hypotheses.

Null hypothesis (H_0): There is no association between gender and financial literacy level

Alternative hypothesis (H_1): There is a strong association between gender and financial literacy level

The result was found to be significant with LR= 7.088, X^2= 8.560, F-Test= 7.056(P=.024< 0.05), p=.014<0.05. Hence the association is statistically significant. Therefore, it can be concluded that there is strong association between gender and financial literacy level of respondents.

3. Age:

Age plays a crucial role to assess the financial literacy level of respondents. Research suggests that respondents' age varied differently in financial decision making due to belong in different financial knowledge. The output of cross tabulation showing the inter association between age and different level of financial literacy in annexure.

To evaluate the statistical significance of the association between age and financial literacy level of respondents, a chi-square test was attempted, with the following hypotheses.

Null hypothesis (H_0): There is no association between age and financial literacy level

Alternative hypothesis (H_1): There is strong association between age and financial literacy level

The result was found to be significant with LR= 53.839, X^2= 60.231, F-Test= 48.796(P=.000< 0.05), p=.000<0.05. Hence the association is statistically significant. Therefore, it can be concluded that there is a strong association between age and financial literacy level of respondents.

4. Education:

Education plays a vital role to assess the financial literacy level of respondents. Research suggests that respondent's education profile varied differently in financial decision making due to belong in different financial knowledge. The output of cross tabulation showing the inter association between education and different level of financial literacy in annexure.

To evaluate the statistical significance of the association between education and financial literacy level of respondents, a chi-square test was attempted, with the following hypotheses.

Null hypothesis (H_0): There is no association between education and financial literacy level

Alternative hypothesis (H_1): There is strong association between education and financial literacy level.

The result was found to be significant with LR= 38.305, X^2= 29.101, F-Test= 32.008(P=.000< 0.05), p=.000<0.05. Hence the association is statistically significant. Therefore,

it can be concluded that there is a strong association between education and financial literacy level of respondents.

5. Workplace activity:

Work place activity plays an important role to assess the financial literacy level of respondents. Research suggests that work place activity affected differently in financial decision making due to belong in different financial knowledge. The output of cross tabulation showing the inter association between education and different level of financial literacy in annexure.

To evaluate the statistical significance of the association between workplace activity and financial literacy level of respondents, a chi-square test was attempted, with the following hypotheses.

Null hypothesis (H_0): There is no association between workplace activity and financial literacy level

Alternative hypothesis (H_1): There is strong association between workplace activity and financial literacy level

The result was found to be not significant with LR= 8.002, X^2= 6.070, F-Test= 5.929(P=.073>0.05), p=.067>0.05. Hence the association is not statistically significant. Therefore, it can be concluded that there is no association between workplace activity and financial literacy level of respondents.

6. Occupation:

Occupation plays a vital role to assess the financial literacy level of respondents. Research suggests that occupation affected differently in financial decision making due to belong in different financial knowledge. The output of cross tabulation showing the inter association between occupation and different level of financial literacy in annexure.

To evaluate the statistical significance of the association between occupation and financial literacy level of respondents, a chi-square test was attempted, with the following hypotheses.

Null hypothesis (H_0): There is no association between occupation and financial literacy level

Alternative hypothesis (H_1): There is strong association between occupation and financial literacy level

The result was found to be significant with LR= 40.054, X^2= 58.186, F-Test= 36.082(P=.000< 0.05), p=.000<0.05. Hence the association is statistically significant. Therefore, it can be concluded that there is strong association between occupation and financial literacy level of respondents.

7. Investment frequency:

Investment frequency plays a vital role to assess the financial literacy level of respondents. Research suggests that investment frequency affected differently in financial decision making due to belong in different financial knowledge. The output of cross tabulation showing the inter association between investment frequency and different level of financial literacy in annexure.

To evaluate the statistical significance of the association between investment frequency and financial literacy level of respondents, a chi-square test was attempted, with the following hypotheses.

Null hypothesis (H_0): There is no association between investment frequency and financial literacy level

Alternative hypothesis (H_1): There is strong association between investment frequency and financial literacy level

The result was found to be not significant with LR= 8.023, X^2= 7.068, F-Test= 7.516(P=0.083>0.05), p=0.116>0.05. Hence the association is not statistically significant. Therefore, it can be concluded that there is no association between investment frequency and financial literacy level of respondents.

8. Financial literacy and investment intention:

Investment intension indicates that motives for which an investor can state of being invested. Literacy shows that financial literacy is one of them for which an investor can be intended to invest. In our research we try to assess the relationship between financial literacy level and investment intension in mutual fund on Bangladesh perspective.

Spearman's rank correlation test was used to measure the inter-relationship between the variable: financial literacy level and investment intension of an individual MF investor.

$H_0$1: There is a significant relationship between the financial literacy level of individual's and their plan to invest in MF.

$H_0$2: There is a significant relationship between the financial literacy level of individual's and their continuation to invest in MF.

$H_0$3: There is a significant relationship between the financial literacy level of individual's and their perception of any inconvenience caused to invest in MF.

$H_0$4: There is a significant relationship between the financial literacy level of individual's and their recommendation to others to invest in MF.

$H_1$1: There is no significant relationship between the financial literacy level of individual's and their plan to invest in MF.

$H_1$2: There is no significant relationship between the financial literacy level of individual's and their continuation to invest in MF.

$H_1$3: There is no significant relationship between the financial literacy level of individual's and their perception of any inconvenience caused to invest in MF.

$H_1$4: There is no significant relationship between the financial literacy level of individual's and their recommendation to others to invest in MF.

For, first hypothesis, Correlation is very nominal but positive. Furthermore the relationship is not statistically significant. Result signifies that financial literacy level has minor relationship between individual's plans to invest in mutual fund and the person's financial literacy level.

Based on the data for second hypothesis form SPSS, spearman rank order correlation coefficient is statistically significant. From the output, we can state that there is a negligible inverse relationship between the financial literacy level of individual's and their continuation to invest in MF. That means investor with low financial literacy level will prefer mutual fund investment more.

Correlation results for third hypotheses shows that the correlation is almost zero. Moreover the relationship is statistically insignificant. It is state that, financial literacy almost no way to affect investors perception about invest in mutual fund due to any inconvenience situation.

It implies whether an investor will stay in a mutual fund depends on other factors other than financial literacy. The spearman rank order correlation coefficient was significant for fourth hypothesis also.

So, we can state that there is a negligible relationship between the financial literacy level of individual's and their recommendation to others to invest in MF. Financially literate investors motivate others who are belongs to low literacy level will investment in mutual fund.

VI. IMPLICATION

People will only have knowledge limitations. And this limitation is keeping people away from investing in the capital market. Our study has found that financial literacy is not a barrier to investing in the capital market if it is a mutual fund. So, to find out the potential investors and also to screening and implementing marketing strategy, the fund house can use these findings to develop product adoption or scheme verity.

VII.   LIMITATIONS AND FUTURE RESEARCH

Mutual fund is in a very delicate situation in Bangladesh. So the main limitations of this paperwork were that to find out the mutual fund investors available. Due to On-line survey method investor psychology is a little difficult to understand. In future avoiding this hurdle, researchers can work on marketing strategy to attract the potentiality of mutual fund**.**

VIII.   CONCLUSION

Due to lack of financial literacy, people prefer savings over investment. Our study has a great significance for the investors and the marketers also. It is profound that, Mutual fund can be a profitable option without any ambiguity of financial literacy. Rather low literate investors can be a vital key to promote mutual fund and enrich financial market of Bangladesh**.** The beauty of mutual fund is experts like fund managers, who can dictate the investors timely basis. In turn it decreases associated risk with stock markets. Fund managers performance and relationship management can retain a large scale of investors in this field. Tapping right investors, promotion and product development should be in the pipeline to aboard such potential investors.

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IX.   ANNEXURE

Profile of the study's respondent

Socio-Demographic Factors	Categories	Frequency	Percentage (%)
No. of respondents		150	100
Gender	a. Male	113	75
	b. Female	37	25
Age Group:	a.18-30	0	0
	b.31-40	29	19
	c. 41-50	95	63
	d. 51-60	16	11
	e. Above 60	10	7
Income:	a. Below 5000	25	17
	b.5000-15000	1	1
	c.15001-25000	0	0
	d.25001-35000	4	3
	e.35001-45000	65	43
	f. Above 45000	55	37
Occupation:	a. Unemployed	0	0
	b. Student	0	0
	c. Home Maker	26	17
	d. Professional	51	34
	e. Retired	1	1
	f. Service	46	31
	g. Business	26	17
Work Place Activity:	a. Finance/ Banking/Investment	73	49
	b. Accountancy & related profession	0	0
	c. Other	77	51
Education	a. School	20	13
	b. college/ University	38	25
	c. Post Graduate	76	51
	d. Professional	16	11
Frequency of investment:	a. Monthly	109	73
	b. Regularly	32	21
	c. Occasionally	9	6

Financial Concept	Factors	Categories	Frequency	Percentage
"Investment is related with risk-Higher the risk, Higher the return"	Understand of risk return-1	True	35	23.3
		False	40	26.7
		Do not know	41	27.3
		Refuse	34	22.7
"Buying a single company stock usually provides a safe return than a stock mutual fund."	Understand of risk return-2	True	1	.7
		False	54	36
		Do not know	67	44.7
		Refuse	28	18.7
Investment return depends on time frame of investment, higher the time higher will be absolute return	Time frame-1	True	34	22.7
		False	3	2.0
		Do not know	62	41.3
		Refuse	51	34
Investment for long term in share market or equity mutual fund is relatively more risky	Time frame -2	True	1	.7
		False	33	22.0
		Do not know	76	50.7
		Refuse	40	26.7
Do you know the concept of NAV	Instrument	Yes	83	55.3

	knowledge-1	No	67	44.7
Do you know the concept of entry load or exit load?	Instrument knowledge-2	Yes	111	74
		No	39	26
Do you know the concept of Time value of Money?	Instrument knowledge-3	Yes	114	76
		No	36	24
When a Mutual Fund house launches a new scheme it is called	Instrument knowledge-4	IPO	150	100
		FPO	0	
		NFO	0	
		None of the above	0	
Suppose you had Rs.100 in a savings account and the interest rate was 2% per year. After 5 years, how much do You think you would have in the account if you left the money to grow?	Numeracy-1	More than Rs.102	150	100
		Exactly Rs.102	0	
		Less than Rs.102	0	
		Do not know	0	
		Refuse	0	
Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1, how much would you be able to buy with the money in this account?	Numeracy-2	More than today	16	10.7
		Exactly the same as today	44	29.3
		Less than today	28	18.7
		Do not know	56	37.3
		Refuse	6	4
If the interest rate falls, what should happen to bond prices?	Interest Rate	Rise	6	4
		Fall	66	44
		Stay the same	19	12.7
		None of the above	27	18
		Refuse	32	21.3

Table No.2 Concept wise financial Awareness score of Investors (All respondents are tabulated on percentage basis)

Categories	Frequency (Correct)	Percentage (correct)	Frequency (Incorrect)	Percentage (Incorrect)	Total frequency
Understanding of risk return	35	23	115	77	150
	54	36	96	64	150
Time frame	34	23	116	77	150
	33	22	117	78	150
Instrument knowledge	83	55	67	45	150
	111	74	39	26	150
	114	76	36	24	150
	150	100	0	0	150
Numeracy	150	100	0	0	150
	32	21	118	79	150
Interest rate	6	4	142	96	150

Table: 2.1 Financial score

Score	Literacy level	Frequency(correct responses)	Percentage (correct)	Frequency (incorrect responses)	Percentage (Incorrect)	Total Percentage
Above 80%	High	29	19	121	71	100
60-80%	Moderate	5	3	145	95	100
Below 60%	Low	116	78	34	22	100

Table: 2.2 Overall financial literacy of the respondents

Gender with Financial literacy			Financial literacy			Total
			high	moderate	low	
Gender	Male	Count	22	1	90	113
		Expected Count	21.8	3.8	87.4	113.0
	Female	Count	7	4	26	37
		Expected Count	7.2	1.2	28.6	37.0
Total		Count	29	5	116	150
		Expected Count	29.0	5.0	116.0	150.0

Table No. 1.2 Cross tabulation of Gender with financial literacy

	Value	df	Asymp. Sig. (2-sided)	Sig.	Lower Bound	Upper Bound
Pearson Chi-Square	8.560[a]	2	.014	.020[b]	.017	.024
Likelihood Ratio	7.088	2	.029	.036[b]	.032	.041
Fisher's Exact Test	7.056			.024[b]	.020	.028
Linear-by-Linear Association	.342[c]	1	.559	.643[b]	.630	.655
N of Valid Cases	150					

Table No. 1.2.1 The result of Chi-square test is exhibited

Age with financial literacy			Financial literacy			Total
			High	Moderate	Low	
Age	31-40	Count	9	3	17	29
		Expected Count	5.6	1.0	22.4	29.0
	41-50	Count	10	1	84	95
		Expected Count	18.4	3.2	73.5	95.0
	51-60	Count	0	1	15	16
		Expected Count	3.1	.5	12.4	16.0
	Above 60	Count	10	0	0	10
		Expected Count	1.9	.3	7.7	10.0
Total		Count	29	5	116	150
		Expected Count	29.0	5.0	116.0	150.0

Table No. 1.3 Cross tabulation of Age with financial literacy

	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)		
				Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Pearson Chi-Square	60.231a	6	.000	.000b	.000	.020
Likelihood Ratio	53.839	6	.000	.000b	.000	.020
Fisher's Exact Test	48.796			.000b	.000	.020
Linear-by-Linear Association	5.417c	1	.020	.007b	.000	.020
N of Valid Cases	150					

Table No.1.3.1 The result of Chi-square test is exhibited

Education with financial literacy			Financial literacy level			Total
			High	Moderate	Low	
education	School	Count	0	0	20	20
		Expected	3.9	.7	15.5	20.0

		Count				
	College	Count	0	2	36	38
		Expected Count	7.3	1.3	29.4	38.0
	PG	Count	24	1	51	76
		Expected Count	14.7	2.5	58.8	76.0
	Professional	Count	5	2	9	16
		Expected Count	3.1	.5	12.4	16.0
Total		Count	29	5	116	150
		Expected Count	29.0	5.0	116.0	150.0

Table: 1.4 Cross tabulation of Education with financial literacy

	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)			Monte Carlo Sig. (1-sided)		
					95% Confidence Interval		95% Confidence Interval		
				Sig.	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Sig.
Pearson Chi-Square	29.101[a]	6	.000	.000[b]	.000	.020			
Likelihood Ratio	38.305	6	.000	.000[b]	.000	.020			
Fisher's Exact Test	32.008			.000[b]	.000	.020			
Linear-by-Linear Association	18.889[c]	1	.000	.000[b]	.000	.020	.000	.020	.000[b]
N of Valid Cases	150								

Table No.1.4.1 The result of Chi-square test is exhibited

Table: 1.5 Cross tabulation of work place activity with financial literacy

	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)			Monte Carlo Sig. (1-sided)		
				Sig.	95% Confidence Interval		95% Confidence Interval		
					Lower Bound	Upper Bound	Lower Bound	Upper Bound	Sig.
Pearson Chi-Square	6.070[a]	2	.048	.067[b]	.027	.107			
Likelihood Ratio	8.002	2	.018	.040[b]	.009	.071			
Fisher's Exact Test	5.929			.073[b]	.032	.115			
Linear-by-Linear Association	1.866[c]	1	.172	.220[b]	.154	.286	.052	.148	.100[b]
N of Valid Cases	150								

Table No. 1.5.1 The Chi-Square test is exhibited

Occupation with financial literacy			Financial literacy			
			High	Moderate	Low	Total
occupation	home maker	Count	0	1	25	26
		Expected Count	5.0	.9	20.1	26.0
	professional	Count	8	2	41	51
		Expected Count	9.9	1.7	39.4	51.0
	retired	Count	0	1	0	1
		Expected Count	.2	.0	.8	1.0
	service	Count	20	1	25	46
		Expected Count	8.9	1.5	35.6	46.0
	business	Count	1	0	25	26
		Expected Count	5.0	.9	20.1	26.0
Total		Count	29	5	116	150
		Expected Count	29.0	5.0	116.0	150.0

Table: 1.6 Cross tabulation of occupation with financial literacy

	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)			Monte Carlo Sig. (1-sided)		
				Sig.	95% Confidence Interval		95% Confidence Interval		
					Lower Bound	Upper Bound	Lower Bound	Upper Bound	Sig.
Pearson Chi-Square	58.186[a]	8	.000	.000[b]	.000	.020			
Likelihood Ratio	40.054	8	.000	.000[b]	.000	.020			
Fisher's Exact Test	36.082			.000[b]	.000	.020			
Linear-by-Linear Association	3.797[c]	1	.051	.047[b]	.013	.080	.001	.052	.027[b]
N of Valid Cases	150								

Table No. 1.6.1 The result of Chi-square test is exhibited

investment with financial literacy			Financial literacy			
			high	moderate	low	Total
Frequency of Investment	Monthly	Count	20	2	87	109
		Expected Count	21.1	3.6	84.3	109.0
	Regularly	Count	9	2	21	32
		Expected Count	6.2	1.1	24.7	32.0
	Occasionally	Count	0	1	8	9
		Expected Count	1.7	.3	7.0	9.0
Total		Count	29	5	116	150
		Expected Count	29.0	5.0	116.0	150.0

Table: 1.7 Cross tabulation of investment frequency with financial literacy

	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)			Sig.
				Sig.	99% Confidence Interval		
					Lower Bound	Upper Bound	
Pearson Chi-Square	7.068[a]	4	.132	.116[b]	.108	.124	
Likelihood Ratio	8.023	4	.091	.092[b]	.085	.100	
Fisher's Exact Test	7.516			.083[b]	.076	.090	
Linear-by-Linear Association	.031[c]	1	.861	.933[b]	.927	.940	.447[b]
N of Valid Cases	150						

Table No.1.7.1 The result of Chi-square test is exhibited

Correlations								
			Literacy Level	Int1	Int2	Int3	Int4	
Spearman's rho	Literacy Level	Correlation Coefficient	1.000	0.07[**]	-0.20[**]	-0.02[**]	0.26[**]	
		Sig. (2-tailed)	.	.412	.014	.844	.001	
		N	150	150	150	150	150	
*. Correlation is significant at the 0.05 level (2-tailed).								
**. Correlation is significant at the 0.01 level (2-tailed).								

Table No.3 Correlation between financial literacy and Investment intension