Personality Traits and Risk Perception of Indian Investors

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ABSTRACT

The present research paper explores the relation between the personality traits of individual investors and their risk perception in the investment management by using personality traits of MBTI Personality Model given by Carl Gustav Jung. Data has been collected from 1000 individual Indian investors by using judgment sampling through a structured questionnaire. The data has been analyzed through linear regression analysis by the use of SPSS version 24. The results of the study indicate a significant relationship between personality traits and risk perception of the investors. The findings of the study could be useful for individual investors in improving their investment decisions and consequently the investment return by understanding their personality traits and the adverse effects of them on their risk perception towards investment decisions. Apart from this the financial advisors also could take advantage from the findings of the present study by understanding the personality traits and the risk perception of their client and accordingly suggesting them the best investment option available for them in the Indian financial market.

Keywords: Investors, Risk Perception, Personality Traits, Investment Decision, Regression Analysis

1. INTRODUCTION

Risk perception is the subjective judgment that people make about the characteristics and severity of a risk. Risk perception in investment means the way in which investors view the risk of financial assets, based on their concerns and experience. It plays a very significant role in the investment decision making. Risk perception may vary person to person on the basis of his/ her demographical culture, personal characteristics or personality traits. Risk aversion is the tendency of investors of avoiding risk. A person, who possess, this tendency, always try to avoid risk in his all the investment decisions, whether he has to bear a loss for it, he will never be willing to put his any investment in a risky assets. Risk tolerance is also similar to risk aversion, but a little change in the meaning; it means the capacity of bearing risk i.e. how much risk an investor can tolerate towards his investments thus it can be defined as the level of risk one is willing to take in his investments.

In the present study, the focus has been put on finding the impact of the relation between Risk perception and personality traits which has been considered as per MBTI (Myers Briggs Personality Test Indicator) on the investment decisions of individual investors in India.

1.1. Personality Traits:

Following are the eight personality traits (as per MBTI model) which had been used in the present study:

1.1.1. Extroversion:

If someone prefer to direct his/her energy to deal with people, things, situations, or "the outer world", then this preference is called as Extraversion.

1.1.2. Introversion:

If someone prefer to direct his/her energy to deal with ideas, information, explanations or beliefs, or "the inner world", then this preference is called as Introversion.

1.1.3. Sensing:

This preference is related to information seeking. If you prefer to deal with facts, what you know, to have clarity, or to describe what you see, then your preference is for Sensing.

1.1.4. Intuition:

If you prefer to deal with ideas, look into the unknown, to generate new possibilities or to anticipate what isn't obvious, then your preference is for Intuition.

1.1.5. Thinking:

It is related to the style of decision-making. If you prefer to decide on the basis of objective logic, using an analytic and detached approach, then your preference is for Thinking.

1.1.6. Feeling:

If you prefer to decide using values - i.e. on the basis of what or who you believe is important - then your preference is for Feeling.

1.1.7. Judging:

It describes the type of lifestyle you adopt. If you prefer your life to be planned and well-structured then your preference is for Judging.

1.1.8. Perceiving:

If you prefer to go with the flow, to maintain flexibility and respond to things as they arise, then your preference is for Perception.

2. Literature Review:

There had been conducted lot of studies regarding the investment decisions of men and women. The following are few recent researches in this area:

Ansari & Pathak (2017) have found in their study on financial risk tolerance and preferred investment avenues of investor that maximum number of respondents belong to average risk tolerance that means investors were neither high risk taker nor risk averse.

Sindhu & Kumar (2014) identied the factors unpredictability of returns, knowledge about the financial assets, chance for incurring loss, diversification of portfolios, and dependence on professional investment advice.

Thanki et al. (2015) have done a study in Ahamdabad, India, titled "Risk Tolerance Dependent on What? Demographics or Personality Type: Findings from an Empirical Research" and revealed that females are more risk averse than males. Single/unmarried investors take higher risk than married. Positive relationship between income and risk tolerance level but it has also been noticed that when income increases beyond a certain level marginal rate of increase in risk taking capacity reduces.

Chattopadhyay S & Das Gupta R. (2015) found that the investors have a lower risk tolerance level which makes them highly risk averse, aged investors are more risk averse than their younger, inexperienced counterparts; married investors with children and other dependents are more risk averse than their unmarried and with less dependents counterparts; higher education brings risk tolerance attitude and thereby makes investors risk prone; higher income and savings also decrease risk aversion whereas future planning approach increases risk aversion.

Lodhi (2014) revealed through his study's results that financial literacy and accounting information helps investors in lowering information asymmetry and allows investors to invest in risky instruments. But as age and experience increase investors preference changes to less risky investments, it does not mean that investor does not prefer to invest in shares, he will but with the intention of getting dividend return rather than capital gain.

Lin H. W. (2012) clarified the relationship of individual investor types, risk tolerance and herding bias. The results showed that more impetuous investors would be prone to herding bias directly, but rather exhibit higher risk tolerance. However, risk tolerance would fully mediate between the level of confidence (i.e., confident or anxious) and herding bias, but not mediate between the method of action(careful or impetuous) for individual investors.

3. Objectives of the Study:

Following are the main objectives of the present study:
1. To study the personality traits of Indian individual investors.
2. To study the risk perception of Indian individual investors.
3. To find out the relationship between personality traits and risk perception of Indian individual investors.

4. Research Methodology:

Data has been collected through structured questionnaire from Indian individual investors by using judgment sampling. The questionnaire has been divided into three parts first part included ten questions regarding the personal profile of investors, second part included ten questions related to the risk aversion and risk tolerance and third part included twenty four questions related the personalities of investors as per the study objectives. Data analysis has been conducted by applying multiple linear regression method for finding out the significance of relationships between various personality traits and risk perception of individual investors in India through SPSS version 24 after checking the reliability of all the constructs of risk perception and personality traits included in the questionnaire through Cronbach's alpha.

4.1. Data Analysis & Interpretation:

Before starting the data analysis, it was worth to check the reliability of the data on a reliability scale therefore Cronbach's alpha has been used for the same purpose.

4.1.1. Reliability Analysis:

Table No:1-Reliability Statistics of Personality Traits

Personality Traits Under MBTI Model	Cronbach's Alpha	N of Items
Extroversion	0.868	3
Introversion	0.863	3
Sensing	0.837	3
Intuition	0.83	3
Thinking	0.887	3
Feeling	0.761	3
Judging	0.863	3
Perceiving	0.806	3
Risk Aversion	0.783	6
Risk Tolerance	0.742	4

The value of Cronbach's alpha above 0.7 is considered satisfactory and we have found the Cronbach's alpha values more than 0.7 for all the personality traits and behavioral biases data constructs for the present study, so it was worth to keep going with the further analysis.

First Hypothesis:
H0: "There is no significant relation between individual investors' personality traits and their risk aversion behavior.
H1: "There is a significant relation between individual investors' personality traits and their risk aversion behavior.

Table No-2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.748	.559	.555	3.394	.559	157.050	8	991	.000

Table No-3: ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14474.203	8	1809.275	157.050	.000[b]
	Residual	11416.668	991	11.520		
	Total	25890.871	999			
a. Dependent Variable: Risk Aversion						
b. Predictors: (Constant), P, N, I, S, F, J, E, T						

Table No-4: Coefficients

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.343	2.087		7.831	.000
	E	.044	.029	.065	1.531	.126
	I	-.041	.022	-.040	-1.910	.056
	S	-.008	.025	-.007	-.327	.744
	N	.012	.026	.010	.487	.626
	T	-.162	.035	-.209	-4.582	.000
	F	.159	.026	.218	6.191	.000
	J	.117	.030	.157	3.836	.000
	P	-.179	.040	-.176	-4.450	.000

From the above tables, it was revealed that the model was found a good fit as the R square value was 0.559 and F (8,991) = 157.050 with P < 0.05 therefore the null hypothesis was rejected and it was interpreted that there is a significant relation between Risk Aversion and Personality traits of investors.

The regression model equation has been formed as follows:

Risk Aversion = 16. 343 + E (0.044) + I (-0.041) + S (-0.008) + N (0.012) + T (-0.162) + F (.159) +J (.117) +P (-.179)
All the independent variables were found to have relation with the dependent variable (Risk Aversion) as all were entered in the model as predictors but significance was found less than 0.05 with Thinking ,Perceiving (negative) ,Feeling and Judging (positive), out of which Perceiving(P) was found to be the most significant predictor of Risk Aversion among personality traits with the correlation coefficient value of -0.179 followed by Thinking(T) with the value -0.162 , Feeling (F) 0.159 and Judging(J) 0.117.

Second Hypothesis:
H0: "There is no significant relation between individual investors' personality traits and their risk tolerance behavior.
H1: "There is a significant relation between individual investors' personality traits and their risk tolerance behavior.

Table No-4.13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.271[a]	.073	.066	2.420	.073	9.785	8	991	.000

Table No- 4.14: ANOVA

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	458.291	8	57.286	9.785	.000[b]
	Residual	5801.620	991	5.854		
	Total	6259.911	999			
a. Dependent Variable: Risk Tolerance						
b. Predictors: (Constant), P, N, I, S, F, J, E, T						

Table No-4.15: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.846	1.347		2.856	.004
	E	-.003	.019	-.008	-.136	.892
	I	.029	.015	.058	1.891	.059
	S	-.047	.018	-.083	-2.673	.008
	N	.033	.018	.055	1.792	.073
	T	.075	.024	.196	3.124	.002
	F	.018	.017	.052	1.093	.274
	J	-.033	.020	-.092	-1.703	.089
	P	.003	.025	.006	.120	.905

From the above tables, it was revealed that the model was found a good fit as the R square value was 0.073 and F (8,991) = 9.785 with P < 0.05 therefore the null hypothesis was rejected and it was interpreted that there is a significant relation between Risk Tolerance and personality traits of investors.

The regression model equation has been formed as follows:

Risk Tolerance = 3.846 + E (-0.003) + I (0.029) + S (-0.047) + N (0.033) + T (0.075) + F (.018) +J (-.033) +P (.003)

All the independent variables were found to have relation with the dependent variable (Risk Tolerance) as all were entered in the model as predictors but significance was found less than 0.05 with Thinking (positive) and Sensing(negative), out of which Thinking(T) was found to be the most significant predictor of Risk Aversion among personality traits with the correlation coefficient value of 0.075 followed by Sensing(S) with the value -0.047.

5. Conclusion:

Present study has thrown light on the relationship of personality traits and risk perception of individual individual investors in India by using eight personality traits and two risk perception dimensions i.e. risk aversion and risk tolerance and it was found that there are few type of personalities which had significant relationships with the risk perception of investors regarding investment decisions. The findings of the present study would be useful for the individual investors to identify their risk perception behavior and consequently improving their investment decision making. Apart from this the findings would also be useful for the financial advisors by identifying the particular personality traits of their clients and according suggesting them the right avenues of investment at the right times and in such a way help them to increase their overall investment returns.

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