

INVESTORS' PERSONALITY TRAITS ACROSS GENERAL AND INVESTMENT RELATED DEMOGRAPHICS

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ABSTRACT

Financial theory and models are based on the assumption of 'homo economicus' or a rational economic man who acts prudently when making financial decisions. Contrarily literature provides evidences of investors' irrationally when faced with risk and uncertainty. The deviation of investors from the expected rational behaviour is attributed to characteristics like personality, psychology and general socio-economic conditions. Personality is an key behavioural dimension of an investor which drives his investment behaviour. Present study examines the personality traits of individual equity investors in Indian stock market using NEO-FFI personality inventory (Costa & McCrae). Further the influence of investors' general and investment related demographic has been investigated on various personality traits. The collected data has been analyzed by applying independent sample t-test and one-way ANOVA followed by Bonferroni post-hoc test. Results reveal that Indian individual equity investors' personality ranges from high neuroticism, moderate extroversion, moderate to low openness and conscientiousness to low agreeableness. Equity investor is weak in terms of conscience, open and agreeable traits. The demographic dissection of investors' personality reveals that personality traits vary across general and investment related demographics of the respondents.

Keywords: Personality Traits, Indian Individual Equity Investor, Neuroticism, Extra version, Openness to Experience, Agreeableness and Conscientiousness.

Introduction

Financial markets offer large variety of asset classes and financial instruments to investors to meet their investment objectives. Investment environment is extremely complex and dynamic. Kahneman and Tversky(1979) developed an alternative to expected utility theory which explained that human beings behave irrationally due to limited cognitive abilities and complexities associated with the decision environment. Therefore, investors' decision making gets affected by a combination of psychological, personal and environmental factors making them susceptible to behavioural biases and driving them away from rationality. The interplay between personal and psychological factors and investment decision making may lead to excessive volatility and stock market scams (Pompain and Longo, 2004).

Researchers in the area of finance have accepted the fact that an investor's decision making and behaviour gets determined by their unique personality. Phares (1991) in his book

“Introduction to Personality” defines personality as “that patterns of characteristics, thoughts, feelings and behaviour that distinguishes one person from another and that persists over time and situation”. Personality is the sum of all these variables. The proportion of these variables differentiates one personality from other. Everyone has their unique pattern of feelings, emotions, thoughts and behaviour, which is formed by a fairly stable combination of personality traits (Phares, 1991). Personality of any individual is formed by his psychological as well as psychographic factors like attitude, cognition, perception and their decision making abilities (Charles A and Kasilingam R, 2014). With the emergence of behavioural finance, an extensive body of literature seeks to explain how individual personality influences the behavior of investors.

Numerous psychographic models have been developed to categorise the investors into different personality clusters. Barnewall (1987) classified investors as active and passive investors. Bailard, Biehl and Kaiser (1986) classified investors' personality into five types (popularly known as BB&K model): adventurers, celebrities, individualists, guardians and straight arrows. This classification was based on two dimensions, namely, level of confidence and method of action. Another widely recognised model explaining personality types is Myers-Briggs Type Indicator (MBTI). It describes sixteen personality types based on four dimensions (Pompain & Longo, 2004),

Costa and McCrae comprehensively explained the concept of personality and arrived with five dimensions of personality through “Big- Five Factor Approach” which evolved in the 1960s but accelerated in the 1980s, 1990s & 2000s and a vast body of research has also supported that these five dimensions of personality are able to capture the most common traits of an individual's personality. The Big- Five Factor Approach to personality is research based approach and has both positive as well as negative connotations with a view that no trait is completely positive or negative. The five dimensions of Big-Five Factors Approach are: Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness (NEOAC).

The unique and complex personalities of investors are shaped by their social backgrounds, personal experiences, and economic status. Personality typing can assist investment advisors in determining an individual investor's propensity for risk taking and his decision-making style in seeking returns. Personality type may affect an investor's risk tolerance, choice of investment, investment horizon and the investment decision process. Keeping this in background, present paper is designed to enhance one's understanding of personality type of individual equity investor in Indian stock market and how investors with general and investment related demographics differentiate investors' across various personality traits.

The present paper is divided into four section; part one is devoted to introduction followed by literature review and research methodology. The subsequent sections give a detailed discussion of results followed by conclusion and managerial implications.

Literature Review

Extensive body of literature exists that investigates the relationship between investors' personal characteristics and his investment decision making. Pompian and Longo (2004) desired to create increment programs base on the personality types of the investors to minimize the influence of behavioural biases on investment decisions. MBTI instrument was used to identify the personality dimensions of the investors. The results indicated significant association between personality type and investment behaviour. They further suggested to the investment advisors that for client profiling, they must use personality and gender as a prominent factor. Fenton O 'Creevy *et al.* (2004) investigated the relationship between personality traits and investment decision making of traders from investment banks. The results exhibit that the successful traders are more introvert, stable and open to new experiences.

Mayfield *et al.* (2008) examined the influence of personality type on investment management by individual investors. Personality type was identified using Big Five Personality taxonomy. The results indicate that extroverts engaged in short term investing and individuals who are open to experience invest for long-term. The individual investors in Taiwan stock market were investigated by Lin (2011) to examine the influence of demographics and personality traits on behavioural biases. Personality traits and behavioural biases were found to be closely associated. Neurotic investors exhibit herding tendency and were influenced by disposition effect. Extroverts and open personalities have a tendency to herd. Openers and conscientiousness are positively related to overconfidence. Zaidi and Tauni (2012) examined the influence of an investor's personality and demographics on overconfidence bias. Findings exhibit that agreeableness; extroversion and conscientiousness have a positive relationship with the said bias. To the contrary, overconfidence bias and neuroticism have a negative relation. They conclude that Pakistani investors are not fully rational.

The influence of demographic and psychological characteristics in investment prejudices in Tehran stock market was examined by Jamshidinavid *et al.* (2012). The results indicate that demographic characteristics have weak relationship with investment biases whereas the personality traits significantly influence the biased investment behaviour of investors. Exploration of personalities of retail investors in Indian market was done by Thakral, Doajh and Aggarwal (2013). The results exhibit strong relation between personality of investors and their decision making. Five types of personality traits are discovered, namely, the Innocent, the Victim, the Warrior, the Martyr and the Fool. Profit/loss from investment also depends on their personality. The influence of investor's personality on their investment success was explained by Charles and Kasilingam (2014). The results suggest that demographic and investment variables are significantly correlated with personality traits. Investor's age, education, profession, financial dependence, income, experience and risk profile have significant association with investor's different personality states, namely, Type-A, Type-

B and Type-C. What influences an investor's risk tolerance? Is it personality or demographic factors? Thanki (2015) tried to answer these questions by conducting a survey of individual investors in India. The results reveal that Investors with Personality A traits take higher risk compared to investors with traits of Personality B.

Review reinforces the relation between investment decision making and personality of an investor. The present study aims to investigate investors' personality across various demographic variables and may prove useful to investment advisors in profiling the investors and designing appropriate investment strategies based on their personality traits.

Methodology

The study aims to collect data from individual equity investors. Descriptive research methodology was used to analyze and interpretation of primary data. Total 802 investors have been examined during the study representing the northern territorial jurisdiction as specified by SEBI for investor related policy matters and conduct of educational workshops for retail investors. To study the personality types of the equity investors, structured questionnaire comprising of 60 statements, developed by Costa and McCrae through "Big-Five Factor Approach" having the five dimensions: Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness (NEOAC) has been used. This questionnaire has already been pre-tested across countries and respondent groups. Thus, its reliability and validity is well established.

Data was collected and decoded across 5 point Likert scale and then tabulated. Mean and standard deviation is calculated to make a meaningful comparison among the various personality types across the categories of general and investment related demographics of investors. Independent t-test and One-way ANOVA (f-test) was used for test of significance. Bonferroni post-hoc test was applied to outline the difference between the categories of general and investment related demographics of investors.

Results and Discussion

Investors' Profile across Big-five Personality Types

The sample respondents representing 802 individual equity investors' have been mapped across big-five personality types (table 1). The mean score for the five personality types are 3.72 for neuroticism, 3.02 for extroversion, 2.43 for openness, 1.57 for agreeableness and 2.38 for conscientiousness with standard deviation of 0.71, 0.72, 0.69, 0.71 and 0.85 respectively. This indicates that the major part of investors' personality is characterized as neurotic type personality as the mean value for neuroticism is higher than other personality types. Neuroticism is the tendency to experience negative emotions such as; anger, anxiety, self consciousness, immoderation and depression. This reflects emotional instability of the individual. Those who score high in neuroticism are emotionally reactive and vulnerable to stress. This implies that individual equity investors are emotional, cannot think clearly and ineffective in stress management. Out of total investors, 57.86 per cent, representing majority, investors possess high neurotic personality.

Table 1 : Investors' Profile across Big-five Personality Types

Personality Type	Frequency	Very High	High	Average	Low	Very Low	Total
Neurotic (Mean= 3.72)	N	76	464	224	35	3	802
	Percent	9.48	57.86	27.93	4.36	.37	100.00
Extrovert (Mean= 3.02)	N	18	148	484	137	15	802
	Percent	2.24	18.45	60.35	17.08	1.87	100.00
Open (Mean= 2.43)	N	0	29	349	361	63	802
	Percent	0.00	3.62	43.52	45.01	7.86	100.00
Agreeable (Mean= 1.57)	N	0	9	79	271	443	802
	Percent	0.00	1.12	9.85	33.79	55.24	100.00
Conscientious (Mean= 2.38)	N	7	70	243	380	102	802
	Percent	0.87	8.73	30.30	47.38	12.72	100.00

Source : Field Survey

Extroverts get their energy from socialising. Individuals with extroversion personality traits are energetic, talkative, gregarious, active, cheerful and assertive. They are generally known as excitement seekers. While 60.35 per cent of investors exhibit average extraversion. Further, the mean score of 3.02 implies that individual equity investors are moderately extrovert implying that they are moderate risk (excitement) seekers. People who like to learn new things and enjoy new experiences usually score high in openness. The mean score of 2.43 depicts low to moderate openness among

individual investors. More than eighty five per cent of respondents fall in this category. This might influence the diversification decision of the investor as investors may find it more comfortable to stick to older and familiar choices rather than shifting to new and unfamiliar investment avenues. People with high agreeableness easily adapt to situations and show sympathetic behaviour. They are trustworthy, straight forward and modest (Farzanepey, 2006 as cited in Sadi *et. al.* 2011). Majority of investors have reported very low (55.24 per cent) to low (33.79 per cent) agreeableness. The mean

agreeableness score of sample respondents is 1.57 only. Such investors have higher tendency to exhibit herd behaviour (Jamshidinavid *et. al.*, 2012). Agreeableness results in low risk taking behaviour of an individual investor (Nicholson *et. al.* 2005).

Individuals that have a high degree of conscientiousness are reliable and prompt. They are dutiful, orderly and self-disciplined. They usually strive for achievements and are self-made people. Majority of retail investors investigated lie between low (47.38 per cent) to average (30.30 per cent) degrees of conscientiousness. Such investors tend to be overconfident (Lin 2011). Thus, investors who have lower level of conscientiousness may have higher tolerance towards risk as suggested by results of Pan and Statman (2013).

All the big five personality types (Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A) and Conscientiousness (C)) are further analyzed in-depth across investors' general as well as investment related demographics.

Investors' Profile across General and Investment Related Demographics

In all information on eight demographic variables of the respondents has been collected which have further been classified as general demographics and investment related demographics. The general demographic variables considered for the study are: age, gender, educational qualification,

marital status and occupation. Investment related demographics are average monthly income, approximate investment in the stock market and investment experience in stock market.

Age-wise analysis reveals that major part (345) of total sample (802) belongs to age group of 18-30 years followed by 275 respondents who belong to 31-40 years of age group, 131 respondents belong to 41-50 years of age group and 51 respondents are from 51 years and above age group. Segregating investors on the basis of gender reveals that majority of investors (688) are male whereas there are only 114 female investors. With regard to marital status of investors, 605 are married and 197 are single. On the basis of education, major part (383) of investors possesses post graduate degree followed by 318 graduate investors, 75 and 26 investors possess 12th and 10th class degrees respectively. Occupation wise, 436 investors are in service followed by 243 businessmen investors and rest of the sample (96 and 27) constitutes professionals and students respectively. Monthly income wise analysis of investors reveals that major part (373) of total sample (802) belongs to Rs. 25,001-50,000 monthly income group followed by 221 respondents who belong to up to Rs. 25,000 monthly income group, 106 respondents belong to Rs. 50,001-75,000 monthly income group and 102 respondents are from Rs. 75,001 and above monthly income group.

Table 2 : Neuroticism Across Investors' General Demographics and Investment Related Demographics

Neuroticism			N	Mean	Std. Deviation	t-Value/ F-Value	Level of Significance	Bonferroni Post-hoc Analysis
General Demographics	Total		802	3.72	0.71			
	Age	18-30 Years	345	3.74	0.64	0.20	0.90	
		31-40 Years	275	3.70	0.75			
		41-50 Years	131	3.70	0.78			
		51 Years & above	51	3.71	0.70			
	Gender	Male	688	3.75	0.73	3.79	0.00	
		Female	114	3.53	0.55			
	Marital Status	Married	605	3.73	0.71	0.95	0.34	
		Single	197	3.68	0.70			
	Education	10th	26	3.50	0.76	2.68	0.05	
		12th	75	3.68	0.77			
		Graduate	318	3.80	0.64			
		Post Graduate	383	3.67	0.74			
	Occupation	Business	243	3.77	0.69	1.48	0.22	
		Professional	96	3.65	0.65			
		Service	436	3.72	0.73			
Student		27	3.52	0.64				
Monthly Income of Investors	Up to Rs. 25,000	221	3.72	0.68	0.47	0.70		
	Rs. 25,001- 50,000	373	3.71	0.66				
	Rs. 50,001- 75,000	106	3.67	0.82				
	Rs. 75,000 & above	102	3.78	0.82				

Investment Related Demographics	Stock Market Investment Experience	Up to 2 Years	239	3.74	0.60	4.27	0.01	11 Years & above	Up to 2 Years (-0.38 at 0.01 Significant Level)
		3-5 Years	283	3.76	0.69				3-5 Years (-0.40 at .00 Significant Level)
		6-10 Years	236	3.70	0.80				6-10 Years (-0.34 at 0.02 Significant Level)
		11 Years & above	44	3.36	0.78				
	Investment in Equities	Up to Rs. 75,000	303	3.71	0.60	1.37	0.25		
		Rs. 75,001-1,50,000	200	3.78	0.58				
		Rs. 1,50,001-2,25,000	105	3.76	0.77				
		Rs. 2,25,001 & above	194	3.64	0.92				

Source : Field Survey

On the basis of stock market investment experience, majority (283) of investors are having 3-5 years of investment experience, 239 investors are having up to 2 years of investment experience followed by 236 with 6-10 years of investment experience and only 44 investors have investment experience of 11 years and above. Investment in equities says that maximum number of investors (303) invest up to Rs. 75,000; 200 investors invest money between Rs. 75,001-1,50,000 in the equities followed by the group investing Rs. 2,25,001 and above and Rs. 1,50,001-2,25,000 respectively.

Investors' Neurotic Personality Type across General and Investment Related Demographics

Neuroticism is amply evident among individual equity investors in Indian stock market. Further, the results in Table 2 indicate that the investors do not significantly differ across various age, marital status, occupation, monthly income of investors and investment in equities groups as the calculated f/t-values are greater than 0.05. However, gender, education and stock investment experience significantly differentiate investors in terms of extent of neuroticism exhibited by them. Gender has emerged as a prominent differentiator in extent of

neuroticism among investors as indicated by t-value (3.79) with is significant at one per cent level. The mean values for neuroticism of male and female investors are 3.75 and 3.53 along with values of standard deviation i.e. 0.73 and 0.55 respectively. It means that male investors have shown more neurotic personality than their female counterparts.

The investors of different education categories have shown significantly different neurotic personality type as f-value (one-way ANOVA) comes out as 2.68 which is significant at 5 per cent level. The mean values for various categories of education, namely, post graduate, graduate, 12th and 10th are 3.67, 3.80, 3.68 and 3.50 respectively. Graduate investors (mean value is 3.80) are more neurotic followed by 12th pass investors. Postgraduate investors and 10th pass investors are found comparatively less neurotic. Experience in stock market substantially influences ones tendency to depict neurotic personality. The investors of different investment experience categories have shown significantly different neurotic personality type as f-value (4.27) is found significant at 0.01 significant level. The investors with investment experience more than 11 years have shown least neurotic personality type.

Table 3 : Extrovert Across Investors' General Demographics and Investment Related Demographics

Extrovert			N	Mean	Std. Deviation	t-Value/ F-Value	Level of Significance	Bonferroni Post-hoc Analysis	
General Demographics	Total		802	3.02	0.72				
	Age	18-30 Years	345	2.91	0.71	5.94	0.00	18-30 Years	31-40 Years (-0.24 at 0.00 Significant Level)
		31-40 Years	275	3.16	0.77				
		41-50 Years	131	3.03	0.63				
		51 Years & above	51	3.00	0.60				
	Gender	Male	688	3.03	0.72	0.62	0.54		
		Female	114	2.98	0.70				
	Marital Status	Married	605	3.05	0.70	1.96	0.05		
		Single	197	2.93	0.78				
	Education	10th	26	3.12	1.18	0.64	0.59		
		12th	75	3.00	0.94				
		Graduate	318	2.98	0.65				
		Post Graduate	383	3.05	0.69				

Investment Related Demographics	Occupation	Business	243	3.01	0.67	1.97	0.12
		Professional	96	2.89	0.74		
		Service	436	3.06	0.73		
		Student	27	2.89	0.85		
	Monthly Income of Investors	Up to Rs. 25,000	221	3.04	0.85	0.74	0.53
		Rs. 25,001- 50,000	373	3.00	0.66		
		Rs. 50,001- 75,000	106	3.10	0.69		
		Rs. 75,000 & above	102	2.97	0.68		
	Stock Market Investment Experience	Up to 2 Years	239	3.03	0.67	1.31	0.27
		3-5 Years	283	3.00	0.71		
		6-10 Years	236	3.07	0.78		
		11 Years & above	44	2.87	0.75		
	Investment in Equities	Up to Rs. 75,000	303	3.01	0.74	0.14	0.94
		Rs. 75,001-1,50,000	200	3.03	0.66		
		Rs. 1,50,001-2,25,000	105	3.06	0.72		
		Rs. 2,25,001 & above	194	3.01	0.76		

Source : Field Survey

In order to make in-depth comparison between the categories of stock market investment experience, Bonferroni test for post-hoc analysis is applied. The results shows that the investors with investment experience of 11 years and above are significantly less neurotic than rests of three experience categories. This may be attributed to the fact that with more experience one can be more proficient and have more knowledge of the field which will help the investors to be more positive towards their investment related decisions.

Investors' Extraversion Personality Type across General and Investment Related Demographics

Extrovert personality investors are socially active and enthusiastic. The results of the study already depict that the Indian individual equity investors are moderately extrovert. The trait of extroversion gets affected by only two general demographic variables, namely, age and marital status. Investment related demographics have no significant influence on extroversion personality depicted by the sample respondents.

The mean values for the investors of distinguished age groups for extraversion are 3.16 (for 31-40 years of age group), 3.03 (41-50 years of age group), 3.00 (51 years and above) and 2.91

(18-30 years of age group) along with their standard deviation i.e. 0.77, 0.63, 0.60 and 0.71 respectively. Investors of age groups of 31-40 years have shown maximum followed by 41-50 years of age group. The investors of age groups of 51 and above years and 18-30 years are found comparatively less extrovert. In order to check this significance, is applied. *The results of one-way ANOVA show that the extrovert personality type of various age categories are found significantly different from each other as the computed f-value is 5.94 at 0.00 significance level.* The results of Bonferroni test exhibit that the investors belonging to 18-30 years and 31-40 years are significantly different. The reason may be that the age between 18-30 years is formative time for individual personal and professional life whereas, during 31-40 years of age most of the individuals have overcome initial struggle and hitches of life making them more confident and socially active. Marital status enhances ones involvement in family and social life. Thus, marital status significantly seems to influence an individuals' extroversion. The results have clearly depicted that married investors are statistically more extrovert when compared with single investors different as the computed t-value is 1.96 with 0.05 significant level.

Table 4 : Openness Across Investors' General Demographics and Investment Related Demographics

Openness		N	Mean	Std. Deviation	t-Value/ F-Value	Level of Significance	Bonferroni Post-hoc Analysis	
General Demographics	Total	802	2.43	0.69				
	Age	18-30 Years	345	2.32	0.73	5.54	0.00	31-40 Years
		31-40 Years	275	2.51	0.64			
		41-50 Years	131	2.48	0.69			
		51 Years & above	51	2.59	0.54			
	Gender	Male	688	2.42	0.69	-0.75	0.45	
		Female	114	2.47	0.67			
	Marital Status	Married	605	2.44	0.67	0.89	0.37	
		Single	197	2.39	0.75			

Investment Related Demographics	Education	10th	26	2.46	0.81	2.08	0.10	
		12th	75	2.31	0.66			
		Graduate	318	2.39	0.65			
		Post Graduate	383	2.49	0.71			
	Occupation	Business	243	2.47	0.64	4.81	0.00	Business Professional (0.22 at 0.05 Significant Level)
		Professional	96	2.25	0.71			
		Service	436	2.42	0.71			Student Professional (0.53 at 0.00 Significant Level)
		Student	27	2.78	0.58			
	Monthly Income of Investors	Up to Rs. 25,000	221	2.39	0.67	2.23	0.08	
		Rs. 25,001- 50,000	373	2.40	0.68			
		Rs. 50,001- 75,000	106	2.58	0.72			
		Rs. 75,000 & above	102	2.44	0.71			
	Stock Market Investment Experience	Up to 2 Years	239	2.41	0.68	1.88	0.13	
		3-5 Years	283	2.38	0.69			
		6-10 Years	236	2.52	0.67			
		11 Years & above	44	2.39	0.78			
	Investment in Equities	Up to Rs. 75,000	303	2.39	0.75	2.99	0.03	Rs. 2,25,001 & above Rs. 1,50,001-2,25,000 (0.22 at 0.05 Significant Level)
		Rs. 75,001-1,50,000	200	2.48	0.63			
		Rs. 1,50,001-2,25,000	105	2.30	0.65			
		Rs. 2,25,001 & above	194	2.52	0.66			

Source : Field Survey

The mean values for married as well as single investors are 3.05 and 2.93 respectively along with the values of standard deviation i.e. 0.70 and 0.78 respectively.

Open Personality Type across General and Investment Related Demographics

Individuals with openness are open to new ideas and do not hesitate to experiment. Individual investors in Indian stock market have exhibited low to moderate openness as explicit from the mean score of 2.43. Further, Table 4 indicates that the open personality is not different across gender, marital status, education, monthly income of investors and stock market investment experience while age, occupation and investment in equities significantly differentiate investors on the basis of openness exhibited by them.

It is evident that openness increases among investors with age. As investors advance in age their learning curve and consequent socialising compulsions make them open. The mean values for openness for the investors from different age groups are 2.59 (for 51 years and above of age group), 2.51 (31-40 years of age group), 2.48 (41-50 years of age group) and 2.32 (18-30 years of age group) along with values of standard deviation i.e. 0.54, 0.64, 0.69 and 0.73 respectively. *The results show that the personality type of various age categories are significantly different from each other as f-value (one-way ANOVA) comes out as 5.54 with 0.00 significant level (the value of significant level is less than 0.05).* The results of Bonferroni test for post-hoc analysis show that the investors belong to 31-40 years age group is found significantly different from 18-30 years with regard to openness. This tendency may be attributed to similar reasons cited for enhanced extroversion in age group 31-40 years.

The mean values and standard deviations for the openness of investors of different occupations are as: 2.78 (0.58) for students, 2.47 (0.64) for businessmen, 2.42 (0.71) for servicemen and 2.25 (0.71) for professionals. On the basis of mean values of students, businessmen, servicemen and professionals, *it is concluded that students possesses more open personality followed by businessmen; servicemen and professionals shows least open personality.* The f-value (4.81 at 0.00 significant level) for investors of different occupation shows that the difference is significant. In order to get the in-depth understanding of this difference between various categories of occupation, Bonferroni test suggests that this difference is significantly reported among businessmen and professionals as well as among students and professionals.

The mean value states that the group who is making investments of Rs. 2,25,001 and above found most open followed by the group belongs to making investment of Rs. 75,001-1,50,000. The mean values for the investment groups up to Rs. 75,000 and Rs. 1,50,001-2,25,000 are found comparatively less open. *This difference is also found significant amongst the categories based on investment in equities as the f-value 2.99 is found significant at 0.03 significant level.* Further Bonferroni test for post-hoc analysis reveals that difference related to openness is reported by the investment groups of Rs. 2,25,001 and above; and Rs. 1,50,001-2,25,000.

Agreeable Personality Type across General and Investment Related Demographics

Agreeable personalities are modest, generous and respect others feelings. Individual investors have exhibited very low to low degree of agreeableness in the Indian market.

Agreeableness when mapped across demographics indicates that for gender, education, stock market investment experience and investment in equities significantly differentiate investors in the extent of agreeableness possessed by them as shown in table.

Gender differences in agreeableness are evident from the results. The mean values for male and female investors for agreeableness are 1.61 and 1.34 along with values of standard deviation i.e. 0.73 and 0.59 respectively. It means that male investors are found more agreeable than female investors. *This difference for male and female investors is found significantly different from each other as t-value is 4.26 which is significant.* This is contrary to the popular Indian belief that females are more modest and sympathetic to others when compared to

males. *F-value (3.80) shows that the investors of different education categories show significantly different agreeable personality types.* This analysis shows that 12th pass investors (mean value is 1.81) are found more agreeable followed by 10th pass investors. Graduate and postgraduate investors are found comparatively less agreeable.

Agreeableness has shown direct relationship with investment experience (computed *f-value 6.50 is significant at 0.00 level*). Analysis depicts that the investors with investment experience of 11 years and more possesses significantly more agreeable personality than the investors with investment experience of 6-10 years followed by investors with 3-5 years investment experience. The investors with investment experience up to 2 years have exhibited least agreeable personality.

Table 5 : Agreeableness Across Investors' General Demographics and Investment Related Demographics

Agreeableness		N	Mean	Std. Deviation	t-Value/ F-Value	Level of Significance	Bonferroni Post-hoc Analysis	
General Demographics	Total	802	1.57	0.71				
	Age	18-30 Years	345	1.52	0.68	1.05	0.37	
		31-40 Years	275	1.62	0.77			
		41-50 Years	131	1.56	0.69			
		51 Years & above	51	1.63	0.69			
	Gender	Male	688	1.61	0.73	4.26	0.00	
		Female	114	1.34	0.59			
	Marital Status	Married	605	1.58	0.71	1.03	0.30	
		Single	197	1.52	0.74			
	Education	10th	26	1.69	0.79	3.80	0.01	12th Graduate (0.26 at 0.03 Significant Level) Post Graduate (0.29 at 0.01 Significant Level)
		12th	75	1.81	0.80			
		Graduate	318	1.56	0.71			
		Post Graduate	383	1.52	0.69			
	Occupation	Business	243	1.56	0.65	0.80	0.49	
		Professional	96	1.56	0.81			
		Service	436	1.56	0.72			
		Student	27	1.78	0.85			
Investment Related Demographics	Monthly Income of Investors	Up to Rs. 25,000	221	1.54	0.74	0.72	0.54	
		Rs. 25,001- 50,000	373	1.55	0.71			
		Rs. 50,001- 75,000	106	1.59	0.67			
		Rs. 75,000 & above	102	1.66	0.72			
	Stock Market Investment Experience	Up to 2 Years	239	1.44	0.62	6.50	0.00	11 Years & above Up to 2 Years (0.47 at 0.00 Significant Level)
		3-5 Years	283	1.58	0.73			
		6-10 Years	236	1.62	0.74			
		11 Years & above	44	1.91	0.86			
	Investment in Equities	Up to Rs. 75,000	303	1.46	0.65	4.69	0.00	Rs. 2,25,001 & above Up to Rs. 75,000 (0.23 at 0.00 Significant Level)
		Rs. 75,001-1,50,000	200	1.62	0.73			
		Rs. 1,50,001-2,25,000	105	1.58	0.76			
		Rs. 2,25,001 & above	194	1.69	0.75			

Source : Field Survey

Further, Bonferroni test for post-hoc analysis reveals that investors' stock market investment experience of 11 years and above has reported significant difference with the group having

experience up to 2 years and 3-5 years investment experience; and the group which is having experience of 6-10 years shows significant difference with the group up to 2 years experience.

Investment in equities has emerged as another significant differentiating variable for agreeableness. The highest investment group is most agreeable followed by the group belonging to investment between Rs. 75,001-1,50,000. *This difference is also found significant amongst the categories based on investment in equities as the f-value 4.69 is statistically significant.* Further, Bonferroni test for post-hoc analysis reveals that difference related to agreeableness has been reported by the investment groups at two extremes, i.e., of Rs. 2,25,001 and above; and up to Rs. 75,000.

Conscientious across Investors' General and Investment Related Demographics

Conscientious individuals are disciplined and regulated. Low to average level of conscientiousness is evident in Indian equity investors with an overall mean score of 2.38. It is interesting to note that all the demographic variables except occupation distinguish investors in the extent of conscientiousness trait depicted by them in their personality.

The results from one-way ANOVA shows that the personality type of various age categories are found significantly different from each other as f-value (one-way ANOVA) comes out as 6.72 with 0.00 significant level. Highest conscientiousness is portrayed by investors of age groups of 31-40 years who are significantly different from investors in age group 18-30 years. The mean values for male and female investors for conscientiousness are 2.41 and 2.18 along with values of standard deviation i.e. 0.83 and 0.92 respectively. It means that male investors are found more conscience than female investors. This difference for male and female investors is also found significantly different from each other as t-value comes out as 2.45 at 0.02 significance level. For conscientiousness with regard to marital status of investors, the analysis shows that married investors exhibit more conscience personality rather than the single investors. The calculated t-value (2.30) is significant.

Table 6 : Conscientious Across Investors' General Demographics and Investment Related Demographics

Conscientious			N	Mean	Std. Deviation	t-Value/ F-Value	Level of Significance	Bonferroni Post-hoc Analysis			
General Demographics	Total		802	2.38	0.85						
	Age	18-30 Years	345	2.23	0.81	6.72	0.00	31-40 Years	18-30 Years (0.30 at 0.00 Significant Level)		
		31-40 Years	275	2.53	0.82						
		41-50 Years	131	2.40	0.91						
		51 Years & above	51	2.45	0.92						
	Gender	Male	688	2.41	0.83	2.45	0.02				
		Female	114	2.18	0.92						
	Marital Status	Married	605	2.42	0.83	2.30	0.02				
		Single	197	2.25	0.87						
	Education	10th	26	2.77	1.07	2.57	0.05	10th	Graduate (0.45 at 0.05 Significant Level)		
		12th	75	2.37	0.80						
		Graduate	318	2.31	0.86						
		Post Graduate	383	2.40	0.83						
	Occupation	Business	243	2.40	0.78	1.04	0.37				
		Professional	96	2.40	0.85						
		Service	436	2.35	0.87						
		Student	27	2.63	0.97						
Investment Related Demographics	Monthly Income of Investors	Up to Rs. 25,000	221	2.31	0.89	3.02	0.03				
		Rs. 25,001- 50,000	373	2.34	0.79						
		Rs. 50,001- 75,000	106	2.49	0.91						
		Rs. 75,000 & above	102	2.56	0.85						
	Stock Market Investment Experience	Up to 2 Years	239	2.26	0.80	5.04	0.00			11 Years & above	Up to 2 Years (0.52 at 0.00 Significant Level)
		3-5 Years	283	2.40	0.82						
		6-10 Years	236	2.40	0.89						
		11 Years & above	44	2.77	0.89						
	Investment in Equities	Up to Rs. 75,000	303	2.29	0.85	3.76	0.01	Rs. 2,25,001 & above	Up to Rs. 75,000 (0.26 at 0.01 Significant Level)		
		Rs. 75,001-1,50,000	200	2.35	0.73						
Rs. 1,50,001-2,25,000		105	2.36	0.91							
Rs. 2,25,001 & above		194	2.55	0.90							

Source : Field Survey

Educational categories also differentiate investors on the basis of conscientiousness as the calculated F value) *comes out as 2.57 with 0.05 significant level*. Bonferroni post-hoc analysis states that difference in conscience personality type is reported by 10th pass in comparison to graduate investors. The results exhibit that with rise in monthly income the level of conscience in the investor also increases. The investors in highest monthly income group have recorded maximum level of conscience personality followed by other income groups in descending order of income. The difference is significant at five per cent level. Similarly, the level conscientiousness among investors increases with investment experience. Experience makes them more disciplined and responsible. The investors with investment experience up to 2 years have shown least conscience personality type. *The results of one-way ANOVA and Bonferroni test reveal that investors with stock market investment experience of 11 years and above have reported significantly more conscientiousness when compared with other three lesser experience groups. The difference is conscientiousness exhibited by different categories based on investment in equities is significant at one per cent level.* Further, Bonferroni test for post-hoc analysis reveals that difference related to conscientiousness is reported by the investment groups at two extreme ends.

Conclusion

Every investor has unique set of personal and psychological characteristics that influence his investment decisions, goals, constraints and risk perception. The present paper strives to profile Indian individual equity investor across Paul Costa's and Robert McCrae's five personality traits: openness, extraversion, conscientiousness, agreeableness, and neuroticism.

It is evident from sample profile of investors across big-five personality types that the Indian individual investors' personality ranges from high neuroticism, moderate extroversion, moderate to low openness and conscientiousness to low agreeableness. Equity investor is weak in terms of conscience, open and agreeable traits. It implies that Indian investor is not mature enough and may have many doubts in his mind for investment related decisions. They are neither open towards new horizons of investment nor able to make a logical order of information while taking the investment decisions. The demographic dissection of investors' personality has been done to understand the how personality varies across general and investment related demographics of the respondents. Gender emerges as a significant differentiator in extent of neuroticism, agreeableness and conscientiousness exhibited by the investors. It is observed that male investors are more neurotic, agreeable and conscientious than their female counterparts. Age classification primarily influences the presence of extroversion, openness and conscientiousness among investors. The investors belonging to age group 31-40 years are significantly more extrovert, open and conscientious when compared with investors in age bracket 18-30 years. Age between 18-30 years is formative time for an individual's personal and professional life, whereas, during 31-40 years of age most of the individuals overcome initial struggle and

hitches of life making them more confident, open, disciplined and socially active. Marriage appreciates an individual's involvement in family and social life making them more extrovert and conscientious. The results clearly depicted that married investors are statistically more extrovert and conscientious when compared with single investors in Indian equity market. Education also emerges as an important determinant of investor personality. Investment related demographics, primarily, income, stock market investment experience and investment in equities differentiate investors in majority of the personality traits.

Hence, Indian equity investors are advised to gain maturity in terms of confidence in their investment related decisions and should be more logic oriented. They should follow scientific base for decisions rather than merely relying on rule of thumb. They should grab opportunity to learn new horizons related to investments. They should inculcate conscientious traits by exploring more and more investment related information. They should avoid negative thoughts and try to be more positive.

Present study is an exploratory study and may serve as a starting point for understanding investors' personality profile. Each personality trait may depict its own unique financial behaviour. Therefore, further research may be conducted on influence of investors' personality traits on their trading behaviour, risk bearing capacity, portfolio choices and investment decision behaviour. Investors' personality across various asset classes may also be explored. Such research give valuable inputs for investors/clients profiling programs, assist the designers of financial products to factor in investor preferences in their financial products and help the investors better understand their personality traits and take more informed investment decisions.

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