Personality Traits and Perceived Investment Performance: Mediating Role of Social Influence

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Abstract: The purpose of this paper is to investigate the effects of personality traits on the perceived investment performance. Also, it assesses the mediating effects of social influence between personality traits and investment performance. The total sample of 277 are gathered from different individuals who have investment experience. PLS-SEM was used to test the hypothesis, findings suggest that personality traits have a positive and significant impact on perceived investment performance. It is also found that personality traits have positive and significant effect on social influence. Similarly, social influence has positive and significant effects on perceived investment performance. Besides the direct relationships, it is found that social influence plays a complimentary mediating role between personality traits and perceived investment performance. Results suggest that awareness session should be conducted to engage investors with different personality traits.

Keywords: Personality traits; perceived investment performance; social influence.

Introduction

The positive outcome of investment is derived by the personality of the investors. Investment preference depends on the personality traits of the investors. Decisions made by an investor toward an investment is majorly demonstrated by his personality with the dominance of behavioral finance (Akhtar, Thyagaraj, & Das, 2018). Behavioral finance is considered as a dominant subject that involves behavioral biases as well as intellectual biases. The cornerstone of behavioral finance is based on both cognitive and arbitrage procedures (Javed, Bagh, & Razzaq, 2017). The effects of behavioral factors are ignored usually by individual investors that hinders their investment return. Human behavior is motivated through personality. It can be investigated from different perspectives, which includes investment decisions, investment performance, risk taking attitude, overreaction and overconfidence.

According to Vyvyan, Blue, and Brimble (2014), personality is the core construct of behaviors, motives, feelings, and thoughts for every individual. It demonstrates as a combination of perceptual, cognitive, and differentiating motivational and emotional attributes (Netemeyer, Warmath, Fernandes, & Lynch Jr, 2018). The decision-making of an individual will be influenced by these combinations based on their environment. In addition, it has been revealed that the influence of individual personality traits is correspondingly on the risk tolerance, spending, and investment management. Therefore, there is a core relationship between individual's tendency to perform based on the behavioral finance

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concepts. It has been proven that guidance is provided to individuals based on their personality traits for resolving an unidentified situation. Thereby, it has been validated that the risk tolerance will be highly observed among younger potential investors as compared to the expert potential investors (Vyvyan et al., 2014).

It is the fact that there are two psychological factors, named as disposition factor (propensity to hold under rated assets and sold the over rated) and availability factor (a state of easiness for proper ideas with relevant resources availability). Due to this, it is important to understand about the personality traits because factors related to personality traits may have the abilities to fluctuate the perceived investment performance. Therefore, this study includes the aspects of Norman's big five model, to observe the personality traits of the investors. The big five model provides the in depth knowledge about the personality traits of the investors, such as extraversion, openness, neuroticism, conscientiousness and agreeableness. Therefore, this study observes the effects of personality traits on the perceived investment performance of an investors, alongside, we also determine the mediating effects of social influence between the studied variables.

Literature Review

Five-Factors Model of Personality

Digman proposed five-factor model of personality in the year 1990 (Digman, 1990; Goldberg, 1993) extended it to the highest level. The theory described personalities into a hierarchical organization into five domains i.e. neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness (Goldberg & Saucier, 1998). It defines the overall problems being faced by each individual and bringing light on the existence of difference at individual level (John & Srivastava, 1999). The proponents of this model provide an overview which is comprehensive and supports the framework for authors by highlight an overall categorized factors of personality, it does not provide a complete personality overview. The theory has been witnessed as a strong model, the five factors or domains of the personality are a part of each research of both self and peer, adults and children (Digman, 1997), also including a number of cultures and languages.

Additionally, the big five model is used most commonly in personality literatures and studies. It provides a common framework and language for authors by combining together a wide range of constructs of personalities (Judge, Heller, & Mount, 2002). An overall view is also provided of the factors which are created by individual distinctiveness. Numerous researchers explained it as an effective personality model for evaluation. The global description has been adopted of personalities including the five individual factors where the information provided is not too short or not too long. The past studies provides validation and support of five-factor model, it occurs as a model for understanding personality characteristics on individual basis. The five factor model does has its limitations, but it still has been seen as a strong framework for investigation and understanding of personality traits, the model has received a great support and validation from past authors (Goldberg & Saucier, 1998).

Empirical Reviews and Hypothesis Development

Oyibo, Orji, and Vassileva (2017) examined the impact of social influence on persuasive technology along with the effect age and gender. The data of 323 was collected and considered all four strategies of social influence namely, reward, social comparison competition and lastly social learning. The outcomes of the study showed that all the four strategies played a crucial role in defining the change in behavior of persuasive technology users. It is also showed that the most persuasive strategy is of competition after reward and the least persuasive strategy is of social learning and comparison. Jaradat and Atyeh (2017) assessed big five personality traits and its connection with addiction of social media in Jordan. The study found that only 7.9% of the students were addicted to social media utilization whereas 62.1% students were in the alert set and normal group consisted of 30% students. Moreover, students whose personalities were found to be extroverted and less neurotic were open towards ideas and untraditional things were found to be addicts of social media, using it heavily. On the other side, Isomidinova and Singh (2017) examined the connection between financial education, socialization agents and financial attitude in the direction of financial literacy in Uzbekistan. The findings of the study revealed a positive relation between financial education and agents of financial education. In another study, Ariffin, Sulong, and Abdullah (2017) determined the level of financial literacy and students behavior towards saving in Malaysia. The outcomes attained shows that financial literacy is positively related in terms of socialization of parents, influence of peer and savings behavior, however, a negative connection between financial literacy and self-control were seen.

Knoll, Magis-Weinberg, Speekenbrink, and Blakemore (2015) examined the development of social influence on risk perception. The findings corroborated the idea that early adolescence is a vital stage in which every individual confront the experience and authority of adults as well as position higher value on the opinions of other teenagers as compared to the opinions of adults. Selvarajan, Singh, and Cloninger (2016) studied the relation between support and conflicts of work family with the moderating effect of personality traits. It is found that the role of co-workers is more important than of a manager when it comes to work family conflicts. Future studies are suggested to examine the role of a co-worker in the same setting. Refera, Dhaliwal, and Kaur (2016) reviewed the financial literacy among emerging economies, focusing on the economy of Africa in this particular case. It is noted that if individuals are financially literate it will not only improve their capability of personal decision making but they will be able to use financial services according to their requirement, gaining benefit from them. Based on the above studies, it can be hypothesized;

H1. Personality traits significantly influence perceived investment performance.

H2. Personality traits significantly influence social influence.

H3. Social influence significantly influences perceived investment performance.

H4. Personality traits significantly influence perceived investment performance with the mediating effect of social influence.

Methodology

The current study used a quantitative research method to achieve the aim of this study. The data was gathered from individuals who have investment experience of at least one year. A total of 300 self-administered questionnaires were distributed among respondents, out of 277 were returned. According to the formula suggested by [Hair, Ringle, and Sarstedt \(2011\)](#), the minimum recommended sample size was 80. However, in our study, the total number of gathered data was 277, fulfilling the criteria. In order to collect the sample, purposive sampling technique was used because the sample was drawn based on some specific purpose. In this case, we have only targeted those individuals who have investment experience of at least one year. Data were gathered using a questionnaire. The measurement tool is adopted from different sources, the research instrument related information is illustrated below;

Data Analysis

Respondent's Profile

Table 1 presents the comprehensive detail about the participants of the study. The collected data reveals that 53% (148) participants are female and 46% (129) are male. Majority of the respondents (51%) are lying between 36-45 age group, 24% are from 26-35 age group and remaining participants have above 45 age (3%). Around 124 participants (44%) have post-graduate degrees and 25% (71) graduate, 21% (60) are pursuing their undergraduate studies. Based on the data collected, it is revealed that all the participants have at least one or more than year investment experience and 73% respondents are earning around 3-5 lakh monthly.

Data Collection Instrument		
Variables	Citation	Items
Neuroticism	{Fatima Akhtar, 2017 #23}	4
Extraversion	(Fatima Akhtar, 2017)	5
Openness to experience	(Fatima Akhtar, 2017)	4
Agreeableness	(Fatima Akhtar, 2017)	3
Conscientiousness	(Fatima Akhtar, 2017)	2
Social Influence	(Fatima Akhtar, 2017; Marchewka & Kostiwa, 2007; Suki, 2013)	5
Perceived investment performance	(Fatima Akhtar, 2017)	4

Table 1
Respondent's Profile

		Frequency	Percent
Gender	Male	129	46.6
	Female	148	53.4
Age Group (years)	25 or below	57	20.6
	26 - 35	68	24.5
	36 - 45	142	51.3
	46 - 55	10	3.6
Education	Undergraduate	60	21.7
	Graduate	71	25.6
	Post-Graduate	124	44.8
	Others	22	7.9
Monthly Income	0 - 1 lacs	77	27.8
	1 - 3 lacs	73	26.4
	3 - 5 lacs	72	26
	More than 5 lacs	55	19.9
Investment Experience	No experience	5	1.8
	1 - 3 years	40	14.4
	3 - 5 years	79	28.5
	5 - 7 years	79	28.5
	7 - 10 years	12	4.3
	More than 10 years	62	22.4

Source: Author's estimation

Measurement Model

Prior testing the hypothesis, measurement model has been tested. The validity and reliability of the constructs have been assessed in the outer measurement model. The reliability test is conducted to check the internal consistency of the research instrument. Results are reported in Table 2.

Table 2
Construct Reliability and Validity

Variables	Items	Loadings	Composite Reliability (CR)	Average Variance Extracted (AVE)
Agreeableness	Agree1	0.844	0.882	0.714
	Agree2	0.912		
	Agree3	0.772		
Conscientiousness	Consc1	0.827	0.840	0.724
	Consc2	0.875		
Extraversion	Extra1	0.862	0.907	0.711
	Extra2	0.857		
	Extra3	0.893		
	Extra4	0.754		
Neuroticism	Neuro1	0.836	0.867	0.620
	Neuro2	0.786		
	Neuro3	0.77		
	Neuro4	0.756		
Openness to experience	Open2	0.723	0.811	0.590
	Open3	0.798		
	Open4	0.78		
Perceived investment performance	PIP1	0.948	0.919	0.791
	PIP2	0.895		
	PIP3	0.82		
Social influence	Social4	0.947	0.906	0.763
	Social5	0.894		

Source: Author's estimation

Reliability and Construct Validity

Table 2, as findings suggest that research instrument, i.e. questionnaire is reliable because the values of composite reliable of each construct is greater than the prescribed limit, i.e. (0.7).

After the assessment of reliability, the validity of the constructs has been tested. In this study, we tested both convergent and discriminant validity. Convergent validity defines whether the items of a single construct has convergence. It can be measured through the average variance extracted. It can be considered as valid if the value of average variance extracted is greater than 0.5. In this case, the AVE values are greater than the prescribed limit, hence fulfilling the criteria and concluded that convergent validity has been established.

Discriminant Validity

It can be defined as the items of single construct should be dissimilar of the items of other construct. The discriminant validity of the construct can be assessed through three distinct methods; [Fornell and Larcker \(1981\)](#) criteria, HTMT, and cross loadings. According to the [Fornell and Larcker \(1981\)](#) criteria, all the diagonal values should be greater than its off-diagonal values, then only discriminant validity can be achieved. Table 3 presents the results of [Fornell and Larcker \(1981\)](#) criteria. From the table, it is showing that all the diagonal values should be greater than its off-diagonal values, hence it is concluded that discriminant validity has established.

Table 3
Fornell and Larcker (1981) Criterion

	AGREE	CONSC	EXTRA	NEURO	OE	PIP	SI
Agreeableness	0.845						
Conscientiousness	0.535	0.851					
Extraversion	0.543	0.573	0.843				
Neuroticism	0.665	0.501	0.395	0.788			
Openness to experience	0.469	0.632	0.219	0.690	0.768		
Perceived investment performance	0.695	0.644	0.501	0.642	0.605	0.889	
Social influence	0.715	0.529	0.483	0.564	0.455	0.811	0.874

Source: Author's estimation

Another method through which discriminant validity can be assessed is cross loadings. According to [Hair Jr, Sarstedt, Hopkins, and Kuppelwieser \(2014\)](#), the factor loadings of all the indicators of single construct should be higher than the indicators of other construct. In our case, all the indicators have higher factor loadings in their own construct, therefore, it can be concluded that discriminant validity has established.

In addition, Heterotrait-Monotrait (HTMT) is another new technique through which discriminant validity can be evaluated. According to [Henseler, Ringle, and Sarstedt \(2015\)](#), discriminant validity will be achieved, when the HTMT ratios are less than 1. In this case, all the HTMT ratios are less than 1 (results are reported in table 5), therefore, we can say that discriminant validity has been achieved.

Table 4
Cross loadings

	AGREE	CONSC	EXTRA	NEURO	OE	PIP	SI
Agree1	0.844	0.487	0.411	0.682	0.495	0.594	0.546
Agree2	0.912	0.533	0.529	0.621	0.422	0.669	0.670
Agree3	0.772	0.299	0.436	0.328	0.235	0.478	0.605
Consc1	0.402	0.827	0.451	0.345	0.535	0.542	0.574
Consc2	0.502	0.875	0.521	0.498	0.542	0.555	0.346
Extra1	0.458	0.406	0.862	0.354	0.088	0.427	0.332
Extra2	0.345	0.379	0.857	0.284	0.072	0.314	0.263
Extra3	0.501	0.595	0.893	0.299	0.131	0.467	0.508
Extra4	0.497	0.518	0.754	0.379	0.406	0.452	0.483
?Neuro1	0.586	0.450	0.422	0.836	0.421	0.486	0.542
Neuro2	0.565	0.439	0.251	0.786	0.642	0.521	0.357
Neuro3	0.444	0.380	0.125	0.77	0.618	0.481	0.438
Neuro4	0.489	0.303	0.423	0.756	0.509	0.535	0.435
Open2	0.413	0.340	0.110	0.618	0.723	0.597	0.447
Open3	0.232	0.446	0.080	0.518	0.798	0.332	0.267
Open4	0.413	0.645	0.290	0.458	0.780	0.450	0.326
PIP1	0.664	0.702	0.517	0.658	0.611	0.948	0.730
PIP2	0.677	0.509	0.321	0.532	0.568	0.895	0.755
PIP3	0.505	0.496	0.499	0.514	0.425	0.820	0.678
Social3	0.411	0.284	0.273	0.321	0.256	0.570	0.770
Social4	0.659	0.578	0.469	0.598	0.554	0.812	0.947
Social5	0.757	0.475	0.490	0.513	0.337	0.714	0.894

Source: Author's estimation

Table 5
Heterotrait-Monotrait Ratio (HTMT)

	AGREE	CONSC	EXTRA	NEURO	OE	PIP	SI
Agreeableness							
Conscientiousness	0.735						
Extraversion	0.643	0.765					
Neuroticism	0.801	0.701	0.475				
Openness to experience	0.614	0.976	0.293	0.967			
Perceived investment performance	0.822	0.873	0.572	0.772	0.792		
Social influence	0.853	0.718	0.536	0.667	0.585	0.939	

Source: Author's estimation

Structural Model

After the assessment of measurement model, structural model is tested using PLS-SEM. Table 6 reports the results of hypothesis testing (direct-effect). Results are shown that personality traits have a positive effect on perceived investment performance ($\beta=0.420$, $P < 0.05$). Similarly, personality traits have also positively and significantly related to social influence ($\beta=0.710$, $P < 0.05$). It is shown that social influence has a positive and significant effect on perceived investment performance ($\beta=0.513$, $P < 0.05$).

Table 6
Hypothesis-testing using direct effect analysis

	Estimates	P Values
Personality Traits -> Perceived investment performance	0.420	0.000
Personality Traits -> Social influence	0.710	0.000
Social influence -> Perceived investment performance	0.513	0.000

Source: Author's estimation

In this study, the personality trait is used as higher order construct. It encompasses agreeableness, conscientiousness, extraversion, neuroticism and openness to experience. Table 7 presents the results and it shows that all the dimensions are significantly related to personality trait.

Table 7
Higher Orders of Personality Traits

	Estimates	P Values
Personality Traits ->Agreeableness	0.841	0.000
Personality Traits ->Conscientiousness	0.783	0.000
Personality Traits ->Extraversion	0.714	0.000
Personality Traits ->Neuroticism	0.847	0.000
Personality Traits ->Openness to experience	0.730	0.000

Source: Author's estimation

Mediating Effect

In this study, we assessed the mediating effect of social influence between personality traits and perceived investment performance. Table 8 illustrates the results of indirect effects. It shows that social influence significantly mediates the relationship of personality traits and perceived investment performance. As per the criteria of [Zhao, Lynch Jr, and Chen \(2010\)](#), social influence has a complimentary mediating effect between personality traits and perceived investment performance.

Table 8
Indirect Effects using PLS-SEM

	Estimates	P Values
Personality Traits ->Social influence ->Perceived investment performance	0.364	0.000

Source: Author's estimation

Predictive Relevancy and Accuracy

It is important to assess the predictive relevancy and accuracy of the model before reporting the results. The predictive accuracy of the model can be checked through R-square and the predictive relevancy can be checked through Q-square. Table 9 presents the results of both predictive relevancy and accuracy, and it shows that both are achieved.

Table 9
Predictive Relevance

	R Square	R Square Adjusted	Q-Square
Perceived investment performance	0.745	0.743	0.558
Social influence	0.505	0.503	0.358

Source: Author's estimation

Conclusion and Recommendations

The present research paper investigated the influence of personality trait on perceived investment performance. It also assessed the mediating effect of social influence between the studied relationship. It is revealed that personality trait has a significant positive relationship with the perceived investment performance, that means personality traits has a greater influence in financial decision making, like savings for retirement, financial security for future incidents, savings for children education, and for personal financing.

In addition, personality traits are also positively related with social influence, that means personality traits and consciousness comes in a human being by social interaction and social influence, this social influence give awareness and make conscience about family and future financial needs. Social influence impacts the decision making ability of individuals, decision making regarding financial investment. The findings of the study may provide substantive implications for managers. Based on the findings, managers can design different financial literacy programs to engage investors with different personality traits in investment. It is also suggested that awareness session ought to be conducted in order to increase the level of financial literacy of the investors.

Although the objective of the present paper is achieved, however, there are certain limitations. Social influence can also be considered as moderator between the relationship personality trait and perceived investment performance. The existing research framework can be modified by adding some other variables, such as; financial literacy, etc. Future researcher can also work on some specific context.

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