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Overconfidence and Herd Behaviour Moderates the Relationship between Personality Traits and Perceived Investment Performances

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ABSTRACT

Purpose: The researcher investigated investment performance of the individual investors which is influenced by the personality traits. The personality traits have five dimensions such as extraversion, agreeableness, conscientiousness, openness to experience, and emotional stability. The overconfidence and herd behaviour are the moderating variable of the study.

Methodology: The stratified random sampling techniques were used. Totally, 913 responses were received from the targeted respondents in Tamil Nadu state. The standardized measurement scale is used to collect the data. In analysis part, simple percentage calculations, KMO and Bartlett's Test, Multiple linear regression were performed.

Findings: The result displayed that the variables has significant at .05 level. The framed hypotheses were examined. There is positive relationship is exist between personality traits and investment performance with the moderating effects of overconfidence bias and herd behaviour of the investors.

Conclusion: Investment performance is influenced by personality traits of the investors. Majority of the investors make decisions by the influence of overconfidence and herd behaviour. Investors must be aware about the available biases in their behaviour in investment aspects.

Keywords: Overconfidence, Herd Behaviour, Investment Performance, Personality Traits

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1. INTRODUCTION

This paper elaborates the relationship of overconfidence and herd behaviour with personality traits and investment performances. A growing theoretical literature attempted this feature. Majority of modern empirical studies delivered possible explanations of the formal facts of impulsiveness and the financial crisis. However, they do not constantly follow the standard measures for investment decision-making because of their behavioural and psychological aspects (Cohn, Lewellen & Schlarbaum, 1975). Investors have numerous psychological biases, which are beside the rational decision-makings (Rubaltelli et al., 2010). Still there are some biases which influence investors' decision making but in this study focused on selected major biases which are thought to effect the investors' behaviour in the evolving markets. Jain, Walia, and Gupta (2019) classified the behavioural biases which impact the decision-making of the investors. The active nature of the market, together with the difficulty and ambiguity typically connected with the market, recommends that there must be a higher prospect that individuals with high financial knowledge.

Xia, Wang, and Li (2014), have related overconfidence in financial knowledge with participations in the stock market, describing overconfidence as a blend of high level of perceived performance and low level of real financial knowledge. Based on the new philosophies, the investors makes the accurate decisions dependable with the clarification of predictable finance theories. Therefore, biases will not arise in an investment decision, as every individual is deliberated to take the ability of picking the best alternatives between several available options, based on theories, right approaches, and concepts. The model of behavioural finance has ascended from the supposition that human beings as social and intellectual creatures encompass semotion and mind. Hirschey and Nofsinger (2008), defined as "A study of cognitive errors and emotions in financial decisions". They clarified that the theory of behavioural finance is a root cause of financial decision-making initiated by cognitive and emotional factors.

Objectives of the Study

1. to analysis the influence of personality traits on investment performance.
2. to investigate the moderating effect of overconfidence and risk capacity in the relationship between personality traits and investment performance.

2. LITERARY REVISED

2.1 Big Five Personality Traits:

Personality psychology defines how the people vary psychologically and those variance can be elaborated and measures (Widjaja et al., 2019). This is an essential psychological element that affecting the behaviour of the investors. The big five personality trait model was studied and adopted by various researchers widely (De Bortoli et al., 2019). Goldberg (1993) promoted for an inclusive framework for various traits that defines a personality. With this end, he used the model as Big Five personality traits contains extraversion, agreeableness, conscientiousness, openness to experience, and emotional stability or neuroticism (Baker et al., 2019). The people who are extroverts are more active, social, impulsive, self-preoccupied, less dysphonic and introspective in nature (Watson & Clark, 1997). The agreeableness contains the features of forgiveness, friendliness, trust and helpfulness. At the same time, disagreeable people are more self-centred, cruel, and sceptical (Costa & McCrae, 1992). The conscientiousness defined as responsible, planned, diligent, careful, and organized also related with persistence, order, success and self-control (Costa et al., 1991). The openness to experience people who are really imaginative, creative, and innovative (Zhao & Seibert, 2006). Finally, the emotional stability of the investors were examined with six elements such as hostility, anxiety, self-consciousness, impulsivity, depression, and vulnerability. Generally, the investors was not aware of their trading activities and their personality (Busic-Sontic & Brick, 2018). It explore the financial risk, psychological biases influence the financial decisions, and personality traits of the investors (Hamza & Arif, 2019). If the investors know about their personality and trading behaviour, it can help to manage effectively for better results and more benefits from the investment platforms (Mayfield et al., 2008; Sadiq & Amna, 2019).

2.2 Overconfidence and Herd Behaviour:

Overconfidence of the individual investors is unwarranted confidence and over estimation of capabilities of their information and knowledge which cause them to take irrational decision-making. It may come from confirmation, optimism, and illusions (Nur Aini & Lutfi, 2019). Based on these, people thinks their decisions will generate optimistic result and that information confirms their existing trusts. According to Kufepaksi (2007), overconfidence leads them to wrong decision while predict about investments in stocks and so on. Investors who are high overconfidence, they think themselves apart from average and incline to high volume trade (Malik et al., 2019, Robin & Angelina, 2019). It shows that aggressive and excessive behaviour in trading activities (Irwan Trinugroho & Roy Sembel, 2011). Some of the investor takes decision with overconfidence which is influenced by past positive performances (Prasad et al., 2014). It may influences money managers, financial analysts and financial advisors, sometimes it may goes wrong or negative outcomes.

2.3 Investment Performance:

Behavioural finance describe cognitive and feelings of the investor that impact performance of the investment (Amir Rafique et al., 2019). Investment performance defines to extent to investors develop their satisfaction with the returns from the avenues which is comparately high than excepted returns (Rehan et al., 2019, Keswani et al., 2019). This is influenced by their investment investors with the support of comparison of existing performances. Investors' performance is based on their psychological level towards investment (Corter & Chen, 2006). Sometimes it may goes wrong with the impact of overconfidence and risk taking attitude of the investors(Noreen & Asif, 2016). So that, the investor must be get attention to their investment performance and personality traits. Professionals and financial advisors are anticipated to estimate and assess the investors' investment performance in periodic basis (Teryima Sev, 2019). It may motive to perform better in future. This research focuses on the influencing factors of investment performance.

3. METHODOLOGY

3.1 Sampling Method

The researcher select the investors who are invested in top 10 companies located in Tamil Nadu which is listed by National Stock Exchange and Bombay Stock Exchange. In this research, the stratified random sampling method were used to concise the respondents from the population. According to Morgan's sample size table, 384 is the sample size. The data were collected during January to March 2020. Data was collected through google forms. The respondents are suggested to fill out the measurement scale. The google forms were not allowed the respondents to skip or unanswer the questions. Finally, 913 response were received valid response and then analysis was made.

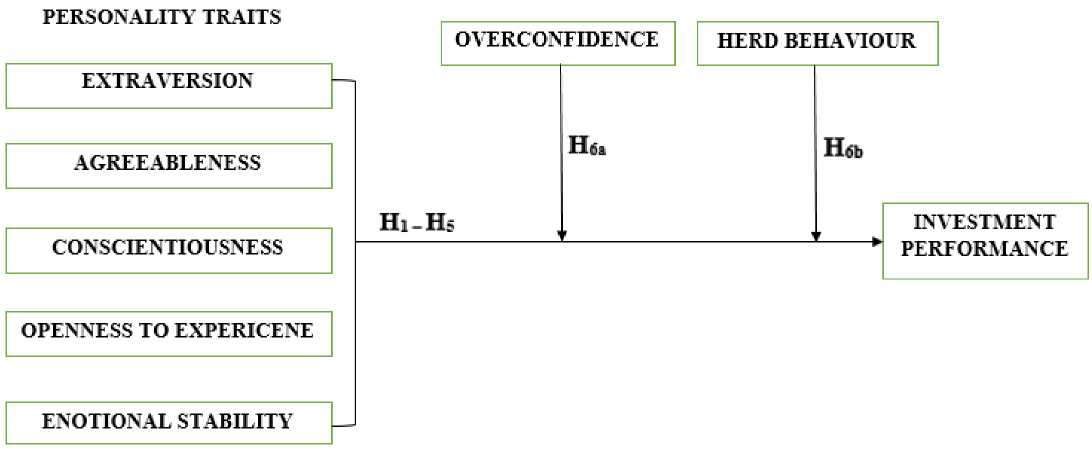
3.2 Tools used

To analyse the collected the data, the specific tools were utilized for accurate outcomes. In this study, percentage calculations, KMO and Bartlett's Test, and multiple linear regression. The framed hypotheses were tested with the outcomes of the analysis.

3.3 Methods and Measures

For data collection, the researcher used standardized measurement scale from previous studies. Personality traits is considered as independent variable, investment performance is treated as dependent variable, and overconfidence and risk act as moderate variable of the research. Personality traits has 44-*items* adopted from Goldberg (1993), Perceived investment performance has 4-*items* adopted from Le Phouc Luong & Doan Thi Thu Ha (2011), Overconfidence has 9–*items* adopted from Souza Silva et al., (2019), and Herd behaviour has 6–*items* adopted from Abdeldayem and Al Dulaimi(2019).

3.4 Conceptual Framework



3.5 Hypotheses Development

Based on the model development, the hypotheses of the study was constructed. The followings are the hypotheses of this study.

H_1 – Extraversion is positively and significantly related to investment performance

H_2 – Agreeableness is positively and significantly related to investment performance

H_3 – Conscientiousness is positively and significantly related to investment performance

H_4 – Openness to Experience is positively and significantly related to investment performance

H_5 – Emotional Stability is positively and significantly related to investment performance

H_6 – Overconfidence moderates the relationship between personality traits and investment performance.

H_7 – Herd Behaviour moderates the relationship between personality traits and investment performance

4. ANALYSIS AND INTERPRETATION

Table 1: Demographics of the Respondents

Items		Respondents	Percentage
Gender	Male	488	53.4
	Female	425	46.5
Age	18 – 31	226	24.7
	32 – 45	311	34.1
	46 – 59	261	28.5
	60 and above	115	12.5
Monthly Income	Below Rs. 50,000	201	22.0
	Rs. 50001 – Rs. 1,00,000	198	21.6
	Rs. 1,00,001 – Rs. 1,50,000	316	34.6
	Rs. 1,50,001 and above	198	21.6
Period of Investment	Short term (Less than 1 year)	237	25.9
	Medium term (1 -3 years)	455	49.8
	Long term (More than 3 years)	221	24.2
Experience in Investment	Less than 1 year	82	08.9
	1 – 3 years	186	20.3
	4 – 6 years	308	33.7
	7 – 9 years	204	22.3
	10 years and above	133	14.5

Source: Field Data

Out of 913 respondents, 488 (53.4 per cent) respondents were male and 425 (46.5 per cent) respondents were female. Age wise, 226 (24.7 per cent) respondents opted 18 – 31 years of old, 311 (34.1 per cent) respondents opted 32 – 45 years of old, 261 (28.5 per cent) respondents opted 46 – 59 years of old, and 115 (12.5 per cent) respondents opted 60 years and above. Under income category, 201 (22.0 per cent) respondents having below 50,000 as monthly income, 198 (21.6 per cent) respondents having monthly income between 50,000 – 1,00,000, 316 (34.6 per cent) respondents having monthly income between 1,00,001 – 1,50,000, 198 (21.6 per cent) respondents having monthly income as 1,50,001 and above. Preference on investment periods, 237 (25.9 per cent) respondents were opted short-term investment plans, 455 (49.8 per cent) respondents were opted medium-term investment plans, and 221 (24.2 per cent) respondents were opted long-term investment plans. In experience wise, 82 (08.9 per cent) respondents having less than one year of experience, 186 (20.3 per cent) respondents having 1 - 3 years of experience, 308 (20.3 per cent) respondents having 4 – 6 years of experience, 204 (22.3 per cent) respondents having 7 - 9 years of experience, and 133 (14.5 per cent) respondents having 10 and above years of experience.

Table 2: Cronbach's Alpha and KMO and Bartlett's Test

Reliability of the Constructs	
Constructs	**Alpha (α)**
Personality Traits: Extraversion Agreeableness Conscientiousness Openness to Experience Emotional Stability	0.892
Overconfidence	0.915
Herb Behaviour	0.988
Investment Performance	0.941
KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.968
Bartlett's Test of Sphericity: Approx. Chi-square Sig.	 5.15E4 .000

Source: Field Data

The researcher performed reliability test to know the consistency of the collected data. The cronbach's alpha test were used, the result displayed that the personality traits has 0.892, overconfidence has 0.915, herd behaviour has 0.988, and investment performance has 0.941. It represents that the result were above the cutoff 0.7. To know the overall adequacy and correlation among the variables, the KMO and Bartlett's test was performed. Kaiser-Meyer-Olkin of sampling adequacy is 0.968 which is more than the 0.7. The chi-square value and significant value is lies under 0.01 significance level.

Table 3: Multiple Linear Regression

Model Summary					
Model	**R**	**R^2**	**Adj R^2**	**SE**	**Durbin-Waston**
1	0.943	0.915	.946	0.42657	0.79
ANOVA					
	Sum of Square	**df**	**Mean Square**	**F**	**sig.**
Regression	1134.384	6	245.059	1.224E3	.000
Residual	74.381	907	.187		
Total	1274.496	913			
Coefficients					
	B	**SE**	**β**	**t**	**sig.**

Constant	-0.74	.073		-.864	.418
PT	.258	.084	.256	3.984	.000
OV	.503	.146	.504	4.983	.013
HB	.416	.135	.467	3.184	.026
IP	-.152	.052	.071	-2.785	.000
Residuals Statistics					
	Minimum	**Maximum**	**Mean**	**sd**	**N**
Predicted Value	.7678	4.7987	3.0725	1.87133	913
Residual	-1.98476	.89320	.0000	.38694	
Std. Predicted Value	-1.522	1.078	.000	1.000	
Std. Residual	-4.278	1.037	.000	.993	

Source: Field Data

a. Predictors: (Constant), Extraversion, Agreeableness, Conscientiousness, Emotional Stability, Openness to Experience
b. Dependent Variable: Investment Performance

Note: PT- Personality Traits; OV- Overconfidence; HB – Herd Behaviour; IP – Investment Performance

From the above table 3, the regression was performed. The output showed that the R = 0.943; R^2 = 0.915; Adjusted R^2 = 0.946, Standard Error = 0.426; Durbin-Waston = 0.79. It represented that the R square and Durbin-waste value was more than the standard level of 0.7. Analysis of Variance was significant at 1% significance level. The co-efficient of the value is displayed, the values of personality traits (β = 0.256 and significant at 0.01significance level); for overconfidence (β = 0.504 and significant at 0.05 significance level); for herd behaviour (β = 0.467 and significant at 0.05 significance level); and finally for investment performance (β = 0.071 and significant at 0.01 significance level).

Table 4: Summary of Hypotheses Testing

Hypotheses	Results
Extraversion is positively and significantly related to investment performance	Supported
Agreeableness is positively and significantly related to investment performance	Supported
Conscientiousness is positively and significantly related to investment performance	Supported
Emotional Stability is positively and significantly related to investment performance	Supported

Openness to experience is positively and significantly related to investment performance	Supported
Overconfidence moderates the relationship between personality traits and investment performance	Supported
Herd behaviour moderates the relationship between personality traits and investment performance	Supported

5. DISCUSSION AND CONCLUSION

In recent days, the investment performance in financial market becomes essential and the researchers conducted studies on this particular area. Most of the researchers were involve to this field because the overconfidence bias and herb behaviour play major role in decision-making of the investors. This current study focuses on the influence of personality traits on investment performance of the investors with the moderation effects of overconfidence bias and herd behaviour. The outcomes of the study support the constructed hypotheses. Extraversion, Agreeableness, Conscientiousness, Openness to experience, and Emotional stability has positively and significantly related to investment performance. So that, the first objective is proved here. The personality traits positively influencing the investment performance of the investors. Secondly, there is concluded that the overconfidence and herd behaviour moderates the relationship of personality traits and investment performance of the individual investors. The second objective is also attained. It indicate that the overconfidence of the investors is based on the educational qualification and experience in investments. If it is increases, automatically the overconfidence level is also optimise. Majority of the investors believe with their surrounding's opinion rather than advisors or financial experts. So that, the herd behaviour also play a game in investment decision-makings. The result of the study will helpful to the investors to monitor their biases in investment activities. The future researchers may come up with some other biases like information bias, heuristic, anchoring as a moderating variables.

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