The Influence of an Investor's Personality Traits on Their Propensity to be Overconfident

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Abstract

The study aims to examine the impact of the personality traits of an investor during investment decisions and their overconfidence bias in the least developing country (Nepalese). The study investigates the association between the personality factors of investors and their overconfidence bias during investment decisions. The population used for studying is Nepal. The data were collected through a questionnaire with a five-point scale. 384 questionnaires, the researcher collected 343 questionnaires and 41 questionnaires were not returned. So, the response rate of the study is 89 percent. The researcher has used simple percentages, mean, correlation, standard deviation and regression for data analysis. This study examined the influence of personality traits on the overconfidence bias and discovered a positive correlation between individual investors' overconfidence bias and the big five personality traits: extroversion, agreeableness, conscientiousness, openness to experience, and neuroticism. It results that personality traits significantly impact overconfidence bias and that extroversion positively affects individual investors' overconfidence bias in the Nepal stock market. The study's findings indicate a positive correlation between the five personality traits and the overconfidence bias exhibited by investors. Demonstrates a positive correlation between the big five personality traits "extroversion, agreeableness, conscientiousness, openness to experience, and neuroticism" and the overconfidence bias. These findings suggest a positive relationship between increases in the Big Five personality traits and the corresponding increase in the overconfidence bias of individual investors.

Keywords: *Personality Traits, Overconfidence Bias, Investors, Self-Administered Questionnaire, Likert Scale*

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INTRODUCTION

In the 1980s, behavioural finance theory emerged by combining behavioural and psychological theories, which explain that investors can make decisions for investment choices without any influence from their psyche, personal feelings, or emotions. In some cases, their psyche, emotions and personal feelings come into play and cause them to behave irrationally when making investment decisions (Thomas, 2015). Therefore, it can be said that they exhibit psychological biases when making investment decisions. These biases hinder individuals from making typical decisions. Investors often fall prey to biases, one of which is the overconfidence bias. Overconfidence is an inconvenient belief towards a witnessed reasoning, judgement and the individual's cognitive ability.

According to studies, one of the reasons behind the perceptions of investors is their personalities (Rad and Chirani, 2014). Investors' investment choices can be prejudiced by their present atmosphere, mood, emotions and cognitive abilities. Personality encompasses all these variables. Sets

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individuals apart from each other. Each person has a combination of thoughts, feelings and behaviour formed by a stable mix of personality traits. In the Lahore Stock Exchange, there is a correlation between overconfidence bias and neuroticism among investors. The demographic results indicate no relationship between age or various educational backgrounds and overconfidence bias; however, there is an association among investor experience on investment and overconfidence bias. Parameswari and Krishnan (2015) suggest that personality traits do not impact an investor's attitude towards investments since investors who aim to minimize risk wisely opt for portfolios. Furthermore, investors primarily invest for tax-saving purposes and to encounter their expenditures.

According to Bashir et al. (2013), personality traits such as over-optimism and herding behaviour impact financial behaviour prejudices. Personality traits also affect the risk-taking nature of investors in Pakistan. The findings suggest that demographic variables are not significantly associated with investment biases, such as disposition effect, herding, and over-optimism. Additionally, there is no significant connection between demographic variables and the risk-taking behaviour of investors. Muneer (2015), risk significantly influences both financial and investment decisions. Overconfidence bias is a characteristic of a stockholder's preferences. The study of risk traits of investors is a significant topic in behavioural finance. Investment decisions are influenced by individuals' overconfidence bias and risk tolerance levels. Cultural factors are being included in analysis these days with the emergence of behavioural finance (Thorsten & Wang, 2007). It is interesting to find out how the overconfidence bias of an individual is affected by their cultures and not only their demographic characteristics. It is beneficial for investment advisors so that they can provide suggestions according to the overconfidence bias level of the individual. The present study investigates differences in overconfidence bias and investment behaviour due to cultural factors such as religion and ethnicity. In the past two decades, the behavioural finance has emerged in the finance industry. Many financial institutions offer financial assistance based on the character of investors. For example, involvement pension strategies use results grounded in behavioural finance to assist individuals in investing their retirement currency. Similarly, many hedge assets and asset directors use behavioural finance approaches to improve their investment policies and overall portfolio revenues (Barberis & Thaler, 2003).

Behavioral finance has emerged as a new field in the finance industry over the past two decades. Currently, numerous financial institutions offer financial services founded on outcomes derived from behavioural finance principles. Contribution pension plans utilize insights from behavioural finance to assist individuals in effectively investing their retirement funds. Hedge funds and asset managers often employ behavioural finance strategies to enhance their investment strategies and overall portfolio returns (Barberis and Thaler, 2003). Behavioural finance aims to enhance our understanding of financial markets and their contributors by incorporating insights from behavioural sciences such as sociology and psychology (Ricciardi & Simon, 2000). The notion contradicts the traditional finance paradigm, which assumes that markets and economic agents are rational and act to maximize their self-interests (Ritter, 2003). Despite its appeal and extensive research

debate, this concept relies heavily on assumptions about financial markets and human behaviour. The assumption is that economic agents possess complete knowledge and understanding of the consequences of their actions and can utilize all available information effectively. Additionally, the assumption is made that financial markets exhibit stability, meaning that the price of a security accurately reflects its fundamental value. It is also assumed that traders can counteract the impact of irrational market participants (Barberis & Thaler, 2003).

Investments fundamentally carry out some risk, and understanding investor level of overconfidence bias can assist investors in strategically managing their portfolio and making informed investment decisions. Investors are categorized into aggressive, moderate, and conservative groups based on risk tolerance. Online assessments for overconfidence bias, such as risk-related surveys or questionnaires, can be found. Investors may consider examining the past returns of diverse classes of assets to assess the unpredictability of various financial instruments. The time horizon of an investor is a factor that influences overconfidence bias. Investors with long-term financial goals may achieve higher returns by strategically allocating their investments towards high-risk assets, such as stocks. Cash investments with low risk are suitable for short-term financial purposes. The overconfidence bias of an investor is influenced by their forthcoming earning volume and the possession of further assets such as social security, pension, inheritance, and home. Investors with additional stable sources of funds can assume higher levels of risk with their investable assets. Barberis and Thaler (2003) suggest that investors with more extensive portfolios exhibit greater risk tolerance, which can be attributed to the fact that the fraction of loss experienced in a large portfolio is relatively small and associated with a small portfolio. An aggressive investor, characterized by a high-overconfidence bias, is willing to accept the possibility of financial losses in pursuit of potentially superior investment outcomes. Aggressive investors possess market knowledge, know the fluctuation in securities, and employ strategies to attain above-average returns (Thorsten and Wang, 2007).

The investor's primary objective is to invest in capital appreciation rather than generating revenue or conserving the initial venture. Investors allocate their assets primarily to stocks, with minimal or no provision for bonds or cash. Moderate investors aim to achieve capital growth while minimizing potential losses. The investor aims to evaluate opportunities and risks, often referred to as a "balanced" strategy. Moderate investors typically create a diversified portfolio of stocks and bonds (Ricciardi & Simon, 2000). Conservative investors prioritize stability and are averse to significant fluctuations in their investment portfolios. Retirees and individuals nearing retirement are frequently classified in this group due to their aversion to potential losses in their main investment and preference for short-term investment strategies. Conservative investors prioritize certain high-liquid investment vehicles. Risk-averse persons often choose bank certificates of deposit (CDs), money markets, or U.S. Treasuries as investment options to generate income and protect their capital (Thorsten and Wang, 2007).

Research has indicated that investors exhibit irrational behaviour when making investment decisions. Current portfolio theory posits that

rational and risk-averse investors desire low-risk investments over high-risk ones, given an equivalent level of return. The concept is rooted in the notion that risk-averse individuals can create portfolios that exploit and maximize predictable returns while considering a precise level of market risk. It highlights the idea that higher rewards are inherently linked to increased risk. The effective market hypothesis posits that financial prices reflect all relevant info, making them accurate estimations of actual investment values at any moment. The efficient market hypothesis posits that individuals act rationally, optimize anticipated utility, and incorporate all relevant information. Both theories posit that investors are rational and seek to maximize their wealth when making investment decisions. Additionally, these theories suggest that market prices are resolute by the actions of individual investors (Dohmen et al., 2011). The study aims to achieve the following objectives:

→ To measure the relationship between extraversion, neuroticism, openness, agreeableness, conscientiousness and overconfidence bias.

→ To examine the effect of extraversion, neuroticism, openness, agreeableness and conscientiousness on overconfidence bias.

REVIEW OF LITERATURE

Research in behavioural finance has shown that personality traits significantly impact investor behaviour. According to Burton (2001), investment decisions should be based on a realistic assessment of market returns relative to the risks undertaken by investors. Various factors influence investment risk, including gender, education, age, income, and occupation. According to Joo and Pauwels (2002), individuals with younger ages and higher levels of education tend to exhibit greater retirement confidence. Therefore, the younger generation tends to be overconfident at an early age. Several factors have contributed to individuals' failure to save for retirement, including a lack of awareness regarding the importance of financial planning, a lack of motivation, and an overconfidence bias. Job satisfaction positively influences retirement planning. This type of relationship may improve an individual's work-related attitudes periodically.

Hogarth (2002) defines overconfidence bias as how individuals handle their finances, encompassing insurance, investments, savings, and budgeting. Overconfidence bias refers to the perception and application of fundamental financial concepts to effectively strategize and control one's financial choices, as observed in certain research studies. Financial capability, or financial literacy, is influenced by an individual's experience, expertise, and personal needs. It is crucial in enhancing consumers' engagement with financial markets and services. Mandell (2003), a survey revealed that graduating high school seniors still face challenges in understanding the fundamentals of overconfidence bias. The administration of tests upon high school graduation reveals a significant overconfidence bias among adolescents in the education system. The survey results indicate a decrease in the level of overconfidence bias over time, as observed from a series of surveys conducted since 1998. According to OECD (2005), overconfidence bias refers to the tendency of financial consumers, such as investors, to overestimate their comprehension of financial products and concepts, even without sufficient information, instruction, or objective advice. This cognitive

bias can lead individuals to believe they better understand financial risks and opportunities than they do, potentially leading to poor financial decisions.

So, instead of enhancing their comprehension, individuals affected by overconfidence bias may falsely believe that they understand financial matters better than they truly do, leading to overestimating their abilities and taking on excessive risks. The goal is to make informed choices that enhance their financial well-being. When considered in the context of portfolio construction, overconfidence bias can protect against impulsive reactions to market volatility, helping individuals stay committed to their financial objectives. Anderson (2005) highlights the significance of the overconfidence bias in financial planning, which individuals often overlook. Problems may arise if one fails to assess their overconfidence bias accurately or acts contrary to their self-awareness. Investors often overestimate their risk tolerance. Subsequently, in the event of a significant decline in the value of the stock component of their investment portfolio, individuals tend to experience a sense of panic and opt to sell their stocks rather than endure the fluctuations in the market. Investors are unwilling to tolerate the possibility of their investments declining further. Their risk tolerance is lower than anticipated.

Lusardi and Mitchell (2007) conducted a study to measure the extent and prevalence of overconfidence bias. The study findings indicate that individuals with lower education levels, females, African-Americans, and Hispanics, exhibit lower levels of overconfidence bias, which in turn impacts their financial decision-making. The study revealed that these respondent groups exhibit inadequate retirement planning, limited engagement in the stock market, and unfavorable borrowing habits, potentially stemming from a lack of understanding of fundamental financial principles.

Grable (2021) observed moderate evidence in the literature suggesting that single individuals exhibit higher risk tolerance levels. Unmarried individuals typically have fewer responsibilities than their married counterparts, resulting in a reduced sense of personal loss and a greater willingness to engage in risky behaviour. Research indicates that unmarried individuals exhibit higher risk tolerance than their married counterparts. This aids in evaluating the presence of overconfidence bias among workers in their peak earning years. This period is characterized by significant financial decision-making. The researchers provided a comprehensive assessment of overconfidence bias by presenting detailed questions to evaluate participants' financial knowledge. An important finding pertains to the role of overconfidence bias as a significant determinant of overconfidence bias. In addition, respondents who received economics education at the primary level and participated in company-based financial training programs demonstrated a higher level of understanding than other respondents. Grable (2021) found strong evidence in the literature supporting a significant association between financial knowledge and overconfidence bias. The literature presents multiple definitions of financial literacy/knowledge. Financial literacy can encompass a broad comprehension of the economy or a more specific focus on money management.

Based on the provided research framework, the study's hypotheses are as follows:

H_1: There is a positive relationship between extraversion and overconfidence bias.

H_2: There is a positive relationship between neuroticism and overconfidence bias.

H_3: There is a positive relationship between openness and overconfidence bias.

H_4: There is a positive relationship between agreeableness and overconfidence bias.

H_5: There is a positive relationship between conscientiousness and overconfidence bias.

H_6: There is a positive effect of extraversion and overconfidence bias.

H_7: There is a positive effect of neuroticism and overconfidence bias.

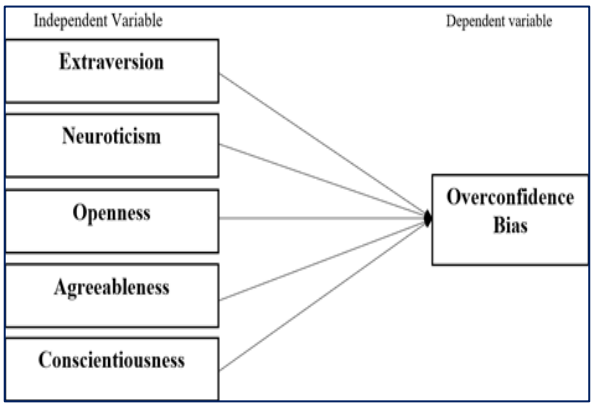
H_8: There is a positive effect of openness and overconfidence bias.

H_9: There is a positive effect of agreeableness and overconfidence bias.

H_{10}: There is a positive effect of conscientiousness and overconfidence bias.

Note: Adapted from Jency, 2017

Figure 1: Research Framework



The conceptual framework provides a structural groundwork for this research work. The conceptual outline elucidates the underlying theory that explains the existence of the research problem being investigated. A conceptual framework is a structural framework that illustrates the association between independent and dependent variables. The study's conceptual framework is outlined below.

RESEARCH METHODOLOGY

Research design

The present research used the descriptive research method, and it aimed to define a subject by gathering data and tabulating the frequencies of items of research variables (Cooper and Schindler, 2003). This study aims to depict the existing state of affairs without manipulating variables. A causal-comparative design investigates the relationships between independent and dependent variables after a specific action or event.

Population, sample size and sampling method

Population in research refers to individuals or objects sharing specific characteristics or qualities that pique the researcher's interest. It serves as the target group for which the researcher aims to generalize their findings. Essentially, it encompasses all individuals possessing the traits or attributes under investigation. In the case of Butwal sub-metropolitan city investors, the total number remains unknown, rendering the study population effectively infinite. As a result, the researcher has employed a specific formula designed for situations when the population size is uncertain to determine the sample size. A sample represents a smaller subset drawn from the accessible population. This subset is thoughtfully chosen to mirror the population's key characteristics. In this context, every member or case within the sample is referred to as a subject, respondent, or interviewee. The formula utilized for calculating the sample size is provided below.

$n = z^2 p (1-p)/e^2$

n denotes the sample size
When we have no idea about the population, then put the value of p=0.5
e= error, which is 5 percent, so the value of e is 0.05
z= when the error is assumed as 5 per cent, the value of Z=1.96 from the normal area table.
Therefore, $n= 1.96^2 * 0.5(1-0.5)/0.05^2 =384$.
So, the final sample size is 384 for the study.

The chosen method for selecting sample respondents in this study is convenience sampling, primarily because it was not feasible to identify all potential investors. This approach was convenient for the researcher. Data was collected through a self-administered questionnaire with closed-ended questions, which was selected due to its practicality, relevance to the research problem, and the size of the target population. Of the 384 questionnaires distributed, 343 were collected, resulting in an 89 percent response rate.

The questionnaire comprised two main sections: the first section gathered demographic information from the respondents, while the second section collected data on various independent and dependent variables. A five-point Likert scale was used for respondents to express their agreement or disagreement, with five indicating "Strongly Agree," 4 for "Agree," 3 for "Neutral," 2 for "Disagree," and 1 for "Strongly Disagree."

To analyze the collected data, the research employed SPSS software version 20. The analysis involved correlation and multiple regression techniques.
The regression equation for this study can be summarized as follows, which encapsulates the relationships between the various independent and dependent variables under investigation:

$$Y= a + b1x_1 + b2x_2 + b3x_3 + b4x_4 + b5x_5$$

Whereas,

Y= Overconfidence Bias
X_1= Extraversion
X_2= Neuroticism
X_3= Openness
X_4= Agreeableness
X_5= Conscientiousness

DATA ANALYSIS AND RESULTS

Table 1 displays the Cronbach Alpha values for extraversion, neuroticism, openness, agreeableness, and conscientiousness about overconfidence bias, with values of 0.975, 0.906, 0.965, 0.968, and 0.798. These results indicate that the questions in the questionnaire assessing these different variables exhibit high reliability. Reliability, in essence, is a crucial factor when assessing the effectiveness of a measurement tool. It pertains to the instrument's capacity to consistently measure the same constructs. Validity focuses on how accurately an instrument measures the intended constructs. While reliability addresses consistency, validity assesses whether the instrument genuinely measures what it is designed to measure.

Descriptive statistics is a vital notion in mathematics and statistics area. The mean is the average or the maximum common value in a gathering of numbers. The mean and standard deviation values of different dimensions of investors' personality traits have been calculated in this section to know investors' responses.

Table 1: Descriptive statistics

Variables	N	Mean	S. D	Cronbach Alpha
Extraversion	343	3.17	0.94	0.975
Neuroticism	343	3.18	0.95	0.906

Openness	343	3.57	1.13	0.965
Agreeableness	343	3.47	1.07	0.968
Conscientiousness	343	3.57	1.13	0.975
Overconfidence bias	343	3.63	0.96	0.798

Table 1 shows that the mean value of extraversion includes the total mean value found, which is 3.17. The responses of respondents are inclined towards Agree. Investors are satisfied with the extraversion dimension of their personality traits.

Similarly, neuroticism includes a mean value of 3.18, indicating agreement. Openness includes the total mean value found is 3.57. The responses of respondents are inclined towards agreeing. Agreeableness includes the total mean value found is 3.47, which indicates agree and investor's personality traits with the Agreeableness dimension of investor's personality traits concerning the investors.

Likewise, conscientiousness includes a total value of a mean of 3.57. It shows that respondents' response is inclined towards Agree. The investor's personality traits with the conscientiousness dimension of investor's personality traits concerning the investors.

Furthermore, Overconfidence bias includes the total mean value found is 3.63. This shows the response of respondents is inclined towards Agree. The investor's personality traits with the any Overconfidence bias dimension of investor's personality traits concerning investors.

Correlation

The correlation coefficient falls within a range between +1 and -1. A correlation coefficient +1 signifies a positive correlation between the variables, indicating that they move in the same direction. Conversely, a correlation coefficient of -1 suggests a negative correlation, signifying that the variables move in opposite directions.

Table 2: Correlations

Variables	EXT	NEU	OPE	AGR	CONS	OB
Extraversion	1					
Neuroticism	.968**	1				
Openness	.923**	.954**	1			
Agreeableness	.999**	.967**	.921**	1		
Conscientiousness	.915**	.951**	.998**	.913**	1	
Overconfidence bias	.792**	.810**	.847**	.790**	.842**	1
**. Correlation is sig at the 0.01 level (2-tailed).						

Table 2 illustrates a connection between personality traits, such as neuroticism, extraversion, openness, agreeableness, conscientiousness, and the tendency towards overconfidence bias. The data reveals strong positive linear relationships, as indicated by correlation coefficients (r) and their significance levels. For instance, the correlation coefficient between extraversion and overconfidence bias is a robust 0.792, demonstrating a significant positive relationship at the 0.01 significance level. Similarly, neuroticism exhibits a correlation

coefficient of 0.810 with overconfidence bias, again indicating a strong positive link significant at the 0.01 level.

Additionally, openness displays a correlation coefficient of 0.847, signifying a substantial positive linear relationship with overconfidence bias at the 0.01 significance level. Furthermore, agreeableness demonstrates a correlation coefficient of 0.790, reinforcing the presence of a significant positive connection with overconfidence bias at the same 0.01 significance level. Conscientiousness is also closely linked, with a correlation coefficient of 0.842, again at the 0.01 significance level.

The p-values for extraversion, neuroticism, openness, agreeableness, and conscientiousness concerning their relationship with overconfidence bias are all remarkably low at 0.00. This indicates that these independent variables are highly significant at the 0.01 level, underscoring the substantial associations between extraversion, neuroticism, openness, agreeableness, conscientiousness, and overconfidence bias. Consequently, we can confidently conclude that hypotheses H1, H2, H3, H4, and H5 have been validated based on the data analysis.

Overall Regression

The regression coefficient is a statistical tool that helps us understand how two or more variables are related. It quantifies the associations between variables from dependent (predicted) to independent (influencing) variables, thus measuring the degree of dependence of each variable.

Table 3: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.849[a]	0.721	0.716	0.54727
(a) Predictors: (Constant), Conscientiousness, Openness, Extraversion, Agreeableness, Neuroticism				

Table 3 shows that the R square is 0.721. R square of 0.72.1 indicates that 72.1 per cent of the variation in the dependent variable, i.e., overconfidence bias, is explained by the independent variable, i.e., openness, extraversion, agreeableness, conscientiousness and neuroticism.

Table 4: ANOVA [b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	260.363	5	52.073	173.865	.000[a]
	Residual	100.932	337	0.3		
	Total	361.294	342			
a. Predictors: (Constant), Conscientiousness, Openness, Extraversion, Agreeableness, Neuroticism						
b. Dependent Variable: Overconfidence bias						

Table 4 indicates the significance of the regression model (significance of R square). Sig value of 0.000 on the test indicates that the model is significant at a 5 percent significant

level. The p-value is less than 0.05; therefore, the model shows the impact is accepted. Conscientiousness, openness, extraversion, agreeableness, and neuroticism significantly affect overconfidence bias.

Table 5: Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.446	0.109		4.101	0
	Extraversion	0.314	0.564	0.322	0.557	0.01
	Neuroticism	-0.069	0.156	-0.067	-0.44	0.012
	Openness	1.135	1.001	1.07	1.134	0.031
	Agreeableness	-0.235	0.55	-0.238	-0.427	0.021
	Conscientiousness	-0.251	0.992	-0.237	-0.253	0.001
a. Dependent Variable: Overconfidence bias						

Regression equation showing the relation between all variables.

$Y=a+b_1X_1+b_2X_2+b_3X_3+b_4X_4+b_5X_5$

Overconfidence bias =0.446+0.314X1-0.069X2+1.135X3-0.235X4-0.251X5

R = .849, R^2=.721

Table 5 shows that one unit change in X_1 will lead Y to change with 0.314, keeping X_2, X_3, X_4 and X_5 constant, One unit change in X_2 will lead Y to change with 0.069 keeping X_1, X_3, X_4 and X_5constant, One unit change in X_3 will lead Y to change with 1.135 keeping X_1, X_2, X_4 and X_5constant, One unit change in X_4 will lead Y to change with -0.235 keeping X_1, X_2, X_3 and X_5constant and One unit change in X_5 will lead Y to change with -0.251 keeping X_1, X_2, X_3 and X_4constant.

A significant result with a p-value of 0.000 in the ANOVA test signifies that the model holds significance at a 5 percent significance level. The model's impact is accepted because the p-value is less than 0.05. This indicates that conscientiousness, openness, extraversion, agreeableness, and neuroticism significantly influence overconfidence bias. The R-squared value of 0.721 tells us that approximately 72.1 percent of the variation in the dependent variable, overconfidence bias, can be explained by the independent variables - openness, extraversion, agreeableness, conscientiousness, and neuroticism. This statistic helps us understand how well our independent variables collectively account for the changes observed in the dependent variable.

DISCUSSION

The study's impact on personality traits and the overconfidence bias of retail investors inside the Nepalese stock exchange. Similarly, this study investigates the association between personality factors and overconfidence bias. For this objective, the impact of personality traits on overoptimism bias was analyzed. Individual investors' overconfidence bias was positively related to the big five personality traits of extroversion, conscientiousness, agreeableness, openness to experience, and neuroticism. The study's findings revealed that personality traits significantly influence overconfidence bias.

The study's empirical findings revealed that extroversion significantly influences individual investors' overconfidence bias in the Nepal stock market. It indicates that an extroverted investor will be overconfident in financial selections. Such investors will make impulsive investing judgments. As a result, investors who socialize more actively will seek indications of what others are investing in. This finding is similar to the study of Saeed (2021). However, this finding contradicts the findings of Githui and Ngare (2014). This finding might differ because important factors like stock market size and other macroeconomic factors can significantly influence investor psychology. The study's findings revealed conscientiousness significantly positively impacts retail investors' overconfidence bias. It indicates that highly conscientious individuals always seek high-quality information that will increase their overconfidence bias. This finding is consistent with Brown and Graf (2013).

This study also discovered that the trait of openness to experience has a significant positive impact on investors' overconfidence bias. We find that openness raises the risk of an investor becoming overconfident in the capital market. An investor may develop a sense of pseudo know how by inviting new ideas and experiences, developing an overconfidence bias. This result is consistent with the findings of Githui and Ngare (2014). Further, the study found that neuroticism significantly positively impacts the overconfidence bias. These findings contradict the findings of Saeed (2021). These findings may vary between nations due to demographic factors socioeconomic, cultural, and political variations.

However, agreeableness has no significant impact on the overconfidence bias. This discovery is similar to the results of Saeed (2021). One reason that could define this result is that agreeableness does not influence overconfidence bias. Investors with agreeableness personality traits investing in highly regularized markets think rationally and make their investment decisions through their analysis rather than being influenced by others (Githui & Ngare, 2014). This research underscores the importance of individual investors' self-awareness of their personality traits, as it can significantly impact their financial investment decisions. Understanding their unique personality types can help them recognize and guard against the potential pitfalls of overconfidence bias. Investors should take into account their personal financial risk tolerances. By doing so, investors can make more informed and balanced choices in their financial endeavors, ultimately contributing to more successful and prudent investment decisions (Brown & Graf, 2013).

CONCLUSION AND IMPLICATION

According to the data analysis, the Stock market has become an integral part of Nepalese household investors as participation in the primary and secondary markets increases. However, these investors are not rational compared to other developed market investors. One reason for this irrationality is their behavioural bias, namely overconfidence. Many factors influence the overconfidence bias of the investors, and one of them is their personality. The results from the study show that each of the five personality traits is positively correlated with the overconfidence bias of the investors. The study has revealed that all the prominent personality traits,

commonly known as the "big five" - including extraversion, agreeableness, conscientiousness, openness to experience, and neuroticism - positively correlate with the overconfidence bias. In simpler terms, when these personality traits are more pronounced in individuals, their overconfidence bias tends to increase in the same direction. The research findings suggest that overconfidence bias among individual investors is positively influenced by extraversion, conscientiousness, openness to experience, and neuroticism. This means that individuals with higher levels of these traits are more prone to displaying overconfidence bias in their decision-making processes. However, interestingly, agreeableness does not appear to have a significant impact on this bias. It implies that investors with personality traits such as extraversion, conscientiousness, openness to experience, and neuroticism should be particularly mindful of their potential vulnerability to overconfidence bias when making investment decisions. It also implies that an extroverted investor will be overconfident in financial selections. Such investors will make impulsive investing judgments.

The primary implications might be that financial advisors should consider investors' profiles and personality traits when designing optimal portfolios and making appropriate advice and tips to limit risk and make sensible decisions. Financial planners and advisers might use investor personality traits to meet customers' financial demands efficiently and guide clients on suitable financial services. Finally, future research should consider other factors affecting overconfidence bias, such as investor behaviour, risk perception, and demographic factors.

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