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Big Five Personality Traits, Financial Literacy and Investment Decision

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ABSTRACT

Investment behavior is increasingly explained through behavioral finance, recognizing that personality traits and financial literacy significantly shape investor decisions beyond rational models. In developing markets like Nepal, where financial education is limited and market participation is evolving, understanding how these psychological and cognitive factors interact is essential for promoting informed and sustainable investment behavior. This study analyses how retail investors in the Nepalese Stock Market are influenced by the Big Five Personality Traits, with specific focus on Surkhet district. Also, this research assesses whether financial literacy serves as a moderator for these relationships and addresses an important gap in the behavioral finance literature in emerging markets. A descriptive and causal-comparative research design was applied in this study, whereby a structured questionnaire was provided to 400 retail investors actively participating in the Nepal Stock Exchange (NEPSE) who were 'convenience sampled' from Surkhet District. The data was analysed with Structural Equation Modelling (SEM) using Smart PLS software to determine the direct effects as well as the moderating effects of the trait and the moderating variable. Results indicate that openness to experience; conscientiousness, agreeableness and neuroticism positively affect investment decisions; however, extraversion did not have a significant effect. Also, financial literacy strengthens the connection between openness to experience and investment decisions, thereby enhancing the predictive ability of these traits in investment decisions. This study provides valuable insight for policy makers, financial educators, and the financial advisory service industry in Nepal. Recognizing the mental aspects that affect the behavior of investors, it is possible to create specially designed financial literacy programs and advisory services based on personality to be a tool that individual investors use for making investment decisions that are more rational and informed.

1. INTRODUCTION

Investment behavior has become a significant part of the conversation at the cross point of psychology, economics, and finance. This reflects the intricate decision-making processes of investors in the highly unstable markets. Historically the classical and neoclassical theories, which were quite different, were the main ones that led the investment modes while the Efficient Market Hypothesis (EMH) and Modern Portfolio Theory (MPT) were the most recognized among such theories since these were based on the assumption of rationality and optimal decision-making (Fama, 1970; Markowitz, 1952). Still, a considerable number of researches indicate that investors usually are "asleep" to their feelings, heuristics, and biases, and consequently, they tend to expect the opposite of what a rational investor would (Barber & Odean, 2008; Kim & Nofsinger, 2008). Consequently, behavioral finance, which includes psychological and sociological aspects in financial decision-making, has become dominant.

Behavioral finance has been heavily influenced by a major factor which changes the way we look at investment preferences, risk tolerance, and general behavior personality traits. The Big Five Personality Traits model consisting of Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism is one of the psychological models that can be extremely helpful in understanding differences in financial behavior (McCrae & Costa, 1997). Various widely accepted in the literature studies, indicate that openness is related to the novelty of investing, conscientiousness is linked to discipline and long-term planning, extraversion is connected with active trading and social investing, agreeableness is associated with cautious or socially responsible investment, and neuroticism is related to emotional and risk-averse behavior (Durand et al., 2013; Lodi-Smith & Roberts, 2007; Sadi et al., 2011; Tsao & Chang, 2010).

Moreover, financial literacy (FL) that is linked to a person's capacity to understand and use financial knowledge has been, in recent times, recognized as a trait that goes hand in hand with being a sound investor in one's own market (Lusardi & Mitchell, 2014). Those with financial literacy are going to be the ones who take the most informed, rational investment decisions and are less likely to fall into cognitive biases (Chen & Volpe, 1998; Van Rooij et al., 2011). To sum it up, personality and literacy are two different factors which bear a relationship in a highly intricate manner: in fact, quite a few investors will behave irrationally notwithstanding their knowledge if their personality predisposes them to emotional or impulsive decisions (Hamza & Arif, 2019).

In a developing economy like Nepal, where there is almost no formal financial education, and stock market participation is low, it is really important to understand the behavioral and educational factors which influence investment decisions (Shrestha et al., 2023). The Nepalese stock market which is still at the early stage of its development is characterized by certain patterns of speculative trading and herd behavior which, thus, points to the necessity of knowing the psychological and educational factors that affect investment decisions (Shahu, 2023). Besides, the COVID-19 pandemic has brought these trends into sharper focus, as it shows that emotional stability, conscientiousness, and financial literacy were the factors that helped investors to balance out the uncertainty during the crisis (Dinu & Bunea, 2022).

We can, therefore, say that this work is of great social and timely importance. It examines the interaction between the Big Five Personality Traits, financial literacy, and the impact on retail investors' investment decisions in Surkhet, Nepal. The study region is one where the behavioral and educational dimensions of finance have not been thoroughly researched. The understanding gained from the research can be used to

direct the financial education programs and the personalized advisory strategies, in the end, resulting in the promotion of rational and sustainable investment behavior.

Investment behavior literature is increasingly highlighting the role of the interaction of one's personality, cognition, and financial education in an individual's investment decision-making process, which clearly indicates the movement from rational choice models towards behavioral finance models. Most of the time, classical financial theories fail to anticipate the deviations brought about by human judgment and emotions (Barberis & Thaler, 2003; Shefrin & Statman, 2000), while behavioral finance resort to the psychological and emotional factors as the determinants of decision-making (DeBondt et al., 2010; Pompian, 2007).

The Big Five Personality Traits model has, among the psychological factors, been the most influential framework in explaining the source of individual differences in financial decision-making (McCrae & Costa, 1997; Durand et al., 2013). Several articles relate openness to creativity and risk-taking (Nga & Yien, 2013; Pan & Statman, 2013), conscientiousness to the characteristic of being careful and investing with one's financial goals in mind (Sadi et al., 2011; Zaidi & Tauni, 2012) and extraversion to activities such as social trading and optimism bias (Lin, 2011; Mayfield et al., 2008). Neuroticism has been linked to emotional instability and risk aversion (Jamshidinavid et al., 2012), while agreeableness is more likely to initiate behaviors such as following the herd trend and relying on the advice of the group (Costa & McCrae, 1992; Mayfield et al., 2008).

Alongside these psychological revelations, financial literacy is becoming more and more acknowledged as an essential factor that can moderate the effect of personality and thus greatly help in making more rational decisions by lessening the influence of biases originating from one's personality (Lusardi & Mitchell, 2014). The evidence depicts that literacy improves risk evaluation abilities, curbs impulsive decision-making, and facilitates long-term investment planning (Harini & Subramanian, 2023; Hyat & Anwar, 2016). Besides, financially educated people are not that easily influenced by emotional interferences which, in turn, enable them to execute investment strategies that are of a more balanced nature (Antony & Selvarathinam, 2022; Hussain & Rasheed, 2022).

Several empirical papers that have incorporated advanced quantitative approaches such as Structural Equation Modeling (SEM) and Partial Least Squares (PLS) have, to a large extent, supported these conclusions. For example, the research by Herliana and Ratnawati (2023) argued that personality traits are one of the mediators that link financial literacy to investment behavior, on the contrary, the study by Chouhan and Meman (2023) revealed that the extroversion, neuroticism, and risk tolerance among Indian investors are strongly interrelated. Antony and Selvarathinam (2022), in the same vein, showed that financial literacy leads to a reduction in the occurrence of cognitive biases and a subsequent increase in rational financial behavior.

Even with extensive research, the literature still shows gaps and contradictions. One such gap is the role of financial literacy as a moderator between personality traits and investment decisions which is theoretically accepted but empirically inconsistent across different contexts. Furthermore, the paper identifies cultural, emotional, and social factors such as collectivism, gender norms, and social learning that are not only ignored but also have a significant impact on financial behavior (Ahmad & Maochun, 2019; Bashir et al., 2013). Another question arises about the link between personality and sustainability-oriented investment in the light of global trends toward environmental, social, and governance (ESG) investing (Dietz et al., 2007; Hirsh, 2010).

Current findings point to three main conclusions: Firstly, the Big Five personality traits framework continues to be a reliable predictor of investment behavior; Secondly, financial literacy serves as a cognitive moderator that alleviates behavioral biases; and lastly, substantial geographical as well as methodological gaps remain, in particular, in the financial markets of Nepal, which are still developing. If we deal with these gaps, it will not only deepen the understanding of behavioral finance literature but also help create financial literacy programs that are sensitive to context and cater to the personality profiles of investors.

The present study is based on the concepts of Behavioral Finance Theory which refutes the rational-agent assumptions of traditional finance by highlighting the impact of cognitive and emotional factors on decision-making (Shefrin & Statman, 2000). According to behavioral finance, investors' choices are heavily influenced by psychological biases and personality dispositions, thus leading to phenomena like overconfidence, loss aversion, and herding (Barber & Odean, 2001; Kahneman & Tversky, 1979).

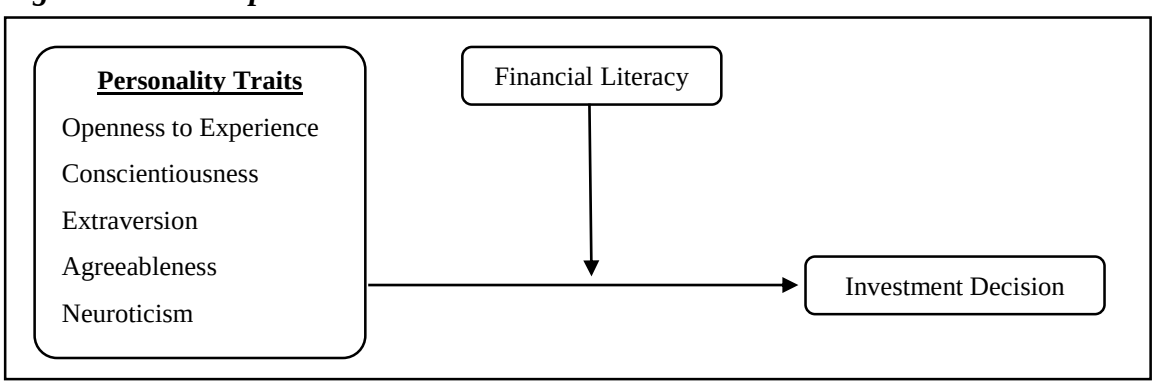
The Big Five Personality Traits Model represents the main theoretical concept for the study of individual differences in investor behavior. It is hypothesized that each personality dimension influences certain aspects of financial decision-making, risk-taking, diversification, and investment horizon either positively or negatively (Durand et al., 2013; Mayfield et al., 2008).

On the other hand, the Financial Literacy Model offers the cognitive basis for rational economic behavior, indicating that people with better financial knowledge would be more active in financial markets and make more prudent investment decisions (Van Rooij et al., 2011).

This research combines the two theories using a moderated model that suggests financial literacy is a moderator of the relationship between personality traits and investment decisions. The conceptual framework indicates that the personal traits of an individual and their investment behavior are inherently related, however, the financial literacy of the investor is the factor that sets both the size and the change of the effects. The study employs the Structural Equation Modeling (SEM) technique to depict not only the direct effects but also the moderating effects of the variables, thus it unveils the total effect of psychological and educational factors co-existing and influencing investor behavior in the emerging market scenario.

The paper delves into the effect of the Big Five Personality Traits on the decision-making of retail investors in Nepal, simultaneously, it assesses the influence of financial literacy as a moderator in these relationships. The theoretical framework of the research is illustrated in

Figure 1: A Conceptual Framework



Source: (Akhtar et al., 2017; Basana et al., 2024; Hamza & Arif, 2019; Khan et al., 2020)

The propositions as alternative hypotheses to the statistically validated significances or associations between the different constructs selected for the study are made following the established goals and research questions of the study.

Openness to Experience and Investment Decision: Openness to Experience is associated with a set of traits like being innovative, curious, and willing to even take the risk of losing in the financial market, trying new methods. Numerous researches showed that people who are very open are more likely to invest in such instruments and take more risks (Nga & Yien, 2013; Nicholson et al., 2005). Moreover, they could fall into a wrong pattern of thoughts which are very common among investors, like undervaluing the risks or just copying others (Jamshidinavid et al., 2012; Lin, 2011). Such a liberal investor will not only hear about but also participate in dubious activities in the market (Antony & Selvarathinam, 2022). Therefore, this research, after scrutinizing the proofs, derives the following hypothesis.

H_1: Openness to Experience significantly influences investment decisions of retail investors in the Nepalese Stock Market.

Conscientiousness and Investment Decision: Conscientiousness is the personality trait that shows a person with the characteristics of being thoughtful, and exercising restraint and foresight, and it is this quality that drives investors to be more cautious and tasteful in their choosing. Studies have shown that people banking on their conscience often go for safer investments, take their time to decide and are very logical about the assets they want to include in their portfolio (Akhtar & Das, 2020; Durand et al., 2013; Sadi et al., 2011; Zaidi & Tauni, 2012). In the unpredictable and at times speculative stock market of Nepal, the quality of conscientiousness distinguishes those retail investors who employ conservative strategies and is a key factor in separating them from the rest of the market. Thus, the present research suggests the following hypothesis:

H_2: Conscientiousness significantly influences the investment decisions of retail investors in the Nepalese Stock Market.

Extraversion and Investment Decision: Investors with an extroverted personality are often seen as the ones who keep the party going, being assertive and full of energy. Their characteristics push them to not only be market-leaders' co-participants but also to take risks that are considerably above average. The literature backing this is rather robust, as it shows, among other things, that extroverts tend to be the most active traders, apply overconfidence as a leading factor in their decision-making process, and still, be the strongest group depending on social and media cues (Ahmad & Maochun, 2019; Lin, 2011; Mayfield et al., 2008). In the case of Nepal's market, which suffers from information asymmetry, the role of extraversion regarding investment choices might be very strong. Hence, the study puts forward the below hypothesis:

H_3: Extraversion significantly influences the investment decisions of retail investors in the Nepalese Stock Market.

Agreeableness and Investment Decision: The model identified agreeableness as one of the personality traits and it included characteristics like being helpful, trustful, and having the habit of living in a socio-psychologically calm environment. Nevertheless, these traits made the investors to more likely follow and get peer influence. A number of studies have reported that a significant percentage of individuals possessing the trait of agreeableness demonstrate the behavior that is characteristic of the majority of investors and they select non-conflict situations to receive social signals rather than be personally assessed (Antony & Selvarathinam, 2022; Bashir et al., 2013; Mayfield et al., 2008). An agreeable person in Nepal would likely

be able to assess his or her risk and make a trading decision that is compatible with that risk assuming the risk is figured out through informal financial advice which is common in the country. Hence, the author proposes the following hypothesis:

H_4: Agreeableness significantly influences the investment decisions of retail investors in the Nepalese Stock Market.

Neuroticism and Investment Decision: Neuroticism is a character quality composed of the individual's emotional instability that, in addition, often and coupled with this instability, creates a lack of confidence in the person. Furthermore, this character trait also results in lower risk-taking ability and fear-based investment decisions that are poorly thought out. Investors with such a personality trait are often found to stay alone, hiding inside, as their way of reacting to the market slump, whereas those who keep an eye on the market with great anxiety and interpret the price changes as losses are very upset by them (Ahmad & Maochun, 2019; Antony & Selvarathinam, 2022; Jamshidinavid et al., 2012; Sadi et al., 2011). Taking into consideration that Nepal has a very unstable stock market, neuroticism can be seen as a reason for the investors' dramatic reactions to the market, which then leads to more frequent trading of the shares in the short run. Therefore, the hypothesis is:

H_5: Neuroticism significantly influences the investment decisions of retail investors in the Nepalese Stock Market.

Financial Literacy and Investment Decision: The term financial literacy refers to the understanding of financial principles followed by investors and thus is a major factor that decides the overall perception of the market, the elimination of biases and the final rational decision making process, respectively. It has been concluded by the researchers that a financially literate person is a more daring investor in the stock market and thus makes fewer cognitive errors (Lusardi & Mitchell, 2014; Van Rooij et al., 2011). Besides, it alters one's behavior by eliminating the preconceptions associated with some of the personality traits such as being nervous or lacking confidence (Antony & Selvarathinam, 2022; Harini & Subramanian, 2023). Thus, the study puts forth the following moderating hypotheses:

H_{6A}-H_{6E}: Financial literacy moderates the relationships between each of the Big Five personality traits (Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism) and investment decisions.

2. METHODS

The study employed a quantitative cross-sectional survey design in order to determine the relationship between the Big Five Personality Traits and financial literacy as well as the effect they have on the retail investors' decisions in Nepal. A survey was selected as the data collection method because it has the advantage of allowing collection of large standardized data samples and it also fits the study's positivist and deductive approach (Creswell, 2009). This strategy supported the objective hypothesis testing and made it easier to compare and replicate the results of the study.

The area of the research was Birendranagar, Surkhet, and the main concern was the retail investors who were trading at the Nepal Stock Exchange (NEPSE). The data collection period was from November to December 2024, after a pilot test was done in October 2024. The study area represents a rapidly developing investment atmosphere that is being influenced by the growing number of digital trading platforms, hence why it is a contextually relevant place to study the behavior of investors.

The population that was being targeted comprised the retail investors of the Nepalese stock market. Even if the whole country has a base of more than 6.28 million investors, it is not known how many of them are in Birendranagar town. In order to gather the sample, investors who were still active were purposively selected, followed by convenience sampling to make sure that the chosen investors were practically accessible (Etikan et al., 2016; Taherdoost, 2016). A minimum sample of384 respondents was determined using Cochran's formula, a 95% confidence level, 5% margin of error, and $p = 0.5$, in order to achieve adequate statistical power and reduce the chances of Type II errors (Cohen, 1992).

Data were gained by means of a structured, self-administered questionnaire that was derived from previous studies on personality traits, financial literacy, and investment decisions. The instrument was subjected to validity checks through expert reviews and a pilot test that was carried out in October 2024. Reliability was determined by Cronbach's alpha, Composite Reliability (CR), and Average Variance Extracted (AVE), adhering to the thresholds suggested by Kline (2013) and Hair et. al., (2020). Ethical procedures i.e., voluntary participation, privacy, and informed consent were strictly observed.

Data were processed, coded and analyzed with the help of Microsoft Excel and Smart-PLS 4. Descriptive statistics provided an overview of the demographic and variable distributions (Bryman & Cramer, 2011). Factor analysis, on the other hand, checked the data suitability (Field, 2009; Tabachnick & Fidell, 2019). Structural Equation Modeling (SEM) was used to measure the direct impacts of personality traits on investment decisions and at the same time to check the moderating effect of financial literacy. The hypotheses were confirmed when the standardized coefficients (β) indicated $p < 0.05$.

One of the drawbacks of using non-probability sampling is that it may affect the generalizability of the results as the sample might not accurately portray the entire investor population of Nepal which is very diverse. Self-reported data can cause bias in a way that they can be influenced by the participant's desire to be favorable or by their personal interpretation. Moreover, the cross-sectional design of the research limits establishing cause-and-effect relationships. Nonetheless, the validity procedures and the analytical frameworks that were used were very rigorous and hence the findings were credible and replicable.

3. RESULTS

An ultimate sample of 400 participants was acknowledged for analyzing. Earlier than performing the hypothesis testing in Smart-PLS 4.0, the researcher had a look at the survey responses to better understand the dataset and the demographic make-up of the respondents. Table 1 contains a description of the descriptive findings.

Table 1: Descriptive Statistics

Variables	Categories	Frequencies	Percentage
Gender	Female	193	48.30%
	Male	207	51.80%
Age	16 to 25	248	62.00%
	26 to 35	126	31.50%
	36 to 45	21	5.30%
	46 to 55	5	1.30%
Occupation	Employed	151	37.80%
	Entrepreneur	19	4.80%
	Student	224	56.00%

Monthly Income	Unemployed	6	1.50%
	Below Rs. 25,000	225	56.30%
	Rs. 25,000 - Rs. 50,000	122	30.50%
	Rs. 50,000 - Rs. 100,000	32	8.00%
	Above Rs. 100,000	21	5.30%
Education Level	Intermediate and below	60	15.00%
	Bachelors	237	59.30%
	Masters	101	25.30%
	M. Phil/Ph.D	2	0.50%
Investment Portfolio	Less than Rs. 100,000	236	59.00%
	Rs. 100,001 - Rs. 500,000	113	28.30%
	Rs. 500,001 - Rs. 1,000,000	19	4.80%
	Above Rs. 1,000,000	32	8.00%

Table 1 contains the demographic responses of the survey respondents as well as their distribution. In the male-to-female ratio, the male percentage was slightly higher with 51.8%, and the female percentage was 48.3%. The age distribution was such that the younger age groups made up about 80% of the total sample. The age groups of the respondents were as follows: 16-25 years (62%), 26-35 years (31.5%), while the rest of the age groups 36-45 years (5.3%) and 46-55 years (1.3%) represented the older population segment in the sample. The main occupation of the respondents was student status (56%), with the second most common being employed (37.8%). On the other hand, lesser numbers were classified as entrepreneurs (4.8%) or unemployed (1.5%).

Income levels showed that the highest number of respondents (56.3%) earned less than Rs 25,000. Rs. 25,000-50,000 income bracket was occupied by about 30.5% of the respondents, while 8% indicated their earnings between Rs. 50,000 and 100,000, and the last 5.3% were of those earning above Rs. 100,000. Similarly, bachelor's degree was the highest educational qualification (59.3%) followed by master's (25.3%) among the respondents. The rest were reporting intermediate or below (15%) and only 0.5% had M. Phil/PhD. Finally, data on investment portfolios shows that 59% of respondents had investments less than Rs. 100,000 and 28.3% in the Rs. 100,001-500,000 categories. Meanwhile, 4.8% had investment portfolios worth Rs. 500,001 to 1,000,000 and 8% reported having investments of more than Rs. 1,000,000.

The analysis began by assessing the dataset's reliability and validity, which involved examining both the outer and inner measurement models. Initially, the quality of the outer measurement model was evaluated through several indicators, including composite reliability (CR), Cronbach's alpha for internal consistency, as well as assessments of convergent and discriminant validity.

Table 2: Reliability Statistics

Constructs/Items	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
OE	0.777	0.781	0.856	0.598
C	0.749	0.773	0.855	0.663
E	0.716	0.729	0.840	0.638
A	0.745	0.760	0.839	0.567
N	0.801	0.824	0.884	0.719
ID	0.753	0.758	0.858	0.668
FL	0.710	0.722	0.838	0.633

The different concepts measured in the study and their quality in terms of reliability and validity are captured in Table 2. The scales used in the study were internally consistent as evidenced by Cronbach's alpha coefficients which were in the range of 0.710 to 0.801 and went beyond the minimum recommended threshold of 0.70. Similarly, the composite reliability (CR) for rho_a (0.722 to 0.824) and rho_c (0.838 to 0.884) went beyond the acceptable level of 0.70 showing that the constructs have been reliable. Besides that, convergent validity was also supported by the Average Variance Extracted (AVE) values which ranged from 0.567 to 0.719. Since all AVE values were higher than the minimum requirement of 0.50, it means that each construct explains more than half of the variance of the respective indicators, which is in line with the standards given by Hair et al. (2020).

Furthermore, to determine discriminant validity, the research used different criteria like the assessment of cross-loadings, the Fornell-Larcker criterion, and the heterotrait-monotrait (HTMT) ratio. These steps verified that every construct was sufficiently unique from the others, thus the measurement model overall became stronger.

Table 3: Cross Loading

	A	**C**	**E**	**FL**	**ID**	**N**	**OE**
OE 10	0.554	0.497	0.473	0.374	0.525	0.457	**0.803**
OE 4	0.345	0.377	0.551	0.372	0.422	0.204	**0.747**
OE 6	0.432	0.510	0.473	0.389	0.541	0.338	**0.768**
OE 9	0.385	0.443	0.532	0.449	0.533	0.283	**0.775**
C 10	0.491	**0.815**	0.441	0.405	0.448	0.456	0.412
C 5	0.662	**0.857**	0.546	0.433	0.617	0.569	0.600
C 9	0.421	**0.769**	0.439	0.403	0.462	0.289	0.408
E 1	0.420	0.486	**0.849**	0.438	0.501	0.256	0.522
E 10	0.458	0.490	**0.810**	0.410	0.505	0.308	0.563
E 2	0.415	0.436	**0.732**	0.380	0.394	0.217	0.472
A 1	**0.776**	0.490	0.418	0.390	0.502	0.511	0.444
A 2	**0.734**	0.463	0.308	0.210	0.379	0.496	0.319
A 7	**0.675**	0.401	0.438	0.306	0.405	0.352	0.390
A 8	**0.821**	0.610	0.447	0.297	0.526	0.546	0.504
N 2	0.639	0.483	0.295	0.270	0.481	**0.895**	0.371
N 7	0.586	0.496	0.227	0.331	0.464	**0.906**	0.376
N 8	0.362	0.423	0.330	0.345	0.364	**0.731**	0.324
ID 10	0.384	0.430	0.470	0.492	**0.790**	0.311	0.516
ID 12	0.525	0.584	0.498	0.488	**0.848**	0.411	0.468
ID 5	0.567	0.538	0.476	0.530	**0.813**	0.527	0.620
FL 1	0.315	0.449	0.508	**0.843**	0.550	0.308	0.443
FL 3	0.335	0.381	0.296	**0.754**	0.429	0.303	0.373
FL 4	0.322	0.378	0.399	**0.787**	0.484	0.265	0.405

The results shown in Table 3 imply that each indicator exhibited a stronger load on its related construct in comparison to the others. Such a scenario of higher outer loadings in contrast to cross-loadings is a significant proof of good discriminant validity (Hair et al., 2020).

Table 4: HTMT Ratio

	OE	**C**	**E**	**A**	**N**	**ID**	**FL**
OE		0.754	0.876	0.718	0.526	0.848	0.686
C			0.794	0.853	0.695	0.826	0.692
E				0.735	0.440	0.795	0.706
A					0.805	0.794	0.553
N						0.653	0.495
ID							0.835
FL							

Table 4 shows the results of the HTMT ratio that was used to evaluate discriminant validity at the construct level. According to Leguina (2015), the HTMT values should always be below the threshold of 0.90. In this study, the HTMT values were considerably lower than the 0.90 threshold, which means that discriminant validity between the constructs was well established.

Table 5: Fornell-Larcker Test Measures

	OE	**C**	**E**	**A**	**N**	**ID**	**FL**
OE	0.773	0.595	0.652	0.559	0.422	0.658	0.513
C		0.714	0.590	0.659	0.552	0.636	0.508
E			0.799	0.539	0.329	0.589	0.513
A				0.753	0.637	0.609	0.405
N					0.748	0.518	0.366
ID						0.717	0.617
FL							0.796

Table 5 presents the Fornell-Larcker test coefficients for discriminant validity which are lower than 0.80 and the diagonal values are higher than all other values reported showed constructs values are discriminated in its own construct than other constructs as suggested by Hair et al. (2020).

Structural relationships in this research were assessed via the PLS-SEM bootstrapping method to find the significance of the paths. A bootstrapping sample of 5000 resamples was used, thus, it was possible to make a strong and reliable assessment of the statistical significance and the trustworthiness of the estimated path coefficients (Hair et al., 2020).

Table 6: Model Summary

	R-square	R-square adjusted
ID	0.638	0.627

Table 6 shows the model summary of the study. The model produced an R-square value of 0.638, which means that the independent variables included in the analysis are responsible for about 63.8 percent of the variability in Investment Decision (ID). This is a clear indication of high explanatory power, as the model seems to capture a considerable portion of the determinants of investment decisions.

The adjusted R-square was found to be 0.627, which means that it considers the number of predictors and also compensates for the fact that R-square generally increases with the addition of more variables. The adjusted value is bit lower, as it would be expected, giving a more cautious and precise picture of the model's explanatory power. Nevertheless, an adjusted R-square of 0.627 still means that the model is capable of explaining a quite large chunk of the variance in investments decisions, while also considering the complexity of the model.

The study not only investigated but also took into account the moderating effects of the variables under consideration. Five direct and five moderating hypotheses were proposed and tested. The outcomes of the measurement and structural models, along with the estimated path coefficients, are illustrated in Figure 2 and Table 7.

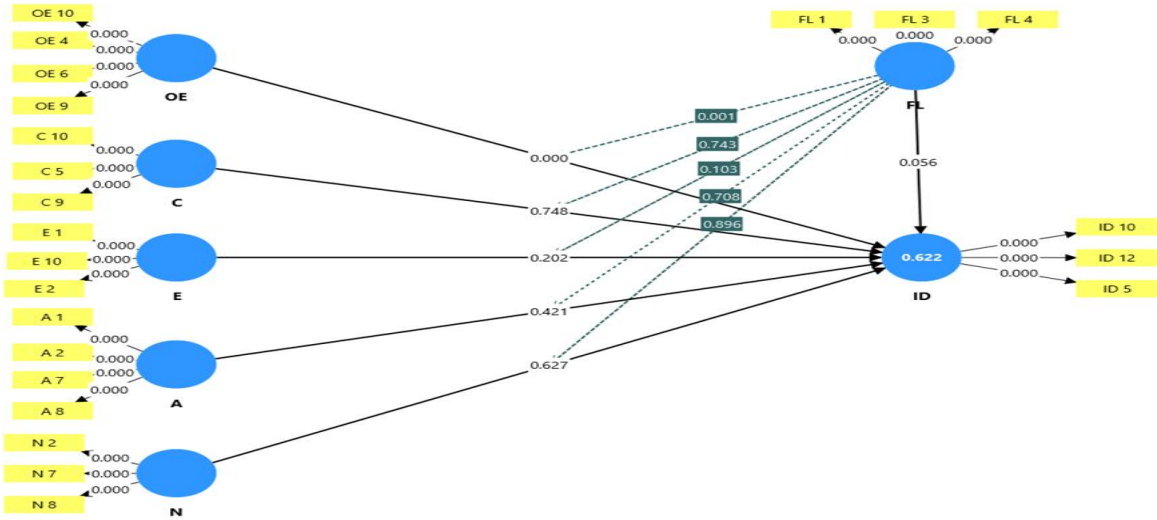


Figure 2: Structural and Measurement Model

Table 7: Path Coefficient and Hypothesis Testing

Hypothesis		Beta	T statistics (|O/STDEV|)	P values	Results
H_1	OE -> ID	0.223	4.364	0.0000	Accepted
H_2	C -> ID	0.146	2.422	0.0150	Accepted
H_3	E -> ID	0.107	1.654	0.0980	Rejected
H_4	A -> ID	0.153	2.384	0.0170	Accepted
H_5	N -> ID	0.111	2.116	0.0340	Accepted
H_{6A}	FL x OE -> ID	-0.137	3.152	0.0020	Accepted
H_{6B}	FL x C -> ID	0.007	0.049	0.9610	Rejected
H_{6C}	FL x E -> ID	0.09	1.571	0.1160	Rejected
H_{6D}	FL x A -> ID	-0.024	0.271	0.7860	Rejected
H_{6E}	FL x N -> ID	-0.031	0.576	0.5640	Rejected

The findings from the structural model indicate that Openness to Experience is the one personality trait that influences investor decision the most and its effect is positive and significant ($\beta = 0.223$, $p < 0.001$), confirming H_1. Conscientiousness also shows a strong effect on Investment Decision which is positive and

significant as well ($\beta = 0.146$, $p = 0.015$), thus H_2 is accepted. Extraversion, in contrast, does not produce a significant enough effect ($\beta = 0.107$, $p = 0.098$), so H_3 is rejected. Agreeableness, nevertheless, is a positive influence on Investment Decision ($\beta = 0.153$, $p = 0.017$), thus H_4 is supported. Neuroticism, on the other hand, has a similar effect ($\beta = 0.111$, $p = 0.034$) and thus H_5 is confirmed as well. The role of Financial Literacy as a moderating variable shows the interaction between Financial Literacy and Openness to Experience is negative ($\beta = -0.137$, $p = 0.002$) and, thus, supports H_{6A}. The interactions among Financial Literacy and Conscientiousness, Extraversion, Agreeableness, and Neuroticism (H_{6B} to H_{6E}) are not statistically significant as their p-values are high indicating the rejection of these hypotheses.

4. DISCUSSION

The research examined how the Big Five Personality Traits influenced the behavior of retail investors in Nepal's stock market, with financial literacy considered as a moderating factor. The results of this investigation revealed that four personality traits, namely Openness to Experience, Conscientiousness, Agreeableness, and Neuroticism, were able to significantly predict the investment decisions while Extraversion was excluded as a trait influencing the decision-making process.

Moreover, the study has revealed that financial literacy had a moderating effect on the relationship between Openness to Experience and investment decisions only. The interaction between these two variables pointed to a negative direction, which implies that the higher the financial literacy, the less significant would be the influence of openness on investment behavior. However, there were no categorization effects for Conscientiousness, Extraversion, Agreeableness, or Neuroticism. The findings open up a new angle of the Nepalese capital market and reveal the behavioral patterns of retail investors. The typical investors are predominately composed of young people, students, and individuals from low-income groups.

The marked impact of Openness to Experience is in line with the prior research of Nicholson et al. (2005) and Lin (2011), who established that people with high openness levels are more likely to participate in financial markets and demonstrate certain risk-related behavioral biases. Thus, the person who is a bit of a risk-taker, and has no problem opening up is more likely to market to and thus will be more capable of gaining new market insights. On the other hand, the positive impact of Conscientiousness on investment decisions was confirmed by Durand et al. (2013) and Akhtar and Das (2020), who reported that planners could take calculated risks, be disciplined, and financially capable. So, it seems that the investors in Nepal are following a very specific method while making investment choices which helps them stay consistent and disciplined in their approach.

On a similar note, the characteristic of agreeableness had a substantial impact, which was only partly in concord with Mayfield et al. (2008). While some research indicates that agreeableness can be a factor in herd behavior, the present situation seems to signal the opposite since the positive effect may be interpreted as a reflection of the cooperativeness and trust-oriented financial culture among Nepalese investors. The effect of Neuroticism was positive, which is contrary to the results of research like Jamshidinavid et al. (2012) and Sadi et al. (2011), which associated neuroticism with risk aversion. In these circumstances, the neurotic ones may suffer from intense financial anxiety which, in turn, prompts them to invest more as a way of acquiring future financial security. In fact, the study can so far be regarded as an important contextual contributor to the current debate.

Nonetheless, extraversion did not present a significant effect which was contrary to Mayfield et al. (2008) who claimed that extroverted people prefer to make investment choices that are more active. One possible

reason for this difference could be the different levels of the Nepalese retail investors' psychological and social aspects, as such markets could have been to day either more or less developed, or different access to information affecting the investors' decision making process.

On the issue of moderation, financial literacy had an impact only on the Openness to Experience - investment decisions correlation, where it acted as a leverage. This is in line with the results of Lusardi and Mitchell (2014) and Van Rooij et al. (2011), who also claimed that financial literacy boosts the competence to identify risks and take educated decisions. However, the non-existence of moderation for the other traits contrasts with Zeb's (2020) findings, who suggested that the rather low financial literacy rates of the investors in the sample were to blame for limiting the wider moderating role of the financial literacy factor.

The results obtained through this research point out many essential implications for investors, financial practitioners, and regulators in the market. The comprehension of the personality traits that influence investment behaviors will assist the advisers in providing more personalized guidance, especially for people with higher levels of Openness, Conscientiousness, Agreeableness, or Neuroticism. The investors, particularly those who have a strong inclination towards curiosity or discovery, may find it quite useful to enhance their financial literacy for the purpose of not only making more careful but also informed decisions. The picture of the state and the practices of the financial institutions could be improved if they adopt the measures suggested by the researchers, as these officials and institutions would be more in touch with the retail over-the-counter sources of biases and behaviors which could be redressed through financial literacy as an approach. In conclusion, the markets' conditions in Nepal would promote the mixing of behavioral knowledge and financial literacy campaigns as a means of supporting the development of rational and self-confident investment practices.

The research unveils some insightful matters; nevertheless, it has a few restrictions which have to be sorted out. One of the major problems is the fact that the sample was mainly composed of the young investors who were energetic. Thus, it is a bit tricky to determine to what extent the findings can be generalized to the investor population of Nepal. The authors, by employing self-reported personality and financial literacy measures, might have done so at the risk of response bias. Additionally, the limitation of the present study is that its cross-sectional design cannot reveal changes in personality traits or investment behavior over time. Besides that, the researchers ignored the possibility of risk tolerance, emotional intelligence, or access to the financial information interaction with personality traits, which might have influenced the results.

It is recommended that later studies figure out the effects of other variables that may mediate or moderate, for instance, risk tolerance, social influence, financial self-efficacy, or cultural values, thus, getting a deeper insight into the investing behavior. Such studies would allow researchers to observe gradual changes in personality traits, financial literacy, and investment outcomes over time. Besides that, doing comparative research in different locations or emerging markets may assist in finding out whether the relationships that have been identified in Nepal also exist under similar circumstances elsewhere. Another point of departure for further research could be the examination of the role of financial literacy, whether as a moderator or mediator, in the cognitive and emotional mechanisms that connect Openness to Experience with investment decisions.

5. CONCLUSIONS

The study aimed at investigating the impact of Big Five Personality Traits on retail investors' decisions in Nepal and at the same time, the role of financial literacy in either strengthening or modifying these relationships was examined. The results of the study indicated that Openness to Experience, Conscientiousness, Agreeableness, and Neuroticism had an investment decision impact that was both

significant and positive. On the contrary, Extraversion did not have any noteworthy influence within the context of the study. The other important finding was moderation by financial literacy being selective; Openness to Experience and investment decision link was heavily influenced while there was no effect for the other four traits.

The current results support the view that psychological factors are at the forefront among the main reasons of investment behavior in Nepal's emerging financial market. Furthermore, they indicate that the literacy factor has a role in deciding how certain character traits are manifested in financial choices; this is especially so for the curious, exploratory, and open-minded investors. The research not only provides behavioral finance literature with evidence from the young investors' demographic group but also one that is growing and increasingly participating in the stock market. It further emphasizes the importance of blending personality-aware methods with financial literacy initiatives that are well-targeted in order to help develop the market through informed investment practices.

The study in its entirety emphasized the importance of considering psychological and educational viewpoints as one in understanding investor behavior. Through the identification of individual differences in terms of how they influence financial decisions, the programs and strategies of the policymakers, educators, and practitioners can be better designed to promote informed, confident, and responsible participation in the financial market.

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