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Role of Personality Traits in Influencing Investment Decisions: Exploring the Moderating Effect of Financial Literacy

Shivam Chaturvedi[1], Dr. Neeraj Shukla[2]

[1]Senior Research Fellow, Department of Commerce, Khwaja Moinuddin Chishti Language University Lucknow (UP)
[2]Assistant Professor, Department of Commerce, Khwaja Moinuddin Chishti Language University Lucknow (UP)

Abstract:
A key element of every economic development is the decision-making process. Selecting an investment is crucial for investors aiming to maximize their returns and effectively utilize their capital. There are several factors to consider before choosing an investment. This study aims to assess how personality traits such as extraversion and neuroticism impact investment decisions, with financial literacy playing a moderating role. The sample consisted of 204 investors and master's level students who participated in a questionnaire survey designed to gather primary data for the study. Using the SPSS software, this survey was conducted. Analysing the data and verifying the hypotheses involved the use of statistical methods including mean, standard deviations, correlation, and regressions. The analysis's findings indicated that neuroticism, extraversion, and investment decisions all have a significant impact. While financial literacy does positively and significantly influence investment decisions, it does not act as a moderator in the relationship between these three variables and investment decisions.

Keywords: Investors Behaviour, Financial literacy, Personality Traits

Introduction:
Investment decisions play a vital role in driving economic progress. They are pivotal for investors seeking to effectively utilize their capital and enhance their returns. The process of making investment decisions encompasses various elements such as financial acumen, financial management skills, input from peers and family, and personal characteristics (Sadiq & Khan, 2019). They have a significant impact on investment choices. In the current study, we describe how investors' behaviour would be influenced by their personality features. The process of choosing the best candidate from among the available options to achieve the goal under consideration is known as decision making (Chand, 2015). Researchers have studied investor behaviour throughout the years to better understand why different methods of managing assets are used by different persons (Mayfield, Perdue, & Wooten, 2008). The literature of today explains how a person's personality affects their behaviour as an investor. The general theme in this study is that a person's personality influences how they perceive risk, whether they are willing to take a risk or not, and whether they are risk averse (Mayfield et al., 2008).

Conventional finance literature emphasizes rational investment decisions based on expected utility theory (Savage, 1953). However, behavioral finance argues that investors' choices are influenced by various behavioral factors, including cognitive and psychological traits, leading to irrational actions (Kahneman & Tversky, 1979; Ritter, 2003; Fama, 1998; Tiwana et al., 2007). Perceptions of risk play a significant role in investor behavior, with Von Neumann and Morgenstern (1995) laying down foundational principles that prioritize maximizing expected utility. This approach has long been central to economic and financial thinking.

According to Allais (1952), maximising utility is one concern while choosing a risky choice, and this concern is raised by someone who must trade off projected return. When an investor wants better returns but does not want the risk of uncertain returns, Markowitz proposed the two criterion technique in 1952. Mutswenje (2014) states that individual investors often prioritize purchasing small quantities of assets for their personal portfolios when making investment decisions. Additionally, he mentioned that some investors base their investment decisions on their personal observations as well as fundamental and technical studies. The maximisation of rational wealth has long been considered a fundamental financial principle by investors (Mutswenje, 2014). Investors are willing to take on varying levels of risk, and it.

As noted by Gillen and Kim (2014), every individual possesses a distinct combination of feelings, thoughts, behaviors, and motivations that shape their personality and impact their perceptions and reactions to their environment. Ahmed (2020) explains that personality traits encompass cognitive, perceptual, emotional, and motivational elements, which collectively influence decision-making processes depending on the context. With the rise of behavioral finance, it is widely accepted, as emphasized by Bapat (2020), that an investor's capacity to make informed decisions is significantly shaped by their personality traits. Durand, Newby, Sanghani, Peggs, and Siekierka (2008) and Durand, Newby, Peggs, and Siekierka (2010) have demonstrated a link between personality traits, investment decisions, and subsequent investment performance. JALAL, ZEB, and FAYYAZ (2019) propose that personality traits should adhere to five key principles encapsulated in the Five-Factor Model (FFM) or the Big-Five factors: comprehensiveness, external correlates, source traits, and hierarchical levels. The FFM categorizes personality traits into Extraversion (E), Conscientiousness (C), Agreeableness (A), Neuroticism (N), and Openness to Experience (O) (Ahmad, 2020). Individual personality has been found to significantly influence cognitive and behavioral patterns (Allport, 1961). Researchers suggest that the decision-making of potential investors is influenced by their level of financial literacy, which is often defined as a specific type of consumer competence related to effective management of personal finances or as a form of human capital pertinent to financial matters (Alba and Hutchinson, 1987). Financial literacy, according to Remund (2010), "is a measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances through appropriate short-term decision-making and sound, long-term financial planning, while mindful of life events and changing economic conditions."

Extraversion and neuroticism are the only two personality qualities that were examined in this study since they are more prevalent in rural and Semi Urban in Lucknow region, Uttar Pradesh. Thus, the study's findings about how financial literacy influences investment decisions may be shown. Extraversion and neuroticism are two personality qualities that are related to financial literacy. The main aim of this study is to investigate how personality traits, such as extraversion and neuroticism, relate to investment decisions while also examining the moderating influence of financial literacy.

OBJETIVES OF THE STUDY:

This study seeks to evaluate the impact of personality traits, notably extraversion and neuroticism, on investment decision-making, with a focus on the moderating role of financial literacy. Primary data was collected from 204 investors and master's-level students through a questionnaire survey conducted for this purpose. The SPSS statistical package was used to conduct this survey. Data analysis and hypothesis testing used statistical methods including mean, standard deviations, correlations, and regressions. The analysis's findings showed that neuroticism, extraversion, and investment decision-making have a significant impact on each other. Financial literacy plays a significant role in influencing investment decision-making, although it does not act as a moderator in the relationship between these three variables. Our findings suggest that although people with higher neuroticism shun short-term activities and choose long-term investments, those with higher extraversion aim to engage in short-term investing.

LITERATURE REVIEW

Investment Decision : -

Individuals are responsible for deciding how much cash to invest in the hope of generating a profit. Investment decision-making evolves throughout time in terms of variety and trading frequency (He, Liao, Bi &Guo, 2019). For investment decisions, nevertheless, an efficient decision-making method is crucial. Older and more seasoned investors like high diversity, low risk holdings, and fewer trades, and this investment ability deteriorates beyond age 70 (Hadi, 2017). Effective investment return plan formulation is the foundation for the dependability of investment decisions (Rutkauskas&Stasytyte, 2008). Agents do not always act rationally when it comes to some components of the decision-making process that have not yet been fully clarified (Scalliet, Karoui, Jeanblanc, &Martellini, 2008). Since they don't know how their actions will turn out in the end, investors need to be aware of the combined distributions that reveal potential outcomes (Weber, 2005; Zhou, & Xu, 2020).

Extraversion and Investment Decision: -

One of the Big Five personality factors is extraversion. Zhang, Wang, Wang, and Liu (2014); Camgoz, Karan, and Ergeneli (2011); Durand et al. (2008); and Kumari, Chandra, and Pattanayak (2019). People who are extraverted are described as being vivacious, amiable, and outgoing. According to Woods and Hutchinson, those who are more outgoing on their own are more likely to talk to and become close to strangers. Extroverts are outwardly focused and would feel comfortable mingling with many people (Leary et al., 2009). After all, extraversion has been shown to have a significant influence on investing choices (Sadi, 2011). According to Charles and Kasilingam (2014), extraversion can be a factor in determining how friendly and chatty a person is. According to Krishan and Beena (2009) and Zhang et al. (2014), people experience strong emotions when they do well, which influences investors' choices regarding their investments.

Extroversion and hindsight bias were found to have positive associations in Nga and Yien's (2013) and Sadi et al.'s (2011) studies, respectively. Risk aversion and extroversion have a bad connection. Because extraverts tend to take risks and invest with confidence, they are risk-takers. Investors who are averse to taking on risk are labelled as such and refrain from making an investment choice. On the other hand, extroverted investors have a larger risk tolerance while making an investment (Nga &Yien, 2013).According to Lin and Lu (2015), extroverted investors take more risks and are more eager to make investing decisions. According to Zhang et al. (2014), extroverted investors were able to make sensible investing decisions. Because extraverted people are gregarious and busy, they have more information when making decisions. Researchers found that extroversion had a favourable correlation with investing decision-making but a negative correlation with risk aversion in earlier investigations. Extroversion and investment choice have also been positively and significantly linked, as demonstrated by Durand, Newby, and Sanghani (2008).

H1: Extraversion and investing decisions have a favourable and substantial relation.

Financial Decisions and Neuroticism:

According to Salgado (1997), neuroticism refers to how calm, self-assured, and cool a person is compared to how insecure, depressed, and emotional they are. According to Komarraju, Karau, Schmeck, and Avdic (2011), neuroticism is a term used to describe a person's level of emotional stability, impulsive control, and anxiety. They indicated that when the need scenario is really poor, neurotic people tend to overrate the danger, but when the market environment is right, they tend to underestimate the return on investment. According to Durand (2018), people with neuroticism have a propensity to feel unfavourable emotions, including sadness, guilt, worry, and instability. Investors base their decisions on their emotions, according to Chirat and Sreedevi (2011). Negative emotions result in a limited judgement of danger, according to Wang et al. (2014). Mayfield, Perdue, and Wooten (2008) looked at those who are extremely neurotic, risk-averse, and uneasy about making short-term investments. Therefore, people won't be interested in making short-term investments. People who are risk averse in some way tend to invest in short-term securities, which suggests that neurotic investors may also be risk averse while making investment decisions.

Durand (2018) carried out a study to comprehend how an individual's psychology affects their investment and return behaviour. According to his study, there is a positive and substantial correlation between neuroticism and investment choices. According to Sadi et al. (2010), investors' decisions are dependent on their personalities. They also noted a connection between cognitive biases and neuroticism, which suggests that these biases have an impact on neurotic investors' investment decisions. In their study, Brown and Taylor (2017) examined whether the neuroticism personality characteristic has a significant association with unsecured debt and financial assets. Their findings suggest that, if someone has a neurotic personality, their economic decision-making may not be influenced.

H2: Neuroticism significantly improves investment decision-making.

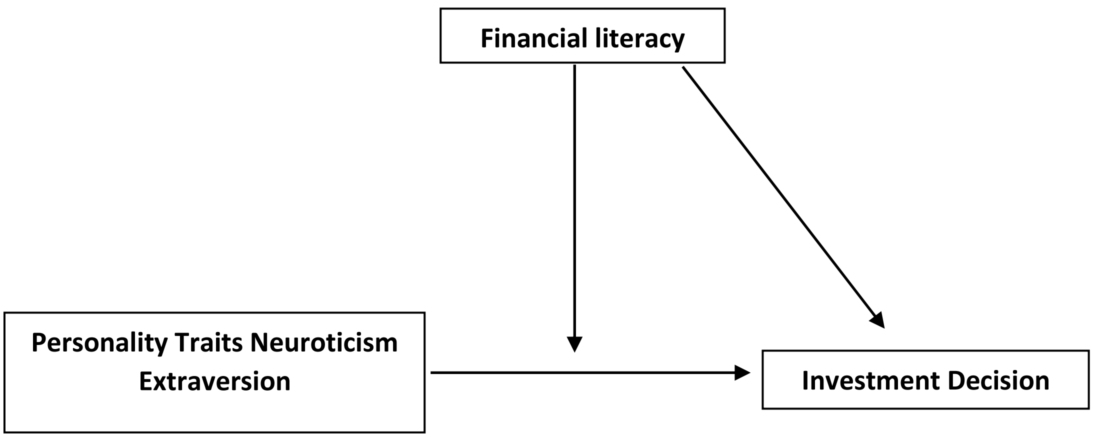
Investment Decision and Financial Literacy:

Money is a necessity for social interaction and a source of income, according to Zvarková and Majerová (2013). People who want to generate money effectively need to be able to trade financial items on the open market. In order to make responsible financial decisions, knowledge, skills, and confidence are required, according to Altman (2018). These are all elements of financial literacy. Duca&Kumar (2014) assert that there is a direct correlation between general education and financial literacy. People's financial understanding and decisions to actively participate in the financial markets have been significantly affected by social relationships with coworkers, friends, and family members. The financial markets' shifting behaviour is better understood by educated people than by the ignorant. According to Marcolin and Abraham (2006), the importance of financial literacy increased following the development of the financial markets. Financial literacy has been found to have a large and favourable impact on investment decisions in previous studies (Bongomin, Munene, Ntayi, & Malinga, 2018). Financial

literacy, according to several studies (Mitchell, & Curto, 2010;Lusardi, Jappeli & Padula, 2013; Lusardi & Mitchell, 2007), has a favourable impact on investment decisions and helps people get the most out of their investments.
H3: Financial literacy significantly influences investment decision-making in a good way.

Function of financial literacy as a moderator:
Risk taking is determined by the investor's degree of education; investors with high levels of education are more inclined to take risks than investors with low levels of education (Riley & Chow, 1992). Similar to this, research shows that an individual's capacity to make investment decisions depends on his or her level of financial sophistication in terms of investing guidelines, as well as their gender and amount of wealth (Dulebohn, 2002; Khan, 2020). A high degree of education can help investors who are risk-averse become less risk-averse since education offers a range of options for making investing decisions (Jung, 2015). Low financial literacy causes people to be less confident and confused while doing financial transactions (Disney & Gathergood, 2013). According to Abreu and Mendes (2010), investment diversification and investor financial knowledge are positively connected. According to the findings, households with trust and stock market literacy demonstrate a stronger inclination towards participating in the market (Balloch, Nicolae, & Philip, 2014).According to Breuer, Riesener, and Salzmann (2014), those who are overconfident and overly optimistic exhibit investment behavior. As stated by Dittrich, Güth, and Maciejovsky (2005), the bias of overconfidence in personality motivates investors to invest in risky assets. In comparison to sensible investors, those who are overconfident are more hopeful about the future (Kliger& Levy, 2010). Extroverts tend to take more risks and make investments since they spend less time assessing things (Li & Liu, 2008).
H4A: Financial literacy influences how extraversion and investment choices interact.
H4B: Financial literacy influences how neuroticism and investing choices interact.

Figure 1. Research Model



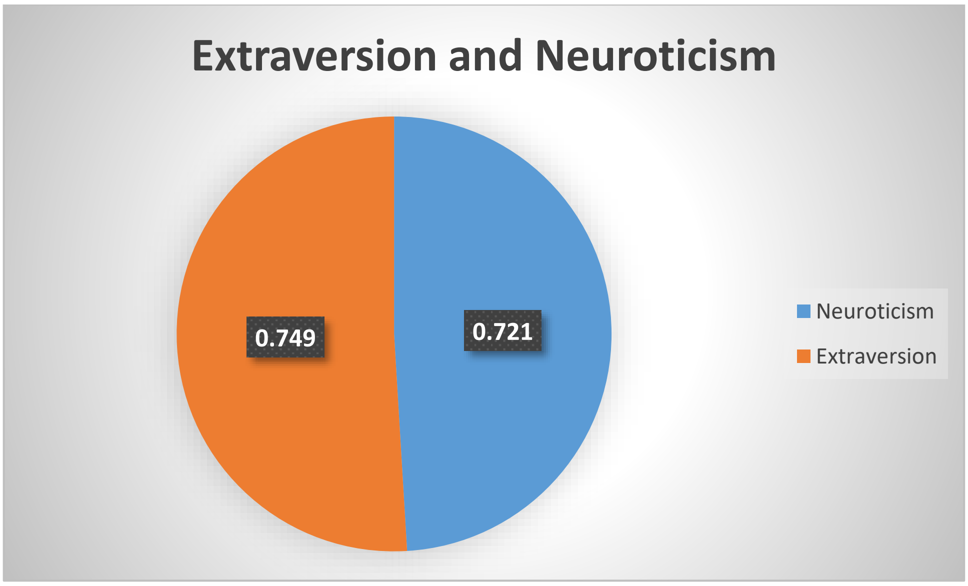
METHODOLOGY
Data collection and sampling are crucial steps in ensuring the validity of the research process. This study aims to investigate how personality traits, specifically extraversion and neuroticism, influence investment decisions under the moderating influence of financial knowledge. Data is gathered from investors and a specific sample of pupils. A total of 300 questionnaires were dispersed around the

Lucknow region, and 230 of them were recovered; however, only 204 of these 230 surveys could be used. The reply rate was 67%, which is higher than the cutoff level proposed by earlier research (Hafeez et al., 2018; Zahra et al., 2019; Muneer et al., 2019; Nuseir et al., 2020; Asada et al., 2020; Hameed et al., 2019;Yan et al., 2020; Nisar et al., 2021).

Measurement

Extraversion and Neuroticism:

For the purposes of the current study, they are independent variables. For measuring neuroticism and extraversion, Costa and McCrae (2003) developed a 5-item and 4-item questionnaire. Examples of items representing these variables include statements like "I frequently experience feelings of inferiority," "I often feel tense and nervous," and "I derive great satisfaction from social interactions." The study reported Cronbach's alpha values of 0.721 for neuroticism and 0.749 for extraversion, indicating the reliability of the scales.



Investment Decision:

The current study's dependent variable is investment choice, measured using a ten-item scale developed by Grable and Lytton (1999), exhibiting a Cronbach's alpha of 0.757, indicating good reliability.

Financial literacy:

In this study, this variable serves as a moderator. In this study, a 4-item scale designed by Lusardi, A. (2015), to assess financial literacy was employed. The question "If the interest rate goes up, what should happen to bond prices?" was an example question. The scale's Cronbach's alpha was 0.699.

RESULTS

According to correlation study, neuroticism and investment choice are significantly positively correlated ($r=0.298$, $p<0.01$). Extraversion and financial decision-making are significantly positively correlated ($r=2.38$, $p<0.01$). The decision to invest and financial literacy are not significantly related. The link between neuroticism, extraversion, and investing choice is not moderated by financial literacy.

Results show a substantial positive association between neuroticism and investment choice ($r = 0.298$, $p<0.01$). Extraversion and financial decision-making are significantly positively correlated ($r = 2.38$,

$p<0.01$). The decision to invest and financial literacy are not significantly related. The link between neuroticism, extraversion, and investing choice is not moderated by financial literacy.

Hypothesis 1 is validated in light of the results, which show that extraversion has a considerable favorable influence on investing decisions. Hypothesis 2 is validated because neuroticism significantly influences investment decision-making ($\beta = 0.132$, $p<0.01$). Nevertheless, the results do not uphold Hypothesis 3, indicating that financial literacy does not significantly impact investment decisions. Furthermore, the findings reveal no moderation effect. The relationship between extraversion, neuroticism, and investment decision-making remains unaltered by financial literacy, suggesting a deficiency in financial literacy within the sampled population. The 4a and 4b hypotheses were not supported by the results.

DISCUSSION

Extraversion is favourably and strongly associated with investment choice, according to the first hypothesis. Chatty and gregarious extravert investors are open to all types of investment opportunities. They gather a lot of information before making a decision. The choice to invest is strongly and positively correlated with neuroticism. According to Mayfield, Perdue, and Wooten (2008), neuroticism is also positively and strongly associated with investing decision-making, and neurotic people tend to invest for the long term. Likewise, financial literacy demonstrates a positive and significant influence on investment decisions, suggesting that individuals who make investments based on accurate financial information exhibit financial literacy.

A moderating hypothesis was put forth to determine whether or not financial literacy enhances or weakens the association between extraversion, neuroticism, and investing. The results of the present study indicated that financial literacy did not have an impact on extraversion, neuroticism, or investment decision-making. It indicates a lack of financial understanding. Finance theories do not have any application in Rural and Semi-Urban in Lucknow region, Uttar Pradesh. Due to a lack of financial awareness, the individual does not make successful investment decisions.

This research may have the consequence that, in order to increase their return on investment, investors need to be adequately prepared with financial knowledge. This may be accomplished by giving stock market investors and finance students the appropriate instruction. It is important to note that the sample size herein study be limited; therefore, upcoming research could consider testing these relationships with a larger sample size to explore further the impact of neuroticism and extraversion on investment decisions and the moderating role of financial literacy. The findings from this study can potentially benefit investors, managers, and scholars. Managers and institutional investors might consider the insights from this study when selecting individuals with neurotic and extraverted personalities for suitable roles. Thus, this study might be quite important in this area. Before giving someone a specific position, managers might conduct personality tests.

Therefore, in order to accomplish this study, the government, stock market, and universities must each play their part. Despite the fact that we have indicated that financial literacy does not mitigate the association, this may just be a result of the smaller sample size.

Moving forward, future studies may explore how extraversion and neuroticism influence risk aversion or cognitive biases, while as well considering the moderating impact of financial expertise.

REFERENCES

1. Ahmad, F. (2020). Personality traits as predictor of cognitive biases: moderating role of risk attitude. Qualitative Research in Financial Markets.
2. Allais, P. M. (1953). Le Comportment de l'HommeRationneldevant Le Risque: Critique des PostulatsetAxiomes. deL'EcoleAmericaine. Econometrica, 21, 503–546.
3. Altman, M. (2018). Implications of behavioural economics for financial literacy and public policy. The Journal of Socio-Economics, 41(5), 677-690.
4. Ballantine, J., & Stray, S. (1998). Financial appraisal and the IS/IT investment decision making process. Journal of Information Technology, 13(1), 3-14
5. Bapat, D. (2020). Antecedents to responsible financial management behavior among young adults: moderating role of financial risk tolerance. International Journal of Bank Marketing.
6. Blanchet-Scalliet, C., El Karoui, N., Jeanblanc, M., &Martellini, L. (2008). Optimal investment decisions when time-horizon is uncertain. Journal of Mathematical Economics, 44(11), 1100-1113.
7. Camgoz, S. M., Karan, M. B., &Ergeneli, A. (2012). Relationship between the Big-Five personality and the financial performance of fund managers. Diversity, Conflict, and Leadership, 1(13), 137-152.
8. Charles, A., &Kasilingam, R. (2014). Do framing effects of investors determine their investment personality? Anvesha, 7(2), 38-45.
9. Disney, R., &Gathergood, J. (2013). Financial literacy and consumer credit portfolios. Journal of Banking & Finance, 37(7), 2246-2254. 14.
10. Durand, R.B., Newby, R., &Sanghani, J. (2018). An intimate portrait of the individual investor. The Journal of Behavioral Finance, 9(4), 193–208.
11. Eysenck, H. J. (1991). Dimensions of personality: 16, 5 or 3?—Criteria for a taxonomic paradigm. Personality and individual differences, 12(8), 773-790.
12. Gillen, M., & Kim, H. (2014). Older adults' receipt of financial help: Does personality matter?. Journal of Family and Economic Issues, 35(2), 178-189.
13. Grable, J., & Lytton, R. H. (1999). Financial risk tolerance revisited: the development of a risk assessment instrument☆. Financial services review, 8(3), 163-181.
14. Zahra, M., Hameed, W. U., Fiaz, M., & Basheer, M. F. (2019). Information technology capability a tool to expedite higher organizational performance. UCP Management Review (UCPMR), 3(1), 94-112
15. Zhou, W., & Xu, Z. (2020). Investment Decision Making Based on the Asymmetric Hesitant Fuzzy Sigmoid Preference Relations. In Qualitative Investment Decision-Making Methods under Hesitant Fuzzy Environments (pp. 21-48). Springer, Cham.
16. Zvaríková, K., &Majerová, J. (2014). Financial literacy in the Slovak Republic. Procedia-Social and Behavioral Sciences, 10, 1106-1115