Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

Policy Journal of Social Science Review

Let's Start!

Overconfidence, Financial Literacy and Investment Success: Unravelling the Complex Relationships

Dr. Roman Ullah[1]
Dr. Abdul Latif[2]
Dr. Faqir Sajjad Ul Hassan[3]
Ishfaq Ahmed[4]

Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

Overconfidence, Financial Literacy and Investment Success: Unravelling the Complex Relationships

Dr. Roman Ullah	Lecturer, Department of Management Sciences, Khushal Khan Khattak University Karak
Dr. Abdul Latif	Lecturer, Department of Management Sciences, Khushal Khan Khattak University Karak
Dr. Faqir Sajjad Ul Hassan	Assistant Professor, Department of Management Sciences, Khushal Khan Khattak University Karak
Ishfaq Ahmed	Lecturer, Department of Management Sciences, Khushal Khan Khattak University Karak

Abstract

In the world of financial markets, where financial expertise and behavioural biases greatly influence results, investment decisions are crucial. The intricate relationship between overconfidence bias, financial literacy, and investment choices made by individual investors on the Pakistan Stock Exchange is investigated in this study. The study examines how overconfidence, which is defined as an overestimation of one's own talents, influences investment decisions and determines whether financial literacy moderates this link, drawing on behavioural finance theories. A structured questionnaire was used to gather information from 514 individual investors as part of a cross-sectional study design. SEM, or structural equation modelling, was employed to examine the connections between the structures. The findings confirm that overconfidence influences investor behaviour by showing a substantial positive correlation between overconfidence bias and investing decisions ($\beta = 0.301$, $p < 0.000$). Furthermore, financial literacy has a significant impact on making logical financial decisions by improving investment decision-making on its own ($\beta = 0.440$, $p < 0.000$). Additionally, the positive correlation between overconfidence bias and investment decisions is strengthened by financial literacy, which moderates the link (interaction effect = 0.145, $p < 0.000$). The protective function of financial literacy in reducing the possible hazards of overconfidence bias is highlighted by this moderating impact, which results in better informed and wiser investment choices.

Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

The results highlight the value of financial literacy initiatives to enhance investing behaviour and have important ramifications for financial institutions, educators, and legislators. Such programs can enable investors to make logical, fact-based decisions by eliminating behavioural biases and improving financial literacy, which will help to create more stable and effective financial markets.

Keywords: Investment Decisions, Financial Literacy, Behavioral Finance and Overconfidence

INTRODUCTION

The foundation of financial practice is the premise that people make logical judgements by thoroughly weighing all of the information accessible in the market (Baker & Filbeck, 2013). However, research showing the impact of behavioural biases, which frequently result in less-than-ideal investment outcomes, has been challenging this logical viewpoint more and more (Barber & Odean, 2008). The field of behavioural finance, which examines the psychological and emotional elements influencing departures from logical investment behaviour, has grown as a result of this change in perception (Yoong & Ferreira, 2013).

One such behavioral bias is overconfidence, as defined by Daniel, Hirshleifer, and Subrahmanyam (1998). Overconfidence is a behavioral bias that is said to the tendency of persons who overrate their skills, decisions, abilities, knowledge, and judgment, particularly in financial decision-making. This over confidence can be marked in numerous ways, such as overrating the accuracy of personal predictions about the market and undervaluing investment risks, also over-relying on personal opinions and information.

A key factor in reducing bad investment choices is financial literacy, which comprises the knowledge, abilities, and self-assurance required to make wise financial judgements (Altman, 2012). Investors that lack sufficient financial literacy are more likely to make poor choices that could result in large debt (Lusardi et al., 2009; Sezer & Demir, 2015; Son & Park, 2019).

The basic objective of the current study is to examine how the overconfidence bias can affect the individual investors' investment choices on the Pakistan Stock Exchange(PSX) and determine whether financial literacy acts as a moderating factor in this connection (Huston, 2010). The study's conclusions will provide insightful information about investment behaviour with useful ramifications for investors, financial institutions, regulators, and politicians.

Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

LITERATURE AND HYPOTHESES FORMULATION

THE INVESTMENT DECISIONS

According to conventional financial philosophy, investors use logical processes to maximise returns while making decisions in the equity markets (Nozick, 1993). Mintzberg et al. (1976) outlined the basic framework of rational decision-making in finance, which states that this process consists of three essential steps: determining the problem, creating potential solutions, and choosing the best option. However, Kahneman and Tversky (1979), who study how people make decisions when faced with ambiguity, cast doubt on these presumptions.

Thaler (1980) introduced prospect theory to the banking industry after Kahneman and Tversky (1979) initially proposed it. Thaler argued that the traditional rationality assumptions often do not hold true in real-world scenarios. Prospect theory states that investors base their decisions less on expected results and more on the perceived worth of returns (Kahneman & Tversky, 1979). The concept of heuristics in decision-making was further introduced by Tversky and Kahneman (1979), who claimed that people commonly employ mental heuristics or shortcuts while making investment decisions.

An overview of behavioural finance, which examines how psychological aspects impact financial decision-making, is given by Shefrin and Statman (2000). The work of Kahneman, Tversky, and Thaler emphasises how important it is to take into account both behavioural and rational factors when analysing investment decision-making.

THE OVERCONFIDENCE BIAS IN MAKING INVESTMENT DECISIONS

Behavioural finance researchers like Daniel et al. (1998) have shown that overconfidence has a big effect on financial markets, frequently causing overreactions and increased stock price volatility. Overconfidence has also been linked to less than ideal investing choices and worse returns for individual investors (Chandra, 2008).

According to De Bondt and Thaler (1995), overconfidence is the propensity for people to overestimate their knowledge, talents, and accuracy. According to Jain et al. (2015), this cognitive bias causes people to underestimate future uncertainty and place an undue amount of trust in their own judgements.

Overconfident investors often overreact to market information, according to Odean (1999). According to a number of research, men tend to be more overconfident than women, which leads to excessive trading behaviour among them (Barber and Odean, 2001; Grinblatt and Keloharju, 2009; Statman et al., 2006).

Self-attribution bias and overconfidence bias are frequently combined, with investors placing more weight on their own information and becoming more overconfident as a result

Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

(Daniel et al., 1998). Zaidi and Tauni (2012) discovered that when investors gain expertise trading on the stock market, they have a tendency to grow increasingly overconfident.

Although research by Javed et al. (2017) and Lim (2012) suggested that overconfidence and investor decision-making were positively correlated, Kengatharan and Kengatharan (2014) subsequently contested these findings, arguing that overconfidence has a significantly negative impact on investment decisions.

H1: Overconfidence Bias may positively relate to Investment Decisions of Investors.

FINANCIAL LITERACY AND INVESTMENT DECISIONS

In order to manage financial resources and make wise investment decisions, financial literacy is essential (PACFL, 2008; OECD, 2013). People with greater financial literacy are more likely to make wise investing decisions, according to a wealth of research (Hilgert et al., 2003). For instance, Lusardi et al. (2014) observed that older persons with low financial literacy had difficulty making wise financial decisions, while Bucher-Koenen and Ziegelmeyer (2011) discovered that low financial literacy is associated with less-than-ideal investment choices. By empowering investors to better evaluate and process information, increasing financial literacy can greatly increase their ability to make decisions (Hayat and Anwar, 2016). These results demonstrate how crucial the financial literacy is while opting informed investment options, not just for the broader American public (Chen and Volpe, 2002), but also for students (Chen and Volpe, 1998) and people of all ages. Thus our hypothesis number second of this work is:

H2. Financial literacy has a positive significant impact on the investment decisions of investors

MODERATING ROLE OF FINANCIAL LITERACY

One of the most important topics of discussion in finance is the connection between financial literacy and investing decision-making, especially as it relates to overconfidence. Due to its substantial influence on investment decisions, overconfidence bias. which is defined as people's propensity to rely solely on their own opinions and ideas without doing independent research has been extensively researched.

Ates et al. (2016) found a significant relationship between investor overconfidence and financial literacy. According to Bucher-Koenen and Ziegelmeyer (2011), those with lesser financial literacy are more prone to biases when making investing decisions. Additionally, it has been demonstrated that financial literacy reduces the disposition effect and overconfidence bias, indicating that raising financial literacy may aid in lessening these biases (Baker et al., 2019).

According to Sabir et al. (2019), financial knowledge is essential for reducing the link between overconfidence bias and herding bias. Hetling and Postmus (2014) observed that overconfidence bias is more common among people with less financial literacy, which lends

Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

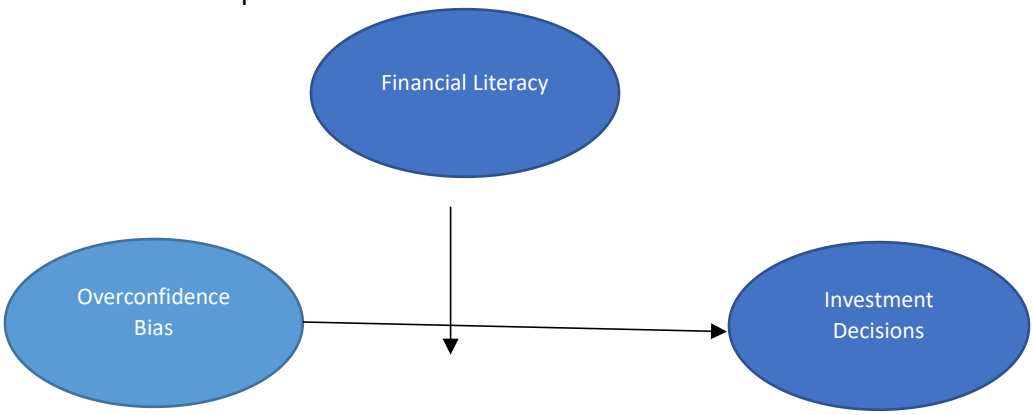
credence to this theory. Similarly, Amirat and Bouri (2009) show that by improving investors' ability to evaluate and use private and personal information, financial literacy might lessen overconfidence bias.

To sum up, a large amount of research backs up the idea that financial literacy is essential for reducing overconfidence bias and improving investing choices. Higher financial literacy has been linked to a lower risk of overconfidence bias and better investing decisions, according to the research.

H3: Financial literacy positively moderates the overconfidence bias - investment decision-making relationship.

CONCEPTUAL MODEL

The research's theoretical framework, which focusses on how overconfidence bias affects investor decision-making, is based on a thorough analysis of the pertinent literature. The three main variables in the paradigm are financial literacy as a moderating factor, investment decision-making as the endogenous variable, and overconfidence bias as the exogenous variable. The study's assumptions and empirical analysis are based on this framework, which outlines the relationships between these factors.



METHODOLOGY

A cross-sectional research strategy was used in this study, and data was gathered using a specially created and modified questionnaire. The questionnaire was divided into four sections, the first of which collected demographic data and the second of which concentrated on the research variables.

In the second section, four questions modified from Jain, Walia, and Gupta (2019) were used to evaluate the independent variable, overconfidence bias. The third segment included six questions modified from Van Rooij et al. (2011) to test the moderating variable, financial literacy. Six questions modified from Pasewark and Riley (2010) were used in the last portion to assess

Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

the dependent variable, investment decisions. A seven-point Likert scale was used to record responses, omitting demographic data. A comprehensive and rigorous analysis of the connections between investor overconfidence bias, financial literacy, and investment decisions was made possible by this research design and questionnaire development approach.

As suggested by Podsakoff et al. (2003, 2012), the questionnaire included items measuring many constructs in a randomised order to reduce the likelihood of common method variance.

Based on pilot research results (SD) and Cochran's (1977) formula for an infinite population, a sample size of 514 respondents was chosen to provide a representative population at the required degree of confidence. Convenience sampling was used to collect the data, and 547 answers were obtained. Following a data screening procedure, 514 valid questionnaire responses were left for analysis after 33 invalid questionnaires were eliminated.
Using Smart PLS version 3.2, structural equation modelling (SEM) with partial least squares (PLS) was used to examine the theoretical model. Hair et al. (2017) suggest using this method to analyse complex models.

To make sure the results were reliable and valid, a three-step data analysis procedure was used. In order to evaluate the scales' validity and reliability in the context of Pakistani organisations, a measurement model was first run. To ascertain how well the data fit the entire study model, the structural model was estimated in the second stage. Before looking at the structural relationships of the theoretical model, Hair et al. (2017) recommended using this statistical analysis approach to confirm the validity and reliability of the measures. Lastly, the measurement model's direct correlations between variables were looked at. This meticulous method of data analysis is essential to guaranteeing the precision and dependability of the study's findings.

ANALYSIS AND RESULTS

CORRELATION ANALYSIS

A correlation analysis was performed to ascertain the associations between the research variables, which were evaluated on interval-based scales and thus regarded as metrics, prior to evaluating the study's model (Field, 2009). After being judged appropriate, the correlation analysis was carried out. The findings, which are shown in Table 1, show that the research variables have moderate relationships with one another.

Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

Table 1: Correlation Analysis results.

	Overconfidence	Financial Literacy	Investment Decisions
Overconfidence Bias	-		
Financial Literacy	0.380**	-	
Investment Decisions	0.470**	0.455**	-

**. Correlation is significant at the 0.01 level (2-tailed).

TABLE 1 CORRELATION ANALYSIS RESULTS

PROFILE OF RESPONDENTS

The study's sample population was divided into groups based on important demographic characteristics, such as age, gender, and educational attainment. Male respondents made up 83% of the sample, and 78% of them were between the ages of 30 and 60. Regarding educational attainment, the majority of participants had a bachelor's degree (31.91%), followed by a master's degree (40.08%). The fact that none of the responders had a Ph.D. is significant.

RESULTS OF MEASUREMENT MODEL

As advised by Ringle et al. (2015) and Hair et al. (2017), we assessed the measurement model's quality using the reliability and validity criteria because every variable in our model was measured reflectively. We calculated composite reliability scores and Cronbach's alpha for reliability. We looked at average variance extracted (AVE) and factor loadings as two important indices to evaluate validity. The measures were found to be both valid and reliable, as evidenced by the fact that factor loadings for each item exceeded 0.7, AVE values were above 0.5, Cronbach's alpha values exceeded the 0.7 threshold, and composite reliability values likewise exceeded 0.7.

To evaluate discriminant validity, we employed the heterotrait-monotrait (HTMT) ratio of correlations, a more modern and trustworthy method suggested by Hair et al. (2017). The constructs exhibited acceptable levels of discriminant validity, as demonstrated by Table 2, where all of the HTMT values were below 0.90.

Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

Table 2 Reflective Measure Assessment

Measures	Item Reliability	Loading	Composite Reliability	Cronbach's Alpha	AVE
Overconfidence Bias	OB.1.	.911	0.939	0.913	0.793
	OB.2.	.877			
	OB.3.	.887			
	OB.4.	.886			
Financial Literacy	FL.1.	.884	795	0.948	795
	FL.2.	.882			
	FL.3.	.895			
	FL.4.	.901			
	FL.5.	.896			
	FL.6.	.893			

****p<0.001, d=deleted items, ns-d= non-significant deleted item*

Table 3 Discriminate validity HTMT ratios

	Overconfidence	Financial Literacy	Investment Decisions
Overconfidence	1		
Financial Literacy	0.408	1	
Investment Decisions	0.507	0.589	1

RESULTS OF STRUCTURAL MODEL

Explanatory power and predictive relevance of the current study's model was assessed by analysing the direct correlations between constructs using Hair et al. (2017) metrics, including R2, f2, Q2, and path coefficients. Our investigation revealed that the model has a respectable predictive capacity and can explain 43% of the variance between overconfidence and financial literacy, with a respectable R2 value of 0.431.

Additionally, we measured changes in R2 that resulted from the deletion of particular factors in order to assess the significance of each variable within the model. With respective f.2. values of .137 and .284, the f.2. effect size calculation demonstrated that Herding and Financial

Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

Literacy significantly influence other variables in the model. Financial Literacy on Overconfidence had a f.2. value of .032. According to these findings, every exogenous variable strongly affects the coefficient of determination, and leaving any one out could make the model less fitful. These procedures align with the suggestions made by Kenny (2016) and Cohen (1988). Additionally, we used the blindfolding process to evaluate model predictive usefulness. The obtained Q2 value was 0.315, which is higher than zero. This outcome validates the model acceptable predictive relevance in line with the recommendations made by Hair et al. (2017).

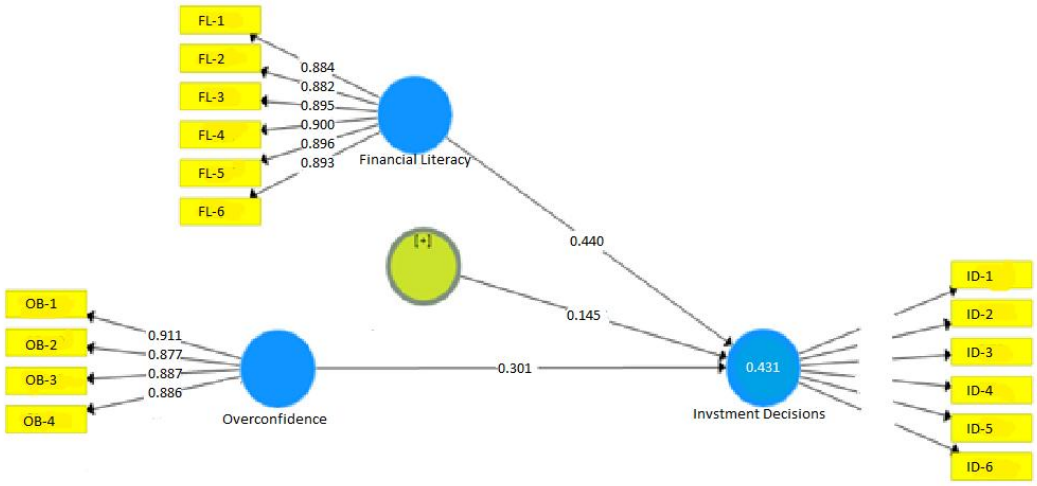


Figure 1. Summary of results of inner and outer models

DIRECT RELATIONSHIPS

The results of our study show a strong and positive relationship between financial literacy and investment decisions (β = .440; p < .00) and overconfidence bias and investment decisions (β=.301; p < 0.000). Hypotheses 1 (H1) and 2 (H2) are both supported by these findings.

The data specifically shows that investor overconfidence directly and favourably influences their investment decision-making process. Additionally, there is a substantial correlation of financial literacy with better investment decision-making, highlighting the importance of financial literacy in raising the calibre of investment choices.

MODERATION IMPACT OF FINANCIAL LITERACY

Our research found that FL expressively and favourably moderates the relationship between overconfidence bias and investing choices. In particular, we discovered that, with an interaction

Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

effect of 0.145 ($p < 0.000$), a higher FL was linked to a stronger relationship between overconfidence and investment choices.

Hypothesis 3 (H3) is strongly supported by these facts. Figure 2 presents the specific findings that demonstrate this moderating impact.

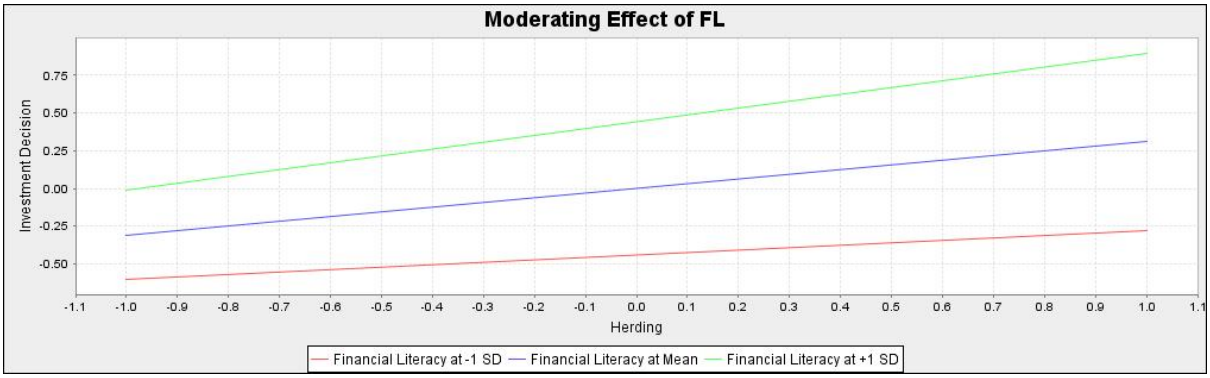


Figure 2. simple slop of moderating effect of Financial literacy

These impacts can be seen more clearly in the simple slope graph. The association between overconfidence bias and investment choices at an average level of financial literacy moderator is depicted by the middle blue line. High levels of the moderator are represented by the higher green line, which has a steeper slope, while low levels are represented by the lower red line, which has a gentler slope.

FINDINGS

Our study's findings show a strong positive correlation (coefficient of .301, significant at $p < .01$) between investor overconfidence and investment choices. In particular, a 0.301 improvement in investment decision-making is correlated with a one-unit increase in overconfidence, validating Hypothesis 1, which holds that overconfidence bias affects investment decisions.

Additionally, it was discovered that financial literacy had a positive coefficient of 0.440, that was significant at $p < .01$. This supports Hypothesis 2, which holds that FL has a major influence on investment-decision-making, by showing that a one-unit growth in financial literacy brings 0.440 improvement in investment decisions.

With a value of 0.145, our investigation of the moderating effect of FL showed that it strengthens the link of overconfidence bias and investment choices. The moderation effect was very significant ($p < 0.000$), and the intensity of this connection increased by 0.145 for every unit increase in financial literacy. This highlights the need of financial literacy in mitigating the impact of excessive confidence on investment decisions. These results have important

Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

ramifications for investors and regulators and offer compelling evidence in favour of Hypothesis

The findings highlight how crucial it is to raise financial literacy in order to mitigate the impacts of overconfidence bias in financial markets and encourage better-informed and logical investing decisions. As a result, these observations are probably going to influence the formulation of regulations meant to raise investors' level of financial literacy and encourage more sensible investing practices.

DISCUSSION AND CONCLUSION

The study findings indicate that overconfidence bias significantly influences investment choices. Higher overconfidence makes investors more likely to make an investment, which is consistent with earlier research by Ghalandari and Ghahremanpour (2013), who also discovered a link between overconfidence bias and investment choices. In this context, overconfidence bias can be defined as an investor's tendency to make investing decisions primarily based on their own abilities, views, and knowledge, frequently ignoring advise from brokers, friends, or relatives. These results emphasise how crucial it is to promote a more knowledgeable and careful attitude to investing. It is essential for investors to use solid judgement and rely on trustworthy information when making decisions rather than just following the herd in order to lessen the possible harmful impacts of overconfidence bias (Qasim et al., 2019).

Additionally, the study shows that FL has a big impact on investment choices. The probability of making wise investment decisions rises with financial literacy. These results align with Novianggie and Asandimitra's (2019) research, which found a clear positive correlation between investing decisions and financial literacy. People with greater financial literacy are better able to evaluate information about investment instruments because investment decisions are an important subset of larger financial decision-making. The work of Wardani and Lutfi (2019) supports the idea that this capacity helps people choose the best investment selections.

The study also shows that investment decisions are greatly influenced by financial knowledge. Making wise investing decisions is more likely as financial literacy rises. The research by Novianggie and Asandimitra (2019), founded a clear positive correlation of FL and investing choices, is in line with these findings. Higher financial literacy makes people more capable of evaluating information about investment instruments since investment decisions are an essential subset of larger financial decision-making. They can choose the best investment options thanks to this capacity, according to Wardani and Lutfi's (2019) research.

The study concludes by highlighting the crucial roles that FL and overconfidence bias play in investment-decision-making. FL serves as a critical moderating factor that improves the quality of decisions, even while overconfidence might influence investment behaviour. These

Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

results imply that initiatives to raise investor financial literacy are critical to encouraging more logical and knowledgeable investing practices, which in turn produce better financial results.

REFERENCES

Yoong, J., & Ferreira, V. R. D. M. (2013). Improving financial education effectiveness through behavioural economics: OECD key findings and way forward. *OECD Publishing*, *1*(1926), 1982.

Barber, B. M., & Odean, T. (2013). The behavior of individual investors. In *Handbook of the Economics of Finance* (Vol. 2, pp. 1533-1570). Elsevier.

Baker, H. K., & Filbeck, G. (Eds.). (2013). *Portfolio theory and management*. Oxford University Press, USA.

Altman, M. (2012). Implications of behavioural economics for financial literacy and public policy. *The Journal of socio-economics*, *41*(5), 677-690.

Lusardi, A. (2012). *Numeracy, financial literacy, and financial decision-making* (No. w17821). National Bureau of Economic Research.

Park, M., & Son, J. B. (2022). Pre-service EFL teachers' readiness in computer-assisted language learning and teaching. *Asia Pacific Journal of Education*, *42*(2), 320-334.

Huston, S. J. (2010). Measuring financial literacy. *Journal of consumer affairs*, *44*(2), 296-316.

Nozick, R. (1994). Invisible-hand explanations. *The American Economic Review*, *84*(2), 314-318.

Mintzberg, H., Raisinghani, D., & Theoret, A. (1976). The structure of" unstructured" decision processes. *Administrative science quarterly*, 246-275.

Kahneman, T. (1979). D. kahneman, a. tversky. *Prospect theory: An analysis of decisions under risk*, 263-291.

Thaler, R. (1980). Toward a positive theory of consumer choice. *Journal of economic behavior & organization*, *1*(1), 39-60.

Shefrin, H., & Statman, M. (2000). Behavioral portfolio theory. *Journal of financial and quantitative analysis*, *35*(2), 127-151.

Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. Federal Reserve Bulletin, 89(7), 309-322.

Hirt, G.A., Block, S.B., 2006. Fundamentals of investment management. McGraw Hill.

Hon-Snir, S., Kudryavtsev, A., & Cohen, G. (2012). Stock market investors: Who is more rational, and who relies on intuition. *International Journal of Economics and Finance*, 4(5), 56-72.

Huston, S. J. (2010). Measuring financial literacy. *Journal of consumer affairs*, 44(2), 296-316.

Jain, J., Walia, N., & Gupta, S. (2020). Evaluation of behavioral biases affecting investment decision making of individual equity investors by fuzzy analytic hierarchy process. *Review of Behavioral Finance*, 12(3), 297-314.

Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. Econometrica: *Journal of the Econometric Society*, 263-292.

Kengatharan, K. and Kengatharan, C. (2014). "Herding behavior and investment decisions: Evidence from the Sri Lankan stock market." *International Journal of Economics and Financial Issues, 4*(1), 194-200.

Komalasari, N. et al. (2020). "Herding behavior in stock market: Evidence from Indonesia." International Journal of Economics, Commerce and Management, Vol. VIII, No. 8.

Landberg, R. (2003). "Individual herding in financial markets." *International Journal of Theoretical and Applied Finance*, 6(1), 33-46.

Lim, K. H. (2012). "Herding behavior and its impact on stock returns: Evidence from the Malaysian stock market." *International Journal of Economics and Finance*, 4(5), 160-167.

Lo, A. (2002). "The adaptive markets hypothesis." *Journal of Financial Economics*, 70(3), 503-530

Lusardi, A. and Mitchell, O. S. (2007). Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth. *Journal of Monetary Economics*, 54(1), 205-224.

Lusardi, A., Michaud, P., & Mitchell, O. S. (2014). Financial literacy and retirement preparedness: Evidence and implications for financial education. Business Economics, 49(2), 101-111.

Mintzberg, H., Raisinghani, D., & Theoret, A. (1976). The structure of" unstructured" decision processes. Administrative science quarterly, 246-275.

Nofsinger, J. R. (2005). Social mood and financial economics. The Journal of Behavioral Finance, 6(3), 144-160.

Nozick, R. (1993). The Nature of Rationality. Princeton University Press.

Mintzberg, H., Ahlstrand, B., & Lampel, J. (1976). Strategy Safari: A Guided Tour Through the Wilds of Strategic Management. Simon and Schuster.

Pasewark, W. R., & Riley, M. E. (2010). It'sa matter of principle: The role of personal values in investment decisions. *Journal of business ethics*, 93, 237-253.

Persaud, A. (2000). Sending the herd off the cliff edge: the disturbing interaction between herding and market-sensitive risk management practices. *The Journal of Risk Finance*, 2(1), 59-65.

Postmus, J. L., Hetling, A., & L. HOGE, G. R. E. T. C. H. E. N. (2015). Evaluating a financial education curriculum as an intervention to improve financial behaviors and financial well-being of survivors of domestic violence: Results from a longitudinal randomized controlled study. *Journal of Consumer Affairs*, 49(1), 250-266.

Prechter, R. R. (2016). The Socionomic Theory of Finance. Gainesville: Socionomics Institute Press. Program for the Advancement of Financial Literacy. (2008). Definition of financial literacy. PACFL.

Policy Journal of Social Science Review
ISSN (Online): 3006-4635
ISSN (Print): 3006-4627
https://journalofsocialsciencereview.com/index.php/PJSSR
Vol. 2 No. 4 ,(Fall-2024)

Ramadan, I. Z. (2015). Confidence Index Determinants of the Amman Stock Exchange Listed Companies. *International Journal of Business and Management*, 10(1), 195.

Shefrin, H., & Statman, M. (2000). Behavioral portfolio theory. *Journal of financial and quantitative analysis*, 35(2), 127-151.

Son, J., & Park, J. (2019). Effects of financial education on sound personal finance in Korea: Conceptualization of mediation effects of financial literacy across income classes. *International journal of consumer studies*, 43(1), 77-86.

Thaler, R. (1980). Toward a positive theory of consumer choice. *Journal of economic behavior & organization*, 1(1), 39-60.

Tversky, A., & Kahneman, D. (1970s). Judgment under uncertainty: Heuristics and biases. Science, 185(4157), 1124-1131.

Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial economics*, 101(2), 449-472.

Yoong, J., & Ferreira, V. R. D. M. (2013). Improving financial education effectiveness through behavioural economics: OECD key findings and way forward. OECD Publishing, 1, 1926-1982.