

**BEHAVIOURAL FACTORS AFFECTING INVESTMENT CHOICES & RETURNS OF
INDIVIDUAL INVESTORS AMONG MILLENNIALS**

Dr Syed Irfan Shafi, Dr Rais Ahmad Itoo, Dr Mohd Iqbal Khan, Dr Imran Ul Amin Dr Altaf Ahmad Dar, Assistant Professor, Department of Management Studies, Islamic University of Science and Technology, Awantipora Pulwama-Kashmir.

Abstract

In the realm of investment decision-making, a prevailing assumption posits that individual investor exercise rationality in their choices. However, behavioural finance delves into the realm of non-rational behaviours exhibited by market investors. The theory of behavioural finance posits that, despite the presumption of rationality, investors often make decisions influenced by intermittent deviations from historical patterns and various psychological factors. This framework elucidates how human behaviours significantly impact the process of making investment decisions, transcending the bounds of rationality.

The study at hand aims to scrutinize the role of individual investors and their decision-making processes, with a specific focus on behavioural factors such as heuristics, prospect theory, herding behaviour, and the influence of market value on perceived risks. The central objective is to discern the stimuli influencing the drivers of financial investment decisions among individual investors within the framework of behavioural finance. To achieve this, a validated and reliable questionnaire tailored for individual investors has been employed.

The study conducted its inquiry on a sample of 360 Millennials employed in both private and public enterprises in the vicinity of Jammu and Kashmir. The findings revealed positive associations between the heuristics approach, prospect theory, market value, herding effects, and both investment decision and performance. These results contribute significantly to our comprehension of how cognitive biases and decision-making heuristics exert influence on investor behaviour. Additionally, the validation of the efficient market hypothesis is explored through the positive correlation observed between market efficiency and investment decisions, thus augmenting the theoretical discourse surrounding overall market dynamics.

Keywords: Heuristics approach, Prospect theory, herding behaviour, Market value, investment decisions.

Introduction

In addition to being a source of investment funding, the stock market, characterized by the buying and selling of shares, functions as a signalling mechanism for managerial decisions and plays a pivotal role in corporate governance dynamics (Samuel, 1996). Despite its multifaceted functions, the stock market is renowned as the most efficient avenue for businesses to raise capital (Zuravicky, 2005). Individuals are attracted to stocks due to their potential for long-term capital growth, the assurance of dividends, and their capability to serve as a hedge against the adverse impacts of inflation (Teweles and Bradley, 1998).

Investments in the stock market are very liquid (Jaswani, 2008). Purchasing stock with the intention of benefiting from dividends and stock price growth is the main driving force behind most stock investors (Croushore, 2006). Because behavioural finance takes into account both an individual's risk tolerance and the biases present in financial behaviour, it can significantly influence stock investment decisions. After behavioural economics, behavioural finance became a fascinating field in its own right in the 1980s. It is based on two key ideas: "psychology," which classifies departures from total rationality, and "limits to arbitrage," which implies that rational traders may find it difficult to correct mispricing brought on by less rational traders (Barberis & Thaler, 2003).

The main source of inspiration for behavioural finance is experimental psychology, which combines knowledge from psychology, finance, and classical economics to provide new insights into established financial theories (Huang, Shieh, & Kao, 2016). However, sociological approaches such as participant observations, focus groups, interviews, and surveys have not had as much of an impact, perhaps

because of the costs involved or because finance scholars prefer more controllable approaches with clear causal interpretations (Muradoglu & Harvey, 2012). Retail investors frequently use techniques like fundamental analysis, technical analysis, and personal judgment in their investment analysis. Generally, investors and investment managers make the final decisions about investments. These investment decisions are frequently supported by decision-making tools. Retail investors' investment decisions and market outcomes are generally assumed to be systematically influenced by information structures and market-related factors.

As noted by Jagongo and Mutswenje in 2014, theories of investor market behaviour use psychological concepts of decision-making to explain the reasons behind purchasing or disposing of stocks. As noted by Tekçe, Yılmaz, and Bildik in 2016, a number of studies have shown that investors may not always behave rationally, market efficiency may be in doubt, and prices may deviate significantly from their fundamental values. Individual investors' decision-making is greatly influenced by behavioural factors; emotions, cognitive biases, and social influences frequently result in decisions that are not unbiased, logical.

Review of literature

Factors Influencing Trading Behaviour

When choosing an investment, people take into account a number of factors, including the company's reputation, its standing in the industry, expected earnings, profitability, and financial condition as shown by the statements. They also take into account past stock performance, share price, general economic sentiment, and projected dividends for investors (Jagongo and Mutswenje, 2014). Retail investors display a range of information-gathering and trading behaviours based on their individual personality traits (Tauni, Fang, Rao, and Yousaf, 2015). According to Magnon and Merli (2015), investors base their purchasing decisions on both the conventional funds' and responsible funds' negative returns. Nonetheless, investors frequently let fund returns have an impact on their selling decisions. It's interesting to note that when past negative returns decline, they are less likely to sell funds than conventional ones (Lapanan, 2018).

Heuristics

Heuristics serve as valuable decision-making guidelines, especially in intricate and unpredictable situations (Ritter, 2003). Their utility lies in simplifying the assessment of probabilities and transforming predictions into clearer conclusions (Kahneman and Tversky, 1974). While generally beneficial, these heuristics, particularly in time-sensitive situations (Waweru et al., 2008), may occasionally introduce biases (Kahneman and Tversky, 1974; Ritter, 2003). Pioneering researchers Kahneman and Tversky introduced three crucial factors into the study of heuristics: representativeness, availability bias, and anchoring (Kahneman & Tversky, 1974). Waweru et al. (2008) also acknowledged the Gambler's fallacy and Overconfidence as elements falling under the heuristic theory.

Representativeness, as defined by DeBondt and Thaler (1995), pertains to how closely an event resembles its parent population (Kahneman & Tversky, 1974) or how similar it is to the overall population. This can lead to biases, such as individuals assigning undue weight to recent experiences while neglecting the long-term average rate (Ritter, 2003). Overconfidence is a prevalent trait among analysts and investors in their respective domains (Evans, 2006). It's crucial to note that excessive confidence not only influences personal perceptions of one's abilities but also impacts career advancement and investment tenure (Oberlechner & Osler, 2004). This study delves into the impact of five heuristic components—Overconfidence, Gambler's fallacy, Availability bias, Anchoring, and Representativeness—on investment decision-making and the performance of individual investors at the Indian Stock Exchange.

HI: Heuristics approach have positive effect on investor decision and investment performance among individual investor in Indian Stock Market.

Prospect theory

According to Filbeck, Hatfield, and Horvath (2005), prospect theory explores the area of subjective decision-making, which is strongly impacted by an individual's values. This theory provides insightful

information about the different psychological states that influence how people make decisions. These states include Mental accounting, Regret aversion, and Loss aversion (Waweru et al. In 2003. Anger aversion is related to feelings that surface following errors. Holding onto declining stocks when selling appreciating ones is more common among investors who want to avoid regret. Rather than selling winning stocks too soon, they often regret holding losing stocks for too long (Lehenkari & Perttunen, 2004). Conversely, loss aversion is concerned with the different emotional effects of gains and losses of comparable sizes (Barberis & Huang, 2001).

Studies show that people are generally more distressed when confronted with possible losses than when they are pleased with comparable gains (Barberis & Thaler, 2003). Furthermore, losses that come after previous successes tend to be less upsetting than losses that come after previous losses (Barberis & Huang, 2001). Although it can result in less-than-ideal choices that negatively impact their wealth, risk aversion is a prevalent characteristic among investors (Odean, 1998). Lastly, "Mental accounting" describes the method by which people consider and assess their financial dealings (Barberis & Huang, 2001). Loss aversion, regret aversion, and mental accounting—three essential elements of the prospect theory framework—are used in this study to assess their influence on the investment performance and decision-making of individual investors at the Indian Stock Exchange.

H2: Prospect theory have positive effect on investor decision and investment performance among individual investor in Indian Stock Market.

Market

Behavioural finance has a significant impact on the financial markets by influencing the behaviour of investors. As per the principles of behavioural finance, investors tend to exhibit certain behaviours like overreacting or underreacting to news and price changes, overlooking stock fundamentals, projecting past trends onto future predictions, and gravitating toward popular stocks and seasonal patterns (DeBondt and Thaler, 1995). These inclinations have a big influence on the decisions that investors make in the stock market. Investor decision-making is influenced by a variety of market-related factors, such as price swings, market intelligence, historical stock patterns, customer preferences, inflated reactions to price changes, and the basic qualities of stocks (Waweru et al. and 2008). Scholars contend that news-induced overreactions (DeBondt and Thaler, 1985) and underreactions (Lai, 2001) can influence investors' trading strategies and ultimately impact their investment decisions.

Investors' decisions are heavily influenced by market information in particular, which leads them to concentrate on well-liked stocks and other noteworthy market events (Waweru et al. and 2008). Even when the possible impact on future investment performance is uncertain, investors can be influenced by stock market events that grab their attention (Barber and Odean, 2000). Due to overconfidence, a lot of investors trade excessively and base a lot of their decisions on the accuracy of stock or market information (Odean, 1998a). When there are price swings, investors frequently give in to herd mentality and follow the herd (Caparrelli et al. and 2004).

Furthermore, as prices fluctuate, investors may incorrectly modify their projections of stock returns, which could influence their choice of investments (Waweru et al. and 2008). In conclusion, this research emphasizes the importance of recognizing market factors as essential components influencing investors' decision-making processes in the Indian stock market, even though they are usually seen as external to behavioural factors affecting investor behaviour.

H3: Market values have positive effect on investor decision and investment performance among individual investor in Indian Stock Market.

Herding effects

Herding behaviour is of interest to academic researchers because it can affect stock price fluctuations, which can affect risk-return models and asset pricing theories (Tan, Chiang, Mason, and Nelling, 2008). Because less skilled people may imitate more skilled peers in order to improve their professional reputation, herding behaviour can also have an impact on how professional performance is evaluated (Kallinterakis, Munir & Markovic, 2010). Herding investors congregate in groups for protection and support from one another, much like early humans with little understanding of their surroundings (Caparrelli et al. and 2004). Different investor types have different herding tendencies; individual

investors are more likely to follow the herd than institutional investors (Goodfellow, Bohl & Gebka, 2009).

Herding can generate market momentum and fuel stock trading. The cost of following the herd, however, may eventually exceed any potential abnormal returns, so the effect of herding may become less significant (Waweru et al. and 2008). Therefore, the purpose of this study is to look into how herding affects the Indian Stock Exchange's individual investors' decision-making process.

H4: Herding effects have positive effect on investor decision and investment performance among individual investor in Indian Stock Market.

Investment Decision and efficiency of the market

According to earlier studies, investors frequently exhibit a cognitive bias known as the "disposition effect," whereby they tend to sell fewer assets when their value has dropped relative to when they were first purchased (Shefrin and Statman, 1985). Rather than selling underperforming stocks, individual investors frequently decide to sell stocks that have increased in value since they were first purchased. It is difficult to defend this behaviour, though, in a purely logical framework. It is not totally logical to draw the conclusion that investors sell profitable stocks because they expect them to perform poorly in the future (Odean, 1998). Investors expect to sell at a higher price than others when they sell assets below their purchase prices, a price that is influenced by both market corrections and their own expectations. People who are losing money typically sell for somewhat more money (Genesove and Mayer, 2001).

In the second half of the trading day, investors who realize gains (losses) in the first half of the day typically take on more risk (Coval and Shumway, 2000). This is in line with prospect theory. Since buying and selling are two different processes, attention-grabbing stocks don't seem to have as much of an impact on individual investors when they sell. The greater influence on buying decisions can be explained by the fact that buying offers a wider selection and short-sale restrictions restrict the options for selling (Barberis and Thaler, 2003). The study's analysis of individual investors revealed that purchasing decisions are significantly influenced by attention compared to selling decisions. Investors were more likely to purchase high-attention stocks than to sell them, according to their identification of these stocks, which included those with noteworthy trading volumes, returns, and news (Barber and Odean, 2002). In conclusion, from the standpoint of behavioural finance, stock market efficiency is influenced by investment decisions.

H5: Investment decision have positive effect on overall efficiency of the Indian stock market.

Investment Performance and efficiency of the market

Detractors of behavioural finance contend that if investors displaying irrational behavior consistently demonstrate underperformance, they might face exclusion from the securities market. Conversely, advocates posit that overconfident investors, even those involved in excessive trading, might yield improved outcomes (Anderson, Henker, and Owen, 2005). According to these researchers, individual investors who conduct a higher number of transactions are likely to experience greater returns compared to those who make fewer transactions (Anderson, Henker, and Owen, 2005). Furthermore, stocks that witness a significant increase in individual ownership throughout the year may display a negative abnormal return, whereas stocks with a substantial decrease in individual ownership may yield a positive abnormal return (Kim and Nofsinger, 2003). Investment return rate, which objectively reflects investment performance, is evaluated by investors in relation to the profit rates of their peers. Additionally, an investor's trading experience is seen as an indicator of their duration in the securities market. A study by Oberlechner and Osler (2004) found that while overconfidence may not directly impact investment profit, it can influence an individual investor's trading experience. Therefore, it is suggested that investment performance has an impact on the overall efficiency of the stock market.

H6: Investment performance have positive effect on overall efficiency of the Indian stock market

Research Design

This research is grounded in the foundational theories of behavioural finance, specifically Heuristic theory, Prospect theory, and other relevant theories concerning the impact of behavioural factors on investors' decision-making. These theories have been extensively discussed by Waweru et al. (2008,

p.24-38) and various other authors cited in the literature review. The objective is to amalgamate these theories and formulate a set of questions pertaining to behavioural factors that influence both investment decisions and performance.

Primary data is sought for this research, and to acquire it, the survey method will be employed through the distribution of questionnaires related to pertinent variables. Respondents are instructed to provide responses based on their personal circumstances and experiences. The Likert Scale approach will be utilized, employing 5-point Likert scales to solicit individual investors' evaluations of the degree to which they agree with the impacts of behavioral factors on their investment decisions, as well as their agreement with statements regarding investment performance. The Likert scale ranges from 1 to 5, representing strongly disagree, disagree, neutral, agree, and strongly agree, respectively.

Prior to finalization, drafts of the questionnaire undergo testing by both the Supervisor and individual investors. The study population comprises individual investors employed in both private and public enterprises in the vicinity of Jammu and Kashmir, actively engaged in transactions on the Indian Stock Exchange. Data collected will undergo processing and analysis using SPSS and AMOS software. Initial steps involve cleaning the data by excluding questionnaires with poor quality, such as those containing excessive missing values or biased ratings. Subsequent statistical techniques applied to achieve research objectives encompass Descriptive Statistics, Factor Analysis, Cronbach's Alpha test, and Structural Equation Modeling (SEM).

Measurement of the variables

The constructs embedded within the research framework were evaluated using a carefully crafted questionnaire. This survey instrument, designed with precision, was adapted from validated measures employed in previous research, ensuring both its reliability and validity. The questionnaire was structured into three distinct sections.

The initial segment focused on collecting demographic information from the respondents. Subsequently, the following section consisted of a series of items addressing contextual factors. The scale used to assess these contextual factors was derived from A1 Tamimi's work (2006) and comprised a total of 31 questions, each rated on a five-point Likert scale.

The concluding segment of the questionnaire encompassed six questions designed to measure individuals' investment decisions. These questions were adapted from the research conducted by Mayfield et al. (2008).

Table 1: Demographics Profile of the respondents

Variables	Category	Frequency (n 360)	Percentage
Gender	Male	293	81
	Female	67	19
Age (In years)	20-30	57	16
	30-40	133	37
	40-50	75	21
	50-60	58	16
	60 and above	37	10
Education	School	22	6
	Graduation	83	23
	Post-Graduation	149	41
	PhD	82	23
	Other	24	7
Occupation	Business	110	31
	Salaried	99	28
	Professional Practice	89	25
	Retired	41	11
	Others	21	6
Income	Less than 250,000	69	19
	250,000 to 500,000	83	23
	500,000 to 750,000	143	40
	750,000 to 1,000,000	45	13
	More than 1,000,000	20	6
Experience in Investments	1-3 years	159	44
	3-6 years	99	28
	6-9 years	56	16
	More than 9 years	46	13
Received any financial education	Yes	166	46
	No	194	54

Analysis and findings

In this research study, we employed statistical software SPSS version 23 for conducting descriptive analyses of the data. Additionally, we utilized AMOS version 22 to assess the structural equation model. Following the methodological recommendations outlined by Anderson and Gerbing (1988), a two-step structural equation modeling (SEM) approach was employed. In the initial phase of analysis, a confirmatory factor analysis (CFA) was executed as part of the measurement model to establish the reliability and validity of the underlying constructs. Subsequently, in the subsequent phase, path analysis was conducted as part of the structural model to assess the validity of the proposed hypotheses. Following the completion of the path analysis, a multi-group analysis was undertaken. This entailed conducting several invariance tests to investigate potential moderating effects of gender on the structural model.

1.1 Measurement Model Assessment

Examination of factor analysis loadings was conducted for the items comprising the research scales. As illustrated in Table 2, the standardized factor loading values ranged from 0.585 to 0.880. All loadings were found to be statistically significant at the 0.001 level. To assess convergent validity and internal consistency, the average variance extracted (AVE) and composite reliability (CR) were computed, following the approach outlined by Fornell and Larcker (1981). The findings indicate that all research variables exhibited AVE values exceeding 0.5 and CR values surpassing 0.70. This implies that the data demonstrated convergent validity and internal consistency across the research constructs.

Table 2: Convergent validity statistics

<i>Constructs</i>	<i>Items</i>	<i>Factor Loadings</i>	<i>Cronbach's alpha</i>	<i>CR</i>	<i>AVE</i>	<i>MSV</i>	<i>DV</i>
Heuristics Approach	HA1	.784	0.992	0.923	0.625	0.325	0.745
	HA2	.696					
	HA3	.690					
	HA4	.648					
	HA5	.623					
Prospective Theory	HA6	.585	0.828	0.978	0.651	0.365	0.829
	PT1	.672					
	PT2	.667					
	PT3	.665					
	PT4	.619					
	PT5	.600					
Market values	PT6	.585	0.852	0.899	0.596	0.331	0.811
	MV1	.787					
	MV2	.754					
	MV3	.698					
Herding effects	MV4	.634	0.794	0.932	0.625	0.389	0.789
	HE1	.792					
	HE2	.789					
	HE3	.764					
	HE4	.511					
Investment Decision	HE5	.792	0.769	0.897	0.544	0.298	0.745
	ID1	.738					
	ID2	.694					
	ID3	.685					
Investment Performance	ID4	.507	0.812	0.974	0.531	0.310	0.84
	IP1	.809					
	IP2	.791					
	IP3	.784					
Efficiency of the Market	IP4	.880	0.912	0.954	0.562	0.387	0.79
	EP1	.511					
	EP2	.792					
	EP3	.738					
	EP4	.694					
	EP5	.811					

Notes: **Significant at 0.001 level.

To evaluate discriminant validity, we performed two separate tests. Initially, we applied the Fornell and Larcker (1981) criterion, which entails comparing the square root of the Average Variance Extracted (AVE) with the intercorrelations among the variables. The results, as presented in Table 2, demonstrate that the square root of AVE exceeded the intercorrelations, thereby providing evidence that the condition for discriminant validity was met.

Additionally, to reinforce the confirmation of discriminant validity, the Heterotrait-Monotrait Ratio (HTMT) was employed. Our results indicate that all HTMT ratios remained below the recommended threshold of 0.85, as proposed by Hulland (1999). This further supports the conclusion that the constructs under investigation exhibited discriminant validity.

Structural model assessment

To evaluate the structural model, we conducted an analysis using AMOS version 23 and computed various criteria. Given the cross-sectional nature of the research design, there was a potential concern regarding Common Method Bias (CMB) as discussed by Podsakof et al. (2003). To address this concern, we conducted a test for CMB by employing Harman's single-factor test in SPSS, utilizing principal component analysis as the extraction method.

The results of this analysis revealed the presence of six factors with Eigen values greater than 1. However, it is noteworthy that the first factor accounted for only 18.16% of the total variance explained, which was considerably less than the recommended threshold of 50%.

TABLE 3: Model fit Index

Model-fit statistics	χ^2	Df	χ^2/df	CFI	TLI	RMSEA	SRMR
Values	2190.395	372	5.888	.921	.922	0.049	0.489

Note(s): Df (Degree of Freedom), CFI (Comparative Fit Index), TLI (Tucker–Lewis Index), RMSEA (Root Mean Square Error of Approximation), and SRMR (Standardized Root Mean Square Residual) Hence, it can be confidently affirmed that there is no evidence of Common Method Bias (CMB) exerting any influence on the statistical results. Furthermore, the model fit was deemed significant, as all the model fit indicators met the established criteria: the root mean square error of approximation (RMSEA) was 0.057, the normed fit index (NFI) reached 0.966, the comparative fit index (CFI) stood at 0.921, Turker-Lewis's index (TLI) registered 0.922, and the goodness of fit index (GFI) was 0.921. Additionally, the chi-square value (χ^2) was 2190.395, with a significance level of $p < 0.001$, and the ratio between chi-square and the number of degrees of freedom was 5.88.

Hypothesis Testing

In the analysis presented, Figure 2 and Table 6 display the outcomes of the direct path analysis. The findings indicate that Heuristics Approach was positively associated with Investment Decision and Investment Performance ($\beta = 0.123$, $p = 0.016$) and ($\beta = 0.126$, $p = 0.019$), Prospective Theory was positively associated with Investment Decision and Investment Performance ($\beta = 0.127$, $p = 0.030$) and ($\beta = 0.129$, $p = 0.011$), Market values was positively associated with Investment Decision and Investment Performance ($\beta = 0.128$, $p = 0.019$) and ($\beta = 0.124$, $p = 0.014$), Herding effects was positively associated with Investment Decision and Investment Performance ($\beta = 0.126$, $p = 0.012$) and ($\beta = 0.123$, $p = 0.011$).

Figure 2. Model estimates

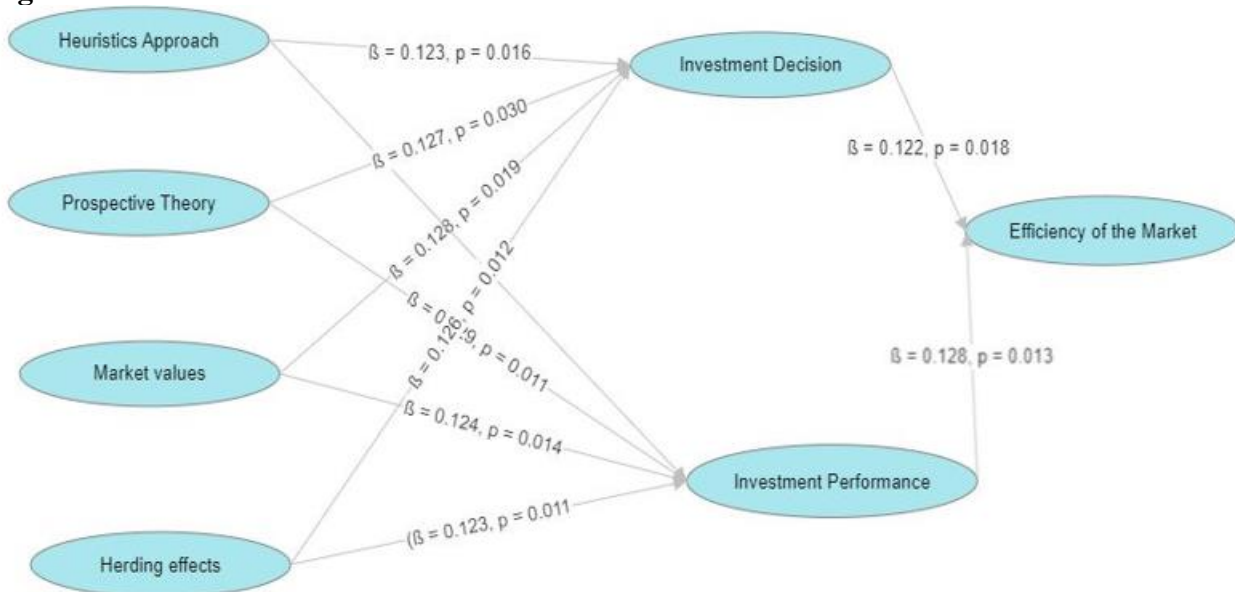


Table 6. Results of structural model

Hypothesis	From	To	Estimates	S. E	C.R	p-value	Decision
H1	Heuristics Approach	Investment Decision	0.123	0.063	2.426	0.016	Accepted
H2	Heuristics Approach	Investment Performance	0.126	0.069	2.456	0.019	Accepted
H3	Prospective Theory	Investment Decision	0.127	0.030	2.449	0.012	Accepted
H4	Prospective Theory	Investment Performance	0.129	0.059	2.440	0.011	Accepted
H5	Market values	Investment Decision	0.128	0.069	2.541	0.019	Accepted
H6	Market values	Investment Performance	0.124	0.068	2.339	0.014	Accepted
H7	Herding effects	Investment Decision	0.126	0.061	2.441	0.012	Accepted
H8	Herding effects	Investment Performance	0.123	0.053	2.398	0.011	Accepted
H9	Investment Decision	Efficiency of the Market	0.122	0.060	2.445	0.018	Accepted
H10	Investment Performance	Efficiency of the Market	0.128	0.053	2.532	0.013	Accepted

The results for the direct path analysis also suggest that Investment Decision was positively associated with Efficiency of the Market ($\beta = 0.122$, $p = 0.018$) and Investment Performance was also positively associated with Efficiency of the Market ($\beta = 0.128$, $p = 0.013$), Thus, hypotheses H1 - H10 were accepted.

Discussion of findings

This study aims to provide an extensive examination of the investment decision-making processes of individual investors. The analysis encompasses multiple dimensions, including the heuristics approach, prospective theory, market values, herding effects, factors influencing individuals' investment performance, and the efficiency of the market. The obtained results align with the findings reported in prior research offers important insights into the relationships between various factors and their impact on investment decisions and performance. These results are based on a direct path analysis, and they reveal several significant associations among the variables under investigation.

Firstly, the positive associations observed between the Heuristics Approach and both Investment Decision and Investment Performance highlight the role of cognitive shortcuts or heuristics in shaping investment outcomes ($\beta = 0.123$, $p = 0.016$ and $\beta = 0.126$, $p = 0.019$). This is consistent with previous research on behavioural finance, which has shown that investors often rely on heuristics when making financial decisions (Kahneman & Tversky, 1974). Similarly, the positive relationships found between the Prospective Theory and both Investment Decision and Investment Performance ($\beta = 0.127$, $p = 0.030$ and $\beta = 0.129$, $p = 0.011$) highlight the importance of considering future expectations and possibilities in investment strategies. This aligns with the principles of prospect theory, which suggests that individuals evaluate potential gains and losses relative to a reference point (Kahneman & Tversky, 1979).

Furthermore, the positive associations between Market Values and both Investment Decision and Investment Performance ($\beta = 0.128$, $p = 0.019$ and $\beta = 0.124$, $p = 0.014$) emphasize the significance of incorporating market information into investment decisions. This is in line with the efficient market hypothesis, which posits that asset prices reflect all available information (Fama, 1970). The positive relationships between Herding Effects and Investment Decision and Investment Performance ($\beta = 0.126$, $p = 0.012$ and $\beta = 0.123$, $p = 0.011$) indicate that herd behaviour can influence investment

choices and outcomes. This aligns with research that has explored the impact of social influence and crowd behaviour on financial markets (Bikhchandani, Hirshleifer, & Welch, 1992).

Additionally, the findings showing a positive association between Investment Decision and Efficiency of the Market ($\beta = 0.122$, $p = 0.018$), as well as Investment Performance and Efficiency of the Market ($\beta = 0.128$, $p = 0.013$), underscore the importance of market efficiency in guiding investment decisions and predicting performance (Fama, 1970). In summary, these findings provide empirical support for the acceptance of hypotheses H1 - H10, demonstrating the interplay between psychological factors, market values, herding behaviour, and market efficiency in shaping investment decisions and performance.

Theoretical and practical implications

The results of this study carry noteworthy theoretical and practical implications within the realm of finance and investment. From a theoretical standpoint, these results advance the field of behavioural finance by reaffirming the role of psychological factors in shaping investment decisions and outcomes. The positive associations observed between the Heuristics Approach, Prospective Theory, and Herding Effects with both Investment Decision and Investment Performance contribute to our understanding of how cognitive biases and decision-making heuristics influence investor behaviour. Moreover, the validation of the Efficient Market Hypothesis through the positive relationship between market efficiency and investment metrics adds to the theoretical discourse on market dynamics. The study's holistic approach of considering various psychological, market-related, and behavioural factors in a single analysis opens avenues for further research into the intricate interplay of these elements in financial decision-making.

On a practical level, these findings offer actionable insights for investors and financial practitioners. Firstly, investors should be cognizant of the impact of heuristics, prospective thinking, and herding behaviour on their investment choices. Awareness of these psychological biases can prompt the adoption of strategies that mitigate their influence and improve decision-making processes. Additionally, the positive correlation between Market Values and Investment Decision/Performance underscores the importance of staying informed about market conditions and trends, suggesting that active monitoring of market data can be beneficial. Furthermore, risk management becomes crucial, as herding behaviour's positive association with investment decisions and performance emphasizes the need to avoid blindly following market trends. For regulators and policymakers, these findings could inform market regulations and investor protection measures, as understanding the impact of behavioural biases and herding behaviour on market stability may lead to targeted interventions to reduce market volatility. In sum, the theoretical and practical implications of this study provide valuable insights for enhancing investment decision-making and performance in the complex landscape of financial markets.

Limitations and future scope

The study's findings offer valuable insights into the relationships between various factors in investment decision-making and performance. In addition to offering valuable theoretical insights to the academic literature and practical implications for stock market participants, this study is subject to several noteworthy limitations. Firstly, its scope is constrained by its focus on a specific geographic region within North Jammu and Kashmir region, potentially limiting the applicability of its findings to a broader context. Secondly, the study employs a cross-sectional research design, which may not capture the dynamic nature of investor responses to fluctuating market conditions over time. Thirdly, while the research strives to provide a comprehensive overview of the determinants influencing investment decisions, there remains an opportunity for future investigations to incorporate a more extensive array of behavioural factors and demographic variables. To enhance the generalizability of the findings, upcoming studies should consider expanding their geographical coverage. Additionally, there exists a prospect for future research to undertake a comparative analysis of the decision-making processes between individual investors and institutional investors, offering readers a deeper understanding of investor behaviour in diverse contexts.

References

- Anderson, A., Henker, J., and Owen, S. (2005). Limit Order Trading Behavior and Individual Investor Performance. *The Journal of Behavioral Finance*, 6 (2), 71– 89.
- Barber, B.M. and Odean, T. (2000). Trading is hazardous to your wealth: the common stock investment performance of individual investors. *Journal of Finance*, 55 (2), 773–806.
- Barberis, N. and Huang, M. (2001). Mental Accounting, Loss Aversion, and Individual Stock Returns. *The Journal of Finance*. 56 (4), 1247-1292
- Barberis, N. and Thaler, R. (2003). A Survey of Behavioral Finance. *Handbook of the economics of finance*. Volume 1B. Financial markets and asset pricing, 1053-1123
- Caparrelli, F.D., Arcangelis, A.M and Cassuto, A. (2004). Herding in the Italian stock market: a case of behavioral finance. *Journal of Behavioral Finance*, 5 (4), 222– 230.
- Coval, J., and Shumway, T. (2000). Do behavioral biases affect prices? Working Paper. University of Michigan, Ann Arbor, MI.
- Croushore, D. (2006) *Money and Banking: A Policy oriented approach*, Cengage Learning.
- DeBondt, W. F. M. and Thaler, R. H. (1995). Financial Decision-Making in Markets and Firms: A Behavioral Perspective. *Handbooks in Operations Research and Management Science*, 9 (13), 385-410.
- DeBondt, W.F.M. and Thaler, R. (1985). Does the stock market overreact? *Journal of Finance*, 40 (3), 793–805.
- Evans, D.A. (2006). Subject perceptions of confidence and predictive validity in financial cues. *Journal of behavioral Finance*, 7 (1), 12–28.
- Filbeck, G., Hatfield, P. and Horvath, P. (2005). Risk aversion and personality type. *Journal of Behavioral Finance*, 6 (4), 170–180.
- Genesove, D. and Mayer, C. (2001). Loss aversion and seller behavior: evidence from the housing market. *Quarterly Journal of Economics*, 116 (4), 1233–1260.
- Goodfellow, C., Bohl, M. T. and Gebka, B. (2009). Together we invest? Individual and institutional investors' trading behaviour in Poland. *International Review of Financial Analysis*, 18 (4), 212–221.
- Huang, J. Y., Shieh, J. C. P., & Kao, Y.-C. (2016). Starting points for a new researcher in behavioral finance. *International Journal of Managerial Finance*, 12(1), 92-103. doi:10.1108/IJMF-05-2015-0111
- Jagongo, A., & Mutswenje, V. S. (2014). A survey of the factors influencing investment decisions: The case of individual investors at the NSE. *International Journal of Humanities and Social Science*, 4(4), 92-102.
- Jagongo, A., & Mutswenje, V. S. (2014). A survey of the factors influencing investment decisions: The case of individual investors at the NSE. *International Journal of Humanities and Social Science*, 4(4), 92-102.
- Jaswani, T. (2008), *Function and Purpose of Stock Market*, Articlesbase website, [Retrieved 2011-03-28]
- Kahneman, D. and Tversky, A. (1974). Judgment under Uncertainty: Heuristics and Biases, *Science*, 85 (4157), 1124-1131.
- Kallinterakis, V., Munir, N. and Markovic, M. R. (2010). Herd Behavior, Illiquidity, and Extreme Market States: Evidence from Banja Luka. *Journal of Emerging Market Finance*, 9, (3), 305–324.
- Kim, K. and Nofsinger, J. (2003). The Behavior and Performance of Individual Investors in Japan., [Retrieved 2011-04-01].
- Lai, M. (2001). Are Malaysian investors rational? *Journal of Psychology and Financial Markets*, 2 (4), 210–215.
- Lapanan, N. (2018). The investment behavior of socially responsible individual investors. *The Quarterly Review of Economics and Finance*, 70, 214-226. doi: 10.1016/j.qref.2018.05.014
- Lehenkari, M. and Perttunen, J. (2004). Holding onto the losers: finish evidence. *The Journal of Behavioral Finance*, 5 (2), 116–126.
- Magron, C., & Merli, M. (2015). Repurchase behavior of individual investors, sophistication and regret. *Journal of Banking & Finance*, 61, 15-26. doi: 10.1016/j.jbankfin.2015.08.021

- Muradoglu, G., & Harvey, N. (2012). Behavioural finance: The role of psychological factors in financial decisions. *Review of Behavioural Finance*, 4(2), 68-80. doi:10.1108/19405971211284862
- Oberlechner, T. and Osler, C., L. (2004). Overconfidence in currency markets. Website: , [Retrieved 2011-04-20].
- Odean, T. (1998a). Volume, volatility, price and profit when all trades are above average. *Journal of Finance*, 53 (6), 1887–1934
- Odean, T. (1998a). Volume, volatility, price and profit when all trades are above average. *Journal of Finance*, 53 (6), 1887–1934.
- Ritter, J. R. (2003). Behavioral Finance. *Pacific-Basin Finance Journal*, 11 (4), 429-437.
- Samuel, C. (1996), *Stock Market and Investment: The signaling Role of the Market*, Policy research working paper No.1612, The World Bank.
- Sapkota, M. P. (2022). Behavioural Finance and Stock Investment Decisions. *Saptagandaki Journal*, 70-84.
- Shefrin, H., and Statman, M., (1985). The disposition to sell winners too early and ride losers too long: theory and evidence. *Journal of Finance*, 40 (3), 777–790.
- Tan, L., Chiang, T. C., Mason, J. R. and Nelling, E. (2008). Herding behavior in Chinese stock markets: An examination of A and B shares. *Pacific-Basin Finance Journal*, 16 (1-2), 61–77.
- Tauni, M. Z., Fang, H. X., Rao, Z.-u.-R., & Yousaf, S. (2015). The influence of Investor personality traits on information acquisition and trading behavior: Evidence from Chinese futures exchange. *Personality and Individual Differences*, 87, 248-255. doi: 10.1016/j.paid.2015.08.026
- Tekçe, B., Yılmaz, N., & Bildik, R. (2016). What factors affect behavioral biases? Evidence from Turkish individual stock investors. *Research in International Business and Finance*, 37, 515-526. doi: 10.1016/j.ribaf.2015.11.017
- Teweles, R. J. and Bradley, E.S. (1998) *The Stock Market*, 7th edition, John Wiley and Sons, Inc.
- Waweru, N., M., Munyoki, E., and Uliana, E. (2008). The effects of behavioral factors in investment decision-making: a survey of institutional investors operating at the Nairobi Stock Exchange. *International Journal of Business and Emerging Markets*, 1 (1), 24-41.
- Zuravicky, O. (2005), *The Stock Market: Understanding and applying ratios, decimals, fractions, and percentages*, The Rosen Publishing Group, Inc.
