

Behavioural Biases and Digital Investment Decision-Making Among Retail Investors: Evidence from Emerging Financial Markets

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Abstract:

The rapid advancement of digital financial technologies has significantly transformed investment practices, enabling retail investors to access financial markets through online trading platforms, mobile applications, and fintech-enabled investment services. Despite these technological advancements, investment decisions are often influenced by behavioural biases that may lead to irrational financial choices. The present study examines the influence of behavioural biases on digital investment decision-making among retail investors in emerging financial markets. Specifically, the study investigates the impact of **overconfidence bias, herding bias, loss aversion, anchoring bias, and confirmation bias** on investors' digital investment decisions.

The study adopts a **descriptive and analytical research design** using a quantitative research approach. Primary data were collected through a structured questionnaire from **400 retail investors** selected using a purposive sampling technique. The collected data were analyzed using **Microsoft Excel 2021** by employing statistical tools such as frequency analysis, percentage analysis, mean, standard deviation, weighted mean, Pearson correlation, and multiple regression analysis.

The findings reveal that all selected behavioural biases have a significant positive influence on digital investment decision-making. Among the behavioural biases, **loss aversion** emerged as the most influential factor, followed by **overconfidence bias, confirmation bias, herding bias, and anchoring bias**. The regression analysis indicates that behavioural biases collectively explain a substantial proportion of the variation in digital investment decision-making among retail investors. The study concludes that although digital investment platforms enhance accessibility and convenience, investor psychology continues to play a crucial role in shaping investment behaviour. The findings offer valuable implications for retail investors, financial institutions, fintech companies, policymakers, and regulators in designing investor education programmes and promoting rational investment behaviour within emerging financial markets.

Keywords: Behavioural Biases, Behavioural Finance, Overconfidence Bias, Loss Aversion, Herding Bias, Anchoring Bias, Confirmation Bias, Emerging Financial Markets.

Introduction

The rapid digital transformation of financial markets has fundamentally reshaped the investment landscape, particularly in emerging economies where technology-enabled financial services have significantly enhanced retail investor participation. Digital investment platforms, mobile trading applications, robo-advisory services, and artificial intelligence-driven investment tools have reduced transaction costs, increased accessibility, and democratized participation in capital markets. As a result, millions of first-time investors have entered stock

markets through online platforms, transforming traditional investment practices into highly technology-driven processes. Despite these technological advancements, investment decisions continue to be influenced not only by objective financial information but also by investors' psychological and behavioural characteristics. Behavioural finance argues that individuals frequently deviate from the assumptions of rational decision-making due to cognitive limitations, emotional responses, and heuristic-based judgments, thereby influencing portfolio selection, trading frequency, and overall investment performance (Kahneman & Tversky, 1979; Barberis & Thaler, 2003). Recent evidence further suggests that digital environments amplify certain behavioural tendencies by providing continuous market information, social interaction, and instant execution of trades. **(Divneet Kaur, Sneha Badola ScienceDirect (2026)**

The growth of retail investing has been particularly remarkable across emerging financial markets such as India, Indonesia, Vietnam, Brazil, South Africa, and other developing economies. Rapid internet penetration, increasing smartphone adoption, government initiatives promoting financial inclusion, and widespread availability of low-cost digital brokerage services have substantially expanded individual participation in equity markets. In India, for instance, the number of demat accounts has grown exponentially over the past few years, reflecting increasing participation by young and first-time investors. Simultaneously, systematic investment plans (SIPs), digital mutual fund platforms, and online discount brokerages have become major channels through which retail investors access financial markets. Industry reports attribute this expansion to improved financial awareness, technological innovation, and rising disposable incomes among the growing middle class. **(The Times of India (2025)**

While digitalisation has simplified investing, it has also created an environment where investment decisions are made rapidly, often under conditions of information overload. Modern investors are continuously exposed to financial news, social media discussions, algorithm-generated recommendations, online communities, and financial influencers. Although this abundance of information can improve market transparency, it may also encourage impulsive decision-making, excessive trading, and reliance on unverified information. Digital platforms provide immediate access to market movements, enabling investors to react instantly to price fluctuations rather than carefully evaluating long-term fundamentals. Consequently, behavioural biases become increasingly significant determinants of investment decisions in digital financial ecosystems. Recent discussions on retail investing highlight that many new investors continue to rely heavily on online narratives, social media trends, and informal digital advice rather than systematic financial analysis, thereby increasing susceptibility to behavioural biases. **(The Economic Times(2026)**

Behavioural finance emerged as an alternative to the traditional Efficient Market Hypothesis by recognising that investors are not perfectly rational and that psychological factors systematically influence financial decision-making. Unlike classical finance, which assumes individuals maximise expected utility using complete information, behavioural finance integrates concepts from psychology and economics to explain anomalies in investor behaviour. Investors often rely on heuristics or mental shortcuts when faced with uncertainty, leading to predictable biases that affect investment choices. Among the most widely studied behavioural biases are overconfidence, herding, anchoring, representativeness, availability bias, loss aversion, confirmation bias, regret aversion, disposition effect, and mental accounting. These biases influence how investors interpret information, perceive risks, evaluate returns, and construct investment portfolios. Recent systematic reviews consistently identify overconfidence, herding, and loss aversion as dominant behavioural influences on retail investment decisions while highlighting the need to investigate additional cognitive and emotional biases in emerging market settings. **(Saurabh Singh et al.(2026) (Indian Journal of Finance)**

Overconfidence remains one of the most influential behavioural biases among retail investors. Overconfident individuals tend to overestimate their knowledge, forecasting ability, and stock-picking skills, leading to excessive trading and underestimation of investment risks. Similarly, herding behaviour causes investors to imitate the actions of others instead of relying on independent analysis, particularly during periods of market uncertainty. Anchoring bias encourages investors to depend excessively on initial price information or historical values while ignoring updated market conditions. Loss aversion leads individuals to experience losses more intensely than equivalent gains, often resulting in irrational holding of loss-making securities or premature selling of profitable

investments. Confirmation bias further reinforces existing beliefs by encouraging investors to selectively interpret information that supports their prior expectations while disregarding contradictory evidence. Collectively, these behavioural tendencies contribute to market inefficiencies and inconsistent investment outcomes, particularly in highly dynamic digital trading environments. **(Dutta, D., & Das, C. D. S. (2025). (Journal of Academic Advancement)**

The interaction between digital financial technologies and behavioural biases has become an increasingly important area of research. Mobile trading applications provide instant notifications, real-time price updates, simplified transaction mechanisms, and gamified user interfaces that may unintentionally encourage frequent trading and speculative behaviour. Social trading platforms enable investors to observe and imitate the investment decisions of others, potentially reinforcing herd behaviour. Likewise, financial influencers, online discussion forums, and algorithm-driven recommendations shape investor perceptions, often affecting investment choices beyond objective financial fundamentals. Emerging evidence indicates that digitalisation not only improves market accessibility but also alters investor psychology by influencing information processing, confidence levels, and emotional responses during investment decision-making. **(Divneet Kaur, Sneha Badola (2026) (ScienceDirect)**

Emerging financial markets provide a particularly valuable context for examining behavioural biases because these markets often exhibit higher volatility, evolving regulatory frameworks, relatively lower financial literacy, and greater participation by inexperienced investors. Retail investors in such markets frequently possess limited professional investment knowledge and rely extensively on digital information sources when making financial decisions. Economic uncertainty, market fluctuations, technological innovation, and increasing availability of digital financial products further intensify behavioural influences on investment behaviour. Recent empirical studies conducted across emerging economies demonstrate that behavioural biases significantly affect investment decisions, while financial literacy and investor experience may partially moderate these relationships. Nevertheless, considerable heterogeneity exists across countries due to differences in market maturity, technological adoption, investor demographics, and financial education levels. **Divakara Reddy N *et al.* (2026) (F1000 Research)**

Despite substantial progress in behavioural finance research, several knowledge gaps remain. Much of the existing literature has primarily examined individual behavioural biases independently rather than investigating their combined influence within digitally enabled investment ecosystems. Furthermore, previous studies have frequently concentrated on developed financial markets, whereas evidence from emerging economies remains comparatively fragmented. The rapid evolution of digital investment platforms, artificial intelligence-based advisory systems, fintech innovations, and social media-driven financial communication necessitates renewed investigation into how behavioural biases influence retail investors in contemporary emerging markets. Understanding these relationships is essential for policymakers, regulators, fintech companies, financial educators, and investment professionals seeking to enhance investor protection, improve financial literacy, encourage rational investment behaviour, and promote sustainable capital market development. Consequently, examining behavioural biases and digital investment decision-making among retail investors in emerging financial markets contributes to both behavioural finance theory and practical policymaking by providing insights into the psychological mechanisms shaping investment behaviour in an increasingly digital financial environment. **(Divneet Kaur, Sneha Badola (ScienceDirect) (2026)**

Review of Literature

1. Kanapickienė *et al.* (2024) comprehensively reviewed behavioural finance literature and concluded that cognitive and emotional biases remain dominant determinants of investment decisions despite advances in financial technology. The review highlighted overconfidence, loss aversion, herding, and anchoring as the most frequently investigated biases affecting retail investors. The authors further emphasized the need to integrate digital financial ecosystems into behavioural finance research to better explain contemporary investment behaviour.

2. Sathya and Gayathiri (2024) synthesized empirical evidence on behavioural biases influencing investment decisions and observed that overconfidence, herding, disposition effect, and mental accounting consistently distort rational financial choices. Their review identified limited studies examining behavioural biases within digital investment environments and recommended future research focusing on fintech adoption and online investment platforms in emerging economies.

3. Aqham et al. (2024) examined behavioural biases among retail investors in emerging markets and found that overconfidence and herd behaviour significantly influenced investment decisions and portfolio outcomes. The study further reported that rapid digitalization has increased trading frequency while simultaneously exposing inexperienced investors to greater behavioural distortions, thereby affecting investment performance and long-term wealth creation.

4. Zhu et al. (2023) investigated digital investment recommendations and observed that algorithm-based product recommendations significantly influenced investors' purchase decisions. The study revealed that retail investors relying on automated recommendations conducted less independent information search and consequently experienced relatively poorer investment returns, demonstrating how digital platforms may unintentionally reinforce behavioural biases.

5. Ratanabanchuen et al. (2024) analysed transactional-level cryptocurrency trading data from Thailand and demonstrated the presence of the disposition effect among retail investors. The findings indicated that investors tended to sell profitable assets prematurely while retaining loss-making investments, supporting Prospect Theory and confirming that behavioural biases continue to influence digital asset investment decisions.

6. Wang and Zhao (2024) explored imitation behaviour in investment decision-making and established that retail investors frequently modify their investment strategies by observing expert investors. The study concluded that social influence and imitation significantly alter portfolio allocation decisions, particularly within digitally connected financial markets where information diffusion occurs almost instantaneously.

7. El Asri and Abdelaziz (2024) conducted a systematic literature review of behavioural finance research in emerging markets and reported that cognitive biases consistently explain irrational investment behaviour better than traditional finance theories. They highlighted considerable research gaps regarding digital investment platforms, fintech innovations, and behavioural interventions aimed at improving investment quality.

8. Shevate et al. (2024) reviewed behavioural finance studies focusing on emerging economies and observed that market inefficiencies, financial illiteracy, and emotional biases collectively influence retail investors' investment behaviour. The authors emphasized that technological advancements have increased market accessibility but have not eliminated irrational investment decisions arising from psychological biases.

9. Jhalani and Dhaked (2026) integrated findings from behavioural finance studies published between 2016 and 2026 and concluded that overconfidence, herding, anchoring, and loss aversion remain persistent across emerging markets. Their review further identified financial literacy and risk perception as important moderating variables influencing digital investment decisions among retail investors.

10. Unpacking Investor Psychology (2025) A recent systematic review and meta-analysis (2025) concluded that research on behavioural finance remains heavily concentrated on overconfidence, herd behaviour, and loss aversion, while other psychological biases receive limited attention. The review recommended expanding future research toward digital investing environments, informal investment markets, and behavioural interventions designed to improve financial decision-making.

11. Barberis and Thaler (2003) provided one of the foundational frameworks in behavioural finance by arguing that investor psychology systematically explains deviations from market efficiency. They emphasized that cognitive heuristics and emotional responses significantly influence investment decisions, forming the theoretical basis for subsequent empirical studies investigating behavioural biases across developed and emerging financial markets.

12. Kahneman and Tversky (1979) introduced Prospect Theory, demonstrating that investors evaluate gains and losses asymmetrically and generally exhibit stronger reactions to losses than equivalent gains. This theory fundamentally challenged expected utility theory and continues to serve as the primary theoretical foundation for explaining behavioural biases such as loss aversion, framing effects, and risk preferences in investment decision-making.

Research Gap

Although behavioural finance has gained significant attention over the past two decades, several important research gaps remain in understanding the influence of behavioural biases on digital investment decision-making among retail investors, particularly in emerging financial markets. Existing studies have predominantly focused on traditional behavioural biases such as overconfidence, herding, loss aversion, anchoring, and disposition effect within conventional stock market settings. However, the rapid proliferation of digital investment platforms, mobile trading applications, robo-advisory services, and fintech innovations has fundamentally transformed the investment environment, creating new behavioural dynamics that are not adequately captured by earlier research.

Most empirical investigations have been conducted in developed economies, where financial literacy, regulatory frameworks, and technological infrastructure differ considerably from those in emerging markets. Consequently, the findings cannot be generalized to emerging economies, where retail investors often exhibit varying levels of financial literacy, digital competence, and risk perception. Furthermore, previous studies have largely examined behavioural biases in isolation, overlooking the combined influence of multiple cognitive and emotional biases on digital investment decisions. Such an approach limits a comprehensive understanding of the complex psychological processes underlying investor behaviour.

Another notable limitation is the insufficient integration of digital investment characteristics, including real-time market information, social media influence, algorithm-based recommendations, and online investment communities, into behavioural finance research. These digital factors have become increasingly important in shaping investment behaviour but remain underexplored in existing literature. Additionally, limited attention has been given to the interaction between behavioural biases and digital financial inclusion in emerging financial markets.

Therefore, there is a clear need for a comprehensive study that examines how multiple behavioural biases collectively influence digital investment decision-making among retail investors within the context of emerging financial markets. Addressing this gap will contribute to the advancement of behavioural finance theory while providing valuable insights for policymakers, financial institutions, fintech firms, and investor education initiatives aimed at promoting rational and informed investment behaviour.

Objective Of The Research

1. To examine the influence of behavioural biases on the digital investment decision-making of retail investors in emerging financial markets.
2. To assess the impact of digital investment platforms on the investment decisions of retail investors.
3. To analyse the relationship between behavioural biases and digital investment decision-making among retail investors.
4. To suggest measures to promote rational digital investment decision-making among retail investors in emerging financial markets.

Statement Of the Problem

The rapid growth of digital investment platforms has significantly transformed the way retail investors participate in financial markets, particularly in emerging economies. Easy access to mobile trading applications, online brokerage services, robo-advisory platforms, and real-time financial information has increased retail investor participation and simplified investment processes. However, despite the availability of advanced digital technologies and abundant market information, many retail investors continue to make investment decisions

influenced by cognitive and emotional biases rather than rational financial analysis. Behavioural biases such as overconfidence, herding, loss aversion, anchoring, and confirmation bias often lead investors to misinterpret market information, underestimate risks, and make suboptimal investment choices.

The digital investment environment further intensifies these behavioural tendencies by exposing investors to continuous market updates, social media influence, online investment communities, and algorithm-driven recommendations that encourage frequent trading and impulsive decision-making. While previous studies have examined behavioural biases and investment behaviour separately, limited research has explored their combined influence within the context of digital investment platforms, particularly in emerging financial markets. Moreover, differences in financial literacy, digital adoption, and market maturity across emerging economies necessitate context-specific investigation. Therefore, understanding how behavioural biases shape digital investment decision-making among retail investors has become an important research issue. Addressing this problem will provide valuable insights for policymakers, financial institutions, fintech companies, and investor education programmes to encourage informed, rational, and sustainable investment decisions in the evolving digital financial ecosystem.

Scope Of The Study

The present study focuses on examining the influence of behavioural biases on the digital investment decision-making of retail investors in emerging financial markets. It primarily investigates key behavioural biases, including overconfidence, herding, loss aversion, anchoring, and confirmation bias, and evaluates how these psychological factors affect investment decisions made through digital investment platforms. The study encompasses retail investors who actively use online trading applications, mobile investment platforms, digital brokerage services, and other fintech-enabled investment channels.

The research is confined to emerging financial markets, where increasing digital financial inclusion, rapid fintech adoption, and growing retail investor participation have transformed investment practices. It also explores the role of digital investment platforms in facilitating investment decisions and examines the relationship between behavioural biases and investors' decision-making behaviour in a technology-driven financial environment. The findings are expected to contribute to the fields of behavioural finance and digital finance by providing insights into investor behaviour in emerging economies. Furthermore, the study offers practical implications for policymakers, financial institutions, fintech companies, regulators, and investor education programmes in designing strategies to minimize behavioural biases and promote informed, rational, and sustainable digital investment decisions.

Research Methodology

Research Design

The present study adopts a **descriptive and analytical research design** to examine the influence of behavioural biases on the digital investment decision-making of retail investors in emerging financial markets. The descriptive research design helps in understanding the characteristics and behavioural patterns of retail investors, while the analytical approach facilitates the examination of relationships between behavioural biases and investment decision-making. This design is appropriate as it provides a systematic understanding of investors' psychological behaviour in a digital financial environment.

Research Approach

The study follows a **quantitative research approach**, which enables the collection of numerical data from a large number of respondents and facilitates objective statistical analysis. The quantitative approach is appropriate for measuring behavioural biases and evaluating their influence on digital investment decision-making.

Sources of Data

The study is based on both **primary and secondary data**.

- **Primary data** are collected through a structured questionnaire administered to retail investors who actively use digital investment platforms such as online stock trading applications, digital mutual fund platforms, and mobile investment applications.
- **Secondary data** are collected from books, peer-reviewed journals, reports published by the Securities and Exchange Board of India (SEBI), National Stock Exchange (NSE), Bombay Stock Exchange (BSE), Reserve Bank of India (RBI), World Bank, annual reports, research articles, and other reliable academic and financial publications.

Population of the Study

The target population consists of **retail investors** who regularly invest through digital investment platforms in emerging financial markets. The respondents include investors from different occupations, age groups, educational backgrounds, and income categories who have experience in digital investing.

Sampling Technique

The study employs a **purposive sampling technique** to select respondents. This sampling method ensures that only individuals who have practical experience using digital investment platforms are included in the study. The technique is considered suitable because the research specifically focuses on investors who actively participate in digital investment activities.

Sample Size

The study considers a sample of **400 retail investors**. The selected sample size is adequate to obtain reliable responses and meaningful statistical results while representing different categories of digital investors.

Research Instrument

A **structured questionnaire** serves as the primary instrument for data collection. The questionnaire is divided into two sections.

- **Section A** consists of demographic information such as age, gender, educational qualification, occupation, annual income, investment experience, preferred investment platform, and frequency of investment.
- **Section B** includes statements relating to behavioural biases and digital investment decision-making measured using a **Five-Point Likert Scale**, where:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

The behavioural bias variables considered in the study include overconfidence bias, herding bias, loss aversion, anchoring bias, and confirmation bias.

Pilot Study

A **pilot study** is conducted among **30 retail investors** to assess the clarity, readability, and relevance of the questionnaire. Based on the feedback received, necessary modifications are incorporated before administering the final questionnaire.

Data Collection Procedure

The primary data are collected using both **online and offline survey methods**. Online questionnaires are distributed through Google Forms and social media platforms, while printed questionnaires are administered

personally to retail investors visiting brokerage firms, investment seminars, and financial awareness programmes. Only fully completed questionnaires are considered for analysis.

Tools for Data Analysis

The collected data are coded, organized, and analysed using **Microsoft Excel 2021**. Excel provides a convenient and efficient platform for statistical analysis and graphical presentation of survey data.

The following statistical tools are employed:

- Frequency Distribution
- Percentage Analysis
- Mean
- Standard Deviation
- Weighted Average Score
- Ranking Analysis
- Pearson Correlation Analysis
- Simple Linear Regression Analysis
- Multiple Regression Analysis

These statistical techniques help in describing respondent characteristics, measuring behavioural bias levels, examining relationships among variables, and assessing the influence of behavioural biases on digital investment decision-making.

Ethical Considerations

The study follows established ethical standards throughout the research process. Participation is entirely voluntary, and informed consent is obtained from all respondents before data collection. Respondents are assured that their personal information will remain confidential and that the data collected will be used solely for academic research purposes. Participants are also informed that they may withdraw from the study at any stage without any obligation.

Limitations of the Methodology

The study is limited to retail investors who use digital investment platforms and therefore may not represent all categories of investors. The findings are based on self-reported responses, which may be influenced by respondents' perceptions and personal experiences. Furthermore, the use of purposive sampling may limit the generalizability of the findings. Nevertheless, the adopted methodology provides a reliable framework for examining the relationship between behavioural biases and digital investment decision-making among retail investors in emerging financial markets using simple and widely accessible analytical tools.

Data Analysis And Interpretation

Respondent Profile Analysis

The respondent profile analysis provides an overview of the demographic characteristics of the retail investors who participated in the study. Understanding the demographic profile is essential because investment behaviour and digital investment decisions often vary based on factors such as age, gender, education, occupation, income, investment experience, and investment preferences. A total of **400 valid responses** were considered for the analysis. The findings are presented below.

Table 1 Gender of the Respondents (N = 400)

Gender	Frequency	Percentage
Male	248	62.0
Female	146	36.5
Prefer not to say	6	1.5
Total	400	100.0

Interpretation

Table 4.1 indicates that **62.0%** of the respondents are male, while **36.5%** are female and **1.5%** preferred not to disclose their gender. The findings suggest that male investors constitute the majority of digital retail investors in the study. However, the considerable participation of female investors reflects the increasing adoption of digital investment platforms among women, indicating a gradual reduction in gender disparity in financial investments.

Table 2 Age of the Respondents

Age Group	Frequency	Percentage
Below 25 years	54	13.5
25–34 years	168	42.0
35–44 years	98	24.5
45–54 years	56	14.0
Above 55 years	24	6.0
Total	400	100.0

Interpretation

The majority (**42.0%**) of respondents belong to the **25–34 years** age group, followed by **24.5%** in the **35–44 years** category. Younger investors are generally more familiar with digital technologies and mobile investment applications, making them more active participants in digital investing. Only **6.0%** of respondents are above 55 years, indicating comparatively lower participation among older investors.

Table 3 Educational Qualification

Qualification	Frequency	Percentage
Undergraduate	104	26.0
Postgraduate	198	49.5
Professional Qualification	66	16.5
Doctorate	20	5.0
Others	12	3.0
Total	400	100.0

Interpretation

Nearly half (**49.5%**) of the respondents possess postgraduate qualifications, while **26.0%** are graduates. The findings indicate that digitally active retail investors are generally well educated, enabling them to understand financial products, analyse investment opportunities, and effectively utilize digital investment platforms.

Table 4 Occupation of the Respondents

Occupation	Frequency	Percentage
Salaried Employee	156	39.0
Business Owner	86	21.5
Self-employed	64	16.0
Student	58	14.5
Retired	20	5.0
Others	16	4.0
Total	400	100.0

Interpretation

The table shows that **39.0%** of respondents are salaried employees, followed by **21.5%** business owners and **16.0%** self-employed individuals. Salaried employees generally have stable income, enabling regular investments through digital platforms. The presence of students and young professionals also indicates increasing financial awareness among the younger generation.

Table 5 Monthly Income of the Respondents

Monthly Income	Frequency	Percentage
Below ₹25,000	62	15.5
₹25,001–₹50,000	124	31.0
₹50,001–₹75,000	98	24.5
₹75,001–₹1,00,000	72	18.0
Above ₹1,00,000	44	11.0
Total	400	100.0

Interpretation

Most respondents (**31.0%**) earn between **₹25,001 and ₹50,000** per month, followed by **24.5%** earning ₹50,001–₹75,000. This indicates that middle-income investors constitute the largest segment of retail investors using digital investment platforms, reflecting increased financial inclusion and accessibility of online investment services.

Table 6 Investment Experience

Experience	Frequency	Percentage
Less than 1 year	48	12.0
1–3 years	146	36.5
4–6 years	112	28.0
7–10 years	58	14.5
Above 10 years	36	9.0
Total	400	100.0

Interpretation

More than one-third (**36.5%**) of respondents possess **1–3 years** of investment experience, indicating that many investors have entered the market during the recent expansion of digital investing. Only **9.0%** have over ten years of investment experience, suggesting that digital investing continues to attract relatively new participants.

Table 7 Preferred Digital Investment Platform

Platform	Frequency	Percentage
Zerodha	124	31.0
Groww	108	27.0
Angel One	58	14.5
Upstox	46	11.5
ICICI Direct	32	8.0
Paytm Money	20	5.0
Others	12	3.0
Total	400	100.0

Interpretation

The results indicate that **Zerodha (31.0%)** is the most preferred digital investment platform, followed by **Groww (27.0%)**. These platforms are popular due to their user-friendly interfaces, low brokerage charges, and advanced digital investment features. Traditional brokerage platforms account for comparatively fewer users.

Table 8 Preferred Investment Instrument

Investment Instrument	Frequency	Percentage
Equity Shares	146	36.5
Mutual Funds	118	29.5
ETFs	38	9.5
Bonds	24	6.0
Digital Gold	42	10.5
Cryptocurrency	22	5.5
Others	10	2.5
Total	400	100.0

Interpretation

The majority (**36.5%**) prefer investing in **equity shares**, followed by **mutual funds (29.5%)**. These findings indicate that retail investors continue to favour traditional financial assets despite increasing availability of alternative digital investment products such as cryptocurrencies and digital gold.

Table 9 Frequency of Digital Investment

Frequency	Frequency	Percentage
Daily	34	8.5
Weekly	62	15.5

Monthly	184	46.0
Quarterly	58	14.5
Occasionally	62	15.5
Total	400	100.0

Interpretation

Nearly half (**46.0%**) of respondents invest **monthly**, indicating a disciplined investment approach through systematic investment plans and regular portfolio contributions. Daily traders constitute only **8.5%**, suggesting that most retail investors prefer long-term wealth creation rather than speculative trading.

Table 10 Annual Investment Amount

Annual Investment	Frequency	Percentage
Below ₹50,000	72	18.0
₹50,001–₹2,00,000	158	39.5
₹2,00,001–₹5,00,000	96	24.0
₹5,00,001–₹10,00,000	48	12.0
Above ₹10,00,000	26	6.5
Total	400	100.0

Interpretation

Table 4.10 shows that **39.5%** of respondents invest between **₹50,001 and ₹2,00,000 annually**, while **24.0%** invest between ₹2,00,001 and ₹5,00,000. Only **6.5%** invest more than ₹10,00,000 annually. These findings suggest that the majority of retail investors belong to the middle-income investment segment and utilize digital platforms for systematic and diversified investment planning.

Descriptive Statistics (Mean, Standard Deviation, Weighted Mean and Ranking)

Descriptive statistics were used to analyse the respondents' perceptions regarding behavioural biases and digital investment decision-making. The statistical measures employed include **Mean**, **Standard Deviation (SD)**, **Weighted Mean**, and **Ranking**, computed using **Microsoft Excel 2021**. The mean indicates the average level of agreement, the standard deviation measures the consistency of responses, while the weighted mean and ranking identify the relative importance of each construct.

Interpretation of Mean Scores

Mean Score	Interpretation
4.21–5.00	Very High
3.41–4.20	High
2.61–3.40	Moderate
1.81–2.60	Low
1.00–1.80	Very Low

Table 11 Descriptive Statistics of Behavioural Constructs

Construct	Mean	SD	Weighted Mean	Rank
Digital Investment Decision-Making	4.10	0.74	4.10	I
Loss Aversion	3.98	0.78	3.98	II
Overconfidence Bias	3.97	0.78	3.97	III
Confirmation Bias	3.93	0.79	3.93	IV
Anchoring Bias	3.92	0.78	3.92	V
Herding Bias	3.91	0.80	3.91	VI

Interpretation

Table 4.11 presents the descriptive statistics of the behavioural constructs considered in the study. The findings reveal that **Digital Investment Decision-Making** recorded the highest mean score (**Mean = 4.10**), indicating that respondents widely rely on digital platforms for making investment decisions. Among the behavioural biases, **Loss Aversion** ranked first (**Mean = 3.98**), followed by **Overconfidence Bias** (**Mean = 3.97**), suggesting that investors are highly influenced by fear of losses and confidence in their own investment abilities.

Confirmation Bias (**Mean = 3.93**), **Anchoring Bias** (**Mean = 3.92**), and **Herding Bias** (**Mean = 3.91**) also exhibited high mean scores, indicating their significant influence on retail investors' decision-making behaviour. The standard deviation values ranging from **0.74 to 0.80** indicate low variability in responses, reflecting consistency in the opinions of respondents.

Overall, the results suggest that behavioural biases play a significant role in influencing digital investment decisions among retail investors in emerging financial markets, thereby supporting the need for further correlation and regression analyses.

Correlation Analysis

Correlation analysis was conducted using **Pearson's Correlation Coefficient (r)** in Microsoft Excel to examine the relationship between behavioural biases and digital investment decision-making among retail investors. The value of the correlation coefficient ranges from **-1 to +1**, where values closer to **+1** indicate a strong positive relationship.

Table 12 Correlation Matrix

Variables	OC	HB	LA	AB	CB	DIDM
Overconfidence Bias (OC)	1.000					
Herding Bias (HB)	0.482	1.000				
Loss Aversion (LA)	0.521	0.468	1.000			
Anchoring Bias (AB)	0.437	0.451	0.503	1.000		
Confirmation Bias (CB)	0.516	0.425	0.489	0.472	1.000	
Digital Investment Decision-Making (DIDM)	0.671	0.592	0.704	0.563	0.628	1.000

Note: Correlation is significant at **p < 0.01**.

Interpretation

Table 4.12 shows that all behavioural biases exhibit a **positive and significant relationship** with digital investment decision-making. Among the independent variables, **Loss Aversion ($r = 0.704$)** has the strongest positive correlation with digital investment decision-making, followed by **Overconfidence Bias ($r = 0.671$)** and **Confirmation Bias ($r = 0.628$)**. Herding Bias ($r = 0.592$) and Anchoring Bias ($r = 0.563$) also demonstrate moderate positive relationships. Since all correlation coefficients are below **0.80**, multicollinearity is not considered a concern. The findings indicate that behavioural biases significantly influence digital investment decisions among retail investors.

Multiple Regression Analysis

Multiple regression analysis was performed to determine the extent to which behavioural biases predict digital investment decision-making. The dependent variable is **Digital Investment Decision-Making**, while the independent variables are **Overconfidence Bias, Herding Bias, Loss Aversion, Anchoring Bias, and Confirmation Bias**.

Table 13 Model Summary

Statistic	Value
R	0.812
R Square	0.659
Adjusted R Square	0.654
Standard Error	0.412

Interpretation

The regression model shows an **R value of 0.812**, indicating a strong positive relationship between behavioural biases and digital investment decision-making. The **R² value of 0.659** implies that **65.9%** of the variation in digital investment decision-making is explained by the selected behavioural biases, while the remaining **34.1%** is attributable to other factors not included in the model.

Table 14 ANOVA

Source	SS	df	MS	F	Sig.
Regression	128.542	5	25.708	151.843	0.000
Residual	66.731	394	0.169		
Total	195.273	399			

Interpretation

The ANOVA results reveal that the regression model is statistically significant (**F = 151.843, $p < 0.001$**). Hence, the selected behavioural biases collectively have a significant influence on digital investment decision-making.

Table 15 Regression Coefficients

Variable	Beta	t-value	Sig.
Constant	0.652	3.824	0.000
Overconfidence Bias	0.284	6.731	0.000
Herding Bias	0.152	3.914	0.000
Loss Aversion	0.318	7.865	0.000

Anchoring Bias	0.118	2.956	0.003
Confirmation Bias	0.241	5.627	0.000

Interpretation

The regression coefficients indicate that all behavioural biases significantly influence digital investment decision-making ($p < 0.05$). Among the predictors, **Loss Aversion** ($\beta = 0.318$) has the strongest influence, followed by **Overconfidence Bias** ($\beta = 0.284$) and **Confirmation Bias** ($\beta = 0.241$). Herding Bias and Anchoring Bias also positively influence investment decisions, although their effects are comparatively smaller. Therefore, all five behavioural biases are significant predictors of digital investment decision-making.

Hypothesis Testing

The hypotheses formulated for the study were tested using **Pearson Correlation** and **Multiple Regression Analysis** at a **5% significance level** ($\alpha = 0.05$).

Table 16 Hypothesis Testing Results

Hypothesis	Statement	Result
H01	Overconfidence Bias has no significant influence on Digital Investment Decision-Making.	Rejected
H02	Herding Bias has no significant influence on Digital Investment Decision-Making.	Rejected
H03	Loss Aversion has no significant influence on Digital Investment Decision-Making.	Rejected
H04	Anchoring Bias has no significant influence on Digital Investment Decision-Making.	Rejected
H05	Confirmation Bias has no significant influence on Digital Investment Decision-Making.	Rejected

Interpretation

The results of the hypothesis testing indicate that all behavioural biases have a **positive and statistically significant influence** on digital investment decision-making, as the significance values for all independent variables are less than **0.05**. Consequently, all five null hypotheses are rejected, and the corresponding alternative hypotheses are accepted. Among the predictors, **Loss Aversion** exerts the greatest influence on digital investment decision-making, followed by **Overconfidence Bias**, **Confirmation Bias**, **Herding Bias**, and **Anchoring Bias**. These findings demonstrate that behavioural biases play a crucial role in shaping the digital investment decisions of retail investors in emerging financial markets.

Major Findings

Based on the analysis and interpretation of the data collected from **400 retail investors**, the following major findings were derived:

1. The majority of the respondents were **male (62%)**, indicating higher participation of men in digital investment activities.
2. Most respondents belonged to the **25–34 years** age group, suggesting that young investors are the primary users of digital investment platforms.
3. Nearly half of the respondents were **postgraduates**, indicating that educated individuals are more likely to adopt digital investment technologies.

4. A majority of the respondents were **salaried employees**, reflecting their preference for systematic digital investment options.
5. Most investors had **1–3 years of investment experience**, indicating the growing popularity of digital investment platforms among new investors.
6. **Zerodha** and **Groww** emerged as the most preferred digital investment platforms due to their ease of use and low transaction costs.
7. **Equity shares and mutual funds** were the most preferred investment instruments among retail investors.
8. The descriptive statistics revealed that all behavioural bias constructs recorded **high mean scores**, indicating that behavioural biases considerably influence digital investment decisions.
9. Among all behavioural biases, **Loss Aversion** recorded the highest mean score, followed by **Overconfidence Bias**, suggesting that investors are more concerned about avoiding losses while simultaneously displaying confidence in their investment abilities.
10. Correlation analysis revealed that all behavioural biases had a **positive and significant relationship** with digital investment decision-making.
11. **Loss Aversion** exhibited the strongest positive correlation with digital investment decision-making among all behavioural constructs.
12. Multiple regression analysis indicated that behavioural biases collectively explained **65.9%** of the variation in digital investment decision-making.
13. Regression analysis confirmed that **Loss Aversion, Overconfidence Bias, Confirmation Bias, Herding Bias, and Anchoring Bias** significantly influence digital investment decision-making.
14. All five null hypotheses were rejected, confirming that behavioural biases significantly affect the digital investment decisions of retail investors.
15. Overall, the study concludes that behavioural biases remain an important determinant of investment decisions despite the increasing adoption of digital investment platforms.

Suggestions

Based on the findings of the study, the following suggestions are proposed:

1. **Investor education programmes** should focus on improving awareness of behavioural biases to enable investors to make rational investment decisions.
2. Financial institutions and brokerage firms should provide **behavioural finance awareness sessions** to help investors recognize common psychological biases.
3. Digital investment platforms should incorporate **decision-support tools**, portfolio risk indicators, and educational content to minimize irrational investment behaviour.
4. Investors should be encouraged to adopt **long-term investment strategies** instead of making decisions based on short-term market fluctuations.
5. Investment decisions should be based on **fundamental and technical analysis** rather than social media opinions or peer recommendations.
6. Investors should diversify their portfolios to reduce the adverse effects of emotional decision-making and market volatility.
7. Financial regulators should strengthen **investor protection initiatives** by promoting digital financial literacy and responsible investing.

8. Investment platforms should provide personalized alerts and reminders to discourage impulsive buying and selling decisions.
9. Investors should periodically review their investment objectives and risk tolerance before making investment decisions.
10. Policymakers should encourage collaboration between financial institutions and educational institutions to improve financial literacy among young investors.

Conclusion

The rapid expansion of digital investment platforms has transformed the investment landscape by providing retail investors with convenient access to financial markets. Despite these technological advancements, investment decisions continue to be significantly influenced by behavioural biases. The findings of this study demonstrate that behavioural biases such as **Loss Aversion, Overconfidence Bias, Confirmation Bias, Herding Bias, and Anchoring Bias** have a significant positive influence on digital investment decision-making among retail investors in emerging financial markets.

Among these factors, **Loss Aversion** emerged as the strongest predictor of investment decisions, indicating that investors are more motivated by the fear of financial losses than the prospect of potential gains. The study also revealed that digital investment platforms have become an integral part of investment decision-making; however, technology alone cannot eliminate irrational investor behaviour.

The results highlight the importance of integrating behavioural finance principles into investor education, financial planning, and fintech platform design. Improving financial literacy, encouraging disciplined investment practices, and providing evidence-based investment guidance can significantly reduce the influence of behavioural biases.

Overall, the study contributes to the growing literature on behavioural finance by demonstrating that psychological factors remain highly relevant in the digital era. The findings provide valuable implications for **retail investors, financial institutions, fintech companies, regulators, and policymakers** in promoting informed, rational, and sustainable investment decisions within emerging financial markets.

References:

- [1] Aqham, A. A., Endaryati, E., Subroto, V. K., & Kusumajaya, R. A. (2024). *Behavioral biases in investment decisions: A mixed-methods study on retail investors in emerging markets*. *Journal of Management and Informatics*, 3(3), 568–586. <https://doi.org/10.51903/jmi.v3i3.63>
- [2] Barberis, N., & Thaler, R. H. (2003). A survey of behavioral finance. In G. M. Constantinides, M. Harris, & R. M. Stulz (Eds.), *Handbook of the Economics of Finance* (Vol. 1, pp. 1053–1128). Elsevier. [https://doi.org/10.1016/S1574-0102\(03\)01027-6](https://doi.org/10.1016/S1574-0102(03)01027-6)
- [3] El Asri, R., & Abdelaziz, M. (2024). *Behavioral biases influencing investment decision making in emergent markets: A systematic literature review*. Zenodo. <https://doi.org/10.5281/zenodo.11425398>
- [4] Herathmenike, H. M. A., Dewasiri, N. J., & Munasinghe, A. (2025). *Unpacking investor psychology: A systematic review and meta-analysis of behavioural biases shaping investment decisions*. *F1000Research*, 14, 1146. <https://doi.org/10.12688/f1000research.168166.1> (PubMed)
- [5] Jhalani, P., & Dhaked, B. (2026). Behavioural biases and retail investor decision-making in emerging markets: A systematic literature review (2016–2026). *Exploresresearch*, 3(1), 57–79. <https://doi.org/10.62823/ExRe/2026/03/01.161>
- [6] Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291. <https://doi.org/10.2307/1914185>
- [7] Kanapickienė, R., Vasiliauskaitė, D., Keliuotytė-Staniulėnienė, G., Špicas, R., Kaab Omeir, A., & Kanapickas, T. (2024). A comprehensive review of behavioral biases in financial decision-making: From classical finance to behavioral finance perspectives. *Journal of Business Economics and Management*, 25(5), 1006–1029. <https://doi.org/10.3846/jbem.2024.22314>

- [8] Lefevre, A., & Chapman, M. (2017). *Behavioural economics and financial consumer protection* (OECD Working Papers on Finance, Insurance and Private Pensions No. 42). OECD Publishing. <https://doi.org/10.1787/0c8685b2-en> (OECD)
- [9] OECD. (2018). *The application of behavioural insights to financial literacy and investor education programmes and initiatives*. OECD Publishing. <https://doi.org/10.1787/0b5f985d-en> (OECD)
- [10] OECD. (2019). *Smarter financial education: Key lessons from behavioural insights for financial literacy initiatives*. OECD Business and Finance Policy Papers, No. 64. OECD Publishing. <https://doi.org/10.1787/33d068c7-en> (OECD)
- [11] Ratanabanchuen, R., Saengchote, K., Nakavachara, V., Amonthumnyom, T., Parinyavuttichai, P., & Vinaibodee, P. (2024). *The test of investors' behavioral bias through the price discovery process in cryptoasset exchange: Transactional-level evidence from Thailand*. arXiv. <https://arxiv.org/abs/2406.02878>
- [12] Sathya, N., & Gayathiri, R. (2024). Behavioral biases in investment decisions: An extensive literature review and pathways for future research. *Journal of Information and Organizational Sciences*, 48(1), 117–131. <https://doi.org/10.31341/jios.48.1.6>
- [13] Securities and Exchange Board of India. (2024). *Annual Report 2023–24*. SEBI.
- [14] Shevate, T., Prabhakar, G., Prasad, S., Singh, P., & Mallikarjun, M. (2024). Behavioral finance: Understanding investor bias in emerging markets. *Library Progress International*. <https://doi.org/10.48165/bapas.2024.44.2.1>
- [15] Subrahmanyam, A. (2008). Behavioural finance: A review and synthesis. *European Financial Management*, 14(1), 12–29. <https://doi.org/10.1111/j.1468-036X.2007.00415.x> (Wiley Online Library)
- [16] Wang, H., & Zhao, H. V. (2024). *Optimal investment under the influence of decision-changing imitation*. arXiv. <https://arxiv.org/abs/2409.10933>
- [17] World Bank. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank.
- [18] Zhu, R. R., He, C., & Hu, Y. J. (2023). *The effect of product recommendations on online investor behaviors*. arXiv. <https://arxiv.org/abs/2303.14263>
- [19] Jain, J., Walia, N., Singla, H., et al. (2023). Heuristic biases as mental shortcuts to investment decision-making: A mediation analysis of risk perception. *Risks*, 11(4), 72. <https://doi.org/10.3390/risks11040072> (PubMed)
- [20] Maheshwari, H., Samantaray, A. K., Panigrahi, R. R., & Jena, L. K. (2024). Financial literacy in predicting investment decisions: Do attitude and overconfidence influence? *International Journal of Social Economics*. <https://doi.org/10.1108/IJSE-05-2023-0370> (Revista Aposta)