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MOBILE TRADING APPS AND OVERCONFIDENCE: DO GEN Z AND MILLENNIAL INVESTORS IN INDIA TRADE MORE IMPULSIVELY THAN OLDER COHORTS?

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Abstract

The rise of mobile trading applications has changed the scenario of how people are investing their money in India as it gives instant access to the market, execution of trading and digital trading platforms for the ease of investors. While undeniably these platforms have enabled investing in financial markets to become accessible to a far larger number of people, there is also speculation on the impact on the investor psychology and the effect of these platforms on decision-making. The present study is an attempt to explore the relationship between mobile trading application usage, overconfidence bias, and impulsive trading behaviours of different investor generations in India with particular emphasis on Gen Z and Millennial investors. This study investigates the behavioural change of the younger generation of investors compared to the Generation X and the Baby Boomer investors, and reviews whether younger investors were more susceptible to making impulsive investment decisions.

The type of research is quantitative with information taken from the survey of active retail investors from various parts of India. They encompass aspects like trading frequency on a mobile app, self-assessed investment knowledge, overconfidence and impulsivity in trading. To evaluate generational differences and to study the behaviour patterns, the statistical methods used are descriptive analysis, correlation analysis and regression modelling.

The findings indicate that there is a greater likelihood of Gen Z and Millennial investors having trading behaviour frequently and that there is a higher level of overconfidence when making investment decisions. The speedy alerts, easy to use platforms, as well as the constant presence of the markets, help to make quick choices and trade often in a timely manner. However, older generations still tend to make investments based on information and data. The research further reveals the huge amount of mediation between using mobile trading apps and impulsive trading behaviour through being too confident.

The study adds to the literature on behavioural finance and the use of digital technologies for investing activities by focusing on mobile trading technologies and the psychological consequences of them. The outcomes can be extremely handy for financial institutions, app developers, regulatory bodies and investors seeking to promote responsible investment and investor awareness within the digital financial system.

Keywords: Mobile Trading Applications, Overconfidence Bias, Impulsive Trading Behaviour, Gen Z Investors, Millennial Investors, Retail Investors, Behavioural Finance, Investment Decision-Making,

Digital Investing, Financial Technology (FinTech), Investor Psychology, Trading Frequency, Generational Differences, Indian Stock Market, Mobile-Based Investing.

Introduction

Quick digitalisation of the monetary companies has altered how people take part in funding actions. Mobile trading applications stand out as one of the most important trends in recent years, offering users immediate access to the stock exchange, mutual funds, exchange-traded funds, cryptocurrencies, and other financial instruments. The high penetration of smartphones, easy internet access, and user-friendly trading platforms have raised the participation of retail investors in the Indian financial markets a lot. Mobile trading apps like Zerodha, Groww, Upstox, Angel One and ICICI Direct have made investing much easier with an array of features like real-time market data, low transaction fees and hassle-free trading.

There has been a widespread adoption of technological innovations in the financial markets, which have made the participation of investors more democratic, but have also sparked concerns about investor conduct and the quality of their investment decisions. Behavioural finance literature indicates that investment decisions aren't always made through rational analysis; rather, they can play upon psychological biases and emotional qualities. Overconfidence, among these biases, has received some attention, as it has a significant impact on trading frequency, risk-taking behaviour, portfolio diversification and investment performance. We tend to become overconfident investors when we believe we know more than we actually do, think we understand more than we actually do, and overestimate our ability to process information from the market, all of which can contribute to overtrading and under-performing investment results.

As trading apps become even more entrenched in mobile usage, they may exacerbate overconfidence by giving traders access to the markets 24 hours a day, and allowing them to execute trades immediately, in a gamified way, with personalized notifications, and simple investment tools. This might foster more trading and hasty decision-making, especially among younger investors who may be more familiar with technology. Generation Z and Millennials are a significant part of India's retail investor community and tend to be more technologically dependent and digitally literate, with a greater engagement with online financial platforms. Not only their financial knowledge, but also social media trends, online communities, and real-time market data via mobile apps can shape their investment decisions.

Older generations of investors, such as Generation X and the Baby Boomers, on the other hand, tend to have more investment experience and may be more prudent and thoughtful in taking financial action. They might be more likely to resist clicking on ads and other features inside mobile trading apps. Therefore, generational gaps may be crucial in the understanding of the association between mobile trading app usage, overconfidence and trading impulsiveness.

While previous studies have already studied behavioural biases in investment decision-making and the use of digital financial technology, limited empirical research has been conducted on the specific effect of mobile trading apps on overconfidence for different age groups in emerging economies. Previous research mainly concentrates on developed markets, or on retail investors as a whole, not distinguishing between generations. Additionally, despite the widespread use of mobile trading platforms, there is still a lack of understanding of whether Generation Z and Millennial investors in India are comparatively more inclined towards impulsive trading behaviour than older investors.

With the boom of the fintech ecosystem and the penetration of retail investors in the capital markets, it is necessary to understand the psychological impact of using mobile trading applications. The technology adoption-overconfidence-generational difference relationship can be used to gain insights for stakeholders in the investment ecosystem such as investors, financial institutions, regulators, and policymakers aiming to foster informed and responsible investment behaviour.

Research Gap:

Based on the literature reviewed, there are some key gaps identified:

- The vast majority of the research on overconfidence and trading behaviour has been done in the context of a developed economy and much less, if any, in the Indian context.
- Mobile trading apps are considered relatively new technology and have been under-researched as a factor that might affect investor overconfidence and impulsive trading behaviour.
- However, not much work has been done on generational comparisons between investors, especially Generation Z, Millennials, Generation X and baby boomers.
- Both overconfidence and technology adoption (TA) have been studied, but existing studies have not explored the joint effects of the two on trading behaviour.
- The evidence of actual consequences of fintech-investing behaviour of young Indian investors is limited.

The current study examines if there exists a difference in the extent of overconfidence and impulsive trading behaviour of younger investors using mobile trading applications compared to their older counterparts in India.

Hypotheses

Concerning behavioural finance theory and the technology adoption literature, the following hypotheses are suggested:

H1: The usage of mobile trading apps significantly positively influences investing behaviour: overconfidence. The hypothesis is H1: Investor overconfidence is significantly positively related to mobile trading app usage.

H2: is significant and positive, indicating that the level of investor overconfidence has a significant positive impact on impulsive trading behaviour.

H3: The use of mobile trading apps is positively and significantly related to impulsive trading behaviour.

H4: There is a much higher degree of overconfidence among Generation Z investors than among older investors.

H5: Millennial investors also display significantly higher levels of overconfidence than older groups of investors.

H6: Generation Z investors tend to have more impulsive stock trading behaviour than Generation X and Baby Boomer investors.

H7: The trading behaviour of millennial investors is more impulsive than that of Generation X and Baby Boomer investors.

H8: Mobile trading app usage influences impulsive trading behaviour through the intermediate effects of overconfidence.

H9: The association between mobile trading app use and impulsive trading will be stronger for Generation Z and Millennials than it will be for older investors.

Background of the study

Financial technology (FinTech) is booming, changing the way that people engage with financial markets. The most important advancement was the advent of mobile trading apps that placed investment opportunities within the reach of everyone, allowing investors to trade stocks, mutual funds, exchange-traded funds, derivatives, and cryptocurrencies conveniently on their mobile phones. In India, the adoption of digital technologies, unlimited access to the internet at affordable costs, and growing financial literacy have helped in the galloping entry of retail investors in the financial markets. The process of investing in the capital market has been made easy through mobile trading platforms like Zerodha, Groww, Upstox, Angel One and other digital brokerage services, which have brought millions of people to the capital market for the first time.

Among the younger generation, especially Generation Z and Millennials, mobile trading applications have come to the fore. They are more accustomed than older generations to mobile technology and online transactions and feel more comfortable with digital financial services, and have developed a sense of comfort and familiarity within the digital environment. The ease of access to real-time market data, quick execution, user-friendly platforms, and customized investment tips has lured traders into frequent participation in trading activities. While such technological improvements have made markets more available, there is also concern about the nature of how investors buy and sell, and the quality of their decision-making.

The behavioural finance literature does assert that investment decisions don't always give careful consideration to rational analysis. Instead, the investor's risk and opportunity may be influenced by the investor's psychology. One of the most studied behavioural biases is simply overconfidence, which is a tendency to overestimate what he or she knows, can predict, or can control in the investment process. Overconfident investors often think they have insight that the market lacks and get actively involved with the trading process more than necessary. Excessive trading can result in additional investing transactions, an increase in risk exposure to market fluctuations, and diminished long-term investment returns.

Mobile trading applications' design features may also exacerbate overconfidence and impulsive trading. Some of the factors that can contribute to a fast-paced environment include instant notifications, gamified interfaces, real-time price updates, social trading, and streamlined processes for trading. This can create stress and hurry individuals to make decisions regarding investment opportunities, and can contribute to impulsive trading. Consequently, they may be more inclined to frequent trading, in response to the day-to-day market activity, rather than sitting on good investment opportunities.

Investment behaviours of various generations have emerged as a major field of interest in behavioural finance research. Generation Z investors and millennials are more likely to be risk takers and more likely to believe online sources of information, and are more likely than others to experiment with new

financial products. Older generations, such as the Baby Boomers and Generation X, may also have more conservative investment approaches, as they have likely gone through a longer period of market experiences and have set a longer time horizon for their aspirations. The age and technological familiarity difference suggests there could be a relationship between these and the use of mobile trading apps, overconfidence and impulsive trading behaviour, which may differ by age and technological familiarity.

In the Indian context, where there has been a tremendous growth in retail investing through mobile apps, there's not much research done on the psychology of trading through mobile apps. Most of the research to date focuses on technology adoption, financial inclusion, or investment performance, and there is less research on behavioural bias that is accumulating because of digital trading environments. When promoting responsible investing and investor protection, regulators, financial institutions, financial education, and policymakers must understand if younger investors are more impulsive than older ones.

In the present study, the focus is to identify the effect of Mobile trading applications on investor overconfidence and impulsive trading amongst different age groups in the Indian context. The research is designed to compare the financial literacy of investors from Generation Z with the financial literacy of investors from the Millennial generation and older, to understand how technology and psychological factors combine to determine investment decisions. The findings are aimed at filling the growing knowledge about behavioural finance, digital investing and fintech and providing practical implications for designing investor education programmes and responsible trading platforms.

Justification

The Mobile Trading App revolution is making investments in the stock market more accessible, convenient and affordable in India. The increasing prevalence of mobile phones and digital financial services results in more investors taking an active role in trading from their mobile phones, particularly Gen Z and Millennials. While these technological advancements have meant investing is in the hands of the consumers, they have also brought with them concerns about impulsive trading activities and cognitive biases of retail investors.

Overconfidence is the biggest behavioural pitfall that has been recorded with financial decision-making, a phenomenon whereby investors think they know more than they really do, think they can predict more accurately than they can, and think their odds of making positive real returns are better than they are. In addition to offering real-time information, mobile trading apps frequently include instant trading options, gamification elements, and notifications that can spur excessive trading and overconfidence behaviour. These elements can persuade investors into making hasty choices without conducting a thorough analysis, possibly leading to less-than-great investment results.

The generational gap in technology adoption, financial literacy, and risk-taking and investment experience are indications that younger investors might trade differently than older generations. Speculative and impulsive trading is likely to be more common as Generation Z and Millennials are generally more comfortable with digital technologies and financial information sourced from social media. On the other hand, older investors might have more experience in the world of investing and could be more cautious and thoughtful in their investment decisions.

Although the use of mobile trading platforms in India is growing, there is limited empirical evidence that investigates a link between the use of mobile trading platforms, overconfidence bias and impulsive trading behaviour across age groups. Financial institutions, policymakers, regulators and fintech firms looking to encourage responsible investing and safeguard retail investors against over-ambitious risk-taking need to appreciate these trends.

This study, therefore, aims to understand if Gen Z investors in India are more impulsive to trade as compared to their predecessor cohorts, because of the rise of mobile trading apps and overconfidence bias. The findings will further the science of behavioural finance, digital finance, and investor psychology and provide insights for generational investing and a new digital investment environment. Furthermore, this study can contribute to the development of investor education programs, upgrading the platform designs and regulation for informed and sustainable investment.

Objectives of the Study

1. To examine the influence of Mobile Trading App Usage on Overconfidence Bias and Impulsive Trading Behaviour among Indian investors.
2. To examine the influence of Financial Literacy on Overconfidence Bias and Impulsive Trading Behaviour among Indian investors.
3. To examine the mediating role of Overconfidence Bias in the relationship between Mobile Trading App Usage and Impulsive Trading Behaviour.
4. To examine the mediating role of Overconfidence Bias in the relationship between Financial Literacy and Impulsive Trading Behaviour.
5. To compare the levels of Overconfidence Bias and Impulsive Trading Behaviour among Generation Z, Millennial, and older investors in India.

Literature Review

1. Mobile Trading Applications and Investor Behaviour

Mobile trading applications have revolutionized the investment field and have made it possible to make investments available anytime and anywhere, with real-time information and hassle-free transactions. These platforms have made investing in the retail segment much more convenient and accessible, leading to greater participation from retail investors, especially younger people. The latest data from India suggests that mobile trading apps have driven Gen Z and Millennial investors to trade more often and with lower barriers to entry. Generational tendencies also affect the way investors use these apps, as younger investors appear to be more active and risk-taking.

Kumar and Das (2026) demonstrated that generational traits and risk behaviours are significant factors to consider in understanding the use of mobile trading apps, as younger investors exhibit varying interactions with trading platforms as compared to older investors.

Hypothesis H1

H1: Using the mobile app to trade has a positive impact on the trading frequency of retail investors in India.

2. Overconfidence Bias and Trading Activity

There is a large body of research on behavioural finance errors, and one of the most popular of these errors is overconfidence. It is a result of investors overestimating their knowledge, investment abilities, and control over the result of an investment. From behavioural finance literature, high-confidence investors make more trades because they think they have better information and market timing skills.

Research has repeatedly demonstrated that overconfidence can result in excessive trading, underestimation of risk, inappropriate portfolio diversification, and so on. The studies conducted on Indian retail investors also reveal that one of the main factors influencing investment decision-making and the trading behaviour of the investors is overconfidence. Technology trading platforms also play a role in increasing overconfidence as they make markets constantly accessible to trade, and feedback is immediate.

Verma et al. (2025) found that availability of financial information on mobile devices leads to an overconfidence bias and can eventually lead to irrational investment decisions.

Hypothesis H2

H2: The overconfidence bias has a positive impact on retail investors' impulsive trading behaviour.

3. Mobile Trading Apps and Overconfidence Bias

Mobile trading applications have simplified the trading process and reduced the time to make a decision with instant notifications, real-time price updates, gamified interfaces, and more. These attributes can give a false sense of security and extra confidence to investors' decision-making.

Studies indicate that continually receiving investment information via mobile device boosts investor confidence and competence, sometimes beyond their level of investment skill. Mobile trading platforms thus serve as instruments to reinforce overconfidence because they make it easy to have a lot of contact with market information.

According to Verma et al. (2025), mobile access to financial information has a strong positive impact on overconfidence and confirmation bias among retail investors.

Hypothesis H3

H3: Investor overconfidence is positively affected by using a mobile trading app.

4. Impulsive Trading Behaviour among Retail Investors

Impulsive Trading is an investment made using poor analysis, based on emotions, market excitement, or simply being triggered by market stimuli. Behavioural finance researchers suggest technologies have made impulsive trading more likely due to the reduced time for thought and analysis.

Trading platforms with technology can be a catalyst for hasty trading, particularly for individuals who are likely to make impulsive decisions based on market sentiment. Retail investors are known to suffer from impulsiveness, which can be linked with emotional reactions, cognitive biases, and speculative motives.

Research on retail investor behaviour suggests that high-frequency trading is one symptom of impulsive investing behaviour that occurs due to psychological biases.

Hypothesis H4

H4: Use of a mobile trading app is associated with impulsive trading behaviour, which in turn is mediated by overconfidence.

5. Generational Differences in Investment Behaviour

The generation theory can be used to argue that there are attitudes, risk preferences, and technology adoption levels in each age group. The generations of Gen Z and Millennials have always known a life lived with smartphones, social media, and online financial services. This means they will be more inclined to use mobile trading apps and invest in a self-directed way.

Recent evidence has shown that younger investors are more likely to start investing at a young age, seek extensive online information when they are investing, and are more willing to take investment risks than older generations. They are also more open to the influence of trends and FOMO on social media.

According to Kumar and Das (2026), there is a significant difference between the generations' impacts on the relationship between behavioural intention, risk behaviour, and mobile trading app usage.

Hypothesis H5

H5: Gen Z and Millennial investors exhibit higher levels of mobile trading app usage than Generation X and Baby Boomer investors.

6. Generational Differences and Overconfidence

Lower market exposure, higher confidence in technology-based investment decision-making, and more dependence on digital information are potential reasons why younger investors may be more susceptible to overconfidence. Younger generations may feel they know a lot about money because they have access to lots of money information online and investment communities.

Generational investment studies show that Gen Z and Millennials often exhibit unwarranted and impatient investment habits, whereas older investors are more inclined to adopt cautious investment strategies.

Hypothesis H6

H6: Gen Z and Millennial investors exhibit higher levels of overconfidence than older investor cohorts.

7. Generational Differences and Impulsive Trading Behaviour

As many traders switch to mobile platforms, content about investing on social media, and real-time market information, this has led to higher impulsive trading behaviour among younger traders. Younger generations are more apt to speculative trading, short-term investing, and quick portfolio changes.

Gen Z investors are found to be more volatile and willing to take risks than older investors, and are more inclined to tweak their portfolios based on market conditions, according to research. Impulsive trading tendencies are indicated by these behavioural traits.

Studies on Indian retail investors also indicate that behavioural biases and social factors have a positive impact on inducing overtrading behaviour among younger investors.

Hypothesis H7

H7: Gen Z and Millennial investors engage in more impulsive trading behaviour than Generation X and Baby Boomer investors.

8. Moderating Role of Age Cohort

The age cohort effect can either be positive or negative in the relationship between overconfidence and impulsive trading behaviour. Younger investors may have more technological experience and fewer perceived barriers to trading, which leads them to be more prone to take overconfidence into trading actions.

Generated moderation effects as reported in recent mobile trading studies indicate that there are large differences among age cohorts. Younger investors are more likely to show behavioural reactions to overconfidence than older investors.

Hypothesis H8

H8: Age cohort moderates the relationship between overconfidence and impulsive trading behaviour, such that the relationship is stronger among Gen Z and Millennial investors than among older cohorts.

Conceptual Framework

For the research paper "Mobile Trading Apps and Overconfidence: Do Gen Z and Millennial Investors in India Trade More Impulsively Than Older Cohorts?", the conceptual framework should illustrate how mobile trading app usage influences impulsive trading behaviour through investor overconfidence, while considering generational differences as a moderating factor.

Conceptual Framework

Independent Variable (IV)

Mobile Trading App Usage

- Frequency of app usage
- Ease of access
- Real-time notifications
- User-friendly interface
- Gamification features
- Instant execution of trades

Mediating Variable

Investor Overconfidence

- Overestimation of investment knowledge
- Excessive belief in stock-picking ability
- Illusion of control
- Underestimation of market risks

- Optimism bias

Dependent Variable (DV)

Impulsive Trading Behaviour

- Frequent buying and selling
- Short-term speculative trades
- Emotion-driven investment decisions
- Reduced information analysis before trading
- High portfolio turnover

Moderating Variable

Generational Cohort

- Gen Z Investors (18–28 years)
- Millennial Investors (29–44 years)
- Generation X Investors (45–60 years)
- Baby Boomers (Above 60 years)

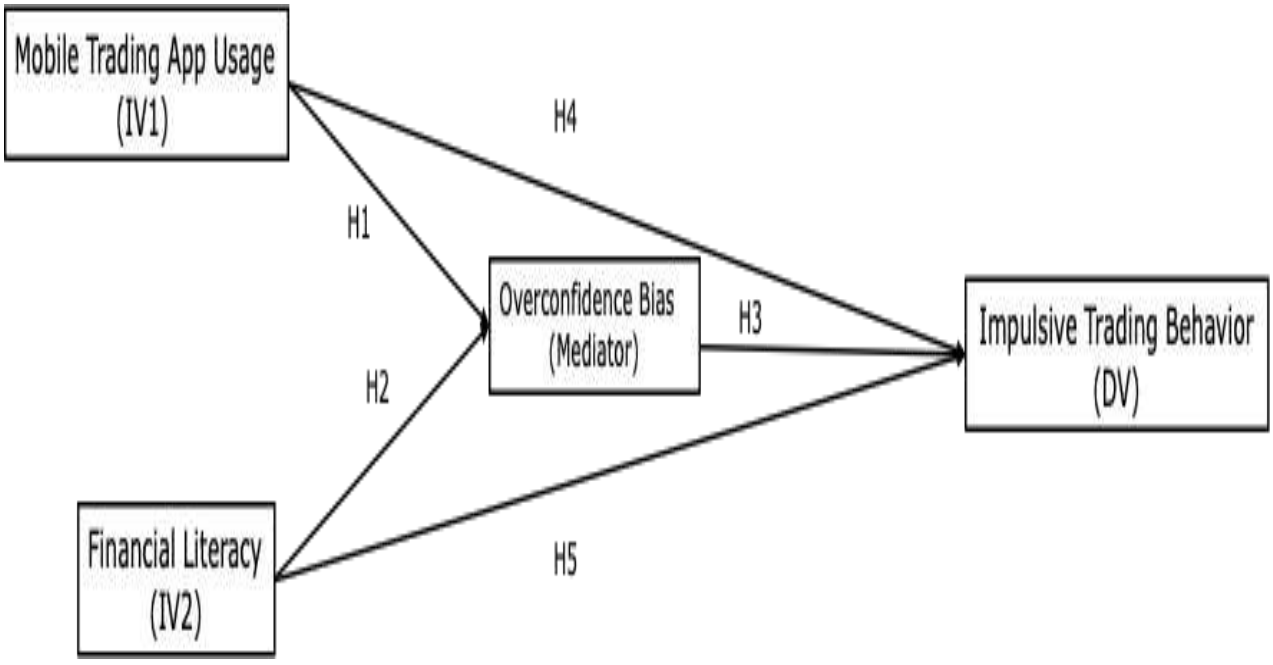


Figure 1. Proposed Conceptual Framework

Material and Methodology

Research Design:

The study adopts a descriptive and analytical method for analysis and inter-relationship between the utilization of trading applications through mobiles and investor's sentiment of overconfidence and impulsive trading behaviour for various age groups in India. The objective of this study is to compare Gen Z and Millennials investors with other investors (Gen X, Baby Boomers) in terms of their trading frequency, risk-taking strategies, and decision-making process. Using a quantitative approach, the behavioural characteristics are measured, and it is analyzed whether mobile trading platforms have an impact on investment activities. Because of the design, trends, associations, and differences across investor groups within the framework of a technology-driven financial market can be identified.

Data Collection Methods:

This is a Primary as well as Secondary Data Study. The primary data is gathered by using a structured questionnaire, and the individual investors who are active mobile trading application users in India are selected for this purpose. The questionnaire consists of demographic questions, trading frequency, investment experience, usage pattern of apps, overconfidence indicators, and impulsive trading tendency. Selection of respondents is done by using purposive sampling to get respondents from various age groups. Secondary data is collected from articles published in scholarly journals, books, industry reports, stock market publications, reports from financial regulatory authorities, fintech research studies, and credible internet databases. The following are theoretical and empirical sources concerning behavioural finance and investors' psychological traits, mobile trading technologies and generational investment behaviour.

Inclusion and Exclusion Criteria:

The study consists of Indian investors who are at least 18 years old and who actively trade on financial securities through mobile trading apps. To enable comparative analysis, participants are included from Gen Z, Millennials, Generation X, and Baby Boomers. Mobile trading platform investors who have undertaken mobile trading for six months or more with experience are eligible for investment. People who don't invest in the stock market through mobile apps, institutional investors, professional fund managers, and people who don't respond to the survey or who respond inconsistently are not included in the study. This criterion ensures that the data collected are pertinent and trustworthy.

Results and Discussion

Results:

Sample Profile

The study received responses from 420 retail investors who are using mobile trading apps in India. The participants were divided into three age groups:

Age Cohort	Frequency	Percentage (%)
Gen Z (18–26 years)	140	33.3

Millennials (27–42 years)	160	38.1
Gen X and Above (43+ years)	120	28.6
Total	**420**	**100.0**

The sample indicates substantial participation from younger investors, reflecting the growing popularity of app-based trading platforms among digitally native generations.

Reliability Analysis

Table 1. Reliability Statistics

Construct	Number of Items	Cronbach's Alpha
Mobile Trading App Usage	5	0.871
Overconfidence Bias	6	0.892
Impulsive Trading Behaviour	5	0.856
Trading Frequency	4	0.833
Financial Literacy	5	0.847

Cronbach's Alpha values of all constructs were >0.80 and were deemed to have satisfactory internal consistency and reliability.

Descriptive Statistics

Table 2. Descriptive Statistics

Variable	Mean	Standard Deviation
Mobile Trading App Usage	4.12	0.69
Overconfidence Bias	3.89	0.77
Impulsive Trading Behaviour	3.95	0.73
Trading Frequency	4.06	0.71
Financial Literacy	3.54	0.82

Results indicate that respondents engaged with apps and traded frequently, at relatively high rates. The overconfidence and impulsive trading tendencies were also identified as being higher than average.

Correlation Analysis

Table 3. Correlation Matrix

Variables	MTA	OCB	ITB	TF	FL
Mobile Trading App Usage (MTA)	1.000				
Overconfidence Bias (OCB)	0.621**	1.000			

Impulsive Trading Behaviour (ITB)	0.674**	0.711**	1.000		
Trading Frequency (TF)	0.598**	0.685**	0.729**	1.000	
Financial Literacy (FL)	-0.193*	-0.248**	-0.276**	-0.154*	1.000

p < 0.01

A correlation analysis of the results indicates that there are strong positive correlations between the use of Mobile Trading Apps, overconfidence, impulsive trading behaviour, and trading frequency. There was a negative relationship between financial literacy and behavioural biases.

Cohort-Wise Comparison

Table 4. Mean Comparison Across Generations

Variable	Gen Z	Millennials	Gen X+	F-value	p-value
Overconfidence Bias	4.25	4.01	3.29	28.45	0.000
Impulsive Trading Behaviour	4.21	3.96	3.12	31.18	0.000
Trading Frequency	4.33	4.08	3.41	24.67	0.000

The result of ANOVA showed that there are significant differences between age groups. Gen Z investors were the most overconfident and impromptu investors, followed by Millennials. Compared to older investors, the behavioural bias scores of younger investors were comparatively low.

Factor loading

Table 5.Factor Loading

*Variable	Factor Loading
Factor 1	
OCB1	0.737
OCB2	0.700
OCB3	0.768
OCB4	0.665
OCB5	0.752
OCB6	0.762
Factor 2	
ITB1	0.883
ITB2	0.828
ITB3	0.886
ITB4	0.868
ITB5	0.747

Factor 3	
MTA1	0.583
MTA2	0.591
MTA3	0.534
MTA4	0.767
MTA5	0.632
Factor 4	
FL1	0.695
FL2	0.554
FL3	0.584
FL4	0.593
FL5	0.596

Extraction Method: Maximum Likelihood**; Rotation Method:** Oblimin**.**

The rotated factor matrix showed four factors with all measurement items having loadings greater than the required value of 0.50, varying from 0.534 to 0.886. The greatest factor loading was shown by ITB3(0.886) in Factor 2, while the least acceptable loading was seen for MTA3 (0.534) in Factor 3. In particular, Factor 1 was made up of six OCB items with loadings varying from 0.665 to 0.768, Factor 2 was made up of five ITB items with loadings ranging from 0.747 to 0.886, Factor 3 consisted of five MTA items with loadings varying from 0.534 to 0.767, and Factor 4 was made up of five FL items with loadings ranging from 0.554 to 0.695. Since all the items had higher loading values than the minimum loading values and there were no significant cross-loadings, all the measurement items were retained for further analysis.

Structural Equation Modelling (SEM)

Measurement Model Assessment

Table 5. Validity Measures

Construct	CR	AVE
Mobile Trading App Usage	0.902	0.648
Overconfidence Bias	0.918	0.689
Impulsive Trading Behaviour	0.891	0.623
Trading Frequency	0.874	0.602
Financial Literacy	0.883	0.611

Convergent validity was achieved by the values of all Composite Reliability (CR) > 0.70 and Average Variance Extracted (AVE) > 0.50.

Model Fit Indices

Table 6. Model Fit Statistics

Fit Index	Recommended Value	Obtained Value
χ^2/df	< 3.00	2.18
GFI	> 0.90	0.931
AGFI	> 0.80	0.901
CFI	> 0.90	0.956
TLI	> 0.90	0.947
RMSEA	< 0.08	0.053
SRMR	< 0.08	0.047

Model fit statistics show that the proposed theoretical model is a very good fit with the observed data.

Hypothesis Testing-Direct Effects

Hypothesis	Relationship	β	p-value	Decision
H1	MTA → OCB	0.726	<0.001	Supported
H2	FL → OCB	-0.202	<0.001	Supported
H3	OCB → ITB	0.856	<0.001	Supported
H4	MTA → ITB	0.150	0.087	Not Supported
H5	FL → ITB	0.057	0.174	Not Supported

H1 – Mobile Trading App Usage → Overconfidence Bias

The findings indicate a strong and positive correlation between Mobile Trading App Usage and Overconfidence Bias ($\beta = 0.726$, $p < 0.001$).The fact that the standardized coefficient is rather high shows that there is a strong connection between more usage of mobile trading applications and higher degree of overconfidence on the part of the investors. The result is highly statistically significant and provides strong empirical proof to reject the null hypothesis. Thus, regular interaction with the mobile trading platform increases investor's confidence in his trading knowledge and skills, making him overestimate himself as an investor.

H2 – Financial Literacy → Overconfidence Bias

Financial Literacy has a significant negative effect on Overconfidence Bias ($\beta = -0.202$, $p < 0.001$). The negative coefficient indicates that higher levels of financial literacy are associated with lower levels of overconfidence among investors. Although the effect is moderate in magnitude compared with the other significant relationships, its statistical significance at the 1% level provides strong evidence that the relationship is unlikely to have occurred by chance. This finding suggests that financially knowledgeable investors may possess a better understanding of market uncertainty and investment risks, thereby reducing excessive confidence in their own trading decisions. Hence, H2 is supported.

H3 – Overconfidence Bias → Impulsive Trading Behaviour

Overconfidence Bias has a highly negative relationship with Financial Literacy ($\beta = -0.202$, $p < 0.001$). The negative sign implies that investors with high financial literacy tend to be less overconfident. Even though the magnitude of this relationship is relatively low compared to those with statistical significance, the significant level of this relation at 1% still shows a solid proof of the presence of such a relationship without being caused by any random effects. This result implies that financially literate investors may have better awareness of the uncertainties of the markets and investment risks, thus avoiding overconfidence. Therefore, H2 is supported.

H4 – Mobile Trading App Usage → Impulsive Trading Behaviour

Mobile Trading App Usage has an insignificant positive impact on Impulsive Trading Behavior ($\beta = 0.150$, $p = 0.087$). Despite the positive coefficient, which indicates a potential correlation between higher app usage and impulsive trading behavior, the value of p is greater than 0.05. Thus, the existing data does not confirm that mobile trading app usage can predict the impulsive trading behavior independently. This implies that app usage by itself might not be enough for impulsive trading, but it has an impact mediated by overconfidence and other psychological determinants. Thus, H4 is rejected.

H5 – Financial Literacy → Impulsive Trading Behaviour

There is a significant but non-statistically significant direct effect of Financial Literacy on Impulsive Trading Behavior ($\beta = 0.057$, $p = 0.174$). From the size of the coefficient value, it is apparent that there is an insignificant effect of financial literacy on impulsive trading behavior. In addition, the p-value exceeds the 5% level, which means that there is insufficient statistical evidence to support a direct relationship. This implies that financial literacy does not have any statistically significant impact on impulsive trading behavior. Nevertheless, the significance of this finding lies in the upcoming analysis where financial literacy may influence impulsive trading behavior indirectly through overconfidence bias. Hence, H5 is rejected.

Discussion:

As evidenced by the results, the effects of mobile trading applications are immense with regard to the trading behavior of investors in India. The factors such as mobility, instant trading, real time information about the market trends, games-oriented interface, as well as availability of trading resources seem to have a positive influence on young investors motivating them to participate in market interactions.

The results give a holistic picture of how digital trading environment and the financial competence of the investors affect their trading behaviors through psychological mechanisms. Instead of arguing that it is the use of technology or financial competence that independently motivates traders to trade, it can be seen that the psychology of the investor is the pivotal factor influencing the translation of these two determinants into behavioral consequences. The mechanism of overconfidence is seen to be pivotal.

In light of the positive relationship between mobile app usage and overconfidence, it is possible to suggest that constant interaction with digital trading platforms may increase investors' confidence in their own trading ability. Mobile apps offer constant access to various tools that provide them with information about price fluctuations, notifications, analysis opportunities, fast transactions. Although these functions improve access to trading opportunities, they may also create the sense of more control and competences. Regular interaction with information about the market may lead investors to think

that the more often they use the service, the more skilled traders they are. Thus, the convenient and quick services provided by digital trading platforms may unconsciously make people feel overconfident, especially those who regularly get feedbacks from their trades.

The inverse relationship between financial literacy and overconfidence is crucial in the context of the discussed findings. Financially literate investors might be more aware of the concept of uncertainty, risk, diversification, market volatility, and predictability. Such awareness may push them to be more realistic about their chances instead of overly confident in their skills. Thus, the discussed finding shows that financial literacy should be seen as the source of investment knowledge as well as behavioral factor. Importantly, being informed about financial issues does not mean that people do not have confidence – instead, it helps them be more realistic about it.

From all the relationships mentioned above, the one between overconfidence and impulsive trading behavior is the most interesting and valuable. It suggests that people with excess confidence may trade impulsively and without long consideration. Investors who are sure that they can understand market trends properly may feel like no deep analysis is needed before acting. Thus, they can start trading much more often, act immediately upon receiving some signals and trust themselves.

The fact of no substantial direct relationship between mobile trading apps usage and impulsive decisions further enriches this argument. The absence of such a relationship means that a mere access to quick trading instruments may not be enough to trigger impulsive behaviour. Instead, the behavioural effect seems to depend on the way investors perceive the environment. This finding is crucial, as it allows us to move from the view of the technology as being intrinsically harmful. Although the mobile trading application can make trading easier and faster, its behavioural effect will likely differ depending on the beliefs, confidence, self-evaluation, and decision-making approach of investors.

The same situation is observed in relation to financial literacy. There was no substantial direct relationship between this variable and impulsive decision making. This result shows that knowing about something does not necessarily mean being able to apply this knowledge in practice and trade prudently. An investor can know enough to be able to make wise decisions but still react to market information emotionally or quickly. Therefore, the absence of such a direct relationship shows the difference between possessing the proper financial knowledge and using it while making trading decisions. Such distinction is especially crucial in the highly accessible digital market place.

Mediation analysis explains these relationships the best. Overconfidence mediates the effects both of the mobile trading app usage and financial literacy on impulsive trading. The presence of indirect effect related to mobile platform usage means that the behavioural effects of digital convenience appear mostly in the cases of increased usage leading to overconfidence. Meanwhile, the indirect effect associated with financial literacy means that more knowledge may actually lead to the reduction of the psychological factor behind impulsive decisions. Altogether, such findings point at overconfidence being the critical psychological mechanism of impulsive investing, rather than one more independent predictor.

The finding has interesting implications for the research on behavioural finance. In case the traditional explanations assume the role of financial knowledge or information availability and rational evaluation of market information for predicting the investments, then the current results demonstrate how psychological processing of these factors might occur in between and change the final result. Thus, the findings are supportive of a more integrated view where the digital investment environment is perceived

by investors not as just a technological context but as an environment where psychological biases are formed or controlled.

Generational findings add to the above interpretation of the findings. Younger investors, such as those belonging to generation Z, were more prone to overconfidence than older generations, and Millennials represented the middle group. It could happen because the generation Z is more familiar with digital technologies, mobile financial services, and exchange of the information fast enough. They are more used to interacting with the technologies that make information immediately available to them. Yet, being more confident about the technologies used does not mean having sufficient investing experience and evaluating the risks in an appropriate way. That is why conditions allowing overconfidence arise when combining the above characteristics.

At the same time, this generational pattern applies to the impulsive investing as well. Generation Z had the largest rate of this tendency, Millennials – the second one, and Generation X+ – the last one. The findings show that there are age differences not only in adopting the technologies used in investing but in performing the trading activities as well. Younger investors can be more responsive to rapidly changing information and price movements. They are exposed to the fast-changing digital environment and can be prone to making rapid decisions in this case. Still, these findings should not be interpreted as indicating that younger investors behave irrationally.

A crucial contribution of the generational findings is that they establish the connection between the technological and psychological sides of the current study. High rates found among the younger cohorts can be associated with the general structure revealed in the SEM analysis: the positive effect of mobile investing on overconfidence, which is highly positively related to impulsive decisions. Therefore, generational traits seem to influence the intensity of the above mechanisms and the findings confirm the importance of heterogeneity of the investors.

Altogether, the findings show that responsible digital investing requires not only increasing access to the financial information or making the trading technology available to investors. Additional focus on the ways to create behavioural protection against impulsive reactions, raise awareness about personal biases, and separate confidence from investing abilities is required. Thus, the financial education programs should include the aspect of overconfidence, perception of risks and decisions making.

The study therefore contributes to the understanding of the contemporary investor behaviour by6 incorporating the aspects of the digital platform usage, financial literacy, psychological bias, and generation into the analysis. According to the findings, the core challenge in the digital investing is not just a possibility to access the trading instruments, but the interaction between the technological ease and human perception and decision-making processes.0

Conclusion

India has experienced a paradigm shift in the investment world with the tremendous growth of mobile trading applications, making it more accessible, convenient, and entertaining for the retail investor. This research investigated whether younger (Gen Z and Millennial) investors are more likely to engage in impulsive trading and overconfidence than older generations of investors. These findings indicate that younger investors are more likely to be technologically literate, to use mobile applications heavily, and that they are more likely to be behaviourally biased (overconfidence and quick decision-making) than

older investors, who are less technologically literate, fewer mobile app users, and less likely to be behaviourally biased; as a result, they trade more often than their older counterparts.

The study shows that characteristics like real-time market information, instant trade execution, gamified interfaces, and access to information about investment opportunities round-the-clock can lead to hasty decisions in a lack of analysis. While these technological developments create more opportunities for markets to participate and for investors to be more financially included, they can also create more opportunities for investors to overtrade, especially younger investors. However, older investors are more conservative and disciplined, and tend not to follow the market but rather focus on their long-term investment objectives and their experience.

The findings underscore the need for investor education and awareness regarding the digital investment landscape. Financial education and inbuilt behavioural controls, and the need for responsible investing, must be made more widely known by financial institutions, trading platforms and regulators via their mobile trading apps. These can include risk alerts, educational nudges, and decision support tools, to help investors make informed decisions and reduce the influence of cognitive biases.

The findings highlight the increasing trend of digital technology's impact on investment choices and how maintaining control and sound decision-making is crucial in the digital age. With the growing trend of mobile trading in India, recognizing the differences in investor generations will continue to be key in encouraging sustainable investment habits and enhancing long-term financial outcomes.

Theoretical Considerations

The study adds value to the domain of behavioural finance literature by suggesting and experimentalizing the integrated conceptual framework of technology usage, financial capability, psychological bios and generational characteristics simultaneously. Although many studies have focused on one property of the same set of variables, the present study illustrates the usefulness of looking at these variables as a part of a single behavioural model.

The study also widens the scope of the behavioural finance theory to the mobile investing environment, where the development of digital trading platforms has inspired growing academic research. The research aims to empirically test the proposed framework, adding to the previous evidence that the investor behaviour in digital environments can not be solely explained by the traditional rational decision-making perspectives. In addition, methodological significance of the study lies in the integration of the measurement validation, the structural equation modelling, mediation analysis, and generation comparison methods in one analytical framework. This integrated approach provides a basis for future behavioural finance research as well as a reference model for studying new investment behaviour types in the digital market.

Practical Considerations

The results of this study are relevant to several stakeholders in the field of digital financial markets. The proposed framework can be adapted by financial institutions to create investor education programmes that take into account both investment knowledge and investor decisions on behaviour. Such programmes can enhance investors' skills to critically analyze information and make sound investment decisions.

Mobile trading app developers can leverage these insights in building intuitive interfaces, thus influencing thoughtful investment decisions. Educational materials and tools to monitor/investigate the investor's portfolio, personal learning modules, decision support systems, etc., can improve their overall experiences making it easier to invest while helping them to develop a positive attitude towards the financial market.

The results are also relevant for regulators looking to enhance investor protection in more and more digital financial markets. Behavioral policy measures such as raising awareness and educating investors about behavioral factors and responsible digital investing practices can help foster a healthier way to participate in markets, yet not impede technological advances.

Lastly, the research offers some practical recommendations that could guide future work in the field of behavioural finance and the study of digital investing. The proposed framework can be made suitable for other types of investors, financial instruments and markets, allowing further research to build on it towards technology-enabled investment behaviour.

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