Investor behaviour and behavioural biases in mutual funds in the state of Goa

A THESIS SUBMITTED IN PARTIAL FULFILMENT FOR THE DEGREE OF

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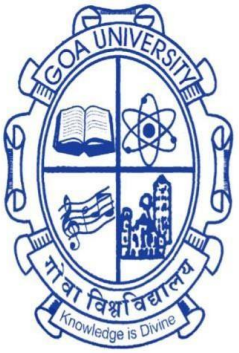

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DECLARATION

I, **Parab Rucha Madhu**, hereby declare that this thesis represents work which has been carried out by me and that it has not been submitted, either in part or full, to any other University or Institution for the award of any research degree.

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CERTIFICATE

I hereby certify that the above Declaration of the candidate, **Parab Rucha Madhu**, is true and the work was carried out under my/our supervision.

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Parab Rucha Madhu

Dedicated to

My Beloved Sister

Late.Shama Parab

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ABBREVIATIONS

AUM	Assets Under Management
MF / MFs	Mutual Fund(s)
SIP	Systematic Investment Plan
UTI	Unit Trust of India
US-64	Unit Scheme 1964
SBI	State Bank of India
LIC	Life Insurance Corporation
GIC	General Insurance Corporation
SEBI	Securities and Exchange Board of India
AMFI	Association of Mutual Funds in India
KYC	Know Your Customer
e-KYC	Electronic Know Your Customer
UPI	Unified Payments Interface
RTA / RTAs	Registrar and Transfer Agent(s)
ESG	Environmental, Social, and Governance
AMC / AMCs	Asset Management Company / Companies
NBFCs	Non-Banking Financial Companies
GDP	Gross Domestic Product
PwC	PricewaterhouseCoopers
FFM	Five Factor Model (of personality)
TRA	Theory of Reasoned Action
TPB	Theory of Planned Behavior
BRT	Behavioral Reasoning Theory
SEM	Structural Equation Modeling
CR	Composite Reliability
AVE	Average Variance Extracted
HTMT	Heterotrait–Monotrait Ratio
VIF	Variance Inflation Factor

CHAPTER 1
OVERVIEW OF MUTUAL FUND INDUSTRY

1.1. Introduction

Mutual funds pool money from multiple investors to purchase a diverse portfolio of stocks, bonds, and other securities. Professional investment managers construct a portfolio to meet specific objectives, such as growth, income, or diversification. Mutual funds provide small and individual investors access to a professionally managed, diversified portfolio, allowing them to participate in the financial markets and potentially achieve higher returns than individual investments. Furthermore, mutual funds can facilitate liquidity in the financial markets by enabling investors to purchase and sell mutual funds, thereby promoting market efficiency. Investments can be diversified across various assets, which also serves to decrease the likelihood of market volatility by mitigating the effects of a single stock or bond's performance.

Savings can be channeled into productive investments through mutual funds, thereby driving economic growth and development. This also boosts the supply of available capital for businesses looking for financing to facilitate growth or expansion. Professionally managed portfolios offered by mutual funds facilitate individual investors, thereby making a significant contribution to market efficiency and economic growth.

1.1.1 Finance industry in India

Covering a broad spectrum of financial services and products, this encompasses banking, insurance, mutual funds, stock markets, and non-banking financial companies (NBFCs).

India's banking sector is subject to strict regulation by the Reserve Bank of India (RBI), which oversees and controls all of the country's commercial and cooperative banks. The sector has experienced considerable growth in recent years, with numerous private sector banks entering the market and introducing innovative financial products and services to customers. The insurance sector in India is growing rapidly with the entry of several new players and the development of new insurance products that cater to the diverse needs of consumers.

India's mutual fund industry has experienced considerable expansion, as more investors opt

for portfolios managed by professionals. The Indian stock market is among the biggest, well-established capital market infrastructure and robust regulatory frameworks.

In India, non-banking financial companies (NBFCs) offer financial services to population segments. They provide consumer loans, microfinance, and housing finance, expanding rapidly in recent years. The Indian finance sector is set for ongoing expansion, driven by a growing economy, increasing consumer financial knowledge, and a strong regulatory framework.

Goa is a small Indian state on the western coast known for its beaches and tourism. Its finance industry is relatively small but supports local businesses and growth. The banking sector in Goa is well developed with national and regional banks offering various services. The insurance sector is also growing with several companies offering insurance products.

The mutual fund sector in Goa is growing, attracting investors seeking professional investment management. Non-banking financial companies in Goa offer financial services and credit to local communities and businesses, especially those underserved by conventional banks. They provide personal loans, microfinance, and housing finance.

The finance industry in Goa is small but crucial to the state's economy, supporting local businesses and individuals. It has a growing pool of savings, well-developed infrastructure, and a supportive regulatory framework, positioning it for further growth.

1.1.2 History of the Mutual Funds Industry in India

The evolution of the mutual fund industry in India is intricately connected to the country's overall economic transformation. Emerging in the early 1960s as a government-backed savings instrument, the industry has evolved into a dynamic and democratized ecosystem by the twenty-first century, mirroring India's transition from an agrarian to a globally integrated economy. This essay provides a historical account of the industry's development across two distinct phases: (i) the foundation years (1964–2014) and (ii) the period of momentum and democratization (2015–2024).

Laying the Foundation (1964–2014)

a) Early Beginnings (1963–1987)

India's first mutual fund, the Unit Scheme 1964 (US-64), was launched by the Unit Trust of India (UTI) in 1963 with government and regulatory backing. At that time, India's economy was primarily agrarian, with agriculture accounting for approximately half of the country's GDP and employing roughly 70% of the workforce. Household savings were largely invested in bank deposits, which offered interest rates of 4-6%, whereas inflation was hovering around 6-8%, steadily eroding household wealth. The introduction of mutual funds thus provided an innovative solution to channel savings into capital markets and offer returns that outpaced inflation (PwC, 2025).

b) Expansion of Players and Regulation (1987–1995)

The late 1980s and early 1990s represented a pivotal moment in the development of the mutual fund (MF) industry in India. Public sector entities, including the State Bank of India (SBI), Life Insurance Corporation (LIC), and General Insurance Corporation (GIC), entered the MF space, thereby increasing accessibility beyond metropolitan elites. Concurrently, the Securities and Exchange Board of India (SEBI) was granted statutory powers in 1992, resulting in enhanced transparency and investor protection. In 1995, the Association of Mutual Funds in India was established with the aim of promoting self-regulation and ethical practices (AMFI, 2024).

During this period, India's 1991 economic liberalization further accelerated the demand for market-linked savings. Between 1987 and 1995, assets under management (AUM) increased from ₹6,700 crore to ₹47,000 crore, with investor accounts expanding from 1.5 million to nearly 6 million (AMFI, 2024). Despite this growth, financial literacy remained limited, with only a minority of households familiar with MF products.

c) Private Sector Innovation and Product Diversification (1995–2014)

In the late 1990s and early 2000s, private sector asset management companies emerged, introducing significant product innovations that transformed the industry. By 2005, private asset management companies managed approximately 35% of the industry's assets under management, offering a range of products including sectoral funds, equity-linked savings

schemes, fixed maturity plans, and later exchange-traded funds. The introduction of Systematic Investment Plans facilitated disciplined long-term investing, as noted by the SEBI in 2013.

Regulatory reforms implemented by the authorities included the introduction of expense ratio caps, the abolition of entry loads in 2008, and stricter disclosure requirements. Investor education initiatives, such as the Market Awareness Campaign launched in 2003 and the simplified Know Your Customer (KYC) norms introduced in 2011, contributed to increased adoption, resulting in a rise in MF accounts to 3.5 crore by 2014, as reported by Business Today in 2014. By this time, assets under management (AUM) had grown to ₹10 lakh crore, with retail investors accounting for approximately 50% of the total AUM, according to a report by PwC in 2025.

2. Gaining momentum and democratization (2015–2024)

a) Exponential Growth

Between 2015 and 2024, the Indian mutual fund (MF) industry experienced rapid growth. The assets under management (AUM) increased six fold, rising from ₹10.8 lakh crore in 2015 to over ₹68 lakh crore in 2024. Consequently, India's share in global MF AUM doubled from 0.3% to 0.8% (PwC, 2025). This expansion was primarily driven by increased retail participation, buoyant equity markets, and structural reforms within the financial ecosystem.

b) Growth Drivers

Product Innovation: The adoption of SIPs experienced significant growth, with monthly inflows increasing from ₹1,000 crore in 2014 to over ₹26,000 crore by 2025. Direct plans and passive funds gained popularity as cost-effective investment instruments, while the RIA framework, introduced in 2013, helped to institutionalize fiduciary advice, thereby enhancing investor trust, as reported by the Association of Mutual Funds in India (AMFI) in 2024.

Technological advancements: have facilitated the adoption of digital-first platforms, which have enabled electronic Know Your Customer (e-KYC) processes, Aadhaar-based onboarding, and Unified Payments Interface (UPI)-enabled payments. This has streamlined

the investment process, even in the Tier-2 and Tier-3 cities. Furthermore, registrars and transfer agents (RTAs) have implemented automation and real-time digital services, thereby enhancing scalability and transparency (PwC, 2025).

c) Regulatory Reforms

1. In 2017, a substantial reclassification of over 2,000 schemes into 36 categories occurred.
2. The following year, 2018, saw the implementation of expense ratio capping.
3. More recently, in 2023, enhanced Environmental, Social, and Governance (ESG) disclosures were mandated.
4. Furthermore, as of 2024, hybrid fund regulations have been introduced to ensure discipline in asset allocation, as outlined by the Securities and Exchange Board of India (SEBI) in 2024.

d) Educational Campaigns

1. The campaign "Mutual Funds Sahi Hai" launched in 2017 successfully reached 350 million Indians, thereby increasing their participation in equity funds.
2. The subsequent initiative "MFD Shuru Karein" in 2022 expanded the distributor base to over 2 lakh.
3. Furthermore, the "Bharat Nivesh Yatra" campaign, launched in 2024, aimed to increase awareness about investment opportunities in underserved rural areas (Association of Mutual Funds in India, 2024).

The cumulative impact of these reforms was significant, resulting in a substantial increase in the proportion of direct plans within the assets under management (AUM), from 31% to 46%. Additionally, passive funds experienced growth from 1.58% to 17.5%. Furthermore, household savings in mutual funds rose from 6.1% in 2013 to 14.7% in 2023, as reported by the Reserve Bank of India (RBI, 2023) [6]. By 2024, mutual funds had solidified their position as a primary component of Indian household financial portfolios.

Over a period of more than six decades, India’s mutual fund industry has undergone significant transformation from a single-product, state-backed instrument to a diverse, technology-driven, and democratized ecosystem. The foundation years spanning from 1964 to 2014 laid the

groundwork for regulated competition, investor protection, and product innovation. Conversely, the subsequent decade from 2015 to 2024 witnessed unprecedented growth facilitated by technological advancements, regulatory frameworks, and financial literacy campaigns.

With over 40 asset management companies (AMCs), 1,500+ schemes, and millions of retail investors, mutual funds now occupy a central position within India's financial system. As the nation progresses toward achieving the vision of Viksit Bharat 2047, mutual funds are poised to play a pivotal role in wealth creation, financial inclusion, and economic resilience.

1.1.3 India's Mutual Fund Industry

The Indian mutual fund industry reached a historic milestone in fiscal year 2025, with assets under management (AUM) totalling ₹65.74 lakh crore, representing a 23.1% year-on-year increase from ₹53.40 lakh crore in March 2024, as reported by the Association of Mutual Funds in India (AMFI) in 2025. This growth was primarily driven by substantial net inflows of ₹8.15 lakh crore and favorable mark-to-market (MTM) gains across both equity and debt markets. Equity-oriented schemes were the largest contributors; with net inflows of ₹4.17 lakh crore, resulting in a 25.4% increase in their AUM to ₹29.45 lakh crore. Conversely, debt funds, which had experienced three consecutive years of outflows, rebounded with inflows of ₹1.38 lakh crore and an AUM growth of 20.5% to ₹15.21 lakh crore. Hybrid funds also achieved record levels, with an AUM of ₹8.83 lakh crore, largely driven by arbitrage and multi-asset allocation funds. Passive funds sustained their momentum, growing 22.7% to ₹11.47 lakh crore, supported by the launch of 150 new schemes, a surge in demand for index funds, and a 2.7-fold increase in gold ETF inflows, as per the AMFI's 2025 report.

Investor participation witnessed a substantial rise, with a 32% increase in folio counts reaching 23.45 crore. Equity folios alone experienced a growth of 33.4% to 16.38 crore, accounting for approximately 70% of the total investor accounts. Systematic Investment Plans (SIPs) continued to drive retail participation, with annual contributions increasing by 45% to ₹2.89 lakh crore. The SIP assets under management (AUM) surpassed ₹13.35 lakh crore, representing over 20% of the total industry assets. The number of SIP accounts also increased, reaching 8.11 crore by March 2025, indicating a stronger long-term investment approach among investors. Notably, women investors comprised 25.9% of the unique

investors, up from 24.2% in 2024, while individual investors maintained their dominance, holding 63.2% of industry AUM, signifying the growing inclusivity of the sector (AMFI, 2025).

Notable progress has been achieved, yet structural challenges persist. A significant proportion of the total assets under management (AUM) is concentrated in the top five cities: Mumbai, New Delhi, Bengaluru, Pune, and Kolkata, which collectively account for 52.5% of industry assets, thereby underscoring the ongoing urban concentration. India's MF penetration, measured as the AUM-to-GDP ratio, reached a record 19.9% in March 2025; however, this level remains below that of developed economies, indicating substantial potential for future growth. The industry's resilience, inclusivity and maturity were reaffirmed in FY 2025, highlighting its increasing significance in mobilizing household savings and supporting India's vision for Viksit Bharat 2047, as outlined in the 2025 report by the Association of Mutual Funds in India (AMFI).

Benefits of investing in mutual funds

Putting your money in mutual funds offers several advantages to investors, including:

1. Professional Management: most important advantages of putting money in mutual funds is that the fund is professionally handled by experienced investment managers. These who are expert and have resources to do the required research and select the right combination of securities that make up the fund's portfolio mix, which gives an edge to increase returns and decrease the amount of risk.

2. Diversification: Mutual funds lets investors to spread risk of their portfolios by putting in money in a pool of securities, which further helps to reduce large amount of risk and get exposure to a types of assets. Diversification can be specifically advantageous for small investors who may not have the resources to diversify their portfolios by their own selves.

3. Affordability: Mutual funds are generally accessible to a range of investors, as they have low minimum investment requirements and allow for smaller, regular contributions. Therefore makes mutual funds a cost-effective way for enabling investors to gain exposure to a broad range of securities

4. Convenience: Investing in mutual funds is a convenient and streamlined process. Investors can easily purchase and manage their investments through a financial

advisor or online brokerage platform. Additionally, many mutual funds offer automatic investment plans and regular reporting to help investors stay informed about their investments.

5. Potential for Higher Returns: Mutual funds have the potential to offer higher returns than other investment vehicles, as the fund's investment portfolio is managed by experienced professionals who have access to a wide range of securities.

6. Flexibility: Mutual funds offer flexibility to investors, as they can choose from a range of investment options, including equity funds, debt funds, and hybrid funds, to align their investments with their financial goals and risk tolerance.

7. Liquidity: Mutual funds are highly liquid, as they can be easily bought and sold on any business day. This allows investors to access their funds quickly and easily, should they need to investing in mutual funds can be a smart way for investors to build wealth and achieve their long-term financial goals. By leveraging the expertise of professional fund managers, investors can access a diversified portfolio of securities, potentially achieve higher returns, and enjoy the convenience and flexibility of a well-managed investment.

Risks of investing in mutual funds

Risks involved in Investing in Mutual Funds:

1. Market Risk: One of the main risks associated with investing in mutual funds is market risk, which refers to the fluctuations in the value of securities in the fund's portfolio due to changes in the stock market or the broader economy. If the market conditions are unfavorable, the value of the mutual fund can decline, resulting in lower returns for investors.

2. Credit Risk: Credit risk refers to the risk that a company or issuer in the fund's portfolio may default on its debt obligations. This can result in a loss for the mutual fund and its investors.

3. Interest Rate Risk: Interest rate risk is the risk that the value of bonds and other fixed-income securities in the mutual fund's portfolio will decline due to changes in interest rates. This can result in lower returns for investors and a decline in the value of the mutual fund.

4. Management Risk: Management risk refers to the risk that the fund manager may make poor investment decisions, leading to underperformance of the fund and lower returns for investors.

5. Liquidity Risk: Liquidity risk refers to the risk that the mutual fund may not be able to sell certain securities in its portfolio quickly or easily, which can impact its ability to meet redemption requests from investors.

6. Regulatory Risk: Regulatory risk refers to the risk that changes in government regulations may have a negative impact on the mutual fund's performance. For example, changes in tax laws or regulations regarding the securities in the fund's portfolio could result in lower returns for investors.

7. Inflation Risk: Inflation risk refers to the risk that the purchasing power of an investment's returns will be eroded over time due to inflation. This can result in lower returns for investors, particularly if the mutual fund is heavily invested in fixed-income securities.

It is important for investors to understand the risks involved in investing in mutual funds and to consult with a financial advisor before making a decision. Additionally, investors should carefully consider the investment objectives, investment strategies, and risks associated with a particular mutual fund before making an investment. By taking a careful and informed approach to investing in mutual funds, investors can help to minimize risk and maximize returns.

1.1.4 Challenges of Mutual Fund Industry

The mutual fund industry in India faces several challenges, some of which are outlined below:

1. Investor Awareness: Despite the growing popularity of mutual funds as an investment option, there is still a lack of awareness and understanding among many investors about the various types of mutual funds, their investment objectives, and their suitability for different investor profiles. This can lead to poor investment decisions, which can negatively impact investors' financial goals.

2. Distribution Network: The mutual fund industry in India still relies heavily on a traditional distribution network, which includes intermediaries such as bank branches

and financial advisors. While this has helped to expand the reach of mutual funds, it has also led to challenges, such as high distribution costs, mis-selling of mutual fund schemes, and lack of transparency in the investment process.

3. Regulatory Framework: The mutual fund industry in India is regulated by the Securities and Exchange Board of India (SEBI), which has put in place several measures to protect the interests of investors. However, the regulatory framework is still evolving, and there have been instances where mutual fund companies and intermediaries have violated regulatory norms, which has led to a loss of investor confidence.

4. Competition: The mutual fund industry in India is highly competitive, with a large number of players vying for a share of the market. This has led to intense price competition, which has put pressure on mutual fund companies to keep their expenses low, which in turn can impact the quality of services provided to investors.

5. Market Volatility: The mutual fund industry in India is heavily impacted by market volatility, as the value of mutual fund holdings is directly linked to the performance of the underlying assets. This means that during periods of market turmoil, the value of mutual fund holdings can fall significantly, leading to a loss of investor confidence.

6. Liquidity: While mutual funds are generally considered to be relatively liquid investments, some types of mutual funds, such as debt funds, can have restrictions on redemption, especially during periods of market stress. This can impact the liquidity of mutual fund holdings, and can lead to difficulties for investors seeking to redeem their investments.

Despite these challenges, the mutual fund industry in India continues to grow, and mutual funds remain an important investment option for many investors. However, it is important for investors to be aware of the challenges and to carefully consider their investment objectives, risk tolerance, and investment horizon before making a decision to invest in mutual funds

1.1.5 Investor's behavior

Human behavior is shaped by a complex interplay of motivations, beliefs, contextual influences, and personal justifications. Traditional theories of behavior, such as the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB), have provided valuable

insights by highlighting the role of attitudes, subjective norms, and perceived behavioral control in shaping behavioral intentions (Ajzen, 1991; Fishbein & Ajzen, 1975). However, these models often treat intention formation as a largely linear process and may fall short when applied to behaviors influenced by conflicting emotions, moral dilemmas, or cultural traditions. In such settings, individuals frequently experience internal conflict and rely on personal justifications to make decisions. This is particularly true for behaviors situated in sensitive, symbolic, or spiritually meaningful domains, such as pilgrimage tourism, religious practices, or ethical consumption (Westaby, 2005; Paché, 2023; Ambrósio, 2019).

Behavioral Reasoning Theory (BRT), developed by James D. Westaby, addresses these limitations by introducing "reasons" as key explanatory variables in the decision-making process (Westaby, 2005). Unlike TPB and TRA, which emphasize evaluative beliefs and social influence, BRT asserts that individuals construct behaviorally relevant reasons that either support or inhibit a particular course of action. These reasons operate as mediators between general value systems and specific behavioral intentions, offering a domain-sensitive framework that more accurately reflects the ambivalence and complexity inherent in human behavior (Westaby, Probst, & Lee, 2010).

The focus of this research is grounded in the application of BRT as the central theoretical framework. In contrast to traditional models that often overlook the role of opposing psychological forces, BRT explicitly incorporates “reasons for” and “reasons against” a behavior, acknowledging the dialectical nature of human cognition and providing a more realistic lens through which to view behavioral outcomes (Westaby, 2005, 2010).

1.1.5.1 Behavioral Reasoning Theory: Conceptual Overview

Behavioral Reasoning Theory was introduced to bridge the explanatory gaps in existing behavioral models by focusing on why individuals decide to engageor not engagein a particular behavior. At its core, BRT posits that people generate behavior-specific reasons that mediate the influence of global values on behavioral intentions (Westaby, 2005). These reasons are shaped by personal experience, cultural context, emotional resonance, and social discourse. By integrating both cognitive and affective dimensions, BRT allows for a nuanced understanding of behavior (Westaby et al., 2010).

A foundational distinction within BRT is between “reasons for” and “reasons against” a behavior. This binary structure reflects the dual forces at play in real-world decision-making. For example, a person considering spiritual travel may feel inspired by religious fulfillment

or a desire to honor tradition (reasons for), while also being concerned about financial limitations or travel discomfort (reasons against) (Westaby, 2005; Paché, 2023). These opposing influences often coexist and interact dynamically in the formation of intentions, resulting in complex decision-making patterns that linear models such as TPB or TRA cannot sufficiently capture (Ajzen, 1991).

The theoretical architecture of BRT comprises the following core elements:

1. Values: Broad, abstract principles that guide general behavior (e.g., tradition, achievement, benevolence) (Schwartz, 1992).
2. Reasons: Specific, articulated justifications that link values to intentions, subdivided into reasons for and reasons against (Westaby, 2005).
3. Intentions and Behavior: Final outcomes resulting from the cognitive processing of competing reasons (Westaby et al., 2010).

In Westaby's model (2005, 2010), reasons serve as cognitive bridges, translating personal and cultural values into tangible intentions and behaviors. This structure is especially important in domains where behavior is not merely utilitarian but is influenced by symbolic, moral, or identity-based concerns (Westaby, 2010; Grondys et al., 2014).

1.1.5.2 Application of Behavioral Reasoning Theory in Financial Studies

Behavioral Reasoning Theory (BRT), originally developed within the domain of social psychology, has increasingly been applied in financial studies due to its ability to capture the nuanced reasoning processes behind complex decision-making (Westaby, 2005; Westaby, Probst, & Lee, 2010). Traditional economic models often assume that individuals are rational actors who maximize utility (Von Neumann & Morgenstern, 1944), yet growing evidence in behavioral finance suggests that real-world financial behavior is driven by a mix of emotional, cognitive, and contextual factors (Thaler, 1999; Barberis & Thaler, 2003). BRT contributes to this understanding by distinguishing between "reasons for" and "reasons against" a behavior, allowing scholars to account for the ambivalence, emotional conflict, and value-laden decisions involved in financial choices.

In financial contexts, BRT has been used to explore why individuals engage or refrain from engaging in investment, savings, insurance uptake, or the use of financial technology (fintech) platforms. For instance, Lim et al. (2022) used BRT to study retail investor behavior in Southeast Asia and found that reasons for investment included the desire for financial

independence, peer influence, and digital convenience, while reasons against included perceived market volatility, distrust in institutions, and lack of understanding. These reasons act not merely as reflections of attitudes but serve as mediators between individual values (e.g., long-term security, ambition, or risk tolerance) and behavioral intentions (Westaby et al., 2010). As an example, an individual may hold values centered on financial prudence yet decide against investing in mutual funds due to past losses or a belief that the market is manipulated highlighting how reasons grounded in personal experience influence intentions (Kumar & Goyal, 2015).

BRT is also valuable for segmenting investors across demographic and psychographic variables. Younger investors may cite reasons for high-risk investments due to tech-savviness and a tendency toward optimism (Nagy & Oben berger, 1994), while older investors may prioritize stability and exhibit reasons against volatile markets due to retirement concerns (Lusardi & Mitchell, 2014). These differences make BRT particularly useful for designing financial literacy programs, targeted marketing strategies, and behavioral interventions aimed at fostering more informed and confident financial decision-making. Importantly, BRT accommodates both affective reasoning (e.g., fear, trust, hope) and instrumental reasoning (e.g., return on investment, ease of access), thus bridging the gap between behavioral finance and cognitive psychology.

In summary, BRT offers a sophisticated and context-sensitive approach to understanding financial behavior. By allowing for the coexistence of enabling and inhibiting reasons, it explains the real-world complexity of investor decision-making more effectively than linear or purely rational-choice models. As financial environments become increasingly digital, volatile, and emotionally driven, BRT provides researchers and practitioners with a robust framework for exploring how values and situational reasoning jointly influence financial intentions and actions.

1.1.6 Investor’s behavior in mutual funds

Investors' behavior plays a crucial role in the success of mutual funds as an investment option. Understanding the motivations, attitudes, and behaviors of investors can help mutual fund companies design products that meet their needs, as well as develop marketing and distribution strategies that effectively reach their target audience.

1. Risk Tolerance: Investors' risk tolerance is a key factor in determining their investment behavior in mutual funds. Some investors are comfortable with higher risk

investments, while others prefer more conservative investment options. Understanding an investor's risk tolerance can help mutual fund companies design products that match their investment objectives and risk preferences.

2. Investment Goals: Investors' investment goals can also impact their behavior in mutual funds. Some investors may be saving for short-term goals, such as a down payment on a house or a child's education, while others may be saving for long-term goals, such as retirement. Understanding an investor's investment goals can help mutual fund companies design products that meet their needs.

3. Investment Horizon: Investors' investment horizon is the length of time they plan to hold their investments. This can impact their behavior in mutual funds, as investors with a longer investment horizon may be more willing to take on higher risks in exchange for the potential for higher returns.

4. Market Knowledge: Investors' market knowledge can also impact their behavior in mutual funds. Investors with a higher level of market knowledge may be more confident in their investment decisions and may be more likely to take on higher risks. On the other hand, investors with limited market knowledge may prefer more conservative investment options.

5. Financial Advisor Influence: Many investors rely on financial advisors for investment advice, and the recommendations of financial advisors can have a significant impact on investors' behavior in mutual funds. Financial advisors can provide guidance on investment objectives, risk tolerance, and investment horizon, and can help investors select appropriate mutual fund products.

6. Emotional Factors: Investors' emotional factors, such as fear, greed, and a lack of trust, can also impact their behavior in mutual funds. During periods of market turmoil, for example, fear can cause investors to pull their money out of the market, while greed can lead to impulsive investment decisions.

Understanding investors' behavior in mutual funds is crucial for mutual fund companies, as it helps them design products that meet the needs of their target audience, as well as develop marketing and distribution strategies that effectively reach investors. By taking a customer-centric approach and tailoring products and services to meet the unique needs of each investor, mutual fund companies can increase investor satisfaction and build long-lasting

relationships with their clients. Additionally, by providing educational resources and tools that help investors understand the mutual fund market and make informed investment decisions, mutual fund companies can promote a more informed and engaged investment community, and help build investor confidence and trust in the industry.

1.1.7 Personality and its impact on attitude towards mutual fund

Personality can play a significant role in shaping an individual's attitudes towards mutual funds and their overall investment behavior. Understanding the personality traits that influence attitudes towards mutual funds can help mutual fund companies better understand their target audience and develop strategies that resonate with their target audience.

1. Individuals who are innovative and open to new ideas tend to have a more positive attitude toward mutual funds that offer unique investment strategies and cutting-edge products. They may view mutual funds as a way to stay ahead of the curve and tap into the latest investment trends.

2. People with high levels of trust are more likely to consider mutual funds a reliable and trustworthy investment option. They may be more inclined to invest in funds managed by reputable financial institutions and may seek the advice of financial advisors.

3. Impulsiveness can lead individuals to have a more favourable view of mutual funds that provide quick and straightforward investment options. However, they may also be more vulnerable to market manipulation. As a result, they may be less inclined to adhere to a long-term investment plan and more prone to making impulsive investment decisions.

4. Individuals with high levels of conscientiousness and discipline generally have a more favourable outlook on mutual funds that align with their long-term investment objectives. They often perceive mutual funds as a means to achieve their financial goals and are less prone to making impulsive investment decisions.

5. Individuals who are extroverted may have a more positive attitude towards mutual funds that are marketed through social media and other digital channels. They may also be more likely to seek the advice of financial advisors and to invest in funds that are recommended by their social network.

In conclusion, personality traits can have a significant impact on an individual's attitudes

towards mutual funds and their overall investment behavior. Understanding the personality traits that influence attitudes towards mutual funds can help mutual fund companies better understand their target audience and develop strategies that resonate with their target audience. By taking a customer-centric approach and tailoring products and services to meet the unique needs of each investor, mutual fund companies can increase investor satisfaction and build long-lasting relationships with their clients.

1.1.8 Behavioral bias in mutual funds

Behavioral biases can have a significant impact on investment behavior, and can lead to suboptimal investment decisions. In the context of mutual funds, understanding and mitigating the effects of behavioral biases can help investors make more informed investment decisions and achieve their financial goals. Some of the most common behavioral biases that impact mutual fund investing are:

1. Overconfidence Bias: Overconfidence bias refers to an individual's tendency to overestimate their ability to predict the future and to make accurate investment decisions. Investors who suffer from overconfidence bias may ignore expert advice, ignore warning signs, and make impulsive investment decisions, leading to suboptimal investment outcomes.

2. Herding Bias: Herding bias refers to the tendency for investors to follow the crowd and make investment decisions based on the actions of others. Investors who suffer from herding bias may ignore their own research and analysis, and may instead follow the advice of others or invest in popular mutual funds without fully understanding the risks involved.

3. Availability Bias: Availability bias refers to the tendency for investors to make investment decisions based on the most recent information they have encountered. Investors who suffer from availability bias may be more likely to make decisions based on the latest news or market events, rather than making decisions based on a thorough analysis of the underlying fundamentals.

4. Confirmation Bias: Confirmation bias refers to the tendency for investors to seek out information that supports their existing beliefs and to ignore information that contradicts their beliefs. Investors who suffer from confirmation bias may ignore

negative news and focus only on positive news, leading to suboptimal investment decisions.

5. Anchoring Bias: Anchoring bias refers to the tendency for investors to rely too heavily on a single piece of information or a single reference point when making investment decisions. Investors who suffer from anchoring bias may ignore other relevant information and focus only on the one piece of information that is most salient, leading to suboptimal investment decisions.

Mitigating the effects of behavioral biases requires an understanding of the biases that impact investment decisions and an awareness of how these biases may impact investment outcomes. Investors can mitigate the effects of behavioral biases by seeking out diverse sources of information, working with a financial advisor, and following a structured investment process that emphasizes rigorous research and analysis. By doing so, investors can avoid the negative impact of behavioral biases and make more informed investment decisions.

1.1.9 Conclusion

The mutual fund industry in India has a history that dates back to the 1960s. The first mutual fund, the Unit Trust of India (UTI), was established in 1963 and was the only mutual fund in the country for several years. Over the years, the industry has grown significantly, with the number of mutual funds and assets under management (AUM) increasing steadily. Today, the mutual fund industry in India has a large number of active asset management companies and AUM exceeding INR 30 trillion as of 2021.

Mutual funds are investment vehicles that pool money from multiple investors to purchase securities such as stocks, bonds, and money market instruments. The primary objective of mutual funds is to offer investors a diversified portfolio of securities, thereby minimizing the risk associated with investing in individual securities. Furthermore, mutual funds are managed by professional fund managers who possess the necessary expertise to make informed investment decisions on behalf of the investors.

The mutual fund industry in India offers a wide range of investment options for investors, including equity funds, debt funds, balanced funds, and money market funds, among others. Equity funds invest primarily in stocks and are designed for investors with a high risk tolerance and a long-term investment horizon. Debt funds invest primarily in fixed income

securities and are designed for investors with a low risk tolerance and a medium to long-term investment horizon. Balanced funds invest in both equity and debt securities and are designed for investors with a moderate risk tolerance and a medium to long-term investment horizon. Money market funds invest primarily in short-term debt securities and are designed for investors with a low risk tolerance and a short-term investment horizon.

The mutual fund industry in India has experienced significant growth over the years, with a growing number of investors investing in mutual funds. This growth can be attributed to several factors, including the increasing availability of investment options, the growing awareness and understanding of mutual funds among the general population, and the increasing ease of investing in mutual funds, among others.

The mutual fund industry in Goa is a subset of the larger mutual fund industry in India, with several asset management companies operating in the state. The industry in Goa has grown over the years, with a growing number of investors investing in mutual funds. However, the industry in Goa is still in its nascent stages compared to other states in India, with a relatively low level of awareness and understanding of mutual funds among the general population. This presents a unique opportunity to study the mutual fund industry in Goa and explore its growth potential, challenges, and opportunities.

The mutual fund industry in India has made significant progress since its inception and has experienced substantial growth over the years. The industry provides a diverse range of investment options for investors and is regulated by the Securities and Exchange Board of India (SEBI) to safeguard investor interests. The mutual fund industry in Goa is a growing segment of the larger Indian industry, offering a chance to examine its growth, challenges, and opportunities. This thesis aims to contribute to the development of the mutual fund industry in Goa by investigating the current trends and challenges in the industry and providing insights and recommendations for future growth.

1.2. Significance of the Research

A comprehensive review of the mutual fund literature highlights several under-researched areas in the behavioral analysis of individual investors. The current study is significant because it addresses these gaps by applying Behavioral Reasoning Theory (BRT) to analyze

the interplay of psychological traits, attitudes, values, behavioral biases, and demographic factors influencing mutual fund buying intentions. This research provides practical insights to stakeholders in the mutual fund industry, including asset management companies, financial advisors, policymakers, and investor education platforms, by offering a more realistic and behaviorally informed model of investor decision-making. The following subsections outline the major areas in which this research makes meaningful contributions.

1.2.1 Personality Traits of Investors in the Mutual Fund Industry

In the mutual fund landscape, understanding what drives investors' decision-making is increasingly important for effective segmentation and personalized advisory services. Personality traits such as openness, conscientiousness, extraversion, agreeableness, and neuroticism have been shown to influence risk tolerance and investment preferences. However, existing mutual fund studies often overlook the role of personality-driven behavioral tendencies. By analyzing how individual traits correlate with buying intentions, this research enables the identification of distinct investor profiles. The findings can assist mutual fund houses and distributors in designing customized products and communication strategies tailored to the psychological makeup of different investor groups.

1.2.2 Attitude of Investors toward Mutual Fund Investment

Investment decisions are not made in a vacuum; they are often grounded in personal values such as financial security, independence, and wealth creation. However, the mechanisms that connect these values to actual investment behavior are not well understood in the mutual fund industry. Behavioral Reasoning Theory offers a novel approach by introducing "reasons for" and "reasons against" investing, which mediate between personal values and behavioral intentions. This study applies BRT in the mutual fund context to capture the cognitive justifications investors use such as "mutual funds offer long-term growth" (reason for) versus "markets are unpredictable" (reason against). These insights allow fund houses and educators to address investor concerns more effectively and promote rational investment behavior.

1.2.3 Values and Reasoning in Mutual Fund Investment Decisions

Investment decisions are not made in a vacuum; they are often grounded in personal values such as financial security, independence, and wealth creation. However, the mechanisms that connect these values to actual investment behavior are not well understood in the mutual fund

industry. Behavioral Reasoning Theory offers a novel approach by introducing "reasons for" and "reasons against" investing, which mediate between personal values and behavioral intentions. This study applies BRT in the mutual fund context to capture the cognitive justifications investors use such as "mutual funds offer long-term growth" (reason for) versus "markets are unpredictable" (reason against). These insights allow fund houses and educators to address investor concerns more effectively and promote rational investment behavior.

1.2.4 Behavioral Biases in Mutual Fund Investment Behavior

Behavioral biases such as overconfidence, herding, anchoring, and loss aversion are widely known to distort investor rationality, yet their specific influence on mutual fund buying intentions remains insufficiently examined. Moreover, the relationship between personality traits and susceptibility to these biases is largely unexplored in investor populations This study contributes to this growing area by analyzing how certain traits (e.g., extraversion or neuroticism) predispose investors to particular biases and how these biases, in turn, affect their intention to invest in mutual funds. The findings have practical implications for financial advisors and regulatory bodies seeking to reduce behavioral errors and improve investment outcomes through targeted behavioral interventions and education programs.

1.3. Research Problem and Questions

A review of important and relevant literature shows that no similar study has been carried out in the state of Goa to address the subject under study which makes it all the more essential for consideration. Detailed literature review in the on the four aspects; viz.; (1) Personality traits of Mutual fund Investors (2) Influence of Personality Traits on Investor Attitude (3) Lack of Integrative Models Examining Personality, Attitude, Values, and Reasons Together and (4) Personality Traits and Behavioral Biases; are provided in Chapter 2. This being a new and unique study in the state, it attempts to address the following gaps in research. The gaps in research are identified by analyzing the existing literature and understanding the limitations of previous studies. By addressing these gaps, this study aims to contribute to the existing body of knowledge in the field of finance and investment.

Research Gap 1: Limited Exploration of Personality Traits as Predictors of Mutual Fund Buying Intention

Although personality psychology has been widely applied in consumer behavior, its application in investment behavior, particularly mutual fund buying intentions, remains limited. Studies in behavioral finance have predominantly focused on external influences such as market trends, product features, and financial literacy, often overlooking the internal psychological mechanisms that guide investment decisions. While models such as the five-factor model (Costa & McCrae, 1992) offer a robust framework for analyzing personality traits, only a few empirical studies have linked traits such as extraversion, neuroticism, or conscientiousness directly to financial decision-making processes. As mutual fund investments involve elements of risk assessment, future orientation, and trust, understanding how stable personality traits influence investors' propensity to buy mutual funds is essential. This study addresses this gap by examining whether distinct personality profiles can be statistically associated with buying intentions, as raised in RQ1. The investigation of the role of personality in investment decisions is crucial for developing targeted marketing strategies and improving investor education programs. By identifying specific personality traits linked to mutual fund buying intentions, financial institutions can tailor their services to better meet the needs of various investor profiles.

Research Gap 2: Inadequate Profiling of Mutual Fund Investors Using Demographic Variables

Demographic profiling is a critical tool in understanding consumer behavior, yet it remains underdeveloped in mutual fund investment studies, particularly in the Indian context. The existing literature often reports mixed results regarding the influence of variables such as age, gender, income level, education, and occupation on investment decisions, without providing a cohesive demographic profile of typical mutual fund investors. In many cases, studies fail to segment investor groups meaningfully or use outdated demographic categories that do not reflect the changing financial behavior of millennial or Gen Z investors. Moreover, demographic studies rarely consider how these variables interact with psychological factors such as risk tolerance or investment goals. This lack of comprehensive understanding of demographic profiles can lead to ineffective marketing strategies and investment products that do not cater to the needs of specific investor groups. As a result, this study aims to provide a more detailed analysis of the demographic characteristics of mutual fund investors. Therefore, the present study seeks to bridge this gap by providing a comprehensive demographic mapping

of mutual fund investors to identify unique investor categories, thereby responding to RQ 2: Can we understand the demographic profile of such investors?

Research Gap 3: Understudied Link between Personality Traits and Investor Attitude

Attitude has long been recognized as a key predictor of behavior in theoretical models such as the Theory of Planned Behavior (Ajzen, 1991), yet its antecedents, particularly in financial contexts, have received limited empirical attention. While some studies have assessed investor attitudes toward risk or mutual funds, few have explored how personality traits influence these attitudes. Given that personality affects cognitive processing, emotional responses, and social behavior, it is likely to shape how individuals perceive the usefulness, risk, or ethical value of investment options. For example, an investor high in openness may have a more favorable attitude toward innovative financial products, while someone high in neuroticism may perceive greater risk. Understanding this relationship is crucial for developing tailored communication and product strategies. This relationship is also complex and can be influenced by various factors such as past experiences and cultural background. Thus, this study explores how personality traits influence investment attitudes, thereby addressing the gap identified in

RQ 3: What is the attitude and how does personality impact attitude

Research Gap 4: Lack of Integrative Models Examining Personality, Attitude, Values, and Reasons Together

Many behavioral finance studies examine isolated constructs such as financial literacy, trust, or risk tolerance but fail to adopt an integrative framework that considers the interplay between psychological traits (e.g., personality), evaluative attitudes, personal values, and cognitive justifications (reasons). This compartmentalized approach often leads to an incomplete understanding of behavioral intention. The lack of a comprehensive framework in behavioral finance research is a significant limitation, as it prevents a thorough understanding of how various factors influence investor behavior. Behavioral Reasoning Theory (BRT) provides a unique lens for such integration by proposing that behavior-specific "reasons" mediate the influence of broader value systems and psychological traits on intentions (Westaby, 2005). However, its application in financial decision-making remains nascent. The present research fills this void by applying BRT to develop a comprehensive model that links

personality traits, values, attitudes, and reasons with the intention to invest in mutual funds. This approach offers a holistic explanation of investor behavior, aligning with the objective posed in RQ4: Is it possible to understand the impacts of personality traits, attitude, values and reasons on behavioral intention? By adopting a more integrated approach, researchers can gain a deeper understanding of the complex factors that influence investor behavior, ultimately contributing to more effective financial decision-making strategies.

Research Gap 5: Sparse Evidence on the Relationship between Personality Traits and Behavioral Biases

Behavioral biases such as overconfidence, herd behavior, anchoring, and loss aversion are central to behavioral finance literature, yet little is known about the personality foundations of these biases. Most research treats biases as cognitive heuristics or learned behaviors, but emerging evidence suggests that stable personality traits may predispose individuals to certain biases. For instance, individuals high in agreeableness may be more susceptible to herding, while those high in extraversion may exhibit overconfidence. However, such associations remain empirically under-investigated, especially in the investment landscape. As biases can significantly distort investment outcomes, understanding their personality correlates can help design personalized investment tools, financial advisory services, and investor education programs. This understanding can also aid in creating more effective interventions to mitigate the negative effects of biases.

Research Gap 6: Sparse Evidence on the Relationship between buying Intention and Behavioral Biases

Research in behavioral finance has shown that investors frequently diverge from rational models due to cognitive biases such as loss aversion, overconfidence, regret aversion, anchoring, and herding (Tripathy, 2021; Kumar & Chaurasia, 2024; Madaan & Singh, 2019). Although these biases can explain why investors hold onto losses or follow others, most studies have focused on financial outcomes rather than the formation of buying intention, a critical component in theories such as the Theory of Planned Behavior (Ajzen, 1991). The formation of buying intention is a pivotal step in the decision-making process, as it determines whether an investor will ultimately purchase a mutual fund. Notably, contextual gaps persist, particularly in India, where tax-saving motivations and collectivist values

significantly influence the investment culture. This study aims to address these gaps by examining the impact of biases on mutual fund investors' buying intentions.

Furthermore, it can contribute to the development of more tailored investment strategies that consider the unique characteristics of individual investors. This study addresses this critical gap by examining the relationship between Buying intention and behavioral biases among mutual fund investors in response to RQ6: Is it possible to understand the relationship between buying intention and behavioral biases of individual mutual fund investors?

1.4. Research Objectives

This research primarily attempts to study the consumer behavior of individual mutual fund investors in India, with a view to understand in detail the influence of personality traits, demographic characteristics, attitudes, values, and behavioral biases on their investment decisions. The study seeks to analyze how investors' inherent traits and profiles shape their buying intentions, how their attitudes are formed, and how these psychological and demographic factors collectively influence their behavioral intentions in mutual fund investments. This involves a thorough examination of the various factors that contribute to an investor's decision-making process, which is crucial for understanding the complexities of consumer behavior in the context of mutual fund investments. The study's focus on the interplay between personality, attitudes, and behavioral biases is essential for developing effective marketing strategies and investment products that cater to the diverse needs of individual investors. In particular, the study addresses gaps in the existing literature by attempting to develop a comprehensive understanding of the relationship between the personality, attitudes, and behavioral biases of
mutual fund investors. This line of inquiry causes several challenging research questions as follows:

RQ 1: Do investors have distinct personality traits which drive theirs buying intentions of mutual funds?
RQ 2: Can we understand demographic profile of such investors?
RQ 3: What is the attitude and how does personality impact attitude?
RQ 4: Is it possible to understand the impacts of personality traits, attitude, values and reasons on behavioral intention?

RQ 5: Is it possible to understand the relationship between personality traits and behavioral biases of individual mutual fund investors?

RQ 6: Is it possible to understand the relationship between buying intention and behavioral biases of individual mutual fund investors?

Keeping these six relevant research questions in mind, the following objectives of the study were drawn up.

a) ***Objective 1:*** To identify distinct personality traits of investors in mutual funds in state of Goa

b) ***Objective 2:*** To investigate how different personality traits contribute to the formation of attitude of investors in state of Goa

c) ***Objective 3:*** To examine the impacts of personality traits, attitude, values and reasons on behavioural intention in state of Goa

d) ***Objective 4:*** To study the relation between the Big Five model of personality traits and behavioural biases of individual mutual fund investors in state of Goa

e) ***Objective 5***: To study the relation between the Buying Intention and behavioural biases of individual mutual fund investors in state of Goa

Research Hypothesis

Keeping in mind the research questions, the objectives drawn up for the study and the issues at hand, the following hypotheses were framed for statistical testing of the objectives

Objective 2: To investigate how different personality traits contribute to the formation of attitude of investors in state of Goa

1. Hypothesis 2a (H2a): "Agreeableness significantly influences the Attitude of the mutual investors"
2. Hypothesis 2b (H2b): "Conscientiousness significantly influences the Attitude of the mutual investors"
3. Hypothesis 2c (H2c): "Extroversion significantly influences the Attitude of the mutual investors.
4. Hypothesis 2d (H2d): "Neuroticism significantly influences the Attitude of the mutual investors.

5. Hypothesis 2e (H2e): "Openness significantly influences the Attitude of the mutual investors.

Objective 3: To examine the impacts of personality traits, attitude, values and reasons on behavioural intention in state of Goa

1. Hypothesis 3a (H3a): "Reason against significantly influences the Attitude of the mutual investors"
2. Hypothesis 3b (H3b): "Reason for significantly influences the Attitude of the mutual investors.
3. Hypothesis 3c (H3c): "Attitude significantly influences the behavioural intention of the mutual investors.
4. Hypothesis 3d (H3d): "Personality traits of the investors significantly influence the Attitude of the mutual investors.
5. Hypothesis 3e (H3e): "Personality traits significantly influence the behavioural intention of the mutual investors.
6. Hypothesis 3f (H3f): "Power significantly influences the reason for the mutual fund"
7. Hypothesis 3g (H3g): "Power significantly influences the Attitude of the mutual investors".
8. Hypothesis 3h (H3h): "Security significantly influences the Attitude of the mutual investors".
9. Hypothesis 3i (H3i): "Security significantly influences the reason against the mutual fund investments".
10. Hypothesis 3j (H3j): "Reason for significantly influences the behavioural intention of the mutual investors".
11. Hypothesis 3k (H3k): "Reason against significantly influences the behavioural intention of the mutual investors".

Objective 4: To study the relation between the Big Five model of personality traits and behavioural biases of individual mutual fund investors in state of Goa

1. H4a: "Agreeableness trait of the investor significantly influence their behavioural Bias"
2. H4b: "Extroversion trait of the investor significantly influence their behavioural Bias"

3. H4c:" Conscientiousness trait of the personality significantly influences their behavioural Bias."
4. H4d: "Neuroticism trait of the personality significantly influences their behavioural Bias"
5. H4e: "Openness trait of the personality significantly influences their behavioural Bias"

Objective 5: To study the relation between the Buying Intention and behavioural biases of individual mutual fund investors in state of Goa

1. Hypothesis (H5a): "Disposition bias among the mutual fund investors significantly influencing their buying intention"
2. Hypothesis (H5b): "Herding bias among the mutual fund investors significantly influencing their buying intention
3. Hypothesis (H5c): "Loss aversion bias among the mutual fund investors significantly influencing their buying intention
4. Hypothesis (H5d): "Overconfidence bias among the mutual fund investors significantly influencing their buying intention

1.5. Research Methodology

The present study aims to understand the consumer behavior of mutual fund investors by exploring psychological and behavioral constructs such as personality traits, behavioral biases, values, attitudes, and investment intentions. Given the multi-dimensional nature of the study, the methodology was designed to align with each research objective in terms of the data collection instrument, sampling strategy, and analytical techniques. The following methodological elements were common across all research objectives:

1. Sample Size: Structured questionnaires were distributed to 700 mutual fund investors who were 18 years of age or older.
2. Response Rate: A total of 700 responses were received. However, after eliminating incomplete or unusable responses, 667 valid responses were retained for analysis. This results in a final response rate of 95%.
3. Final Response Rate: 95.29%

4. Study Area: The study was conducted among individual investors in mutual funds, with participants drawn from various regions across Goa, India to ensure demographic diversity.
5. Study Period: The fieldwork was carried out over a two year period, from January 2023 to December 2024, allowing for broad temporal coverage and sufficient data collection.
6. Sampling Method: A convenience sampling technique was employed to select participants based on accessibility and willingness to participate. This method was practical for approaching investors through both online platforms (email surveys) and offline methods.
7. Data Collection Instrument: Data was collected using a structured, multi-part questionnaire developed from validated scales in previous literature.

The questionnaire was divided into four sections:

1. Part A: Captured demographic information such as age, gender, education, occupation, income level, and investment experience.
2. Part B: Assessed behavioral biases (e.g., overconfidence, herding, disposition effect, and loss aversion) using 20 items on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), adapted from Baker et al. (2019) and Prosad et al. (2015)
3. Part C: Measured Big Five personality traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism) using 27 items adapted from the **NEO** Five-Factor Inventory (Costa & McCrae, 1992, 2003).
4. Part D: Focused on attitudes, investment intentions (short-term and long-term), values, and reasons for and against investing. All items were measured using a five-point Likert scale.

The structured format ensured consistency, reliability, and validity in data collection, facilitating detailed quantitative analysis. To analyze the relationships among the key constructs, Structural Equation Modeling (SEM) was performed using SmartPLS software, allowing for both measurement model validation and hypothesis testing.

The table 1.1 gives an overall view of the Tools used and parts of questionnaires used for respective objectives.

Table 1. 1 : Summary of Tools

Sr. No	Objective	Section of Questionnaire	
1	To identify distinct personality traits of investors in mutual funds in state of Goa	Part C	SEM
2	To investigate how different personality traits contribute to the formation of attitude of investors in state of Goa	Part C and D	SEM
3	To examine the impacts of personality traits, attitude, values and reasons on behavioural intention in state of Goa	Part C and D	SEM
4	To study the relation between the Big Five model of personality traits and behavioural biases of individual mutual fund investors in state of Goa	Part B and C	SEM
5	To study the relation between the Buying Intention and behavioural biases of individual mutual fund investors in state of Goa	Part B and D	SEM

Source: Compiled by author

Objective 1: To identify distinct personality traits of investors in mutual funds in state of Goa

This objective aims to classify and understand the unique personality characteristics of mutual fund investors through the Big Five personality traits model (openness, conscientiousness, extraversion, agreeableness, and neuroticism).

Data Source: Part C of the questionnaire

Tool: SEM was used to validate the factor structure of the traits and to identify dominant personality dimensions among respondents.

Objective 2: To investigate how personality traits influence investor attitudes in state of Goa

This objective explores how variations in personality traits shape the attitudes of investors toward mutual fund investments. It helps explain whether specific personality traits foster a more favorable or skeptical investment attitude.

Data Source: Part C (Personality Traits) and Part D (Attitudes)

Tool: SEM was applied to examine the causal relationship between these constructs.

Objective 3: To examine the impact of personality traits, attitudes, values, and reasons on behavioral intention in state of Goa

This objective brings together multiple constructs to evaluate their collective impact on behavioral intention that is, the intention to invest in mutual funds. It reflects a comprehensive model of investor behavior.

Data Source: Part C (Traits) and Part D (Attitude, Values, Reasons, and Intention)

Tool: SEM facilitated the testing of direct and indirect effects among the variables.

Objective 4: To explore the relationship between personality traits and behavioral biases in state of Goa

This objective aims to understand how certain personality traits correlate with or predict specific behavioral biases such as overconfidence, herd behavior, loss aversion, etc.

Data Source: Part B (Behavioral Biases) and Part C (Personality Traits)

Tool: SEM was used to investigate potential interactions and dependencies.

Objective 5: To analyze the relationship between behavioral biases and investment intentions in state of Goa.

This objective evaluates how behavioral biases affect both short-term and long-term investment intentions. It is key to understanding irrational behavior in financial decision-making.

Data Source: Part B (Biases) and Part D (Intention)

Tool: SEM helped quantify the predictive influence of biases on different types of intentions.

Justification for Using SEM

Structural Equation Modeling (SEM) was chosen as the primary analytical tool for this study due to its ability to:

1. Assess complex relationships between observed and latent variables.
2. Handle multiple dependent relationships simultaneously.
3. Validate the measurement models (construct validity and reliability) before testing the structural relationships.
4. Provide robust statistical indices such as path coefficients, R^2 values, and model fit indices that are critical for theory-driven research.

1.6. Limitations of Research

Undertaking a study of this size is bound to have few constraints which will to greater or lesser extent affect the data collected and the outcomes generated. These constraints can stem from various factors such as limited resources, time constraints, or the complexity of the research design. As a result, researchers must carefully consider these limitations and take steps to mitigate their impact on the study's findings.

1.6.1 Investor's response rate:

A significant limitation faced in the course of this research was the low and inconsistent response rate from investors. Unlike respondents in general consumer studies, investors often exhibit a heightened sense of privacy and caution, particularly when it comes to sharing information related to their financial decisions, investment patterns, or risk preferences. The nature of the questionnaire centered around personal investment behaviour, financial planning, and attitudes toward market fluctuations made many potential participants hesitant or unwilling to engage. Several expressed concerns over confidentiality, while others perceived the questionnaire as time-consuming. Moreover, investors, particularly those with higher investment portfolios or professional experience, were often constrained by time or found limited incentive to participate in academic research, further contributing to the low response rate. The challenge was not only in reaching them but also in ensuring that the responses collected were complete, honest, and reflective of their true behaviour. This was largely due to the fact that these investors were often busy professionals with multiple

responsibilities, making it difficult for them to dedicate time to participating in research studies. Additionally, their lack of incentive to participate was also a significant factor, as they may not have seen the value in contributing to academic research. To address this issue and improve participation, multiple strategies were employed. These included identifying and targeting investors who regularly attended investment seminars, workshops, or networking events; leveraging professional contacts such as financial advisors and mutual fund distributors to reach their clients; and distributing questionnaires via email with clear assurances regarding anonymity and data confidentiality. In certain cases, personal interactions were initiated where the researcher assisted respondents in completing the forms either in-person thereby minimizing the effort required on their part and increasing the likelihood of sincere responses.

Despite these efforts, the overall limitation remains relevant, as the data collected may not fully represent the broader investor population due to this self-selection bias. The findings, therefore, must be interpreted with this constraint in mind.

1.6.2 Language problem:

Another significant limitation encountered during the study was related to language and the technical nature of investment-related terminology. Although the target group included a diverse range of investors across different regions, not all respondents were equally comfortable with financial jargon or the English language, especially when it came to understanding complex terms such as "portfolio diversification," "risk-adjusted returns," "asset allocation," and "market volatility." This posed a challenge in ensuring that all participants interpreted the questions uniformly and responded accurately.

Simplifying certain constructs was not always possible, as many of these terms were essential to the core objectives of the research and central to measuring investor behaviour effectively. In some cases, even when translated into regional languages, the conceptual clarity required to understand financial concepts was lacking, which risked misinterpretation or incomplete responses.

To address this limitation, multiple strategies were adopted. These included providing explanatory notes alongside technical terms, using bilingual questionnaires where feasible, and offering assistance through financial educators or intermediaries familiar with both the subject matter and the local language. Additionally, digital translation tools like Google

Translate were cautiously used to bridge the language gap, particularly when interacting with investors from linguistically diverse backgrounds. Where possible, the responses were verified and reconverted into English to maintain consistency during analysis. Despite these efforts, the potential for misinterpretation or partial understanding of complex financial concepts remained, and thus this limitation must be considered while interpreting the results of the study.

1.6.3 Personal information Revelation:

A significant limitation encountered during the study was the reluctance of investors to share personal and financial information, particularly details relating to their age, income level, investment amount, and sources of financial advice. This hesitation was largely driven by concerns over data privacy and the potential misuse of sensitive financial information. The issue was observed across various investor categories, including high-net-worth individuals and retail investors. The perception that certain questions were intrusive or beyond the scope of a typical research exercise further contributed to the problem. As a result, some key demographic and financial profiling sections of the questionnaire were left incomplete or unanswered, which in turn affected the comprehensiveness of data analysis and limited the study's ability to draw nuanced conclusions across investor segments. The lack of complete data made it challenging to accurately represent the diverse needs and behaviors of investors, which is essential for developing effective investment strategies and policies.

Consequently, the study's findings may not be entirely representative of the broader investor population, and further research may be necessary to address these limitations. To mitigate this concern and encourage greater participation, respondents were given the option to provide their details in predefined ranges or categories, rather than exact figures. This approach allowed for a balance between maintaining confidentiality and gathering relevant data, as it enabled respondents to share information without compromising their personal details. Clear assurances were provided at the outset that all information collected would be used strictly for academic and analytical purposes and that individual identities would be kept confidential. This transparency helped to establish trust with the respondents and alleviate any concerns they may have had about data privacy. Despite these measures, the reluctance to disclose certain financial details remained a challenge, and this limitation should be considered when interpreting the findings, particularly those that rely on demographic or financial segmentation.

1.7. Chapterisation Scheme

The thesis is organized and presented in eight chapters. A brief overview is provided below:

Chapter 1: Overview of mutual fund industry

This chapter starts with a comprehensive study of the mutual fund sector in India with a special focus on Goa. It begins by explaining the significance of mutual funds in enabling small investors to access diversified, professionally managed portfolios. The historical evolution of the mutual fund industry is traced, highlighting key reforms introduced by SEBI to improve transparency and investor protection. Various types of mutual funds such as equity, debt, balanced, and tax-saving funds are detailed along with their risk profiles and investment objectives. The study then examines investor behavior using the Behavioral Reasoning Theory (BRT), emphasizing how psychological traits, personal values, and biases influence mutual fund decisions. It further explores how factors like personality, attitude, trust, and emotional impulses impact investment choices. Specific attention is given to behavioral biases such as overconfidence, herding, and loss aversion that distort rational decision-making. The research identifies several gaps, particularly in profiling individual investors and linking personality traits with buying intentions and biases.

Chapter 2: Review of Literature

This chapter offers a comprehensive theoretical foundation for understanding investor behaviour in the context of mutual fund investments. It presents a detailed content analysis of existing and relevant academic literature, focusing specifically on key areas such as personality traits, attitudes, values, behavioral biases, and decision-making patterns of mutual fund investors.. This structured approach not only helps trace the evolution of research in this field but also allows for a critical comparison of methodologies and findings. By identifying patterns, gaps, and inconsistencies in prior studies, this chapter helps in selecting the most appropriate theoretical models and analytical techniques for the current research. Ultimately, it establishes a solid framework for the study's objectives and justifies the need for an integrative model such as the Behavioral Reasoning Theory to explore the complex interplay between psychological traits and mutual fund investment intentions.

Chapter 3: Personality traits of investors in mutual funds in the state of Goa

This chapter focuses on the classification and in-depth analysis of the distinct personality characteristics of mutual fund investors, using the Big Five personality traits model as the foundational framework. The model encompasses five core dimensions openness to experience (openness), conscientiousness, extraversion, agreeableness, and neuroticism which are widely recognized in psychology as stable indicators of individual behavior. By assessing these traits, the study seeks to explore how inherent psychological dispositions influence investment preferences, decision-making styles, and risk tolerance in the context of mutual funds. Data for this objective was gathered through Part C of the structured questionnaire, which included 27 validated items adapted from the NEO Five-Factor Inventory. These items captured the extent to which each respondent exhibited characteristics related to the five personality dimensions. To ensure the reliability and validity of the trait measurements, Structural Equation Modeling (SEM) was employed. SEM helped confirm the underlying factor structure and assess the strength and significance of each personality trait within the dataset. This analysis not only revealed the dominant personality traits among mutual fund investors in Goa but also provided a crucial foundation for understanding how these traits interact with other behavioral variables explored in the study.

Chapter 4: Personality traits and investor attitudes in the state of Goa

This chapter focuses on exploring how variations in personality traits influence investor attitudes toward mutual fund investments. It delves into the psychological underpinnings of investment behavior by examining whether specific personality characteristics namely openness, conscientiousness, extraversion, agreeableness, and neuroticism are associated with positive or negative perceptions of mutual funds. For example, individuals high in conscientiousness may approach mutual funds with discipline and long-term planning, fostering favorable attitudes, while those high in neuroticism may exhibit anxiety-driven skepticism. By establishing these connections, the study aims to better understand how stable personality dimensions shape evaluative judgments about financial products. The data used for this analysis was sourced from Part C and Part D of the questionnaire, which measured both personality traits and investor attitudes. To assess the strength and nature of these relationships, Structural Equation Modeling (SEM) was employed. SEM provided a sophisticated analytical framework to examine causal linkages and validate the hypothesized

model. The insights derived from this objective contribute to building investor profiles, enabling mutual fund companies and financial advisors to tailor strategies that align with the psychological tendencies of different investor segments.

Chapter 5: Integrative Analysis of Psychological Constructs Influencing Mutual Fund Investment Intentions in the state of Goa

This chapter focuses on integrating multiple psychological and behavioral constructs to evaluate their combined influence on investors' behavioral intention to invest in mutual funds. This objective adopts a holistic approach by examining how personality traits, attitudes, personal values, and cognitive reasoning both in favor of and against investing interact to shape an individual's intention to invest. Rather than studying each factor in isolation, the objective reflects a comprehensive behavioral model that captures the complexity of real-world investment decision-making. Personality traits provide the foundational disposition of the investor, while attitudes represent their evaluative stance toward mutual funds. Values reflect long-term guiding principles such as security or financial independence, and reasons serve as context-specific justifications that mediate the relationship between values and intention. Data for this objective was drawn from Part C and Part D of the structured questionnaire, encompassing these interconnected constructs. To test the strength and direction of both direct and indirect effects among variables, Structural Equation Modeling (SEM) was employed. SEM enabled the modeling of complex relationships and allowed for the identification of key pathways that significantly influence investment intention. The insights gained from this analysis offer a nuanced understanding of how different psychological and motivational factors converge to influence mutual fund investment decisions, thus supporting the development of more targeted investor engagement strategies.

Chapter 6: Assessment of relationship of personality traits and the behavioral biases in the state of Goa

This chapter focuses on examining how specific personality traits are linked to or predictive of particular behavioral biases commonly observed among mutual fund investors. The objective is to explore whether stable psychological characteristics such as openness,

conscientiousness, extraversion, agreeableness, and neuroticism can help explain why some investors are more susceptible to biases like overconfidence, herd behavior, loss aversion, or the disposition effect. For instance, extroverted individuals may be more prone to overconfidence due to their social assertiveness, while highly agreeable investors might exhibit herding tendencies to align with group consensus. By identifying these relationships, the study seeks to uncover the deeper psychological roots of irrational financial behavior and provide a more personalized understanding of investor conduct. Data for this analysis was collected through Part B and Part C of the structured questionnaire, which measured behavioral biases and personality traits, respectively. To assess the strength and nature of these associations, Structural Equation Modeling (SEM) was employed. SEM facilitated the exploration of interaction patterns and dependencies between personality dimensions and bias tendencies. The findings from this objective offer valuable insights for mutual fund advisors and financial educators in designing targeted interventions, risk assessments, and educational programs that account for the psychological profiles of investors ultimately helping reduce bias-driven decision-making and improve financial outcomes.

Chapter 7: Assessment of relationship of Buying Intention and behavioral biases in the state of Goa.

This chapter examines the impact of specific behavioral biases on the purchasing intentions of mutual fund investors in the context. The objective of this study was to investigate whether common psychological distortions, such as the disposition effect, herding behavior, loss aversion, and overconfidence, significantly predict investors' willingness to purchase mutual funds. For example, investors exhibiting herding bias may base their buying decisions on market trends or peer influence, whereas those with overconfidence bias may display stronger investment intentions due to an inflated self-perception of their financial knowledge. Conversely, biases such as loss aversion and the disposition effect may either dampen or fail to influence buying intentions at the pre-investment stage. Data for this analysis were collected through two sections of a structured questionnaire: Part B, which measured bias tendencies, and Part D, which assessed short- and long-term buying intentions. To test these relationships, structural equation modeling (SEM) using SmartPLS was employed, enabling the simultaneous evaluation of multiple hypothesized paths. The findings highlight which biases have the strongest positive influence on buying intention and which remain insignificant, providing critical insights for fund managers, advisors, and policymakers. Understanding these associations contributes to behavioral finance by demonstrating how

pre-investment decisions are shaped more by confidence and collective validation than by fear of losses or reluctance to sell, guiding the design of more effective investor education and advisory strategies.

Chapter 8: Findings, Conclusion and Suggestions for Further Research

This chapter serves as a comprehensive summary of the entire work, encompassing the findings of individual objectives and a conclusion for the framed objectives. It is followed by potential suggestions for individual objectives, including: Academic contribution and Managerial implications these chapters offer actionable insights that are highly valuable for mutual fund companies, financial advisors, and policymakers seeking to promote more rational and sustainable investment behavior among individual investors. By identifying distinct personality traits that influence investment attitudes and decisions, mutual fund companies can develop investor profiling tools that tailor products and services to specific psychological preferences and risk appetites. Financial advisors can utilize these insights to move beyond generic recommendations and instead provide personalized guidance based on an investor's behavioral tendencies, such as risk aversion or susceptibility to biases like overconfidence or herding. Furthermore, the recognition of how attitudes, values, and reasoning processes jointly influence behavioral intention enables the creation of educational tools that address the emotional and cognitive dimensions of investing, moving beyond financial literacy. Policymakers can also leverage this understanding to craft regulatory guidelines and public awareness campaigns that mitigate the effects of behavioral biases and promote informed decision-making. For instance, by incorporating behavioral nudges in policy design such as default investment options or clearer risk disclosures regulators can help protect investors from impulsive or emotionally driven actions. Overall, these insights encourage a shift toward a more holistic, investor-centric ecosystem that empowers individuals to make confident, well-reasoned, and goal-aligned investment choices in the mutual fund domain.

CHAPTER2
REVIEW OF LITERATURE

2.1 Introduction

A literature review is vital to a thesis for reasons that are significant. It primarily helps take cognizance of the subject at hand and pick on the weaknesses in the existing research on the same, thereby enabling related research questions and methodologies to be precise and refined. Secondly, literature review provides a scaffolding where research builds on the existing subject related frameworks and empirical findings, as a result allowing for new and original insights while still founded on entrenched concepts. Further it has the advantage of the macro vision of varied perspectives and methodologies gained through the wide review of diverse studies, as in this case the investor behaviour in the mutual fund industry.

This literature overview aims to look at personality traits of investors in mutual funds and their influence on investor behavior through a combination of exploring and integrating related research. An understanding of these features including attitudes, values, as affecting intentions and biases, in developing an efficient, encompassing model is necessitated by their influence on mutual fund investments. This study thus aims to look into the features that will help target the objectives affecting, such as identifying the precise traits of mutual fund investors and how these traits affect investor attitudes; examining how behavioural intention is impacted by personality traits, attitudes, values, and reasons. It looks to see the relation between an Indian mutual fund investor and the Big Five personality traits, his behavioural biases, and buying intentions.

The literature review here adapts an approach of exploring and analysing scholarly articles, books, and reports related to our research objectives, including academic database searches to identify relevant studies. Critical evaluation of the selections helped to reach key findings, relevant theoretical perspectives and methodological approaches. To do so the

process was taken up of following features in the literature such as personality traits, investor attitudes, behavioral intentions, and biases. This in turn helped give a structure and synthesis to the available subject material and help lay a firm base to the research being undertaken.

Brief Overview of the Research Topic

The human behaviour of mutual fund investors has a significant influence on market dynamics and investment outcomes, making its comprehension crucial for financial advisors and fund managers. The study here therefore requires a fusion of interdisciplinary inputs from the fields of Psychology, Economics and Finance, resulting in a currently accepted theory of Behavioural Finance. It gives a go-by to traditional theories that worked on the premise of rational investors and efficient markets,

This research is taken up primarily to study the impact of distinct personality traits on decision making per se, and in turn the impact on investment decisions. Personality traits are permanent characteristics that impact human behaviour across varied situations. The Big Five personality traits model consisting of Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism, provide a reliable framework for analysing personality traits in the present research study as well. This is seen through examples like investor willingness to explore new and unconventional investment opportunities when high on Openness; investor willingness for more structured and well- researched investments when high on Conscientiousness.

This research also looks to investigating personality traits as contributing factors towards the forming of investor attitudes including intentions and actions, as also the individual‘s positive or negative evaluation of a particular behaviour. An understanding of the link between the traits and attitudes will enable the study in this research, to uncover the underlying mechanisms that drive investment behaviour.

In addition to investor attitudes, values and reasons for investing are also considered in this research as impacting investment decisions, based on

what the investor finds important in life. Hence, there can be examples of investors who prioritize security and stability going in for low-risk investments, while those who value growth and achievement preferring to take risks. Other reasons such as financial goals, retirement planning, or speculative motives, can also make investor behaviour more complex.

The research study also examines how personality traits and behavioural biases like overconfidence; herding, loss aversion, anchoring, and mental accounting affect the Indian individual mutual fund investor leading to the risk of suboptimal investment decisions. The study aims to provide insight into the cognitive processes influencing investor behaviour through an analysis of how different personality traits correlate with behavioural biases.

The research also explores the relationship between short- term and long-term buying intentions and behavioural biases in a final stage. Short-term buying intentions mostly come under the heavy influence of market trends and psychological factors, reflecting speculative motives, whereas long-term buying intentions are typically driven by financial goals and stability. An understanding of behavioural biases impacting the differing intentions can be crucial to designing effective financial products and advising strategies.

To summarize, the aim of this research study is to provide an extensive understanding of the complex relationship between personality traits, attitudes, values, reasons, and behavioural biases in shaping the behaviour of mutual fund investors. The focus being on the specific context of Indian individual investors, the study looks at providing insights into the field of behavioural finance and present better investment practices and policies.

2.2 Personality traits and investment behaviour

A major role is played by personality traits as to how a person behaves in varying situations which include financial decision-making and investment behaviour. An interdisciplinary field known as behavioural finance fuses insights from psychology, economics, and finance, in studying personality traits in the context of investment behaviour. Behavioural finance highlights the influence of psychological factors and behavioral biases on investment decisions and thus challenges the traditional financial theories that assume investors are entirely rational and markets are perfectly efficient. (Lubis et al., 2015).

An analysis of personality traits influencing investment behaviour takes help from the framework of the Big Five personality traits namely openness, conscientiousness, extraversion, agreeableness, and neuroticism, based on which are examples such as the likelihood of persons high in conscientiousness preferring structured and well-researched investments. The optimism that fuels excitement in extraverts makes them take risk laden investment choices; in contrast to neurotic individuals with probable emotional instability and anxiety, who exhibit risk-averse behaviour and preferring safer investments (Ahmad & Maochun, 2019; Oehler et al., 2017).

Personality traits are a contributing factor in forming investors' attitudes and behavioural intentions. How an individual evaluates a particular behaviour, whether positively or negatively reflects their attitude which have a significant influence on investment decisions. As when high conscientiousness in a person will make investment decisions based on diligence and caution which has an impact on their overall strategy and choices. The decision-making process for investments is further coloured by values and reasons for investing, such as financial goals, retirement planning, or speculative motives. (Lubis et al., 2015).

There are studies that show how personality traits can predict susceptibility to behavioural biases like overconfidence, herding, loss aversion, anchoring, and mental accounting. Examples show that individuals high on

traits like extroversion, openness, and agreeableness are less likely to exhibit behavioural biases of overconfidence and herding, pointing to a negative correlation between the mentioned traits and behavioural biases. In contrast, conscientiousness as a trait is positively correlated with both biases mentioned just before, such that overconfidence and herding would probably be prominent in highly organized and meticulous individuals. (Yadav & Narayanan, 2021).

It is beneficial for fund managers and financial advisors to have an understanding of how personality traits and investment behaviour are interrelated, enabling them to tailor their advice. Thus, there is the potential to improve investment outcomes by reducing the impact of behavioral biases. Financial advisors can make personalized assessments and effective investment strategies that are in sync with the inherent psychological predispositions of their clients (Lai, 2019).

To summarize, an insight into the cognitive processes that influence investor behaviour comes from studying how personality traits are impactful in as much as they shape attitudes, values, behavioral intentions, and susceptibility to biases. A healthy understanding of how psychological factors and financial decision-making are interconnected is essential for coming up with informed and effective investment practices by financial practitioners.

2.2.1 Significance of incorporating psychological factors into financial models

It is seen that traditional financial models tend to fail in understanding and predicting investor behaviour. In such circumstances, incorporating psychological factors into financial models becomes important. Behavioural finance, by combining insights from psychology, economics, and finance, is an interdisciplinary field, challenges the assumption that traditional financial theories are generally rational. It shows how suboptimal investment outcomes can result from investors' decisions being influenced by psychological factors and behavioural biases(Lubis et al., 2015).

Psychological factors are integrated into financial models to explain the reason for behavioural biases such as overconfidence, herding, loss aversion, anchoring, and mental accounting impacting investment decisions by distorting investors' perceptions and actions. For instance, overestimating their ability to predict market movements by overconfident investors may lead to excessive trading and higher transaction costs. Herding behavior, where investors follow the majority, can result in market bubbles and crashes. Assimilating these biases into financial models is advantageous to analysts in predicting market anomalies and investor behavior and thus making financial forecasts more robust and accurate (Yadav & Narayanan, 2021).

The personality traits as outlined by the Big Five model— openness, conscientiousness, extraversion, agreeableness, and neuroticism—are crucial in shaping investment behavior, as when individuals high in conscientiousness being typically more diligent and risk-averse, prefer well-researched investments; whereas those high in openness may seek out innovative and higher-risk investment opportunities. An understanding of these traits allows financial advisors to tailor their advice and strategies to align with the psychological profiles of their clients, leading to better investment outcomes and increased client satisfaction (Ahmad & Maochun, 2019).

Risk tolerance which is crucial to investment decision- making is influenced by psychological factors. Financial models are better at understanding an investor's risk tolerance. when they incorporate personality assessments. An example of neurotic individuals, being more prone to anxiety and emotional instability, with lower risk tolerance, preferring safer investments, contrasts with extroverted and open individuals having higher risk tolerance, going in for more aggressive investment strategies. Integrating these insights into financial models, can help advisors develop more personalized investment plans aligned to clients' risk preferences and psychological profiles (Oehler et al., 2017; Brooks & Williams, 2021).

Moreover, psychological factors included in financial models help understand how investors' attitudes and behavioral intentions are formed. A factor like attitude which represents an individual's positive or negative evaluation of a particular behavior, can have a significant influence on investment decisions. For example, a conscientious investor with a cautious attitude towards investments can influence investment strategy. The investment decision-making process can be impacted further by values and reasons for investing, such as financial goals, retirement planning, or speculative motives. Financial models are better equipped to give a comprehensive view of investor behavior by incorporating these psychological In addition; psychological factors such as financial self-efficacy and resilience can slacken the impact of market volatility dimensions (Lubis et al., 2015) on investor behaviour. Dynamic traits such as high financial self- worth and resilience in investors equip them to engage in calculated risk-taking and better handle market downturns. They influence financial decision-making, and making them a part of financial models will yield more effective investment strategies and better risk management practices (Mukhtar Jan & Zahoor, 2023).

In summary, a holistic understanding of investor behaviour rests on incorporating psychological factors into financial models. Doing so will enable predicting behavioral biases, aligning investment strategies with individual risk profiles, and developing personalized financial advice. The outcome of such integration is robust and accurate financial models, which enable improved investment outcomes and client satisfaction.

2.2.2 Big Five Personality Traits and their role

The Big Five Personality Traits, also known as the Five Factor Model (FFM), refer to a framework for understanding human personality that is well recognised in psychology. This model outlines five broad dimensions or traits of personality enclosing a wide range of human behaviours. These traits are Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Each trait represents a spectrum, with individuals falling somewhere along the

continuum for each trait.

1. **Openness to Experience/Change (Openness)**

   Openness describes how far an individual can go to accept new experiences, ideas, and creative pursuits. People high in openness tend to be imaginative, curious, and open-minded, with a likelihood of embracing new, unconventional ideas, appreciating art and exploring new cultures and environments. In the context of investment behavior, individuals high in openness may be more willing to explore new and unconventional investment opportunities, displaying a higher tolerance for risk and innovation (Ahmad & Maochun, 2019).

2. **Conscientiousness**

   Conscientiousness refers to the extent to which an individual is organized, dependable and disciplined, with highly conscientious people typically being diligent, well-organized, and responsible. They are goal-oriented, with high self-standards. Their investment decisions follow a cautious and well researched approach and prefer structured and methodical investment approaches. They carefully consider their options before committing (Lubis et al., 2015).

3. **Extraversion**

   Extraversion measures the extent to which an individual is outgoing, energetic, and sociable. Extraverts are typically enthusiastic, assertive, socially interactive and are often perceived as friendly and confident. In the financial context, their optimism and excitement-seeking nature makes extraverts show an inclination towards engaging in riskier investments. They are also more likely to be influenced by social factors and trends in the market (Oehler et al., 2017).

4. **Agreeableness**

   Agreeableness is a trait outlining how an individual has the inclination to be compassionate, cooperative, and trusting, even empathetic, kind and supportive, where they can compromise for the sake of others and to maintain harmonious relations. In investment behavior, agreeableness can influence the extent to which an individual relies on advice from

others. Agreeable investors may lend an ear to financial advisors or peers and may resist aggressive or high-risk investment strategies that can support positive relationships (Yadav & Narayanan, 2021).

5. **Neuroticism**

   Neuroticism alludes to an individual‘s proclivity for experiencing negative emotions such as anxiety, depression, and emotional instability, including a higher tendency to be stressed, worried, insecure and perceiving threats and challenges. The investment behaviour of a neurotic individual tends to be risk- averse where they opt for safer investments that offer stability and security, where their decisions are influenced by a desire to avoid potential losses and reduce uncertainty (Oehler et al., 2017).

It can be summed up that the Big Five personality traits provide insights into how different individuals approach investment decisions and hence are critical in the field of financial behaviour. Based on these traits, financial advisors are better equipped to offer personalised advice, align investment strategies with the psychological profiles of clients, thereby amplifying satisfaction and investment outcomes.

2.2.3 Association between personality traits and investment beliefs

A good grasp of the association between specific personality traits and investment beliefs, as well as portfolio holdings, is critical in behavioral finance. It benefits financial advisors in providing personalized investment strategies that match up to individual investor profiles. The Big Five personality traits — Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism— distinctly impact investment beliefs and portfolio choices, by influencing an individual's approach to risk, asset allocation, and decision-making process.

Openness has the quality of preferring novelty, creativity, and variety, where an investor high on this trait is likely to hold diverse and unconventional portfolios while exploring emerging markets and innovative financial products. For them crypt currencies or socially responsible funds are also potential

investment avenues given their higher risk tolerance. There are studies to show that these investors exhibit a willingness to invest in assets that may be unfamiliar to others, driven by their curiosity and enthusiasm to experiment (Ahmad & Maochun, 2019).

Conscientious individuals displaying traits of being diligent, organised, and responsible, prefer well-researched and structured investments, prioritizing reliability and steady growth over quick gains. and hence they favour traditional, stable assets such as blue-chip stocks, bonds, and index funds. Conscientious investors by their meticulous research, thorough analysis and long-term planning, as well as their disciplined saving and investing behaviors, tend to have a balanced and methodical investment portfolio (Lubis et al., 2015).

Extraverted individuals are risk takers, given that they are optimistic and display a positive outlook. Their tendency to be influenced by social interactions and trends has them often participating in investment discussions and following popular market movements. Their assertive and excitement-seeking nature may make them prefer high-risk, high-reward investments such as stocks, venture capital, and real estate. Their portfolios may reflect a more dynamic and aggressive strategy, with frequent adjustments based on market sentiment and peer influence (Oehler et al., 2017).

Agreeable individuals displaying traits of being cooperative, compassionate, and valuing harmonious relationships, tend to rely heavily on advice from financial advisors and trusted peers. A desire to avoid conflict and seek consensus influences their investment beliefs, making them prefer conservative portfolios that prioritize safety and steady returns, steering away from high-risk investments with the prospect of heavy losses and stress. They may also include responsible investments in their portfolios, aligning their financial choices with their ethical values and concern for societal impact (Yadav & Narayanan, 2021).

Neuroticism is linked with emotional instability, anxiety, and a tendency to experience negative emotions. Investors displaying this trait prefer low-risk investments such as savings accounts, fixed deposits, and government bonds.

The fear of loss along with a desire for financial security makes them hold portfolios where capital preservation overrides growth by avoiding volatile assets that could aggravate their anxiety. The result of this conservative approach where perceived financial threats are curtailed, is lower overall returns combined with peace of mind (Oehler et al., 2017).

Behavioral biases significantly influence investment beliefs and portfolio holdings. For instance, overconfidence, which is associated with extraversion, can induce frequent trading, even magnify an investor‘s market knowledge leading to potential suboptimal investment outcomes. But again, conscientiousness in an investor makes up for meticulous and exhaustive investment related decisions as it is linked to lower susceptibility to biases such as overconfidence and herding (Yadav & Narayanan, 2021).

Neuroticism is linked with biases in an investor to a dislike for loss and mental accounting, with the focus is on avoiding losses more than on attaining gains, which results in a conservative portfolio unable to provide for long-term financial goals. Agreeable individuals with traits of being harmonious and receptive to others' opinions, are also susceptible to herding behavior which may result in going along with popular investment trends bereft of independent analysis (Oehler et al., 2017).

The Big Five personality traits have a significant influence on investment beliefs and portfolio holdings. An understanding of these traits enables financial advisors customizes their advice so that it is compatible with the psychological profiles of their clients. This will improve investment outcomes and client satisfaction. Investment experiences can be effective and fulfilling when individualized financial strategies take into account personality traits and associated behavioral biases.

2.2.4 Nuanced models integrating personality traits and investment behaviour

It is crucial for financial models to integrate psychological factors by which to understand investment behaviour while functioning with a subtle complexity, as compared to traditional models which function plainly on unrealistic assumptions of rational investors and efficient markets. Real-world scenarios

are often contrary to these assumptions due to psychological influences and behavioural biases and hence integrating elements like personality traits, emotional states and cognitive biases allows for financial models to catch the complexities of investor behavior.

The impact of individual differences on decision-making processes can be analysed better when investment models are integrated with psychological factors. As an instance, it is seen that investment preferences and risk tolerance are moulded by traits like openness, conscientiousness, extraversion, agreeableness, and neuroticism. When financial advisors recognise this, they are in a position to present effective and personalised advice to investor clients as suiting their psychological profiles. In addition, it is possible to develop intervention to reduce biases such as overconfidence and loss aversion, through an understanding of how personality traits correlate with these behavioral biases. Eventually, models that are fine-tuned to incorporate psychological factors as compared to the traditional ones, are in a better position to predict and enhance investment outcomes due to their holistic and accurate approach and thus contribute to better risk management and increased investor satisfaction.

2.2.5 Research Gap

1. Integration of Personality Traits into Financial Behavior Research

Personality traits have been widely recognized as significant predictors of human behavior across psychology, management, and organizational studies. The Big Five personality traits, which comprise openness, conscientiousness, extraversion, agreeableness, and neuroticism, are considered a robust framework for understanding the complex nature of human personality (Costa & McCrae, 1992). Research in behavioral finance has shown that these traits have a meaningful impact on investment attitudes, susceptibility to biases, and financial decision-making outcomes (Lubis et al., 2015; Ahmad & Maochun, 2019; Oehler et al., 2017). For instance, individuals high in conscientiousness tend to

adopt methodical investment approaches, preferring structured and well-researched strategies. In contrast, extraverts often exhibit optimism and are more inclined toward risk-taking, whereas individuals high in neuroticism tend to be risk-averse due to heightened anxiety and emotional instability.

The integration of personality into financial behavior research is currently restricted and lacks cohesion. The majority of studies treat the Big Five traits as distinct constructs, examining their individual relationships with financial outcomes (Yadav & Narayanan, 2021). This reductionist approach fails to account for the interdependent and collective nature of personality, where multiple traits simultaneously influence decision outcomes. For example, an investor exhibiting both conscientious and extraverted traits may display seemingly contradictory tendencies of caution and risk-seeking, an interplay that cannot be fully understood when traits are examined in isolation

A limitation of current research in behavioral finance is the lack of application of a second-order construct framework, where the Big Five personality traits are represented as higher-order latent variables. This approach enables researchers to investigate the relative impact and direction of each trait (e.g., the positive influence of conscientiousness and openness versus the negative influence of neuroticism) while assessing the overall effect of personality on investor behavior. Although advanced techniques such as structural equation modeling (SEM) provide the tools to validate such models (Hair et al., 2019), few studies in behavioral finance adopt this higher-order perspective. This gap hinders the development of a comprehensive theoretical model that integrates personality traits as a unified construct influencing investment attitudes, behavioral biases, and ultimately, buying intentions in financial decision-making.

2. Contextual Limitations: Predominance of Western-Centric Research

A significant knowledge gap exists in the contextual application of existing research on the Big Five and financial decision-making. Much of

the empirical evidence on this topic originates from Western economies, where investment behavior occurs within environments marked by high levels of financial literacy, well-developed regulatory frameworks, and mature capital markets (Brooks & Williams, 2021; Oehler et al., 2017). In these contexts, investors have greater access to transparent information and structured financial advisory systems, which enables personality traits to manifest within relatively stable market conditions.

In contrast to more developed economies, emerging markets such as India exhibit a distinct investment environment. Investor behavior in these countries is influenced by varying levels of financial literacy, reliance on informal sources of advice, cultural and familial values, and tax-saving motivations. For example, extraversion in a Western context may lead to speculative individual risk-taking, whereas in India, the same trait might manifest as herding behavior, where individuals follow peer networks or community norms. Furthermore, neuroticism may interact more strongly with contextual uncertainties, thereby amplifying risk aversion in less-regulated or volatile markets.

The predictive role of personality traits in influencing biases such as overconfidence, herding, and loss aversion has been highlighted in the behavioral finance literature, with studies by Yadav and Narayanan (2021) and Lubis et al. (2015) providing evidence in this area. However, the majority of these studies have been conducted in Western contexts, thereby limiting the generalizability of the existing theories. Given the growing number of retail investors in India, the country‘s distinct socio-cultural environment, and the increasing importance of mutual funds as investment vehicles, there is a pressing need to investigate how personality traits interact with behavioral biases in this specific setting. Addressing this contextual gap would not only validate the universality of existing models but also reveal culture-specific dynamics that may contribute to a more comprehensive understanding of global behavioral finance theory.

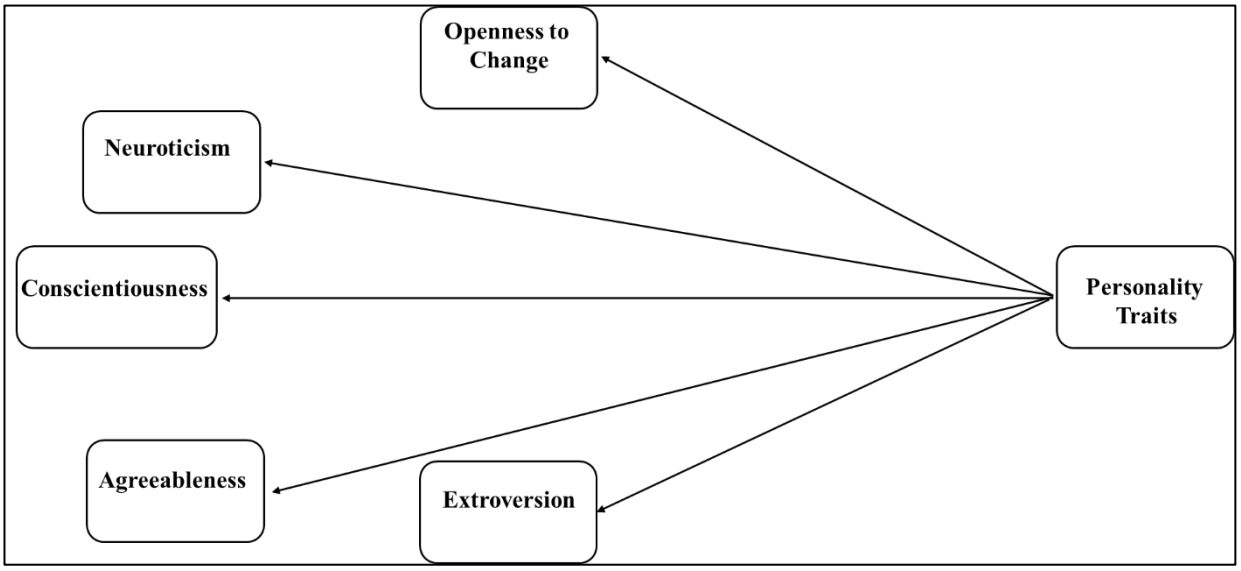
2.2.6 Research Questions

Based on these identified gaps, the present study seeks to address the following research questions:

RQ1: How can the Big Five personality traits be modeled as a second-order construct to capture their collective influence on investor behavior in the context of mutual fund investments?

2.2.7 Proposed Conceptual Model

Figure 2.1: Proposed Model for Personality



2.3 Impact of Personality on Investors' Attitudes

To understand how personality has an impact on investors' attitudes is essential in grasping the complex dynamics of financial decision-making. Personality traits, like risk tolerance, optimism and conscientiousness, have an influence on how individuals perceive and react to investment opportunities. Investors' personality profiles shape their attitudes towards risk, how they decide and how they strategise over making their investments. It is seen when conservative investments are preferred by risk-averse individuals while risk-takers might be inclined towards high-reward opportunities. Furthermore, personality impacts the psychological factors like confidence and reaction to market volatility, which drive market behaviour. By exploring these connections, valuable insights are available to customize financial advice with the result that personalised investment strategies are evolved to enhance financial outcomes for differing investor profiles.

2.3.1 Importance of this objective

An understanding of the influence of personality traits on investment decisions is important for several reasons. Firstly an individual's risk tolerance and decision-making processes are structured by personality traits such as extraversion, conscientiousness, openness , agreeableness, and neuroticism, which also determine the investor‘s inclination towards conservative or high-risk investments. Extraverted individuals displaying higher confidence and risk-taking disposition in contrast to conscientious individuals preferring well-planned, lower-risk investments can be cited by way of example. By recognizing these inherent tendencies financial advisors are better placed to understand and predict investor behaviour, resulting in investment advice which aligns with the investor's natural inclinations and comfort levels.

Secondly, the impact of personality on investment decisions is wide enough to affect overall market behaviour, going beyond individual

preferences. The personality-driven decisions of investors collectively can influence market trends and volatility. An example would be of a market dominated by risk-averse investors experiencing lower volatility compared to one with a higher proportion of risk-takers. Analysts and policymakers, who successfully grasp the predominant personality traits of investors in a market, are better suited to anticipate market movements and potential reactions to economic events. Such knowledge comes in handy for developing market stabilizing strategies, managing risks, and promoting sustainable growth.

Lastly, personalized and effective investment strategies can be a positive outcome when personality assessments are incorporated into financial advising. Such advice synced with the investor‘s personality traits makes them feel understood and supported in their financial journey, thereby enhancing their satisfaction and trust. A personalized approach between investors and advisors thus has the advantages of helping to achieve better financial outcomes and to build long-term relationships. At the macro level, the effect is that an understanding of how personality influences investment decisions can contribute to the development of educational programs and tools aimed at improving financial literacy and decision-making skills. Such an effort could ultimately nurture an investor base that is knowledgeable and quick to bounce back.

2.3.2 Theoretical framework from literature

There are various theoretical frameworks that cover mixed psychological and behavioural finance theories which have been used in previous studies to understand how personality traits impact investors' attitudes. They provide a structured approach for analysing the influence of intrinsic personality traits on financial decision-making processes.

A framework frequently employed is the ―Big-Five Personality Traits model‖ used in studies like those conducted by Kaur and Goel (2022) and Ahmad (2020).This model which broadly categorizes personality into five broad dimensions of extraversion, agreeableness, conscientiousness, neuroticism, and openness, has been utilized to explore how these traits

correlate with risk attitudes and cognitive biases in investment decisions. As a result, extraversion is found to relate to higher risk tolerance and a tendency for overconfidence, while neuroticism is often associated with risk aversion and proneness to herding behaviour.

Another widely used framework is the ―Theory of Planned Behavior (TPB)‖, which examines how attitudes, subjective norms, and perceived behavioural control influence intentions and behaviours of individuals. The study by Rajasekar et al. (2023) integrates TPB to analyse the shaping of investment attitudes and strategies by a combination of personality traits, risk capacity and investment priority. This framework helps in understanding how to strengthen the psychological base affecting investment behaviors and how the effects of personality traits can be abated by external factors like social influence and perceived control.

The ―Prospect Theory‖, introduced by Kahneman and Tversky (1979), is another significant model in behavioural finance. This theory suggests that behaviours like loss aversion and risk-seeking in losses is an outcome of individuals relatively evaluating potential losses and gains to a reference point rather than to absolute outcomes. The study by De Bortoli et al. (2019) integrates Prospect Theory to highlight how personality traits influence deviations from expected utility theory, to demonstrate how individuals high in traits like openness are more willing to engage in risk-seeking behaviour even when confronted with potential losses.

The ―Cognitive Reflection Test (CRT)‖, used in the study by Frederick (2005), measures an individual's ability to set aside intuitive responses and engage in reflective thinking. This test when employed to inquire into the relationship between cognitive ability and risk tolerance, has revealed generally a direct relationship between higher cognitive abilities and more cautious investment choices.

Furthermore, the ―Investor Profile Analysis (IPA)‖ framework, that financial institutions frequently use, is evaluated in studies like those by De Bortoli et al. (2019) to assess its effectiveness in predicting actual investment behaviour based on personality traits. This framework helps bring about an alignment between investment strategies and psychological

profiles of individual investors.

These theoretical frameworks taken together emphasize that investment decision-making has a multi-faceted nature. When psychological theories and behaviorual finance models are integrated, researchers are able to provide a more comprehensive understanding of the influence of investors' personality traits on financial behaviours. This can guide in forming more effective, personalised financial advice and strategies.

2.3.3 Baseline Personality Traits Commonly Associated with Investors

1. **Openness to Experience / Change**

   Investors high in openness show an inclination towards engaging in innovative and potentially risky investments. Their curiosity makes them willing to explore new opportunities due to which they also have an inclination towards novel investment strategies. Studies, such as those by Ahmad (2020), Kaur and Goel (2022), and Mathur and Nathani (2019), have shown that these investors are likely to take risks, correlating openness with a higher risk tolerance.

2. **Emotional Stability (Neuroticism)**

   Emotional stability, which involves a lack of neuroticism, lowers the chances of making investment decisions that are impulsive or emotionally driven. Research by Ahmad (2020), Jiang, Peng, and Yan (2024), and Kamath et al. (2023) indicates that emotionally stable investors, being less disposed to anxiety and stress, can handle market volatility better, whereas neurotic individuals tend to avoid risky investments and are more prone to herding behaviour.

3. **Conscientiousness**

   Conscientious investors tend to be disciplined and display qualities of being methodical, responsible and diligent in their investment approach, preferring well-researched, stable, and low- risk investments. Kaur and Goel (2022), Ahmad (2020), and Ozer and Mutlu (2019) found that conscientious individuals steer away from speculative investments, focusing on long-term financial planning, with prudent financial behavior that involves careful

planning and saving.

4. **Agreeableness**

Investors with the trait of agreeableness are cooperative, trustful, and empathetic. This trait enables collaborative investment decisions and relationship-building with financial advisors; however, it can also lead to conformity and herding behaviour. Studies like those by Nair, Prabhu, and Garad (2023), Ahmad (2020), and Rajagopalan and Gurusamy (2015) highlight that agreeable individuals are influenced by social norms and tend to follow market trends.

5. **Extraversion**

The presence of a sociable nature and high confidence in extraverted individuals makes them engage in high-risk investments. They are proactive in seeking investment opportunities and prepared to take risks to achieve higher returns. Ahmad (2020), Kaur and Goel (2022), and Kamath et al. (2023) noted that extraverted investors often exhibit overconfidence and a propensity for herding behaviour, significantly impacting their investment strategies.

2.3.4 Importance of Understanding Personality Traits

An understanding of baseline personality traits is necessary for several reasons. Firstly, it helps predict investors‘ reaction to market opportunities and risks, enabling financial advisors to adjust the advice they offer, to investors' natural inclinations and comfort levels. Secondly, it provides insights into overall market behaviour, since collective personality-driven decisions of investors can have an influence on market trends and volatility. Anticipating these movements helps analysts and policymakers develop strategies by which to stabilize markets and manage risks effectively.

When personality assessments are incorporated into financial advising, the result is more personalized and effective investment strategies. Personalised financial advice based on an investor's personality traits can enhance satisfaction and trust, helping build long-term relationships between investors and financial advisors. Furthermore, understanding these influences can go a

long way in making it possible to develop educational programs and tools aimed at improving financial literacy and decision-making skills, which will ultimately foster an investor base that is knowledgeable and resilient.

2.3.5 Positive Association Between Big-Five Personality Traits and Investment Strategy

Research on the Big-Five personality traits—openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism—has revealed significantly how investment strategies and behaviours are correlated. Here, we try to understand how these traits influence investment decisions and strategies by taking a look at the findings from multiple studies.

1. **Openness to Experience (Openness)**

   A high degree of openness in investors makes them generally more willing to be involved in innovative and potentially risky investments. These individuals display curiosity and willingness which qualities allow them to explore new opportunities, and align with novel investment strategies. For instance, the study by Kaur and Goel (2022) found that openness was significantly associated with a higher risk tolerance, as these investors are more inclined to venture into uncharted financial territories. Similarly, Ahmad (2020) highlighted that individuals high in openness tend to have a higher propensity for risk, which drives them towards more dynamic and diversified investment portfolios. Mathur and Nathani (2019) further supported this by showing that openness correlates positively with a willingness to invest in new and emerging markets.

2. **Conscientiousness**

   Investors displaying conscientiousness have an investment approach that is typically methodical, responsible, and diligent. This trait leads them to prefer well-researched, stable, and low- risk investments. Kaur and Goel (2022) found that conscientiousness is positively correlated with prudent financial behavior, such as careful planning and long-term investment strategies. Ahmad (2020) also noted that conscientious individuals tend to avoid speculative investments, focusing instead on thorough research and due diligence before making investment decisions. Ozer and Mutlu (2019)

reinforced this finding by demonstrating that conscientious investors exhibit better financial behaviors, including saving and detailed financial planning, which align with long-term investment goals.

3. **Extraversion**

Extraverted individuals take initiative in seeking investment opportunities, with a tendency to engage in high-risk investments due to their sociable nature and high confidence. Ahmad (2020) found that extraverted investors exhibit a significant tendency towards overconfidence, which leads them to pursue aggressive investment strategies. Kaur and Goel (2022) observed that extraverts are more inclined to participate in high-risk, high- reward investment opportunities, driven by their proactive and outgoing personality. Kamath et al. (2023) also noted that extraversion positively affects long-term investment decision- making, indicating that these individuals are willing to take substantial risks for potentially greater returns.

4. **Agreeableness**

Agreeable investors display qualities of cooperation and empathy, which can affect their investment decisions. This trait may allow positive collaboration and trust-building between investors and financial advisors. At the same time, it can also result in conformity and herding behaviour. Nair, Prabhu, and Garad (2023) found that agreeable individuals are more likely to follow market trends and exhibit herding behavior due to their desire for social harmony. Ahmad (2020) indicated that agreeableness is associated with a reliance on advice from others, leading these investors to align their strategies with the consensus rather than independent analysis. Rajagopalan and Gurusamy (2015) further highlighted that agreeableness correlates with a preference for safe and socially endorsed investment options, often resulting in more conservative investment strategies.

5. **Emotional Stability (Neuroticism)**

Emotional stability, or the lack of neuroticism, has a direct correlation to undertaking rational investment decisions. Emotionally stable investors are in a better position to handle market volatility and are less prone to anxiety-

driven decisions. Research by Jiang, Peng, and Yan (2024) showed that emotionally stable individuals are less likely to succumb to panic selling during market downturns, maintaining a more composed and strategic approach to investing. Ahmad (2020) noted that lower levels of neuroticism correlate with a greater tolerance for risk and more resilient investment behaviour. Kamath et al. (2023) found that neuroticism negatively impacts investment sentiment, leading to more cautious and risk-averse investment strategies, thereby highlighting the importance of emotional stability in effective financial planning.

The positive associations between Big-Five personality traits and investment strategies help to underline the importance of having a grasp on the presence of individual differences in financial behaviour. Based on these insights financial advisors are in a better position to develop tailored strategies that are in line with investors' personalities, thereby leading to enhancement of investment outcomes as well as building more knowledgeable and resilient investor bases.

2.3.6 Influence of Personality Traits on Investment Attitudes and Strategies

Investors' attitudes and their investment strategies are crucially affected by personality traits. An understanding of these traits goes a long way in predicting risk perception of investors, how they make decisions, and develop their overall financial approaches.

There has been consistent research to show that openness and a willingness to engage in innovative and potentially risky investments, have a positive association. Investors high in openness favour dynamic and diversified investment portfolios, as they are curious and eager to explore new opportunities. Studies like those by Kaur and Goel (2022) and Ahmad (2020) highlight that these individuals are less risk-averse, which drives them towards novel investment strategies and emerging markets. Mathur and Nathani (2019) further support this by showing that openness correlates positively with a willingness to invest in new and emerging markets. Being ready to take on risk and explore new avenues has the potential to give higher returns, but with the risk of being exposed to market volatility.

Conscientiousness, on the other hand, is linked to investing, but with a more methodical and responsible approach. Conscientious investors prefer well-researched, stable, and low- risk investments that are carefully planned and with long-term investment strategies. This is a result of the prudent financial behaviours they show. The findings from studies by Kaur and Goel (2022) and Ozer and Mutlu (2019) indicate that conscientious investors are diligent in their research and avoid speculative investments, by focusing on ensuring that their investment decisions are well-founded and have long term sustainability. This trait makes investors favour conservative investments that agree with their disciplined nature.

Extraversion influences investment attitudes with its proclivity to search for opportunities and a greater willingness to engage in high-risk investments. Extraverted individuals having a sociable nature and overconfidence, can go for aggressive investment strategies. Ahmad (2020) found that extraverted investors exhibit a significant tendency towards overconfidence, leading them to pursue aggressive investment strategies. Kaur and Goel (2022) observed that extraverts are more inclined to participate in high-risk, high-reward investment opportunities due to their proactive and outgoing personality. Kamath et al. (2023) also noted that extraversion positively affects long-term investment decision-making, indicating willingness of individuals to take substantial risks for potentially greater returns.

Agreeableness when allied with cooperative and empathetic investment attitudes, often leads to conformity and herding behaviour. Agreeable investors are more likely to follow market trends and rely on advice from others, as highlighted by Nair, Prabhu, and Garad (2023). Ahmad (2020) indicated that agreeableness is associated with a reliance on advice from others, leading these investors to align their strategies with the consensus rather than independent analysis. Rajagopalan and Gurusamy (2015) further highlighted that agreeableness correlates with a preference for safe and socially endorsed investment options, often resulting in more conservative investment strategies. This trait can lead to a preference for socially endorsed and safer investment options, but with a risk of suboptimal investment decisions, when the investors unduly conform to the consensus without independent analysis.

Emotional stability, or the lack of neuroticism, plays a crucial role in making rational investment decisions. Emotionally stable investors are better prepared to handle market volatility, being less prone to making anxiety-driven decisions. Research by Jiang, Peng, and Yan (2024) showed that emotionally stable individuals are less likely to succumb to panic selling during market downturns, maintaining a more composed and strategic approach to investing. Ahmad (2020) noted that lower levels of neuroticism correlate with a greater tolerance for risk and more resilient investment behaviour. Kamath et al. (2023) found that neuroticism negatively impacts investment sentiment, leading to more cautious and risk-averse investment strategies, thus reinforcing the importance of emotional stability in effective financial planning.

To summarise, personality traits significantly influence investment attitudes and strategies. Openness pushes innovative and risk-taking behaviours, conscientiousness leads to diligent and long-term planning, extraversion encourages proactive and high-risk investments, agreeableness fosters conformity and social reliance, and emotional stability promotes rational and resilient investment approaches. Understanding these connections allows financial advisors to adjust their advice and align with the inherent preferences and behaviours of different investors, so that investment outcomes and satisfaction are intensified.

2.3.7 Research Gap

Attitude has been identified as a crucial determinant of behavior in theoretical models such as the Theory of Planned Behavior (Ajzen, 1991). However, the antecedents of attitudes in financial contexts have not been thoroughly examined. Previous studies have investigated investor attitudes toward risk, savings, and mutual funds, but there is limited empirical research on how personality traits collectively influence these attitudes. Existing research often adopts a trait-by-trait approach, linking openness to innovation, conscientiousness to cautious planning, and neuroticism to risk aversion. This fragmented approach overlooks the interdependent nature of personality and fails to consider it as a higher-order construct that can holistically affect how investors perceive the usefulness, risk, or ethical value of financial products. A second-order framework would provide a

more comprehensive understanding of how personality as a whole operates through attitudes to drive investment behavior.

Most research validating the relationship between personality and attitudes has been conducted in Western economies, which are characterized by mature markets, robust regulations, and relatively high levels of investor literacy. In contrast, emerging markets such as India present distinct socio-cultural and structural dynamics, including tax-saving motives, reliance on informal advice, varying levels of financial literacy, and strong collective values, which may influence how personality traits shape attitudes and subsequently investment intentions. Without validation in a specific context, it remains uncertain whether findings from Western economies can be generalized or whether culturally distinct dynamics prevail in India.

This study addresses existing research gaps by conceptualizing personality traits as a higher-order construct that affects investor attitudes and validating these relationships within the Indian mutual fund market. In doing so, it directly responds to research question three, examining the attitude and the impact of personality on attitude, and enhances both the methodological robustness and contextual applicability of behavioral finance research.

2.3.8 Research Questions

RQ 3: What is the attitude and how does personality impact attitude?

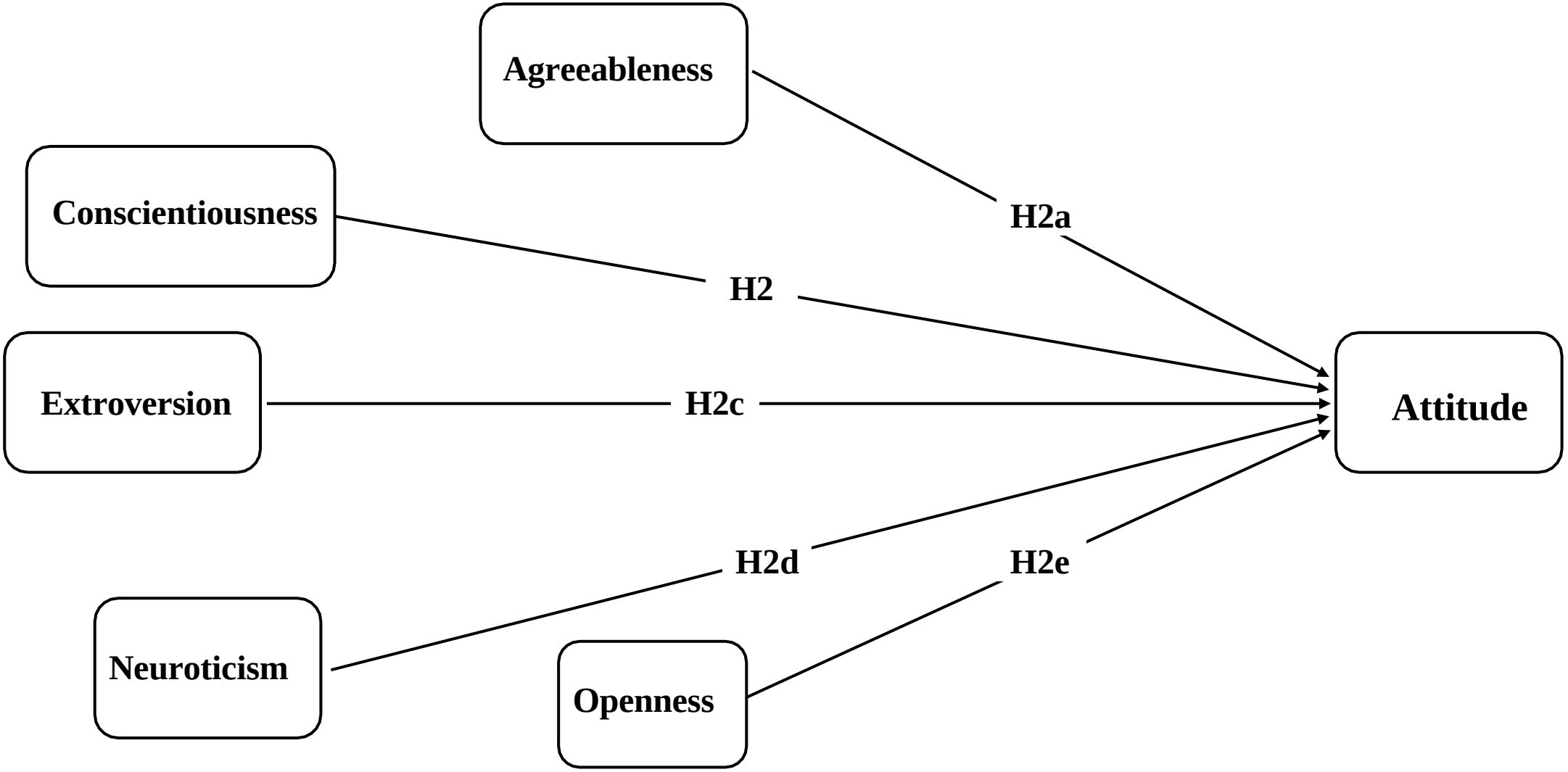
2.3.9 Research Hypothesis

Keeping in mind the research questions, the objectives drawn up for the study and the issues at hand, the following hypotheses were framed for statistical testing of the objectives

Objective 2: To investigate how different personality traits contribute to the formation of attitude of investors in state of Goa

1. Hypothesis 2a (H2a): ―Agreeableness significantly influences the Attitude of the mutual investors‖
2. Hypothesis 2b (H2b): ―Conscientiousness significantly influences the Attitude of the mutual investors‖
3. Hypothesis 2c (H2c): ―Extroversion significantly influences the Attitude of the mutual investors.
4. Hypothesis 2d (H2d): ―Neuroticism significantly influences the Attitude of the mutual investors.
5. Hypothesis 2e (H2e): ―Openness significantly influences the Attitude of the mutual investors.

Figure 2.2: Proposed Model for Personality and Attitude



2.4 Behavioural Drivers of Consumer Decisions

In present times, behavioural reasoning theory (BRT) is drawing the attention of researchers as they try to understand how consumers make decisions based on a process of analytical understanding. The article "Envisioning the future of behavioural decision-making: A systematic literature review of behavioural reasoning theory" by Sahu, Padhy, and Dhir (2020) looks into the way that BRT has developed and is being applied, progressing from traditional behavioural models such as the Theory of Planned Behaviour (TPB). BRT deals with the process that consumers follow in coming to a decision by being more refined as it looks in depth, taking into consideration the behaviour in terms of _reasons for and against‘. It has gained wider relevance in deciphering the intents and behaviours of consumers over a wide sphere covering sustainability, online services and employer employee behaviour.

Even as research grows that shows the rise in using BRT, Sahu et al. (2020) have identified potential areas for future research by pointing out methodological gaps. The review, while it accepts that BRT has positively contributed to the field of behavioural decision-making, it points to the need for longitudinal studies in the field, where the variables in the BRT framework are explored, moderated and mediated. Integrating BRT with other theoretical models will make it easier to apply and to explain, as suggested by the authors. Through this introduction to literature review, the ground is made for analysing in detail, the role that BRT plays to better comprehend consumer behaviour and come up with probable interventions for making such behaviour more effective.

2.4.1 Behavioural Theories and Models

The Theory of Planned Behaviour (TPB), as an extension of the Theory of Reasoned Action, is assessed in detail by Icek Ajzen (1991) in the article "The Theory of Planned Behavior". Ajzen's TPB propounds that its three vital factors influencing the way people behave, namely, attitudes toward the behaviour; subjective norms; and perceived behavioural control, are together responsible for shaping the behavioural intentions that go on to further predict actual behaviour.

Ajzen stresses that by directly influencing behaviour, perceived behavioural control can substitute for measures of actual control especially when it correctly reflects reality. Thereby the scope for better prediction and understanding of behaviours not altogether voluntary expands while also giving scope to explain the variations in behaviour. (Ajzen, 1991).

Ajzen shows how TPB, can be applied in instances of varied contexts and behaviours by assessing supportive data that has been observed and documented. He draws attention to the three critical factors, namely attitudes, subjective norms, and perceived behavioural control as having the ability to predict intentions, which mutually connect to actual behaviours, in particular when perceived control is a level high. The article also touches upon problematic issues, related to inter relations between beliefs, attitudes, norms, and control, and past behaviour is predictive of future actions. Ajzen presents further research as a prerequisite to putting forth measurable indicators to the theoretical construct, even as TPB gives a firm base to the understanding of behaviour. With it is also presented the need to consider integrating extra factors likely to impact behaviour. On the whole, the TPB comes across as a vital tool in behavioural research, insightful of the way constant data observing, storing and retrieving is supportive of all human action. (Ajzen, 1991)

Pillai and Sivathanu (2018) make use of the Behavioural Reasoning Theory (BRT) in their study to comprehend the factors that are impacting the way mobile learning (M-learning) applications are used by employees in the IT and IT-enabled services (ITeS) sectors in India. The study looks at the pros and cons of adopting M-learning apps, by focusing on impacting factors such as need for excitement and gratification; belief in achievement; motivation for self-learning; overall presence of mobile phones with their relative advantage, all being positive prompters for M-learning. However, there are also factors that make employees hesitate in opting for adopting these technologies which are the hurdles of tradition, usage, and image. The findings of the study stress on need for striking a balance between the enabling factors and obstacles when corporates push for implementing M-learning strategies. (Pillai & Sivathanu, 2018)

Further, the study emphasises that certain values like accepting change makes it easier to adapt to M-learning apps, especially where the employees show an

inclination for accepting new experiences which in turn make them to view M-learning with a positive attitude. The study also pinpoints the reasons for adopting are stronger both in the impact they have on attitudes and the intentions, as well as scoring over the reasons against adopting despite these having a critical role as well at times. A refined and subtle understanding of how the adoption process works further shows the requirement for situation or task suited interventions which strengthen motivating factors for adoption and diminish the factors that act as a hurdle to adoption of M- learning. (Pillai & Sivathanu, 2018)

Pillai and Sivathanu‘s work has majorly added to the literature available about adopting technology in the workplace, in light of India as a fast developing economy. Their conclusions and suggestions are valuable aids to HR managers and app developers, to come up with effective and implementable strategies as a result of balanced study of pros and cons of M- learning adoption. They can make the organisational atmosphere more accepting of adopting the M-learning technologies. by leading to a focus that highlights the perceived benefits while mitigating the perceived barriers. (Pillai & Sivathanu, 2018)

The article "Relationship between Risk Aversion, Risky Investment Intention, and Investment Choices: Impact of Personality Traits and Emotion" by Aren and Hamamci (2020) probes into personality traits and emotions as influencing factors like risk aversion, investment intentions, and investment choices even as they mutually interact. The study centres on behavioural finance, which is a field emphasising on financial decision-making being impacted by psychological and emotional factors. The authors analysed data collected from 446 participants in Turkey, and used various statistical analyses, including ANOVA, t-tests, and discriminant analysis, to investigate the effect and impact of the Big Five personality traits—neuroticism, openness, extraversion, agreeableness, and conscientiousness— together with emotions like fear, anger, hope, and sadness, on the risk tolerance and investment behaviours of individuals. (Aren & Hamamci, 2020) The findings have shown that the risk aversion is propelled by traits like neuroticism and openness, together with emotions like fear and sadness. On the other hand, intentions of making risky investments get swayed by risk aversion, neuroticism, openness, fear, and anger. The study also explores how successful prediction of investment choices is possible by being objective in financial literacy,

avoiding risk and intending risky investments. The study therefore puts forward the importance of an individual‘s financial literacy and inherent risk tolerance impacting actual investment decisions, even though emotions and personality traits do affect investment intentions. This research focuses on showing that financial decision-making processes are complex, being impacted more by rational assessments of financial literacy and risk, rather than personality and emotions which in effect impact the intention (Aren & Hamamci, 2020)

In the article "Predicting Dishonest Actions Using the Theory of Planned Behavior" by Beck and Ajzen (1991), the Theory of Planned Behaviour (TPB) is applied college students for predicting dishonest behaviours like cheating, shoplifting, and lying. The study explores how the dishonest behaviours are influenced by attitudes, subjective norms, perceived behavioural control, and moral obligations which impact and further the intentions to indulge in the dishonest behaviour, finally leading to actual dishonest actions. The study makes use of multiple regression analyses on a sample of 146 students, to assess whether these variables can help predict both intentions and behaviours. The findings have pointed out the effectiveness of TPB in predicting intentions for dishonest actions, with perceived behavioural control appearing as a strong predictor. However, the same degree of accuracy was not apparent in predicting actual behaviour suggesting that intentions by themselves do not become actions, without the other factors that also come into play (Beck & Ajzen, 1991).

The study shows that moral obligation can exert influence in predicting dishonest behaviours, being more effective in predicting lying behaviour as compared to cheating and shoplifting behaviour. Further it also focuses on considering past behaviour as a predictor which can have a significant residual impact, even though TPB is the core reason why intentions and behaviour vary. Thus, it is put forward that even though TPB is powerful, it will get the added benefit for recording the nuances of dishonest actions, by including factors like moral obligation and past behaviour. The study on the whole is able to contribute to the related literature by demonstrating how TPB applies to behaviours that are less socially acceptable and providing suggestions that will help in refining the theory (Beck & Ajzen, 1991).

In the article "Behavioral Reasoning Theory: Identifying New Linkages Underlying Intentions and Behavior," Westaby (2005) introduces the Behavioural Reasoning

Theory (BRT) to investigate the primary reasons influencing human intentions and behaviour and tests it empirically. Westaby gives importance to reasons, and proposes that reasons are crucial as they link beliefs, global motives (such as attitudes, subjective norms, and perceived control), intentions, and behaviour. The study asserts that looking farther from the traditional behavioural models like the Theory of Planned Behaviour (TPB), it is the reasons for and against any behaviour that are responsible for a detailed understanding of the cognitive processes that lead up to decision-making.

The research looked to validate BRT's propositions by taking up four studies that utilized confirmatory factor analyses and structural equation modeling. Study 1 demonstrated that reasons are recognizably different from global motives and are a remarkable predictor of intentions and behaviour. Study 2 showed how both reasons and global motives influence intentions, by using experimental manipulation. Study 3 found that reasons have the power to explain while predicting intentions, which goes beyond traditional belief concepts. Finally, Study 4 took help of experiments to show that both belief concepts and reasons together affect both global motives and intentions. These findings suggest that for understanding and predicting human actions, reasons for and against behaviours are essential as they provide an increasing amount of ability to predict future outcomes as compared to traditional belief-based models.

Westaby infers that BRT offers a strong structure to show the basic mental processes fundamental to intentions and behaviour. BRT introduces reasons into the predictive model, thereby strengthening the explanatory power of traditional behavioural theories, as well as providing subtle insights about the way individuals justify and defend their actions. Though it is a theoretical premise, it has value for giving importance to reasons for and against the behaviour under target, making it possible to come up with suitable interventions aiding behaviour change. The extensive approach and meticulous empirical testing taken up by the study make for a crucial addition to the available writings on decision-making and behaviour prediction. (Westaby, 2005)

Parveen, Satti, Subhan, and Jamil (2020) in their article "Exploring market overreaction, investors‘ sentiments, and investment decisions in an emerging stock market", study how the investor decisions in the Pakistan Stock

Exchange (PSX) are influenced by features of behavioural finance. The study focuses on two cognitive biases namely, the representative heuristic and overconfidence to show the tendency of overconfident investors to rely on representative heuristics, resulting in overreaction to new market information. This inference comes from analysing primary data and secondary data obtained from 446 retail investors and from 301 companies listed on the PSX respectively.

The findings present the way investment decisions and trading volume in the PSX are influenced by cognitive biases of overconfidence and representative heuristic. Overconfident investors are often responsible for market overreaction as they believe future success is probable given their knowledge and past performance. Thus, the study looks at overconfidence mediating between the representative heuristic and investment decisions, leading to more pronounced market reactions, which has not been studied or considered in earlier available literature.

Further, the research also focuses on behavioural patterns distinctive to Pakistani investors, where they show an influence of cultural factors as also lower financial literacy levels. Investors have a tendency towards herd behaviour, where decisions are based on the opinions of family and friends, thereby expanding the scope for cognitive bias effects. By analysing both individual and market-level data, the study puts forth its findings of the presence of behavioural finance phenomena in an emerging market. The authors submit that having measures like financial advisory practices and investor education programs, will go a long way in lessening the unfavorable impact on investment decisions arising from overconfidence and heuristics. (Parveen, Satti, Subhan, & Jamil, 2020)

The article "Implication of Behavioral Finance in Investment Decision-making Process" by Jahanzeb, Muneer, and Rehman (2012) explores the efficacy of behavioural finance in strengthening the process of traditional financial decision-making by including psychological insights. The authors speak for this by citing the difference between traditional finance models that assume the behaviour is rational, whereas in actuality decision- making frequently involves cognitive biases and emotional responses. By examining

varied principles related to behavioural finance, including heuristics, prospect theory, and cognitive illusions, their influence on investors' choices is showcased. The study aims to pinpoint a feature of investor behaviour, that they are not always given to rational action, but rather make decisions that are coloured by traits of overconfidence, representativeness, anchoring, and availability biases, giving scope for systematic errors and market deviations, which in turn make the term market efficiency, notional. (Jahanzeb, Muneer, & Rehman, 2012)

The research emphasises that investment outcomes can be enhanced through a better understanding of these behavioural biases, with the authors discussing how errors in judgment, such as the gambler's fallacy and overconfidence bias, can occur due to heuristics, or mental shortcuts. The prospect theory, introduced by Kahneman and Tversky, puts forth the idea that investors' risk preferences are dependent on whether they face potential gains or losses, illustrating that investors tend to be risk-averse when gains are visible and risk-seeking when facing losses. The study connects this behaviour to loss aversion and regret aversion, which makes investors try to shun the emotional pain that comes from poor investment decisions. It also explores the concept of mental accounting, by practically explaining the overall effect on financial strategies resulting from the tendency of investors to compartmentalize their finances. Recognizing these biases and mitigating them, the article proposes, can be helpful for the investors to make more informed and rational decisions that willresult in their enhanced investment performance. (Jahanzeb, Muneer, & Rehman, 2012)

Chen (2014) enlarges on the Theory of Planned Behavior (TPB) when he uses it as a predictor of consumer intentions to visit green hotels, by including into the model, environmental concern and perceived moral obligation. This extended TPB model was validated by using data from 559 respondents in Taiwan and utilised Structural Equation Modeling (SEM). The results demonstrate that environmental concern has a notable impact on consumers' attitudes toward green hotels, subjective norms, and perceived behavioural control, which are all core components of TPB. Moreover, it was found that concern for the environment positively affected perceived moral obligation,

which further impacted the intention to visit green hotels. The extended TPB model furnishes a more exhaustive understanding of what factors motivate consumer behaviour, given the presence of environmentally friendly choices. (Chen, 2014)

Further, through its findings, the study emphasises on the strong explanatory power present in the extended TPB model for predicting intentions to undertake pro-environmental behaviour, specially relating to the choosing of green hotels. The research pinpoints how consumers‘ environmental concerns influence perceived behavioural control and attitudes, which in turn are crucial for shaping their intentions to make environmentally conscious decisions. These insights suggest a more sustainable behaviour can be brought about by strengthening awareness and concern for environmental issues among consumers, which further can be reinforced through targeted environmental education and marketing strategies. The study concludes with important suggestions for policymakers and the hotel industry, underlining how moral and environmental considerations are vital in promoting sustainable consumer behaviour. (Chen, 2014)

Paul, Modi, and Patel (2016) have applied and extended the Theory of Planned Behavior (TPB) and the Theory of Reasoned Action (TRA) while examining in detail, the consumer behaviour related to green products. By focusing on the Indian market, the study explores the influence of environmental concerns on consumer attitudes, perceived behavioural control, and subjective norms, which factors in turn, act on purchase intentions for green products. The research uses the structural equation modelling (SEM) approach to validate the proposed models, confirming that the extended TPB, comprising direct and indirect effects of environmental concern, has a higher predictive power for green product purchase intention in comparison to the traditional TPB and TRA models. The study finds that predicting purchase intentions tends to be based on consumer attitude and perceived behavioural control, rather than subjective norms, thus highlighting consumer behaviour towards green products in India is influenced by cultural and contextual differences. (Paul, Modi, & Patel, 2016)

The study came up with a relevant finding, about the remarkable impact that

environmental concern has not only on all three TPB variables—attitude, subjective norm, and perceived behavioural control— but directly on purchase intention. The extended TPB model reveals the effect of environmental concern in shaping attitudes and perceived behavioural control as also a direct effect on the intention to purchase green products. This goes to show that consumers sensitive about environmental issues are more likely to develop positive attitudes and a sense of control regarding purchase of green products, which ultimately intensifies their purchase intentions. Alternatively, the study also observed that subjective norms or the social pressure perceived by consumers did not have a major influence on their intention to purchase green products, which was an indication that Indian consumers made environmentally conscious decisions based more on their personal beliefs and control rather than social influence. (Paul, Modi, & Patel, 2016)

This research makes a valuable contribution to the existing literature on green marketing in the context of a developing country where its unique cultural and economic factors shape consumer behaviour, by providing the necessary empirical evidence. The findings suggest that marketers whose goal is to promote green products in India would succeed by focusing on ways to enhance consumer attitudes and perceived behavioural control rather than relying on social norms to drive behaviour change. For this it is imperative to take up campaigns to educate and create awareness. Further, the study emphasises how important it is to incorporate environmental concern into marketing strategies as it then becomes a critical factor influencing adoption of green products. There is scope for research in the future to further explore, in the context of different cultural settings, the role played by psychological and contextual variables in shaping green consumption behaviours (Paul, Modi, & Patel, 2016).

2.4.2 Decision-Making in Consumer Behaviour

The article "Envisioning the future of behavioral decision- making: A systematic literature review of behavioral reasoning theory" by Sahu, Padhy, and Dhir (2020) extensively reviews the Behavioural Reasoning Theory

(BRT) and the manner it is applied to consumer behaviour. It is methodically analyzed by the authors from its origins, how it evolved, and its current status, placing it as an improvement on traditional theories like the Theory of Planned Behaviour (TPB). BRT has uniquely contributed the 'reasons for' and 'reasons against' constructs showing that they provide a subtle understanding of consumer decision-making processes, and further are critical in predicting consumer intentions and behaviours, thereby offering contextual insights more valuable compared to previous models.

The review suggests that though the research on BRT is expanding at a fast pace having been applied across diverse contexts, including online services, charitable behaviour, sustainability, and employee behaviour, it continues to be methodologically diverse. The authors have identified key research themes and trends related to BRT framework, as existing literature reveals several gaps, such as the need for more longitudinal studies and greater emphasis on moderating and mediating variables within its framework. In conclusion, the review lays down suggestions for future research, stressing the necessity of methodological advancements as well as integrating BRT with other theoretical frameworks thereby enhancing its explanatory power and practical relevance are enhanced (Sahu, Padhy, & Dhir, 2020)

Tandon et al. (2020) apply Behavioural Reasoning Theory (BRT) in understanding how positive and negative reasoning influence consumer behaviour, by examining the factors influencing the intentions for purchase of organic food among Indian consumers. The study centers on health consciousness, as a value influences attitudes and intentions of consumers toward organic food in the presence of the mediators, namely, reasons for and against the purchase. The research surveyed 307 participants from the National Capital Region (NCR) of India, to come up with the finding that reasons for purchasing organic food, is greatly influenced by health consciousness, which in turn positively affects attitudes and purchase intentions. The theory focuses on the importance of nutritional content and naturalness as health- related reasons leading to health-conscious consumers consuming organic food. (Tandon et al., 2020)

Additionally, the study examines how reasons against purchasing organic

food, like perceived usage and risk barriers, do negatively affect attitudes towards organic food although they only mildly impact purchase intentions. Thus, it is seen that Indian consumers do recognize barriers to organic food consumption, but these do not act as deterrents in their purchase intentions so long as they have positive attitudes towards the benefits of organic food. Further, the study points out that reasons for purchasing organic food, such as ecological welfare and the absence of artificial ingredients, hold more sway than reasons against, thereby highlighting consumer decision-making in this context being dominated by positive motivations. (Tandon et al., 2020)

The research highlights how values like reasoning and attitudes provide a complex interplay between values, reasoning, and attitudes in the organic food market, particularly within the emerging market of India. It is a value addition to the literature existing on the subject, with its findings suggesting focus by marketers towards reinforcing positive reasons for organic food consumption while addressing perceived barriers, to ultimately enhance consumer adoption. Furthermore, it pinpoints the importance of preparing suitable communication strategies stressing on the health benefits and ecological advantages of organic food such that they are in sync with the values and concerns of health-conscious consumers. (Tandon et al., 2020).

Gupta and Arora (2017) have employed Behavioural Reasoning Theory (BRT) to discuss the interplay between reasons for and against mobile banking (m-banking) adoption by Indian consumers. The study remarkably integrates both adoption and resistance factors within a single framework, leading to a nuanced understanding of consumer decision-making. The authors, through their research, have identified that from the varied reasons for adopting m-banking, the noteworthy determinants are ubiquity, convenience, and relative advantage, which have a positive effect on consumer attitudes toward m-banking. These determinants in turn, are strongly correlated with adoption intentions. The study concludes that the practical benefits of m- banking like accessibility and efficiency, are attractive to consumers and positively impact their general attitude towards this banking innovation. (Gupta & Arora, 2017).

On the other hand, the study delves into the major deterrents to m-banking

adoption, such as the traditional thought, perceived risk, and usage barriers. Of these, tradition barriers—such as the preference for in-person banking—have been identified as major inhibitors that tend to negatively impact consumer attitudes and adoption intentions. The findings highlight that these barriers are not to be considered as reasons opposing m-banking adoption but as distinct factors that can be overcome through targeted strategies. To be successful in doing so, the research highlights consumer education and the promotion of secure, user-friendly m-banking platforms as aides to increase adoption rates. (Gupta & Arora, 2017).

The research by Gupta and Arora's is instrumental in a better comprehension of innovation adoption in the banking sector, with a focus on India as a developing market. It provides valuable insights for banking institutions by suggesting that efforts to promote m-banking should find a balance between speaking about the benefits and mitigating the perceived barriers coming in the way of wider adoption. The authors demonstrate by applying BRT, that an understanding of both positive and negative drivers of adoption is essential to determine effective marketing and educational strategies which can result in more consumers accepting m-banking technologies. (Gupta & Arora, 2017)

Cheng, Lam, and Hsu (2005) have examined the Theory of Planned Behaviour (TPB) perceptively, applying it to responses of customer dissatisfaction in high-end restaurants in Shanghai, China. The study tests the TPB model in its original form to see its sufficiency and in its extended form by including past behaviour as a variable. The research specifically focuses on three types of dissatisfaction responses: voice (direct complaints to the restaurant), negative word-of-mouth communication, and exit (refusing to patronize the restaurant again). The authors carried out a survey of 426 participants who had experienced dissatisfaction at high-end restaurants, to assess the predictive power of TPB and the role of past behaviour influencing the intentions to engage in these responses in the future.

The findings made by the study point out how the original TPB model—comprising attitudes, subjective norms, and perceived behavioural control—is an effective predictor of customer intentions to vocalize dissatisfaction, spread negative word-of-mouth, and to exit. However, by adding past behaviour to

the TPB model, there was just a slight increase in the predictive power for voice and negative word-of-mouth intentions, and no significant impact on exit intentions. Thus, it was suggested that the core TPB variables remain the dominant predictors of customer dissatisfaction responses despite some influence of past behaviour. Moreover, the study highlights the mediating role of TPB variables in the relationship between past behaviour and future intentions, particularly noting that attitude has a conciliatory effect of past behaviour on negative word-of-mouth communication and both subjective norms and perceived behavioural control have a conciliatory effect on voice intentions. (Cheng, Lam, & Hsu, 2005)

The research insightfully studies the dynamics of customer dissatisfaction responses in the Chinese context, stressing on how TPB is aptly applicable to understand and predict these behaviours. It emphasises how important it is to take into consideration previous experiences in behavioural research, although including past behaviour, did not by large increase the model's predictive power. Cheng, Lam, and Hsu‘s study contributes to the existing literature by validating the resilience of TPB in a non-Western backdrop, as also presenting the practical implications while handling customer complaints in the hospitality industry. (Cheng, Lam, & Hsu, 2005)

A qualitative approach to understand the investment decision behaviour of retail investors in the Malaysian stock market, is taken by Jaiyeoba and Haron (2016). Their study scrutinises the personal factors and market conditions that influence decision-making by focussing on the subjective experiences of investors, The researchers take help of semi- structured interviews with six experienced retail investors, arriving at the key themes that shape investment behaviour, which also include the importance of Shari'ah compliance for Muslim investors; the reliance on personal research over third-party advice; and the influence of psychological biases such as herd behaviour and cognitive disparity. The conclusion arrived at from these findings points to retail investors in Malaysia pay attention more to comfort and familiarity rather than meticulous quantitative analysis, by generally relying on a mix of personal judgment and fundamental analysis when selecting companies for investment. (Jaiyeoba & Haron, 2016)

The study also discloses the challenges Malaysian retail investors face, like accessing high-quality information, managing market sentiment, and timing their investment decisions effectively. Further, there are psychological biases aggravating these challenges resulting in suboptimal investment outcomes. Despite these difficulties, the interviewed investors showed they were willing to continue participating in the market, with their long-term investment strategies and a sense of patriotism acting as strong motivators. The researchers conclude that although traditional financial theories are the base for understanding investment behaviour, it is vital that insights from behavioural finance are also integrated by which to capture subtleties of practical decision-making by retail investors. (Jaiyeoba & Haron, 2016)

Jaiyeoba and Haron‘s research draws attention to the distinctive factors influencing investment behaviour in particular markets like the emerging Malaysian market, thereby providing value addition to the related literature which is in need of studies in a non-Western context, their findings emphasize that in these settings, there is a dearth of financial advice and financial education that addresses the specific needs and challenges faced by retail investors. Furthermore, the study stresses on the importance of understanding how investment decisions are shaped by the interplay between cultural, religious, and psychological factors, thus offering valuable insights for policymakers and financial advisors for providing effective support for retail investors. (Jaiyeoba & Haron, 2016)

Metawa et al. (2018) study the influence of behavioural factors on the financial decisions of investors in the Egyptian stock market, with demographics and investor psychology intersecting, with the study stressing on four key behavioural factors: investor sentiment, overconfidence, overreaction and underreaction, and herd behaviour. The research analyses taking aid from partial regression, the way these factors mediate the relationship between investors' demographic characteristics— such as age, gender, education, and experience—and their investment decisions. The findings particularly disclose that investment decisions are majorly impacted by investor sentiment, overreaction, and herd behaviour, with demographic variables like gender and education level, having a noticeable influence on

these behavioural factors. The study thus professes that investors who are younger, more educated, particularly males, are more likely to display behavioural biases that impact their financial choices. (Metawa et al., 2018)

The study also examines the role of experience, which does moderate the influence of behavioural biases on investment decisions, even as experience does not significantly alter their impact. Specifically, experienced investors often overlook emotional factors, relying more on rational analysis, which reduces the overall impact of sentiment, overconfidence, and herd behavior on their decisions. The study also highlights the importance of financial education and experience in reducing the effects of behavioural biases in investment decision-making. Moreover, the research underscores the need for targeted financial strategies that consider these psychological factors, particularly in markets like Egypt, where investor behaviour is heavily influenced by emotional and psychological factors. (Metawa et al., 2018)

Metawa et al.'s research provides practical implications for policymakers and financial advisors in making, having majorly contributed to the area of behavioural finance which is comparatively less investigated in Middle Eastern markets. It suggests achieving rational decision-making processes, by enhancing investor education and awareness of behavioural biases, ultimately bringing in stability to check market volatility and to boost market efficiency. Moreover, the insights obtained from this study give scope for developing investment tools and advisory services that are effective and suited to the distinct requirements and psychological profiles of investors in emerging markets. (Metawa et al., 2018).

2.4.3 Risk and Financial Behaviour

The article "Risk tolerance and household financial behaviour: A test of the reflection effect" by Grable, Joo, and Kruger (2021) studies the influence of risk tolerance on household financial behaviours, with specific focus on the reflection effect that the prospect theory has advanced. This theory suggests that individuals tend to display risk-seeking behaviour when they encounter potential losses and risk-averse behaviour in the face of potential gains. The theory uses data from over 40,000 individuals aged 35 and above, to

empirically test it in a real-world setting, resulting in robust evidence coming up that the financial choices of a significant number of decision-makers exhibit the reflection effect. (Grable, Joo, & Kruger, 2021)

In the study, participants are divided into four distinct risk preference groups: risk avoiders, loss averse, loss tolerant, and risk seekers, where these groups are seen to display remarkably different financial behaviours. While risk avoiders are prone to investing in fixed-income securities, the risk seekers prefer equities. Those exhibiting loss aversion or loss tolerance show mixed behaviours, where the portfolio compositions fall between the two extremes. In addition, analysis was done of demographic factors such as gender, marital status, education, age, and income, so as to determine their association with risk preferences. The results suggest that demographic factors, while providing some predictive power, are not sufficient to fully explain individual differences in risk tolerance and financial behaviour. The research calls attention to the fact that for effective financial planning, it is important to understand individual risk preferences. It suggests that financial advisors can categorize clients' risk tolerance using simple questions, and thereby propose accurate investment strategies suiting the risk profiles of the clients. The study highlights the need for additional research that will explore other types of financial decisions and behaviours influenced by risk tolerance, such as mortgage choices, credit usage, and everyday spending decisions. The insights from this study are vital to both financial service professionals and policymakers who aim at supporting household financial decision-making that is informed and effective. (Grable, Joo, & Kruger, 2021)

Jaiswal and Kamil (2012) have used the perspective of behavioural finance and explored in-depth, gender differences in investment behaviour. Their study delves into the varied and differing behavioural biases—such as overconfidence, mental accounting, and susceptibility to prospect theory—of male and female investors. They analyse the data collected from 161 salaried investors in Lucknow, India, and examine how much these biases influence investment decisions and how these influences vary across genders. The research is significant for using a structured questionnaire and chi-square tests to statistically analyse gender differences in financial behaviour and providing

empirical evidence to support its conclusions.

One of the key findings is that male investors tend to be more overconfident with a greater risk appetite as compared to their female counterparts. A result of this overconfidence is that men tend to be more aggressive in their investment decisions, aiming for growth over income. Conversely, female investors tend to be conservative and cautious in their financial decision-making, preferring safe investment options. The study also reveals that although both the genders are susceptible to behavioural biases like mental accounting and herd behaviour, these biases show up in them differently, with women less overreacting to new market information and less likely to subscribe to the prospect theory. This gender-based variation in investment behaviour highlights how essential it is to take into account gender consideration when financial products and advisory services are being designed. (Jaiswal & Kamil, 2012)

The financial services industry is likely to be influenced by the inferences that can be drawn from Jaiswal and Kamil‘s research, especially in adapting investment strategies and advice suitable to the distinct needs of male and female investors. Their findings recommend financial advisors to adopt a gender-sensitive approach, given the need for different types of support and information for men and women, which is needed to alleviate the effects of behavioural biases on their respective investment decisions. Furthermore, the study highlights that more research is required which delves into other demographic factors that could influence investment behaviour, leading to a more nuanced understanding of behavioural finance. (Jaiswal & Kamil, 2012)

Jebarajakirthy and Lobo (2014) investigate how the Theory of Planned Behaviour (TPB) is applied and extended in understanding the microcredit purchase intentions among war- affected youth in Sri Lanka. Their research is focussed on factors influencing these youth for obtaining microcredit by which to engage in entrepreneurial activities, making them less susceptible to economic vulnerabilities. A survey of 1,603 youth in the North and Eastern provinces of Sri Lanka, allows the study to highlight the significance of positive affect, self-identity, and perceived deterrents in shaping purchase

intentions. The results show that while positive affect and self-identity positively influence the intention to obtain microcredit, the perceived deterrents, like collateral requirements and service charges, negatively impact these intentions. The study thus pinpoints financial decision- making among marginalized groups as heavily dependent on emotional and identity-related factors, alongside the practical barriers that can act as deterrents in seeking financial support.

The study further introduces and examines Entrepreneurial Desire as a moderator, influencing the relationship between self- identity and purchase intentions. The findings suggest that Entrepreneurial Desire strongly colours the effect of self-identity on purchase intentions, showing that a strong desire to become entrepreneurs leads to a perception in the youth that microcredit is essential to their identity and success in the future.

The interaction highlights the scope for targeted interventions among war-affected youth to make them have entrepreneurial aspirations, thereby making it more probable that they would engage in microcredit-supported ventures. However, the study found that Entrepreneurial Desire did not significantly moderate the impact of other factors like positive affect or perceived deterrents, suggesting that the desire to become an entrepreneur has a direct correlation primarily with the identity-related aspects of microcredit adoption. (Jebarajakirthy & Lobo, 2014)

Jebarajakirthy and Lobo‘s research can be considered a valuable contribution towards compiling a comprehensive literature on microcredit, as it provides a nuanced understanding of the psychological and contextual factors influencing financial behaviours in post-conflict settings. Their findings emphasize how crucial it is for microcredit institutions to consider these factors when devising and marketing financial products to vulnerable populations. Addressing the emotional and practical barriers that the vulnerable youth face in war-affected regions, microcredit providers are in a sensitive place to support their economic rehabilitation. The study suggests further research to explore the scope for applying these findings in other conflict-affected contexts, along with the long-term impact of microcredit on the livelihoods of the youth in these regions. (Jebarajakirthy & Lobo, 2014)

Ishfaq et al. (2020) emphasises the moderating role of the extraversion personality trait while exploring the relationship between heuristic biases and irrational decision-making among investors. The study examines how heuristics specifically, and cognitive biases like availability and representativeness, influence the decision-making processes of investors, often leading to irrational behaviours. Making use of the data from 247 investors in Pakistan, the researchers employed mediation and moderation analysis techniques to reveal that heuristic biases have a remarkable influence on irrational decision-making, both directly, and indirectly through risk perception. The findings further pointed out that these effects expand by reason of extraversion, making extroverted investors more susceptible to heuristic-driven irrational decisions. Thus, it helps to build the perception that personality traits, particularly extraversion, are vital for shaping the influence of cognitive biases on investment decisions.

Empirical evidence supporting the idea that risk perception is conciliatory to or mediates the relationship between heuristic biases and irrational decision-making, is presented by the study. Investors having heightened risk perception resulting from heuristic biases, show more possibility for engaging in irrational behaviours, more specifically being those with extroverted personalities and susceptible to risk-seeking behaviour. This conciliatory or mediating effect of risk perception calls attention to the complex decision-making processes in financial markets, further suggesting that psychological profiles of investors along with their personality traits, have a notable effect on them being susceptible to cognitive biases.

Ishfaq et al. 's research offers an understanding of the psychological factors that influence investment decisions, thus contributing to the literature on behavioural finance. The study‘s findings provide practical suggestions to financial advisors and policymakers aiming to mitigate the effects of cognitive bias adversely affecting investment behaviour. Recognising the role of personality traits like extraversion, can result in developing strategies which allow for suitable financial advice and interventions that take care of the individual differences in risk perception and decision-making tendencies. (Ishfaq et al., 2020).

2.4.4 Social and Ethical Consumer Behaviour

Park, Cho, Johnson, and Yurchisin (2017) apply Behavioural Reasoning Theory (BRT), in analysing insightfully, the factors influencing attitudes of young consumer towards apparel donation The study examines how the reasons for making clothing donations get formed out of personal values, particularly benevolence and power, where the reasons can be grouped as either other-oriented (e.g., helping others) or self-oriented (e.g., enhancing social status). The researchers conducted a survey of young consumers in the United States, to find that for apparel donations, the significant predictors were, benevolence for other- oriented reasons, and power for self-oriented reasons. The findings suggested that the fundamental values held by consumers are crucial in determining what motivates their donation behaviours, with benevolent individuals probably being motivated by concern for others and those who value power being motivated by personal gain. (Park et al., 2017)

Moreover, the study reveals that positively influencing the attitudes towards apparel donation, is the intent of both other- oriented and self-oriented reasons although the pathways differ. Other-oriented reasons associated with positive attitudes of helping others and the environment, go on to reinforce the idea that selfless motives can guide socially responsible behaviour. Whereas, self-oriented reasons are being linked to self-enhancement attitudes, indicated that boosting their self-image or social standing by some individuals was the reason for donating clothing. Interestingly, the study also found that other-oriented reasons and attitudes towards self-enhancement shared a positive relationship which showed that often, a component of self- gratification is present even in altruistic behaviours. (Park et al., 2017)

Moreover, the study reveals that positively influencing the attitudes towards apparel donation is the intent of other- oriented and self-oriented reasons, although the pathways differ. Other-oriented reasons associated with positive attitudes of helping others and the environment, go on to reinforce the idea that selfless motives can guide socially responsible behaviour. Whereas, self-

oriented reasons being linked to self-enhancement attitudes, indicated that for some, boosting their self-image or social standing is the reason for socially responsible behaviour. Interestingly, the study also found that other-oriented reasons and attitudes towards self-enhancement, both shared a positive relationship which showed that often, a component of self- gratification is present even in altruistic behaviours. (Park et al., 2017)

Park et al.'s research has implications that extend to both academic understanding and practical applications in promoting socially responsible consumption. The study highlights the dual motivations behind apparel donation, to suggest that marketing strategies for charitable organizations should be appealing both to altruistic and to personal benefits. Doing so will possibly lead to a rise in the rate of donations as the appeals are made to a broader range of consumer values. Additionally, the study, having applied BRT in a novel context, contributes to the growing body of literature on consumer behaviour by presenting new insights into the effect of values and reasoning interacting to mould socially responsible actions. (Park et al., 2017). Sattar, Toseef, and Sattar (2020) study how investment decision-making processes are influenced by behavioural finance biases, emphasizing that irrational behaviours impact financial outcomes. Their research looks at various cognitive biases such as heuristic behaviour, prospect theory, and personality traits, to see their role in affecting investors' decisions in uncertain environments. The authors followed a quantitative research approach, using a survey of investors to collect data, and using regression analysis to analyse the relationships. Their findings put focus on the marked impact that heuristic behaviours—such as overconfidence, representativeness, and anchoring—have on investment decisions, including the possibility for making suboptimal financial choices. The study also indicates that prospect theory and specific personality traits, such as conscientiousness and neuroticism, have a crucial role to play in shaping investment decisions, though to a lesser extent than heuristic biases.

Moreover, the study, while highlighting the primary influence of heuristics, also identifies the contribution to investment decision-making, resulting from the interaction between prospect theory and personality traits, particularly in

contexts involving risk and uncertainty. The authors found that the prospect theory as compared to heuristics, explains only a smaller portion of the variance in decision-making, nevertheless is still a critical component, particularly when it comes to explaining loss aversion and regret aversion behaviours among investors. The effects of these biases were shown to be moderated by personality traits, with conscientiousness and openness to experience being linked to more rational and calculated investment decisions. These findings imply a complex connection between investors' cognitive biases and personality profiles, which has a deep influence on their financial behaviours and outcomes. (Sattar, Toseef, & Sattar, 2020)

The research by Sattar et al. offers discernible insights for financial advisors and policymakers, who could be better equipped to undertake interventions that aim to reduce the impact of cognitive biases, leading to better investment decisions. The study also suggests the need for a more nuanced understanding of the role that personality plays in financial decision-making, by recommending the need for apt financial advice based on both psychological and emotional factors influencing investor behaviour. The authors integrate behavioural finance concepts with traditional investment theories, thereby contributing to expanding the available literature that seeks to explain the nature of financial decision-making being in many instances irrational. (Sattar, Toseef, & Sattar, 2020)

In their article "Investment Decisions on the Crowdfunding Platform Based on the Theory of Planned Behavior", authors Yulandreano and Rita (2023) investigate the influence of Theory of Planned Behaviour (TPB) on investment decisions in the crowdfunding situation in Indonesia. The study focuses on attitudes, subjective norms, and perceived behavioural control shaping investment intentions, which in turn affect actual investment decisions. Using a sample of 100 investors from crowdfunding platforms approved by the Financial Services Authority (OJK), the research analysed this data by using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal that investment intentions are positively impacted by both attitudes and perceived behavioural control, while subjective norms do not show a significant effect. Additionally, crowd funding investment

decisions are crucially influenced by perceived behavioural control and investment intentions. (Yulandreano & Rita, 2023)

The results point out the crucial role of perceived behavioural control, which includes investor-confidence in being able to perform investment-related tasks; access to capital; and knowledge about crowdfunding. This factor has a direct impact on investment intentions while also mediating the relationship between intentions to invest and the actual investment decisions. The insights gained from the study focus on the importance of cultivating positive attitudes and enhancing perceived control among investors to excite them to participate in crowdfunding platforms. The not so significant effect that subjective norms propose, is the social influences being more tolerant in this specific investment context, given that crowdfunding in Indonesia is the relatively new and individualized in nature. The study recommends that crowdfunding platforms and policymakers pay attention to investor education and support systems, thus enhancing perceived behavioural control and thereafter improving investment outcomes. (Yulandreano & Rita, 2023)

Areiqat et al. (2019) analyse in-depth the influence of behavioural finance factors on stock investment decisions among investors at the Amman Stock Exchange (ASE), Jordan, with the focus being on four primary behavioural biases: overconfidence, loss aversion, risk perception, and herding. Data gathered from 165 individual investors was analysed through multiple regression and hierarchical regression analysis, with the aim of the researchers being to point at which out of the given factors, had the most impact on investment decisions. The findings reveal the significant influence of overconfidence, loss aversion, and herding factors on investment decisions, but with overconfidence emerging as the most effective factor. Thereby the indication is that investors at ASE having overestimated their abilities and knowledge, leading to a perceived control over outcomes, tend to take riskier investment decisions. (Areiqat et al., 2019)

The study also analyses the role of loss aversion in the decision-making process in instances where investors tend to be more sensitive to potential losses than equivalent gains, in which case they priorities avoiding losses over chasing gains. This behaviour tends to pave the way for more conservative

investment strategies. Another notable factor was herding or the tendency to follow the investment decisions of others, which pointed out that many investors in ASE tend to make decisions based more on the actions of their peers rather than on independent analysis. However, risk perception had no major influence on investment decisions, contrary to what was assumed, suggesting that ASE investors may not reason out the risks involved in their decisions, possibly due to the market's characteristics or their overconfidence in personal judgment. (Areiqat et al., 2019)

These findings hold relevance to financial advisors and policymakers seeking to mitigate the effects of cognitive biases on investment behaviour. The study emphasizes the better investor education is crucial in addressing these biases, especially overconfidence and herding, that tend to result in a situation of market inefficiency and suboptimal investment outcome. An understanding of these behavioural influences can help develop strategies for guiding investors toward making more rational decisions, resulting in a refinement in the overall efficiency of financial markets. (Areiqat et al., 2019).

The article "Behavioral Finance Factors and Investment Decisions: A Mediating Role of Risk Perception" by Almansour, Elkrghli, and Almansour (2023) studies the complex relation shared by behavioural finance factors and investment decision- making in the Saudi equity market, specifically focussing on risk perception playing a mediating role. The study identifies key behavioural finance factors—herding, disposition effect, blue chip bias, and overconfidence—and examines how they impact the risk perception of investors and their ensuing investment decisions. The study collected data from 134 individual investors and by utilising structural equation modeling (SEM), arrived at the finding that herding, disposition effect, and blue-chip bias significantly increase risk perception, which in turn affects investment decisions. Further, it was noted interestingly that overconfidence, while having a direct positive impact on investment decisions, did not significantly influence risk perception. (Almansour, Elkrghli, & Almansour, 2023)

The findings draw attention to the importance of understanding behavioural biases given that they significantly shape risk perception, which acts as a critical mediator influencing investment choices. The study highlights those

biases such as herding, disposition effect, and blue-chip bias play a part in higher risk perception, leading to cautious investment behaviours, whereas overconfidence is likely to bypass risk perception and directly influence investment decisions, with the consequence of framing more aggressive investment strategies. The results suggest that presence of cognitive biases like overconfidence, in investors, can distort their risk assessments, leading to suboptimal investment decisions. It is vital that these biases are taken into consideration at the time of designing strategies to improve investor decision-making processes, which therefore has important implications for financial advisors and policymakers. The study concludes with recommendations for interventions aimed at mitigating these biases, which would include improved financial education and awareness programmes, assisting investors make investment decisions that are more informed and rational. (Almansour, Elkrghli, & Almansour, 2023)

In the article "Understanding Choice of Milk and Bread for Breakfast among Swedish Children Aged 11-15 Years: An Application of the Theory of Planned Behaviour" by Berg, Jonsson, and Conner (2000), the authors apply the Theory of Planned Behaviour (TPB) for analysing the food choices of Swedish schoolchildren related to their consumption of milk and high-fibre bread. The study aims to understand the influence of attitudes, subjective norms, and perceived behavioural control on children's intentions and behaviours related to their breakfast choices. The research took a sizeable sample of students from 5th, 7th, and 9th grades, who filled out a questionnaire based on TPB, followed by a seven-day food diary in which their actual breakfast consumption was recorded. (Berg, Jonsson, & Conner, 2000)

The findings point out that the TPB components are strong predictors of the children's intentions to consume both milk and high-fibre bread. Attitudes toward the food items and the perception regarding the consumption habits of parents{descriptive norms) significantly predicted intention, particularly in influencing the choice of milk. Interestingly, although perceived behavioural control was a predictor of intentions, it related less consistently to actual consumption, especially for bread. The study also pointed out the critical role

that parental influence plays in children's food choices, both, through direct encouragement (injunctive norms) and by serving as behavioural models (descriptive norms). The research emphasises that children's food choices can well be complex, where their intentions are shaped by both personal attitudes and social influences, and further translating these intentions into behaviour is moderated by various other factors, including the availability of food items and the children being able to determine for themselves making of food choices. (Berg, Jonsson, & Conner, 2000)

Bogers et al. (2004) analyses fruit and vegetable consumption behaviours utilizing the perspective of Theory of Planned Behaviour (TPB), with the focus being on the impact of personal misconceptions related to dietary intake. Their study identifies into the influence that inaccurate self-assessments by individuals regarding their fruit and vegetable consumption has on the predictive power of TPB. The authors have categorized participants into those who accurately assess their intake ("realists") and those who overestimate it ("overestimators"), and thereby draw attention to the importance of self-awareness in dietary behaviour research and the practical applications of TPB in health promotion.

The research indicates that the TPB model successfully predicts fruit and vegetable consumption among realists to a greater extent than overestimators, emphasizing the role of perceived behavioural control as critical in determining both intentions and actual eating behaviour. Interestingly, the study makes an interesting finding that the model's predictive ability decreases, when using objective measures such as biomarkers (e.g., plasma vitamin C and carotenoids), particularly among overestimators. This finding recommends correcting individuals' misconceptions concerning their dietary habits resulting in the enhanced effectiveness of interventions aimed at increasing fruit and vegetable intake. (Bogers et al., 2004)

Han, Hsu, and Sheu (2010) provide a comprehensive analysis of the Theory of Planned Behaviour (TPB) as applied in the context of green hotel choices, testing the influence of environmental-friendly activities (EFAs) on the intentions of consumers to stay at eco-friendly hotels. The study significantly makes an empirical investigation into the factors predicting consumer

intentions to choose a green hotel, specifically evaluating the roles of attitude, subjective norm, and perceived behavioural control. The research also compares the traditional Theory of Reasoned Action (TRA) and TPB models, to conclude that TPB, by incorporating non-volitional factors like perceived behavioural control, offers a superior predictive framework for understanding customer behaviour in this context. A survey of 428 U.S. hotel customers through an online questionnaire, provides the authors solid evidence that visit intentions are strongly influenced by attitudes toward green hotels, social pressure from significant others, and perceived control over the ability to stay at such hotels.

Han and colleagues confirm the predictive power of the TPB, and also explore how the practice of environmentally friendly activities moderates the relationship between these TPB components and visit intentions. Their findings surprisingly suggest that the level of engagement in EFAs does not significantly alter the strength of these relationships. This implies that even consumers frequently engaging in eco-friendly practices may not necessarily exhibit stronger intentions to stay at green hotels, as compared to those less engaged in such activities. The results challenge some assumptions stating that pro-environmental behaviours have a uniform impact across different contexts, thus necessitating marketing strategies for green hotels to look at a broader range of factors beyond consumers‘ general environmental consciousness. (Han, Hsu, & Sheu, 2010)

The study has, in a refined manner, applied the TPB within the hospitality industry, drawing attention to perceived behavioural control and its role in the decision-making process, and made valuable contributions to the available literature. The findings have practical implications in the context of the necessity for hotel marketers to reinforce customers' attitudes toward green hotels and to deal with probable hurdles inhibiting their intentions to book in at such premises. The study suggests the need for additional research looking at how specific pro- environmental behaviours and consumer decision-making interplay, leading to a highly detailed understanding of these dynamics, which in turn could make for highly effective green marketing strategies. (Han, Hsu, & Sheu, 2010)

Yasmin and Ferdaous (2023) examine in-depth, the psychological biases influencing investment decisions among individual investors in Bangladesh, with a focus on those active in the Dhaka Stock Exchange (DSE). The study makes use of structured questionnaire and factor analysis, to analyse nine key behavioural biases it has identified: Cognitive Dissonance, Regret Aversion, Loss Aversion, Overconfidence, Hindsight, Illusion of Control, Herd Instinct, Self-attribution, and Representativeness. The authors go on to explore the impact of these biases on rational decision-making in the stock market. As per their findings, the factors having high influence on and significantly affecting investment choices are Cognitive Dissonance, Regret Aversion, Loss Aversion, and Illusion of Control. This research highlights that these biases have a widespread presence and also play a substantial role in causing irrational investment behaviours, thereby challenging the assumption of investor rationality held by traditional financial theories. (Yasmin & Ferdaous, 2023)

The results of this study agree with similar research conducted in other emerging markets, pointing to a broader applicability beyond Bangladesh. It compares studies in Indonesia and Pakistan where biases like overconfidence and herding have a significant impact on investment decisions, thereby showing that these behavioural tendencies are a common feature across different cultural and economic contexts and not unique to a specific market. Yasmin and Ferdaous emphasize that these biases lead to distorting individual investment decisions as well as contributing to market inefficiencies, such as volatility and unexpected returns, which have historically resulted in stock market crashes in Bangladesh. (Yasmin & Ferdaous, 2023)

The study looks from the perspective of an emerging market, and by providing empirical evidence reinforcing the need to integrate psychological factors into financial models; it thus makes its contribution to the field of behavioural finance. Yasmin and Ferdaous plead in favour of increased financial literacy and awareness programs that will enable investors to recognise and to lessen the impact of these biases on their decision-making processes. The findings make a strong case for addressing these psychological factors, resulting in more stable and efficient financial markets, especially

where traditional financial education is often lacking, such as in developing economies (Yasmin & Ferdaous, 2023)

2.4.5 Behavioral Reasoning Theory (BRT) and Its Applications

Understanding why individuals engage in or resist certain behaviors is a central concern in behavioral science. Traditional models such as the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) and the Theory of Planned Behavior (TPB) (Ajzen, 1991) have provided strong predictive power by linking attitudes, subjective norms, and perceived behavioral control to intentions and actions. However, these models often fail to explain the underlying cognitive mechanisms that justify decisions, particularly in situations where individuals experience ambivalence or conflict. This limitation is due to the fact that traditional models rely on a simplistic assumption that attitudes directly influence intentions without considering the complex interplay of cognitive factors.

To address this gap, Westaby (2005) introduced the Behavioral Reasoning Theory (BRT), which emphasizes the role of reasons as key mediators between values, attitudes, and behavioral intentions. BRT posits that individuals generate both reasons for and against a behavior, and these competing justifications significantly influence attitudes and intentions (Westaby, 2005). In contrast to TRA and TPB, which largely assume a unidirectional pathway from attitudes to intentions, BRT provides a richer framework by explicitly accounting for ambivalence and cognitive conflict (Westaby, Probst, & Lee, 2010). By considering the complex interplay of cognitive factors, BRT offers a more nuanced understanding of the decision-making process.

This chapter explores the foundations of BRT, its key constructs, advantages over competing theories, and its wide-ranging applications in domains such as consumer behavior, sustainability, organizational studies, and behavioral finance. The purpose of this exploration is to provide a comprehensive understanding of the BRT framework and its relevance in various fields of study.

BRT is structured around four interrelated components:

1. Values–global guiding principles (e.g., tradition, security, environmental concern) that shape behavior at a higher-order level.
2. Reasons for behavior–justifications supporting engagement in the behavior (e.g., ―it saves money,‖ ―it helps the environment‖).
3. Reasons against behavior–arguments deterring engagement (e.g., ―it is inconvenient,‖ ―it is risky‖).
4. Attitudes and Intentions: Evaluative judgments and readiness to act, shaped by the balance of reasons for and against.

According to Westaby (2005), reasons serve as intervening cognitive structures that connect values to specific behaviors. For example, a value such as environmentalism may translate into reasons for recycling (e.g., protecting nature) but also coexist with reasons against (e.g., lack of access to recycling centers). The interplay of these reasons ultimately shapes both attitudes toward recycling and intentions to act (Claudy, Garcia, & O'Driscoll, 2015).

Unlike TPB, which emphasizes perceived behavioral control as a constraint, BRT emphasizes justification processes. Individuals seek to defend or rationalize their choices through reasons, which serve both explanatory (why a decision was made) and predictive (what decision will be made) functions (Westaby et al., 2010). This focus on justification processes highlights the dynamic nature of human decision-making and the role of reasons in shaping behavior.

2.4.6 Distinguishing Features of BRT

1. Ambivalence and Cognitive Conflict

A defining strength of BRT is its recognition of ambivalence—the coexistence of positive and negative evaluations toward the same behavior. For instance, in mobile shopping adoption, individuals may value convenience (reason for) but distrust security features (reason against) (Sahu et al., 2020). Such competing reasons are often ignored in TPB-based models that emphasize linear causality. This ambivalence can be attributed to the complexity of human decision-making processes, where individuals weigh multiple factors simultaneously.

2. Diagnostic Utility

BRT offers practical diagnostic value by distinguishing why individuals resist behavior despite favorable attitudes. For example, in e-waste recycling, reasons against (e.g., inconvenience, lack of knowledge) often outweigh reasons for (e.g., environmental concern), explaining low participation rates despite high pro-environmental attitudes (Sharma, Mishra, & Mishra, 2022). This diagnostic utility allows researchers to identify specific barriers to behavior change, which can inform targeted interventions.

3. Integration of Values

While TRA and TPB emphasize beliefs and norms, BRT explicitly incorporates values as distal antecedents, aligning with theories such as the Value-Belief-Norm (VBN) framework (Stern et al., 1999). However, BRT adds explanatory richness by mapping values onto reasons, showing how deeply held cultural orientations manifest in specific justifications (Claudy et al., 2015). This integration of values provides a more nuanced understanding of human behavior, highlighting the importance of underlying values in shaping attitudes and behaviors.

4. Cross-Cultural Applicability

Because values and reasons differ across cultural contexts, BRT is especially suitable for cross-cultural research. For example, collectivist societies may emphasize social approval as a reason for behavior, while individualist cultures may prioritize personal convenience (Sahu et al., 2020). This cross-cultural applicability enables researchers to develop more effective interventions that take into account the unique cultural contexts in which they are implemented.

2.4.7 Applications of BRT

1. Consumer Behavior and Technology Adoption

One of the most significant areas of BRT application is consumer behavior. In technology adoption, reasons for adoption often include convenience, efficiency, and cost savings, while reasons against focus on complexity, risk, and distrust (Sharma & Mishra, 2020). A study on mobile shopping adoption demonstrated that reasons for (ease of use, time saving) significantly enhanced attitudes and

intentions, but reasons against (security concerns, lack of trust) moderated adoption even in the presence of strong perceived usefulness (Sahu et al., 2020).

This dual perspective explains phenomena that traditional models such as UTAUT (Unified Theory of Acceptance and Use of Technology) often cannot fully capture. For example, while UTAUT emphasizes performance expectancy and effort expectancy, BRT reveals the nuanced cognitive justifications that underlie these constructs.

2. Environmental Behavior and Sustainability

BRT has been widely applied in pro-environmental research, including recycling, green product adoption, and sustainable tourism. Sharma et al. (2022) applied BRT to e-waste recycling and found that reasons for recycling (e.g., environmental benefits, regulatory compliance) were often outweighed by reasons against (e.g., lack of infrastructure, inconvenience). The study demonstrated that addressing reasons against is crucial for policy interventions, highlighting BRT‘s utility in identifying barriers to sustainable behavior.

Similarly, Claudy et al. (2015) used BRT to explain resistance to green energy adoption, finding that even environmentally concerned individuals generated strong reasons against adoption, such as cost and perceived inefficiency. This aligns with broader findings in sustainability research that ambivalence is a critical factor shaping behavior (Westaby et al., 2010).

3. Tourism and Lifestyle Choices

In tourism research, BRT has been employed to analyze motivations for and against travel decisions. For example, in pilgrimage tourism, reasons for include tradition, spirituality, and cultural belonging, while reasons against involve cost, safety, and logistical challenges (Sahu et al., 2020). By mapping these opposing forces, BRT provides a more accurate account of why tourists may intend to travel but fail to act, or vice versa.

This application is particularly valuable in contexts where tradition and cultural values strongly influence behavior, making BRT a suitable framework for cross-cultural tourism studies.

4. Organizational and Work-Related Decisions

In organizational psychology, BRT explains employee decisions such as job engagement, turnover, and resistance to change. Westaby et al. (2010) demonstrated that reasons for and against engaging in work-related behavior predict not only intentions but also job performance and well-being. For instance, employees may generate reasons for engaging in change (career growth, skill development) but also reasons against (job insecurity, workload). Recognizing both dimensions enables managers to design more effective interventions.

5. **Behavioral Finance and Decision-Making**

Recent systematic reviews highlight the integration of BRT into behavioral finance. Sahu et al. (2020) emphasize that investor decision-making often involves reasons for (trust in familiar assets, herd confidence) and reasons against (fear of loss, market uncertainty). By structuring these competing justifications, BRT helps explain why biases persist in investment choices despite access to rational information. This complements behavioral economics models by embedding psychological justifications into financial behavior.

2.4.8 Comparative Perspective: BRT and Other Theories

1. TRA / TPB – While TPB is strong in predicting rational intentions, it underrepresents ambivalence. BRT enhances predictive validity by including reasons for and against (Ajzen, 1991; Westaby, 2005).
2. UTAUT – Focuses on technology adoption drivers but lacks diagnostic detail. BRT captures cognitive justifications that clarify why adoption stalls even under favorable utility perceptions (Venkatesh et al., 2003).
3. VBN – Explains pro-environmental behavior via values and norms, but BRT extends by highlighting reasons that operationalize values into justifications (Stern et al., 1999).
4. Thus, BRT is not merely an alternative but a complementary framework that enriches traditional theories by explaining the why behind behavior.

Looking through the perspective of Behavioural Reasoning Theory (BRT), Westaby, Probst, and Lee (2010) present an all- encompassing analysis of leadership decision-making. The study is firmly based on the understanding that leaders, in the face of complex decisions, require to justify their choices for themselves as also to various stakeholders. The authors contend that BRT is wider in scope than traditional models like the Theory of Planned Behaviour (TPB) as it incorporates the reasons given by leaders for their actions, which have a direct influence on their intentions and behaviours. This perspective is crucial in contexts where leadership takes decisions that can significantly impact organizations. Based on a sample of executives making decisions related to employment, the study's findings reveal that intentions of leaders are shaped by reasons, both for and against specific actions, often setting aside the influence of global motives such as attitudes, subjective norms, and perceived control. (Westaby et al., 2010)

This research makes a key contribution by demonstrating that the reasons for actions by leaders are both context-specific as well as powerful predictors of behaviour. This is obvious in such contexts as those requiring leaders to

justify decisions that may be unpopular or involve serious risks, such as employing a younger workforce in high-risk industries. The study highlights that when leaders reflect confidence in their reasons—whether those reasons match broader organizational goals or are based on ethical considerations—there is greater likelihood of acting on those intentions, even in the face of opposition or challenging circumstances. This finding submits that effective leadership necessitates decision-making as well as the ability to be articulate in defending the rationale behind those decisions. (Westaby et al., 2010)

Westaby et al. (2010) also discuss how the inferences from their findings can make leadership more effective so that it can help to foster trust and procedural justice within organizations. An understanding of the basic reasons that push for decision making by leaders, can help organizations to be well positioned to support the leaders better in making knowledgeable, transparent choices that are in sync with organisational values. The study makes a case for future research centred around BRT, by way of integrating it with other leadership theories, as also examining the influence on its applicability in different leadership contexts. The study provides a strong base by which to better understand the subtleties of decision making in the context where reason-based justification is vital for good leadership practice. (Westaby et al., 2010)

Guo et al. (2007) delve into applying the Theory of Planned Behaviour (TPB) and the Theory of Reasoned Action (TRA) to predict smoking behaviour among adolescents in China, as it attempts to give a refined understanding of the effect of cognitive factors influencing health-related behaviours in a non-Western environment. The study took a survey of over 14,000 middle and high school students from seven cities in China, and found that while both TPB and TRA are effective predictors of smoking intentions and behaviours, TPB has an edge over TRA as it explains variance brought on by including perceived behavioural control (PBC). This research is remarkable in its demonstration of Western behavioural theories being relevant in a Chinese context, as also in bringing focus on how important is perceived control in behaviours that are not entirely volitional. (Guo et al., 2007)

The study puts forward its results showing how attitudes toward smoking and

perceived social norms significantly predict smoking intentions in both TPB and PBC models. However, TPB, with its additional focus on PBC, explains a better part of the variance in smoking behaviour. The study also presents that PBC moderates the relationship between attitudes, social norms, and smoking intentions, and as such the more adolescents are aware of control over their smoking behaviour, the less they are influenced by their attitudes and social norms. This finding reinforces the importance of strengthening perceived control in smoking prevention programs, more so in environments with strong social pressures. (Guo et al., 2007)

In addition, the study works with a large sample size from diverse cities which increases the findings to become more generalized, and thus strongly supporting the view that both PB and TRA are applicable cross-culture. The research also provides insights into how prevention of smoking programs can be so designed that there are interventions focusing on changing attitudes and norms as well as on increasing perceived control adolescents over their behaviour. This is all the more relevant in the Chinese context which has smoking deeply ingrained in its social and cultural practices. (Guo et al., 2007).

2.4.9 Cognitive and Psychological Influences

The study by Rzeszutek (2015) examines in detail the relationship between personality traits and being vulnerable to behavioural biases with reference to investors on the Polish stock market. Keeping its focus on three well-known biases— overconfidence, mental accounting, and the sunk-cost fallacy— the study investigates the correlation between biases and personality traits that reflect being impulsive, being reckless or venturesome, and being empathetic as outlined by Eysenck‘s personality model. For this research a sample was taken of 90 retail investors from the Warsaw Stock Exchange, taking help of situational exercises to assess how they are susceptible to these biases along with a personality questionnaire to measure the relevant traits. The findings reveal that venturesomeness, which encompasses traits like self-confidence, perseverance, and a readiness to undertake risks, is negatively correlated with susceptibility to all three behavioural biases. This suggests that the more

venturesome individuals are, the less likely are they to exhibit irrational behaviours in their investment decisions. (Rzeszutek, 2015)

Interestingly, the study did not find a significant correlation between the other two personality traits—impulsivity and empathy—and the susceptibility to behavioural biases. This dearth of correlation would be an indication of these traits holding less influence in the context of investment decision-making, as a result possibly of highly impulsive or empathetic individuals being underrepresented in the community of stock market investors. The study also draws focus to the fact that venturesomeness, rather than impulsivity or empathy, is critical to mitigating the irrationality associated with behavioural biases, resulting in investment decisions that are more rational and potentially profitable. (Rzeszutek, 2015)

Rzeszutek‘s research makes a remarkable contribution to the field of behavioural finance through putting emphasis on how individual personality traits play an important role in shaping investment behaviours. It highlights the role of venture someness as a protector against common cognitive biases, and thereby provides appreciable insights aimed at enhancing decision-making processes in the stock market, to both investors and financial advisors. The findings from the study put forward the proposition that a key strategy in reducing the impact of behavioural biases and improvement of overall market efficiency could be the fostering of the traits associated with venture someness. (Rzeszutek, 2015)

The article "Behavioral Finance and Investment Decisions: Does Behavioral Bias Matter?" by Nkukpornu, Gyimah, and Sakyiwaa (2020) does an in-depth study of the impact of behavioural biases on investment decisions in the context of a developing country, specifically focusing on the Ghanaian stock market. The authors explore how investor behaviour has been influenced by four key behavioural biases: overconfidence, regret, belief, and the "snakebite" effect. The study puts into use descriptive and inferential statistics, including multiple regression analysis, in assessing the correlation between these biases and investment decisions and concludes with findings showing that all four biases significantly affect investment decision-making, with the most influential being "snakebite" effect, followed by belief bias,

regret bias, and overconfidence bias. (Nkukpornu, Gyimah, & Sakyiwaa, 2020)

Empirical evidence is gathered from the study, which shows the critical role of behavioural biases in shaping investment behaviours among individual investors in Ghana. Overconfidence bias, based on an excessive belief in one's judgment and abilities, while seeming to have least impact among the four biases, still showed a notable positive relationship with investment decisions. This is in sync with related existing literature, to suggest that overconfidence can result in excessive trading and risk underestimation. Regret bias, reflecting the emotional response to past investment losses, was found to significantly influence investment decisions, often leading to risk-averse behavior and reluctance to engage in new investments. (Nkukpornu, Gyimah, & Sakyiwaa, 2020)

Belief bias, constituting the influence of personal beliefs and trust in past performance, showed to be positively related to investment decisions. Investors were known to rely on their beliefs and past experiences as guiding their decisions, often leading to biased judgments. The "snakebite" effect, or the fear of loss after a previous financial setback, came up to be the most impactful bias. Under this effect, investors tend to become overly cautious and avoid potentially profitable investments because of past negative experiences. The study focuses on the urgency to recognise these biases to ensure better financial decision-making, further suggesting these psychological factors are to be key considerations for financial advisors and policymakers when advising clients or developing financial regulations.

The study concludes that understanding and addressing behavioural biases is the key to enhanced investment outcomes and financial planning. The authors endorse exploring of additional behavioural biases and their effects in different contexts by taking up further research. So also, research is recommended for developing educational programs enabling investors to recognize and mitigate the influence of these biases on their decisions. (Nkukpornu, Gyimah, & Sakyiwaa, 2020)

Procter et al. (2019) apply the Theory of Planned Behaviour (TPB) and the

Theory of Reasoned Action (TRA) to explore the underutilization of consumer protection tools among internet gambling customers. The study concentrates on comprehending the factors influencing the intention to use *t*hese tools, which include activity statements, deposit limits, and temporary self- exclusion options that online gambling platforms provide. The research conducted a survey of 564 Australian online gambling customers, with a follow-up survey to measure actual tool use, with the results indicating that the significant predictors of the intention to use consumer protection tools are attitudes and subjective norms, with perceived behavioural control showing a minor effect. The inference being that customers are influenced by social norms and tend to have a positive view of these tools, but they do not necessarily perceive a lack of control over their ability to use these tools. (Procter et al., 2019)

Further, the study, showing that past use of consumer protection tools is a strong predictor of future intentions and actual usage, indicates the probability that once customers are likely to continue doing so, once they begin using these tools. The findings suggest that interventions aiming to support increased use of consumer protection tools should also look to building positive attitudes towards these tools along with an increased awareness of their benefits through social influence. In addition, the authors highlight the limitations of relying entirely on the TPB model, as it is seen that including perceived behavioural control does not result in significantly enhancing the predictive power of the model. Instead, the TRA, which excludes perceived behavioural control, provides a more precise framework to understand using these tools in the context of online gambling. (Procter et al., 2019)

The study has implications that are of significance to policymakers and online gambling operators; given that it suggests that an increase in the visibility and perceived social acceptance of consumer protection tools would result in more gamblers adopting the same. A focus on strategies for improving attitudes and influence social norms, may lead to lessening the risks associated with online gambling and instead promote gambling behaviours that are more responsible. Moreover, the study emphasises that

considering past behaviours adds weightage to designing interventions, given that habitual tool use is vital for an ongoing commitment to consumer protection measures. (Procter et al., 2019)

2.4.10 Research Gap

While behavioral finance has advanced our understanding of how psychological factors shape investment decisions, several critical gaps remain. First, personality has typically been examined as a set of independent traits, rather than as a higher-order construct that captures its collective influence. This fragmented approach restricts a holistic understanding of how personality traits jointly shape investor behavior. Second, much of the existing evidence stems from Western economies, where financial systems, cultural norms, and regulatory environments differ significantly from emerging markets like India. As a result, the contextual validity of these findings in India‘s unique investment culture—marked by tax-saving motives, collectivist values, and evolving market structures—remains unclear.

Third, although attitude is a well-established predictor of behavior in frameworks such as the Theory of Planned Behavior (Ajzen, 1991), its psychological antecedents in financial contexts have received limited empirical attention. The pathways through which personality traits shape investor attitudes toward risk, usefulness, and ethical considerations remain underexplored, despite their likely influence on investment behavior. Finally, research in this domain has often treated constructs in isolation, overlooking the need for integrative models that simultaneously account for personality, values, attitudes, and reasons. Behavioral Reasoning Theory (BRT) (Westaby, 2005) offers a suitable lens for such integration, yet its application in financial decision-making—especially in India—is still at a nascent stage.

Taken together, these gaps highlight the absence of a comprehensive framework that integrates personality (as a higher-order construct), attitudes, values, and reasons in explaining investors‘ behavioral intentions. Addressing this void is critical for advancing theory and practice in behavioral finance. Therefore, the present study seeks to examine these interrelationships through the lens of BRT, leading to the following research question:

2.4.11 Research Questions

RQ4: Is it possible to understand the impacts of personality traits, attitude, values, and reasons on behavioral intention?

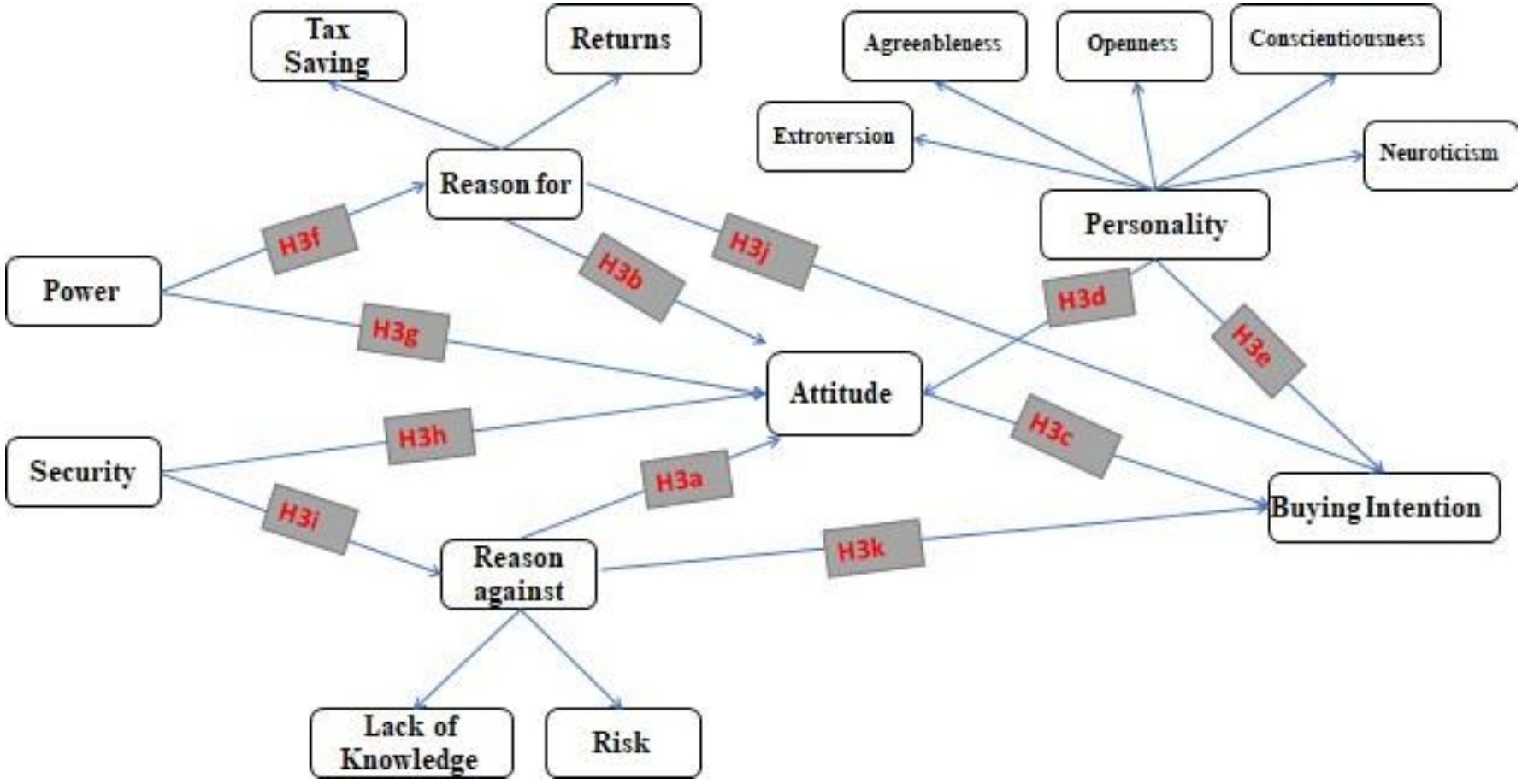
2.4.12 Research hypothesis

Keeping in mind the research questions, the objectives drawn up for the study and the issues at hand, the following hypotheses were framed for statistical testing of the objectives

Objective 3: To examine the impacts of personality traits, attitude, values and reasons on behavioural intention in state of Goa

1. Hypothesis 3a (H3a): ―Reason against significantly influences the Attitude of the mutual investors‖
2. Hypothesis 3b (H3b): ―Reason for significantly influences the Attitude of the mutual investors.
3. Hypothesis 3c (H3c): ―Attitude significantly influences the behavioural intention of the mutual investors.
4. Hypothesis 3d (H3d): ―Personality traits of the investors significantly influence the Attitude of the mutual investors.
5. Hypothesis 3e (H3e): ―Personality traits significantly influence the behavioural intention of the mutual investors.
6. Hypothesis 3f (H3f): ―Power significantly influences the reason for the mutual fund‖
7. Hypothesis 3g (H3g): ―Power significantly influences the Attitude of the mutual investors‖.
8. Hypothesis 3h (H3h): ―Security significantly influences the Attitude of the mutual investors‖.
9. Hypothesis 3i (H3i): ―Security significantly influences the reason against the mutual fund investments‖.
10. Hypothesis 3j (H3j): ―Reason for significantly influences the behavioural intention of the mutual investors‖.
11. Hypothesis 3k (H3k): ―Reason against significantly influences the behavioural intention of the mutual investors‖.

Figure 2.3: Proposed Model for Buying Intention



2.5 Behavioural Biases, Personality, and Buying Intention

The article "Role of Psychological Biases in the Cognitive Decision-Making Process of Individual Investors" by Chandan Kumar Tripathy (2021) delves into the significant impact that psychological biases have on the financial decision-making processes of individual investors in Cuttack and Bhubaneshwar, India. The study identifies four prevalent psychological biases—loss aversion, overconfidence, regrets aversion, and anchoring—that significantly influence the investment behaviors of these investors. Using a structured questionnaire administered to 128 investors, the research employed various statistical tools, including ANOVA, regression analysis, and the AHP, to quantify the impact of these biases on investment decisions. The findings reveal that loss aversion and regret aversion are particularly influential, with investors often making decisions based on the fear of losses rather than the potential forgainst. This tendency leads to risk-averse behavior and reluctance to sell assets at a loss, even when it might be financially prudent to do so. Overconfidence, another prevalent bias identified in the study, drives investors to believe that their abilities and having superior knowledge can give an individual a significant advantage over others in various aspects of life. This can be particularly evident in professional settings where individuals with more extensive knowledge can make more informed decisions and provide better solutions to complex problems. Excessive trading and under-diversification can diminish returns. Anchoring, the fourth bias, causes investors to rely heavily on specific reference points, such as purchase prices, which can skew their perceptions of value and impact decision-making.(Tripathy, 2021). The study underscores the importance of understanding these psychological biases for both individual investors and financial professionals.

By recognizing and mitigating these biases, investors can make more rational decisions, potentially improving their financial outcomes. The research also suggests that financial advisors could use this understanding to better tailor their advice, helping clients navigate their cognitive biases and achieve more optimal investment results. (Tripathy, 2021)

The article "The Relationship between Emotional Biases and Investment Decisions: A Meta-Analysis" by Shailendra Kumar and Akash Chaurasia (2024) explores the significant influence of emotional biases—specifically loss aversion, regret aversion, and overconfidence—on investment decisions. By conducting a meta-analysis of 31 empirical studies, the authors provide a comprehensive overview of how these emotional biases correlate with investment behavior. The meta-analysis revealed that all three emotional biases have a statistically significant positive correlation with investment decisions, with loss aversion showing the strongest relationship ($r = 0.492$), followed by regret aversion ($r = 0.401$) and overconfidence ($r = 0.346$). (Kumar & Chaurasia, 2024).

The findings indicate that loss aversion, where investors prioritize avoiding losses over achieving gains, leads to risk-averse behaviors, such as holding onto losing investments longer than necessary selling prematurely selling assets prematurely. Is linked to overly conservative investment strategies, as investors attempt to avoid the regret associated with potential losses. Overconfidence bias, on the other hand, drives investors to overestimate their knowledge and abilities, often resulting in excessive trading and under-diversification, which can negatively impact long-term returns. The study emphasizes the variability of these effects across different studies, underscoring the complex nature of emotional biases in financial decision-making. This meta-analysis highlights the critical role that emotional biases play in shaping investment decisions and suggests that understanding and managing these biases can lead to more rational and successful investment strategies. The authors also acknowledge the significant heterogeneity among the studies included in the analysis, suggesting that future research should further explore the contextual factors that may influence the strength of these biases. (Kumar & Chaurasia, 2024)

The article by Keller and Pastusiak (2016) delves into the psychological impacts of stock market recommendations on investor behavior, particularly in the Polish stock market. The study is structured in two phases: a behavioral experiment and a real-market data analysis. The experiment reveals that stock recommendations can trigger heuristic effects among investors, such as over-reliance on expert advice or skepticism leading to opposite reactions. These

effects can distort the objective evaluation of investment decisions, often resulting in suboptimal financial outcomes. The study highlights that the ambiguity and varied interpretations of recommendations contribute to these heuristic biases, making it challenging for investors to consistently benefit from such advice.

The authors observe that stock recommendations have a limited impact on actual premovements and investor decisions, especially when considering the broader market context. The results suggest that while some investors rely on these recommendations, their influence is not strong enough to cause significant market shifts. The study ultimately underscores the importance of understanding the psychological underpinnings of investment behavior, emphasizing that stock recommendations alone are not a reliable tool for making profitable investment decisions. (Keller&Pastusiak, 2016)

The article "The Influence of Behavioral Biases on Investment Decisions: Moderating Role of Emotional Stability" by Tahir Imran Gulzar and Dr. Najabat Ali (2023) examines the effect of six key behavioral biases on investment decisions, with a particular focus on how emotional stability influences these effects. The study looks at biases such as anchoring bias, availability bias, self-control bias, overconfidence bias, illusion of control bias, and representative bias, using a sample of 237 active traders on the Pakistan Stock Exchange (PSX). The research methodology involved a hypothetical-deductive approach, utilizing partial least squares structural equation modeling (PLS-SEM) to analyze the data.

The findings reveal that all six behavioral biases significantly influence investment decisions, with anchoring bias and availability bias having the most substantial negative effects. Interestingly, emotional stability was found to moderate these relationships, reducing the negative impact of these biases on investment decisions. For example, individuals with higher emotional stability were less likely to be influenced by

Overconfidence bias and were better able to make rational investment

decisions despite the presence of these biases. The study underscores the importance of emotional stability as a buffer against the harmful effects of behavioral biases, suggesting that emotionally stable investors are more likely to make sound investment choices. These insights are crucial for both investors and financial advisors, highlighting the need for awareness of the psychological factors that can influence decision-making. By understanding and addressing these biases and by fostering emotional stability, investors may improve their decision-making processes and achieve better financial outcomes. (Gulzar & Ali, 2023)

The article "Effect of Emotional Biases on Investor‘s Decision Making in Nigeria" by Ebenezer Y. Akinkoye and Oluwaseun E. Bankole (2020) investigates the role of emotional biases in shaping the investment decisions of Nigerian investors. The study focuses on six key emotional biases: loss aversion, overconfidence, herding, regret aversion, status quo bias, and self-control bias. Data was collected from 300 clients of the top 10 stockbroking firms in Nigeria through a structured questionnaire, and the findings were analyzed using logistic regression.

The results indicate that emotional biases significantly influence investment decisions among Nigerian investors, with loss aversion, overconfidence, herding, and regret aversion being the most prevalent. Loss aversion leads investors to avoid selling off losing stocks due to the fear of realizing losses, while overconfidence causes them to overestimate their ability to predict market movements, often resulting in excessive trading. Herding bias pushes investors to follow the actions of their peers, sometimes leading to suboptimal investment choices. Regret version influences investors to avoid making decisions that could lead to future regret, often resulting in missed opportunities. The study concludes that these emotional biases contribute to irrational investment decisions and market inefficiencies. It suggests that investors should become more aware of their biases and seek expert advice to mitigate their effects. The findings highlight the importance of incorporating psychological insights into financial decision-making frameworks to improve investment outcomes. (Akinkoye & Bankole, 2020)

The article "The Concept of 'Mental Accounting' as the Spirit of Personal

Financial Management for Millennial Women" by Sukma Uli Nuha, Ria Meilan, and Alfinatul Qoni'ah (2024) investigates the role of mental accounting in the personal financial management of millennial women in Indonesia. The study explores how mental accounting—a concept developed by Richard Thaler, which posits that individuals categorize and treat money differently depending on its source or intended use—can influence financial behaviors such as budgeting, spending, and saving. Through an ethno-economic approach, the authors examine the decision-making processes of millennial women, emphasizing the importance of financial literacy in fostering financial independence and effective money management.

The findings of the study suggest that mental accounting plays a significant role in how millennial women manage their finances, particularly in budgeting and planning for future expenses. Mental accounting enables these women to organize their finances in a manner that is consistent with their socio-economic conditions, cultural backgrounds, and personal goals. The authors contend that this approach not only fosters financial discipline but also empowers women to achieve financial well-being and independence. Furthermore, the study implies that financial literacy programs tailored to the needs of millennial women can enhance the positive effects of mental accounting on personal financial management.

In conclusion, the research provides valuable insights into the application of mental accounting in the financial management practices of millennial women, underscoring its potential as a tool for promoting financial stability and independence. The study's findings contribute to the broader understanding of behavioral finance and offer practical implications for developing financial education initiatives that address the unique challenges faced by this demographic. (Nuha, Meilan, & Qoni'ah, 2024).

The article "Personality, Attitude, and Behavioral Components of Financial Literacy: A Comparative Analysis" by Erzsébet Németh and Boglárka Zsótér (2017) explores the interplay between personality traits, financial attitudes, and behaviors in shaping financial literacy among Hungarian individuals. The study is grounded in two significant research projects conducted in Hungary in 2015—one focusing on financial personality types and the other on the financial culture

of the population, utilizing OECD's methodology. The researchers identified nine distinct financial personality types and grouped them into three clusters based on their financial attitudes and behaviors. These clusters are: "anxious unsatisfied," "satisfied conscious," and "moderately anxious unconsidered," each of which encapsulates specific personality traits and financial behaviors. (Németh & Zsótér, 2017)

The findings suggest that financial literacy is not only a matter of knowledge and skills but is also heavily influenced by psychological factors, including attitudes towards money, behavioral patterns, and the ability to manage finances. The study reveals that individuals within the "anxious unsatisfied" cluster tend to be economizers with little money, displaying financial anxiety and dissatisfaction despite their attempts to save. In contrast, those in the "satisfied conscious" cluster exhibit organized and diligent financial behaviors, contributing to higher satisfaction with their financial situation. The "moderately anxious unconsidered" cluster includes individuals who are less disciplined in their financial planning and are more prone to impulsive spending. (Németh & Zsótér, 2017)

This research contributes to the broader understanding of financial literacy by highlighting the importance of personality traits and attitudes in financial decision-making. It underscores the need for financial education programs that address these psychological components to enhance financial well-being and literacy. (Németh & Zsótér, 2017)

The article "The Effect of Financial Knowledge, Financial Attitude, and Personality on Financial Management Behavior" by Wahdiyat Moko, Achmad Sudiro, and Irma Kurniasari (2022) explores the factors that influence financial management behavior among young entrepreneurs in Malang, Indonesia. The study examines the role of financial knowledge, financial attitude, and personality in shaping how these individuals manage their finances, particularly in the context of entrepreneurship. Using a sample of 150 young entrepreneurs, the research employs a quantitative approach with Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the hypothesized relationships between the variables. (Moko, Sudiro, & Kurniasari, 2022)

The findings indicate that personality and financial attitude significantly affect financial management behavior, while financial knowledge does not show a significant direct impact. Specifically, young entrepreneurs with positive financial attitudes and certain personality traits, such as conscientiousness and openness to experience, tend to exhibit better financial management practices. This includes behaviors like budgeting, saving, and investing. On the other hand, the lack of a significant relationship between financial knowledge and financial management behavior suggests that merely possessing financial knowledge is not sufficient; it must be accompanied by the right attitude and personality traits to translate into effective financial management. (Moko, Sudiro, & Kurniasari, 2022)

The study highlights the importance of integrating financial education with efforts to cultivate positive financial attitudes and the development of personality traits conducive to sound financial management. These findings are particularly relevant for policymakers and educators designing financial literacy programs, suggesting that a holistic approach that considers both psychological and educational factors may be more effective in promoting good financial management practices among young entrepreneurs. (Moko, Sudiro, & Kurniasari, 2022)

The article "Herd Instinct Bias, Emotional Biases, and Information Processing Biases in Investment Decisions" by Rohmad Fuad Armansyah (2022) examines the impact of various behavioral biases on the investment decisions of individual investors in the Indonesian capital market. The study focuses on five key biases: overconfidence, herding, endowment, confirmation, and recency biases, and utilizes Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze data

collected from 205 investors. The findings reveal that overconfidence, herding, confirmation, and recency biases significantly influence investment decisions, while endowment bias does not have a substantial impact.

Overconfidence was found to be the most influential bias, with investors displaying excessive confidence in their knowledge and predictive abilities, leading to potentially risky investment behaviors. Herding bias also plays a

significant role, with many investors following the decisions of others without conducting their own analysis, a behavior exacerbated by the rise of social media and digital communication platforms. The study also highlights the effects of confirmation bias, where investors tend to seek out information that supports their existing beliefs, and recency bias, where recent information disproportionately influences decision-making. The lack of impact from endowment bias suggests that, in this context, Indonesian investors may not overvalue their existing assets when making new investment decisions. (Armansyah, 2022)

This research contributes to the behavioral finance literature by providing empirical evidence of how these biases affect investor behavior in a rapidly evolving market environment. It underscores the importance of addressing these biases in financial education and advisory practices to help investors make more informed and rational decisions. (Armansyah, 2022)

The article "Effect of Cognitive and Emotional Biases on Investor Decisions: An Analytical Study of the Iraq Stock Exchange" by Noor Sabah Hameed Al-Dahan, Mohammed Faez Hasan, and Hamid Mohsin Jadah (2019) investigates the influence of cognitive and emotional biases on investment decisions among investors in the Iraqi Stock Exchange. The study focuses on several key biases, including overconfidence, representativeness, availability, and illusion of control, and how these biases lead to irrational investment behaviors. Through the use of a structured questionnaire distributed to 80 investors, the authors found that overconfidence was particularly prevalent, with investors demonstrating excessive confidence in their knowledge and decision-making abilities. This bias often led to overtrading and poor investment outcomes, as investors tended to ignore market signals that contradicted their preconceived notions.

Additionally, the study highlights the impact of emotional biases such as loss aversion, regret aversion, and status quo bias, which further complicate the decision-making process. Loss aversion was found to be a significant factor, causing investors to hold onto losing investments for too long, hoping to avoid realizing a loss. Regret aversion and status quo bias also played a role in discouraging investors from making necessary changes to their portfolios, often leading to suboptimal investment performance. The authors conclude that these

biases significantly affect the efficiency of the financial market in Iraq and suggest that greater awareness and education about these biases could help investors make more rational decisions. (Al-Dahan, Hasan, & Jadah, 2019)

The article "Effect of Cognitive Biases on Investment Decision Making: A Case of Pokhara Valley, Nepal" by Dhungana et al. (2022) examines how cognitive biases influence the investment decisions of individual investors in Pokhara Valley. The study focuses on five key biases: availability, anchoring, overconfidence, herd instinct, and regret aversion. Using a sample of 179 investors, the research employs both descriptive and inferential statistical analyses to determine the extent to which these biases affect rational investment decision-making. The findings indicate that availability bias, overconfidence bias, and herd instinct significantly impact irrational investment decisions. Overconfidence bias, in particular, has the most substantial effect, leading investors to make decisions based on excessive confidence in their knowledge and judgment, which often results in poor financial outcomes. (Dhungana et al., 2022)

Moreover, the study finds that anchoring and regrets aversion biases do not significantly influence investment decisions in this context. The results suggest that while some cognitive biases like overconfidence and availability are pervasive and lead to irrational behavior, others like regret aversion may have a less pronounced effect on the decision-making process of investors in Pokhara Valley. The authors conclude that understanding these biases is crucial for both investors and policymakers to develop strategies that mitigate their negative impact and promote more rational investment behaviors. This study contributes to the growing body of behavioral finance literature by providing empirical evidence from a specific regional context, highlighting the need for tailored financial education and intervention programs to address these cognitive biases. (Dhungana et al., 2022)

The article "An Analysis of Behavioral Biases in Investment Decision-Making" by Geetika Madaan and Sanjeet Singh (2019) explores the influence of behavioral biases on investment decisions, focusing specifically on investors in the National Stock Exchange (NSE) of India. The study reviews four key biases—overconfidence, anchoring, disposition effect, and herding behavior—and assesses their impact on the decision-making processes of individual investors. The

research involved a survey of 243 investors and utilized both descriptive and inferential statistical methods to analyze the data. The findings indicate that overconfidence and herding behavior have a significant positive impact on investment decisions, leading investors to make decisions that deviate from rational financial behavior. Overconfidence, in particular, was shown to cause investors to overestimate their abilities, leading to excessive trading and suboptimal investment choices. (Madaan & Singh, 2019)

Additionally, the study highlights that anchoring and the disposition effect, while present, have a lesser impact on investment decisions compared to overconfidence and herding. Anchoring bias causes investors to rely too heavily on initial information, such as purchase prices, when making subsequent decisions, leading to potential misjudgments in the valuation of assets. The disposition effect, which refers to the tendency to hold onto losing investments too long and sell winning investments too soon, also plays a role, albeit a smaller one, in influencing investor behavior. The authors conclude that behavioral biases significantly affect investment decisions, suggesting a need for increased awareness and education to help investors recognize and mitigate the effects of these biases in their financial decisions. (Madaan & Singh, 2019)

The article "Behavioral Biases on Investment Decision: A Case Study in Indonesia" by Kartini Kartini and Katiya Nahda (2021) examines the considerable influence of cognitive and emotional biases on investment choices made by individual investors in Yogyakarta, Indonesia. The study centers on six behavioral biases: anchoring bias, representativeness bias, loss aversion, overconfidence bias, optimism bias, and herding behavior. Employing a quantitative approach and a sample of 165 individual investors, the researchers discovered that all six biases significantly influence investment decisions. The results indicate that these biases cause investors to stray from rational decision-making processes, frequently resulting in suboptimal investment outcomes.

Anchoring bias, for instance, causes investors to rely too heavily on initial information or specific reference points, such as the purchase price of a stock, when making decisions about buying or selling. Representativeness bias leads investors to make decisions based on stereotypes or past performance, without adequately considering future possibilities. Emotional biases, such as loss

aversion and overconfidence, also play a critical role, with loss aversion causing investors to avoid realizing losses, and overconfidence leading them to overestimate their abilities and take excessive risks. The study highlights the pervasive nature of these biases and underscores the importance of behavioral finance in understanding and improving investment decision- making processes. (Kartini & Nahda, 2021)

The article "Beyond Risk Tolerance: Regret, Overconfidence, Personality, and Other Investor Characteristics" by Carrie H. Pan and Meir Statman (2010) critically examines the inadequacies of traditional risk tolerance assessments used by financial advisors, arguing that these assessments often fail to capture the full range of factors that influence investor behavior. The authors identify five key deficiencies in typical risk tolerance questionnaires, including their inability to account for the multiple risk tolerances that individuals may have across different mental accounts, the opaque rules linking questionnaire answers to portfolio allocations, and the failure to consider the impact of market conditions on an investor's risk tolerance. Additionally, the study highlights the importance of other psychological propensities such as regret, overconfidence, and trust, which can significantly alter an investor‘s risk tolerance and decision-making processes.

The findings suggest that investors' personalities play a crucial role in shaping their financial behavior, with characteristics like extraversion and conscientiousness being particularly influential. For instance, the study finds that extraverted individuals tend to exhibit higher risk tolerance, while those who are more conscientious are generally more risk-averse. Moreover, the study reveals that overconfidence can lead to inflated perceptions of risk tolerance, potentially resulting in overly aggressive investment strategies. The authors advocate for a more comprehensive approach to investor assessment, one that goes beyond simple risk tolerance measures to include personality traits and emotional biases. This approach could lead to better- aligned investment strategies that are more tailored to the individual investor's psychological profile. (Pan & Statman, 2010)

The article "Determinants of Individual Investor Behavior in Stock Investment Decisions" by Reza Widhar Pahlevi and Indri Irma Oktaviani (2018) examines

the various factors influencing individual investors' decisions when selecting stocks in the Indonesian market. The study employs a Structural Equation Model (SEM) using Partial Least Squares (PLS) to analyze data from a sample of university students in Yogyakarta who actively participate in stock trading. The research identifies several key factors that significantly impact investor behavior, including attitudes, subjective norms, perceived behavioral control, overconfidence, excessive optimism, and herd behavior. These psychological and social factors are shown to positively influence investors' intentions to invest, underscoring the complex interplay between individual psychology and investment decision-making. (Pahlevi & Oktaviani, 2018)

The findings suggest that subjective norms and perceived behavioral control are particularly influential, indicating that social influences and the perceived ease of executing investment behaviors play crucial roles in shaping investors' intentions. Overconfidence and excessive optimism also significantly affect investor attitudes, leading to more aggressive investment behaviors. However, the study finds no significant impact of risk psychology on investor attitudes, suggesting that while investors are influenced by social and psychological factors, their perception of risk does not necessarily align with their actual investment behavior. This research highlights the importance of considering both psychological and social factors in understanding investor behavior and suggests that interventions aimed at improving financial decision-making should address these aspects. (Pahlevi & Oktaviani, 2018)

The article "Study of Investment Decisions and Personal Characteristics through Risk Tolerance: Moderating Role of Investment Experience" by Nasira Perveen, Ashfaq Ahmad, Muhammad Usman, and Faiza Liaqat (2020) explores the impact of personal characteristics on investment decisions, specifically through the lens of risk tolerance. The study focuses on two key personality traits—extraversion and introversion—and examines how these traits influence investment decisions among individual investors in the Pakistan Stock Exchange (PSX). Using Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze data from 175 investors, the research finds that extraversion has a significant positive impact on investment decisions, mediated by risk tolerance. Conversely, introversion is negatively associated

with investment decisions, also mediated by risk tolerance. The study further reveals that investment experience plays a moderating role, enhancing the positive relationship between extraversion and risk tolerance but showing no significant effect on the relationship between introversion and risk tolerance. (Perveen, Ahmad, Usman, & Liaqat, 2020)

These findings highlight the importance of understanding the interplay between personality traits and risk tolerance in shaping investment decisions. The research suggests that extraverted individuals are more likely to take risks in their investments, leading to potentially higher returns, while introverted individuals tend to be more cautious, possibly resulting in lower-risk, lower-return investments. The study‘s insights are valuable for financial advisors, as they underscore the need to consider individual personality traits and risk tolerance when advising clients on investment strategies. Additionally, the moderating role of investment experience suggests that more experienced investors may be better equipped to manage the risks associated with their personality traits, particularly in the context of extraversion. (Perveen, Ahmad, Usman, & Liaqat, 2020)

The article "A Study of the Emotional Intelligence and Personality Traits of University Finance Students" by Ana M. Rosales-Pérez et al. (2021) examines the emotional intelligence (EI) and personality traits (PTs) of university finance students compared to professionals in the financial industry. The study utilizes the Trait Emotional Intelligence Questionnaire (TEIQue) and the Big Five Inventory (BFI) to assess the EI and PTs of both groups, with the goal of identifying areas where students may need further training to avoid financial behavior biases. The findings indicate that finance students generally exhibit lower levels of EI in key areas such as empathy, emotion regulation, self- motivation, and stress management. Additionally, students show deficits in personality traits such as agreeableness, openness, and conscientiousness compared to professionals. These deficits contribute to a greater susceptibility to biases like risk tolerance, endowment bias, and optimism bias, which can adversely affect their financial decision-making. (Rosales-Pérez et al., 2021)

The research highlights the importance of incorporating comprehensive EI and PT training into university curricula to better prepare finance students for their professional careers. The authors suggest that enhancing students' emotional

competencies and personality traits could help mitigate the impact of financial behavior biases, leading to more rational and effective decision- making in their future roles within the financial industry. This study contributes to the broader understanding of the psychological factors influencing financial behavior and underscores the need for targeted educational interventions to bridge the gap between students and professionals in the field. (Rosales-Pérez et al., 2021)

The article "Establishing a Link Between Risk Tolerance, Investor Personality and Behavioral Finance in South Africa" by Zandri Dickason and Sune Ferreira (2018) explores the relationship between various behavioral finance biases and investor personality traits, specifically within the context of risk tolerance. The study categorizes investors into different risk tolerance levels—low, medium, and high—and examines how these levels correspond to different behavioral biases. The research reveals that conservative investors, who typically exhibit low risk tolerance, are more prone to biases such as loss aversion and mental accounting. These biases often lead to overly cautious investment behaviors, where investors hold onto poor-performing assets in an attempt to avoid losses, thereby exposing themselves to further risk. . (Dickason & Ferreira, 2018)

Conversely, the study finds that moderate and aggressive investors, who have higher levels of risk tolerance, are more susceptible to biases like overconfidence, representativeness, and gambler‘s fallacy. These biases can result in overly optimistic investment strategies and frequent trading, driven by the belief that they can outperform the market. The research underscores the importance of understanding the interplay between investor personality, risk tolerance, and behavioral biases in order to develop more effective investor profiling and tailored financial advice. By addressing these biases, investment companies can help investors make more rational decisions, thereby improving their financial outcomes. (Dickason & Ferreira, 2018)

The article "Personality and Wealth: An Exploration of Big Five and Financial Outcomes" by James W. Exley (2020) investigates the relationship between the Big Five personality traits and various financial outcomes, including financial literacy, financial risk tolerance, income, and net worth. The study uses the Big Five personality model to assess how traits like extraversion,

conscientiousness, and neuroticism are associated with financial behaviors and outcomes. Exley finds that conscientiousness is positively related to financial literacy, income, and net worth, but negatively associated with financial risk tolerance. Extraversion is linked to higher financial risk tolerance and income, though it does not correlate with higher financial literacy or net worth. This suggests that while extraversion may lead to riskier financial behaviors and greater income, it does not necessarily contribute to wealth accumulation. (Exley, 2020)

The study also highlights that neuroticism negatively impacts financial literacy and income, while openness is positively associated with financial literacy but negatively with financial risk tolerance. These findings imply that certain personality traits play a significant role in shaping financial behaviors and outcomes, making them crucial factors in understanding individual differences in wealth accumulation. Exley's research contributes to the growing field of financial psychology by demonstrating that the Big Five personality traits can provide meaningful insights into financial decision-making and outcomes. The study suggests that integrating personality assessments into financial planning could enhance the effectiveness of financial advice and education, leading to better financial outcomes for individuals. (Exley, 2020)

The article "Impact of Personal Economic Environment and Personality Factors on Individual Financial Decision Making" by Prinz et al. (2014) explores how environmental factors, such as financial socialization and current financial security, alongside personality traits, influence financial decision-making processes. The study was conducted with a sample of young male students, examining their risk aversion and decision-making in financial contexts through controlled experiments. The results indicate that the source of financial support significantly impacts risk aversion, with students relying on scholarships or grants exhibiting higher risk aversion compared to those supported by family. Interestingly, while personality traits, particularly agreeableness and openness, were found to have some effect, their overall impact was modest compared to environmental factors. . (Prinz et al., 2014)

Moreover, the study reveals that intelligence, measured by the Culture Fair Intelligence Test, also plays a role in shaping financial decision-making,

suggesting that cognitive abilities may influence how individuals perceive and manage risk. The findings underscore the complexity of financial decision-making, highlighting the interplay between external financial conditions and intrinsic personality traits. The authors suggest that while personality does contribute to financial behavior, environmental factors, particularly those related to financial security and independence, are more decisive in determining risk aversion. This research contributes to the field of behavioral finance by emphasizing the need for a more nuanced understanding of the factors that drive financial decisions, especially in young adults. (Prinz et al., 2014)

The article "Investor Psychology and Stock Market Behavior During the Initial Era of COVID-19: A Study of China, Japan, and the United States" by Sobia Naseem et al. (2021) investigates the impact of investor psychology on stock market behavior during the early stages of the COVID-19 pandemic. The study focuses on the psychological responses of investors in the Shanghai, Nikkei 225, and Dow Jones stock markets from January 20, 2020, to April 27, 2020. Using principal component analysis (PCA), the authors examine how investor sentiment, driven by the unprecedented uncertainty and fear caused by the pandemic, affected stock market performance. The findings reveal a significant negative relationship between investor psychology and stock market returns during this period, indicating that heightened anxiety and pessimism led to reduced investment activity and lower stock prices. (Naseem et al., 2021)

The study further highlights that the psychological impact of COVID-19 was not uniform across different markets, with each market reacting differently based on regional factors and investor behavior patterns. For instance, while all three markets experienced a downturn, the degree and timing of these declines varied, reflecting the unique investor sentiment in each region. The authors suggest that understanding these psychological influences is crucial for developing strategies to stabilize markets during crises. This research contributes to the broader literature on behavioral finance by providing empirical evidence of the profound effect that global health crises can have on financial markets through the lens of investor psychology. (Naseem et al.,

2021)

The article "Moderating Role of Information Asymmetry Between Cognitive Biases and Investment Decisions: A Mediating Effect of Risk Perception" by Zhang et al. (2022) explores the impact of cognitive biases—specifically anchoring bias and optimism bias—on investment decisions, particularly in the real estate sector. The study utilizes a structured questionnaire to gather data from 317 real estate investors and employs mediation and moderation analyses to investigate the relationships between these cognitive biases, risk perception, and investment decisions. The findings indicate that both anchoring bias and optimism bias significantly influence investment decisions, with risk perception playing a mediating role in these relationships. Additionally, the study reveals that information asymmetry moderates the effect of cognitive biases on investment decisions, suggesting that when investors have unequal access to information, the influence of cognitive biases on their decisions is either amplified or diminished. (Zhang et al., 2022)

This research contributes to the understanding of behavioral finance by highlighting the importance of psychological factors in investment decision-making. The study underscores that investors often rely on cognitive shortcuts, such as anchoring to past prices or being overly optimistic about future outcomes, which can lead to biased decision-making. Moreover, the role of information asymmetry as a moderating factor suggests that access to complete and accurate information is crucial in mitigating the negative effects of cognitive biases. The authors suggest that policymakers and financial advisors should consider these psychological and informational factors when designing interventions aimed at improving investment decision-making, particularly in the context of real estate investments. (Zhang et al., 2022)

The article "Post-COVID-19 Investor Psychology and Individual Investment Decision: A Moderating Role of Information Availability" by Jan et al. (2022) investigates how psychological biases influenced individual investment decisions in the Chinese stock market during the post-COVID-19 pandemic period, with a particular focus on the moderating role of information availability. The study examines four key psychological biases: overconfidence, representativeness, anchoring, and availability bias, and evaluates their impact

on investment decisions. The findings indicate that overconfidence, representativeness, and anchoring biases significantly and positively influence investment decisions, suggesting that investors tend to rely heavily on their cognitive biases when making decisions in uncertain environments like the post-pandemic period. Conversely, availability bias was found to have a significant but negative impact on investment decisions, implying that reliance on readily available information, which may not always be accurate or comprehensive, can lead to suboptimal investment choices.

The study further reveals that the availability of information plays a crucial moderating role in these relationships. Specifically, the impact of psychological biases on investment decisions is either amplified or mitigated depending on the quality and accessibility of information available to investors. This underscores the importance of accurate and comprehensive information in helping investors navigate their biases and make more informed decisions. The research contributes to the field of behavioral finance by providing empirical evidence on the significant role that psychological factors and information availability play in shaping investment behavior, particularly in the context of crisis situations such as the COVID-19 pandemic. The findings suggest that enhancing information dissemination and addressing cognitive biases could improve investment outcomes for individual investors in the future. (Jan et al., 2022)

The article "The Effectiveness of Acceptance and Commitment Group Financial Therapy on Financial Literacy, Personal Financial Management, and Mental Accounting" by Zaniani et al. (2022) examines the impact of a novel financial therapy intervention on various aspects of financial behavior among merchants in Shahrekord, Iran. The study uses a quasi- experimental design with pre-test and post-test measures, comparing an experimental group that received the therapy to a control group that did not. The intervention was based on the Acceptance and Commitment Therapy (ACT) framework, incorporating a five-step model to improve participants' financial literacy, personal financial management, and mental accounting.

The results demonstrated that the therapy significantly improved financial literacy and mental accounting in the experimental group compared to the control group,

with effect sizes of 0.54 and 0.45, respectively. However, the therapy did not significantly impact personal financial management scores. (Zaniani et al., 2022)

The findings suggest that while the ACT-based financial therapy is effective in enhancing cognitive aspects of financial behavior, such as literacy and mental accounting, it may not be sufficient to alter more ingrained financial management behaviors. The study highlights the potential of psychological interventions to address cognitive and emotional barriers to financial decision-making, but it also underscores the complexity of personal financial management, which may require more targeted or prolonged interventions. This research contributes to the growing field of financial therapy by demonstrating the utility of combining psychological approaches with financial education to foster better financial outcomes. (Zaniani et al., 2022)

The article "Investor's Psychology in Investment Decision Making: A Behavioral Finance Approach" by Jhansi Rani Boda and Dr. G. Sunitha (2018) explores the significant role of psychological factors in the investment decision-making processes of individual investors. The study critically analyzes how behavioral biases such as overconfidence, herd behavior, mental accounting, and representativeness impact investors' decisions, often leading them away from rational financial behavior. The research highlights that traditional financial theories, which assume rationality among investors, fail to account for these psychological influences that lead to market anomalies and irrationalinvestment decisions. Through a historical perspective, the authors argue that the investor‘s mood, sentiment, and psychological state significantly influence market movements, making it crucial to integrate psychological insights into financial decision-making frameworks. (Boda & Sunitha, 2018)

Moreover, the article underscores the complexity of investment behavior by examining how cognitive biases, like heuristics, influence the decision-making process. The study suggests that psychological factors, including emotions, moods, and personality traits, play a pivotal role in shaping investment behaviors and outcomes. The findings advocate for a deeper understanding of behavioral finance to mitigate the adverse effects of these biases on investment

decisions. By doing so, investors can potentially convert these biases into financial advantages, thereby improving their investment performance. This research contributes to the growing field of behavioral finance by emphasizing the need for a more nuanced approach to understanding investor behavior that goes beyond traditional economic models. (Boda & Sunitha, 2018)

The article "Investor Psychology in Capital Markets: Evidence and Policy Implications" by Kent Daniel, David Hirshleifer, and Siew Hong Teoh (2002) presents an extensive review of how psychological biases impact investor behavior and market prices, leading to systematic mispricing and resource misallocation. The authors argue that cognitive limitations, such as limited attention and overconfidence, cause investors to be overly credulous about the incentives of informed market participants, which can exacerbate market inefficiencies. The study emphasizes that psychological biases are pervasive and difficult to escape, suggesting that even rational traders cannot bfully eliminate mispricing. The authors review evidence indicating that these biases significantly affect asset prices, with consequences for market efficiency. They also discuss how psychological factors contribute to phenomena like overconfidence, which leads to excessive trading, and loss aversion, which influences investors' reluctance to sell losing investments. . (Daniel et al., 2002)

The article further explores the implications of investor psychology for public policy, suggesting that government regulation might play a role in mitigating the adverse effects of these biases. However, the authors caution against heavy-handed interventions, arguing that market participants, despite their biases, might still be better at correcting mispricing than government officials. The study concludes by recommending that policies focus on improving disclosure, reporting, and investor education, rather than attempting to correct market prices directly. This research contributes to the field of behavioral finance by providing a comprehensive overview of how investor psychology can influence capital markets, and it offers practical recommendations for policy that account for these behavioral insights. (Daniel et al., 2002)

The article "Proposing the Role of Mental Accounting and Financial Cognition on Personal Financial Planning: A Study in Indian Context" by Mousumi Singha

Mahapatra, Jayasree Raveendran, and Anupam De (2017) explores the intricate relationship between mental accounting, financial cognition, and personal financial planning among Indian individuals. The study highlights that mental accounting—a cognitive process where individuals categorize and treat money differently depending on its source or intended use—significantly impacts financial decision-making. The research suggests that mental accounting can lead to irrational financial behavior, such as the misallocation of resources or suboptimal investment choices. Financial cognition, which refers to an individual's understanding and processing of financial information, is also found to play a crucial role in shaping personal financial strategies. The study indicates that higher financial cognition levels lead to better financial planning and decision-making outcomes. (Mahapatra et al., 2017)

The research further underscores the importance of integrating behavioral finance concepts into personal financial planning. The authors argue that traditional financial planning models, which assume rational behavior, are insufficient to account for the cognitive biases that influence financial decisions. By incorporating mental accounting and financial cognition into financial planning strategies, individuals can improve their financial outcomes by making more informed and rational decisions. The findings of this study contribute to the growing field of behavioral finance by providing empirical evidence of the significant role that cognitive processes play in financial planning. The study suggests that financial education programs should focus on enhancing financial cognition and addressing the biases associated with mental accounting to improve personal financial management in the Indian context. (Mahapatra et al., 2017)

The article "Personality, Risk Tolerance, and Social Network Use: An Exploratory Study" by Shaista Wasiuzzaman and Siavash Edalat (2016) examines the relationship between an individual's personality traits, their tolerance for financial risk, and their behavior on social networking sites (SNS), particularly Facebook. The study employs data from 220 university students in Malaysia, using regression analysis to explore how different aspects of Facebook usage, such as the frequency of logging in and the purpose of use (social connection versus self-expression), correlate with financial risk tolerance. The findings indicate that individuals who frequently log in to Facebook tend to have higher

financial risk tolerance, suggesting that the frequency of SNS use can be a predictor of one's willingness to take financial risks. Interestingly, the study also finds that using Facebook primarily for social connection is associated with lower financial risk tolerance, while the number of friends and time spent on Facebook are not significantly related to risk tolerance.

The study contributes to the growing body of literature on behavioral finance by highlighting the potential of using social media behavior as an additional tool for understanding financial risk tolerance. This could have practical implications for financial advisors and consultants, who might consider incorporating social media data into their assessment of clients' risk profiles. However, the authors caution that these findings are exploratory and suggest further research is needed to fully understand the complex relationships between personality, risk tolerance, and social network behavior. The study also emphasizes the importance of considering other factors, such as prior financial knowledge, which was found to be a significant predictor of financial risk tolerance in the sample studied. (Wasiuzzaman & Edalat, 2016)

The article "Impact of Financial Personality Traits on Household Financial Behavior" by Ifra Khan and Dr. Danish Ahmed Siddique (2021) examines how various financial personality traits influence the financial behavior of middle-class families in Pakistan. The study focuses on traits such as objective and subjective financial knowledge, numeracy, cognitive

reflection, self-control, and self-efficacy, exploring their direct and mediating effects on financial behavior. The findings indicate that these financial personality traits significantly impact household financial decisions, with both objective and subjective financial knowledge playing a critical role in determining financial behaviors. Moreover, the study reveals that financial anxiety and financial security serve as mediating factors, further influencing how these personality traits affect financial decisions. (Khan & Siddique, 2021)

The research highlights the importance of understanding the interplay between cognitive and psychological factors in shaping financial behavior. For instance, individuals with higher self-control and self-efficacy are more likely to exhibit sound financial behavior, such as saving and prudent spending. Conversely, those

with higher levels of financial anxiety are more prone to risky financial behaviors. The study suggests that enhancing financial literacy and addressing psychological barriers could lead to better financial outcomes for households. This research contributes to the field of behavioral finance by providing insights into the specific personality traits that influence financial decisions, emphasizing the need for tailored financial education and intervention strategies. (Khan & Siddique, 2021)

The article "The Influence of Behavioral Bias, Cognitive Bias, and Emotional Bias on Investment Decision for College Students with Financial Literacy as the Moderating Variable" by Vido Novianggie and Nadia Asandimitra (2019) explores the impact of various psychological biases on the investment decisions of college students in Surabaya, Indonesia. The study examines how herding bias, risk perception, overconfidence, and representativeness influence investment decisions, with a particular focus on the role of financial literacy as a potential moderating factor. The authors find that herding bias, risk perception, and overconfidence significantly affect investment decisions, while representativeness also plays a role, albeit to a lesser extent. Interestingly, financial literacy, contrary to the authors' expectations, does not moderate the relationship between these biases and investment decisions but instead acts as an independent factor influencing investment behavior. The study highlights that students often rely on external advice from brokers or friends and past experiences when making investment decisions, pointing to the importance of social influences and prior experiences in shaping financial behavior. (Novianggie & Asandimitra, 2019)

Furthermore, the research reveals that disposition effect and experience regret do not significantly impact investment decisions among the students surveyed. This suggests that while students may exhibit certain cognitive and emotional biases, their decision- making is less influenced by past investment outcomes or regret over previous decisions. The findings underscore the complexity of investment behavior among young, relatively inexperienced investors, emphasizing the need for better financial education and awareness to mitigate the influence of biases. By understanding these behavioral factors, educators and financial advisors can develop strategies to improve financial literacy and decision- making among young investors, potentially leading to more rational and informed investment

choices. (Novianggie & Asandimitra, 2019)

The article "Overcoming Cognitive Biases: A Heuristic for Making Value Investing Decisions" by Eben Otuteye and Mohammad Siddiquee (2015) discusses the significant impact of cognitive biases on investment decisions and proposes a heuristic approach to mitigate these biases in value investing. The authors argue that cognitive biases, such as overconfidence, anchoring, and confirmation bias, can lead to suboptimal investment decisions, particularly in environments characterized by uncertainty and limited information. To address this issue, they develop a systematic heuristic that aligns with the principles of value investing as defined by Benjamin Graham. This heuristic focuses on fundamental factors like profitability, financial stability, and margin of safety, providing a structured approach that reduces the likelihood of biased decision-making. The authors emphasize that this pre-specified decision-making process not only simplifies the complex task of stock selection but also enhances the quality of decisions by minimizing the influence of emotional and cognitive distortions. (Otuteye & Siddiquee, 2015)

The heuristic proposed by Otuteye and Siddiquee serves as a practical tool for investors seeking to adhere to value investing principles while avoiding the common pitfalls associated with cognitive biases. By relying on a disciplined and systematic approach, investors can focus on data-driven decisions rather than succumbing to emotional impulses or market noise. The study contributes to the behavioral finance literature by offering a concrete method to improve investment outcomes through the application of a heuristic that is both robust and accessible to a broad range of investors. The authors conclude that the consistent use of this heuristic can lead to superior investment performance by ensuring that decisions are grounded in sound financial analysis rather than cognitive biases. (Otuteye & Siddiquee, 2015. The article "Investor Irrational Selection Bias in Stock Market Based on Cognitive Psychology: Evidence from Herding Behaviour" by Jianhua Ye, Danyang Li, and Yaru Cao (2020) explores how cognitive biases, particularly herding behavior, affect investor decision-making in China's A-share market. The study investigates whether herding behavior, a phenomenon where investors follow the actions of others rather than making independent decisions, is driven by psychological factors like loss aversion and extrapolative expectation—

the belief that past price trends will continue. Using empirical data from the Chinese stock market, the study finds that herding behavior is prevalent, particularly in bear markets, where loss aversion amplifies irrational investor behavior. The researchers conclude that herding leads to significant price volatility, suggesting that investors' cognitive biases can severely impact market efficiency. (Ye, Li, & Cao, 2020)

Additionally, the article provides insights into how herding behavior varies under different market conditions. While herding is more pronounced during market downturns, it is less common during bullish periods. This discrepancy is attributed to investor psychology, where fear of losses drives herd behavior in declining markets. In contrast, during rising markets, investors may become less influenced by the actions of others. The findings emphasize the need for better investor education and regulatory frameworks to mitigate the effects of irrational behavior on stock market stability. The research contributes to the broader understanding of behavioral finance, demonstrating how cognitive biases and psychological factors influence market dynamics. (Ye, Li, & Cao, 2020). The article "Role of Cognitive and Emotional Biases in Investment Decisions: Indian Scenario" by K. Prabhu Sahai (2020) explores the influence of cognitive and emotional biases on investor behavior, specifically within the Indian stock market. The research focuses on biases such as overconfidence, representativeness, availability, and illusion of control, among others. It reveals that Indian investors often exhibit overconfidence, believing they have superior knowledge about market trends, leading to risky decisions without deep research. This overconfidence, coupled with representativeness bias, where investors rely heavily on past patterns to predict future outcomes, causes irrational investment behavior. The study emphasizes that these cognitive biases significantly distort investor decision- making, leading to market inefficiencies. (Sahai, 2020)

The article also highlights the role of emotional biases, particularly loss aversion and regret aversion, which cause investors to hold onto losing investments for too long to avoid realizing a loss or feeling regret. These biases, along with others like self-control bias and status quo bias, further complicate investment decisions, as investors tend to avoid making necessary portfolio changes due to emotional

resistance. The study concludes that a deeper understanding of these biases is essential for improving investment strategies in the Indian stock market and suggests the need for more comprehensive financial education that addresses both cognitive and emotional aspects of decision-making. (Sahai, 2020)

The article "Role of Emotional Bias on Investment Decision from Behavioural Finance Perspective" by Ruchi Priya Khilar and Dr. Shikta Singh (2020) explores the influence of emotional biases on investment decisions, particularly in the Indian context. The study highlights that while traditional finance assumes investors are rational, behavioral finance recognizes that emotions play a significant role in decision-making, often leading to irrational behaviors and losses. The authors focus on four key emotional biases—overconfidence, loss aversion, home bias, and the endowment effect. Overconfidence bias, where investors overestimate their knowledge and abilities, leads to excessive trading and poor decision-making. Similarly, loss aversion causes investors to avoid losses at all costs, often resulting in missed opportunities for gain. The study further examines home bias, where investors prefer domestic investments despite better opportunities abroad, and the endowment effect, where individuals overvalue assets they already own, leading to suboptimal investment decisions. (Khilar & Singh, 2020)

The article also provides a review of literature, emphasizing that emotional biases are prevalent in both individual and institutional investors. The research reveals that overconfidence is the most widely studied emotional bias, followed by loss aversion. The authors suggest that understanding these biases can help investors recognize their own tendencies and take corrective actions to minimize the impact on their financial decisions. They conclude that emotional biases significantly affect the financial market by influencing investment behaviors and leading to market inefficiencies. The study calls for more research on lesser-explored biases like home bias and the endowment effect to better understand their impact on decision-making. (Khilar & Singh, 2020)

The article titled *Personality Traits and Behavioural Biases: The Moderating Role of Risk-Tolerance* explores the relationship between personality traits, behavioral biases, and risk tolerance, particularly in the context of Indian stock market investors. The study investigates how personality traits like

conscientiousness, extroversion, and neuroticism influence various behavioral biases such as overconfidence, herding, disposition effect, representativeness, and anchoring. The research applies structural equation modeling (SEM) to analyze data from 847 investors, finding that conscientiousness and extroversion are significantly associated with biases such as overconfidence and representativeness. Neuroticism, on the other hand, tends to amplify biases like herding and disposition effect due to negative emotions and low self-confidence. The study highlights that personality traits significantly shape the financial decisions of individual investors, leading to cognitive distortions that deviate from rational decision-making frameworks. (Singh et al., 2023)

A key contribution of the research is its examination of the moderating role of risk tolerance in the relationship between personality traits and behavioral biases. The findings suggest that individuals with high risk tolerance are more prone to overconfidence and herding biases, while risk-averse individuals are less likely to exhibit these tendencies. The study emphasizes that risk tolerance can either amplify or mitigate the impact of personality traits on behavioral biases, offering practical implications for financial advisors. Advisors can tailor their advice based on a client's personality and risk tolerance, promoting strategies that help clients avoid cognitive traps. By integrating behavioral insights into investment strategies, financial professionals can potentially guide investors toward more rational and diversified financial decisions. (Singh et al., 2023)

The article discusses the role of mental accounting in personal financial planning, particularly among Indian households. It explores how mental accounting, which refers to the cognitive processes individuals use to segregate, categorize, and manage their finances, plays a significant role in influencing financial decision-making. The study demonstrates that mental accounting mediates the relationship between financial cognition (comprising financial attitude, risk attitude, and financial knowledge) and personal financial planning. By utilizing partial least square structural equation modeling (PLS-SEM), the study confirms that mental accounting has a substantial impact on financial planning practices, such as cash flow management, investment planning, and retirement planning. The findings suggest that individuals with higher financial cognition are more likely to engage in better financial planning when they apply

mental accounting practices effectively. (Mahapatra et al., 2022)

Furthermore, the study emphasizes the importance of financial education, indicating that a deeper understanding of mental accounting can improve individuals' self-control and self- regulation in financial decisions. The research highlights that mental accounting helps individuals manage their spending by categorizing income into different mental accounts, such as current income, current assets, and future income. This cognitive process supports better budgeting and saving behavior, leading to more effective financial planning. The study concludes that financial advisors can leverage mental accounting insights to help clients achieve greater financial stability and meet long-term financial goals. (Mahapatra et al., 2022)

The article by Dowling and Lucey (2004) delves into the role of emotions and feelings in the investment decision-making process, challenging the traditional rational models in finance. Their analysis underscores that investor behavior is often influenced by emotional reactions, which may not align with rational decision-making processes, especially under conditions of risk and uncertainty. The authors review previous research highlighting how environmental factors such as weather, mood, and even market-related images affect investor decisions. They suggest that emotions not only guide cognitive evaluations but also directly influence the decisions investors make in equity markets. This emotional influence can lead to predictable patterns in market behavior, particularly when widely shared feelings impact a large group of investors. (Dowling & Lucey, 2004)

Moreover, Dowling and Lucey argue that investor sentiment significantly affects equity pricing, a finding supported by empirical research cited in the article. They point to studies that show how transient mood states, influenced by weather or other environmental factors, can result in either overoptimism or excessive pessimism in equity valuations. The paper concludes with suggestions for future research, proposing that more theoretical and empirical work is necessary to fully understand the extent to which emotions shape financial decisions. This synthesis bridges the gap between psychology and financial markets, emphasizing the need for finance theories to account for the non-rational elements of human behavior in market predictions. (Dowling & Lucey, 2004)

The article by Daniel, Hirshleifer, and Subrahmanyam (2002) explores the impact of investor psychology on stock market under- and overreactions. The authors argue that biases such as overconfidence and self-attribution lead to predictable patterns of mispricing in financial markets. Overconfidence, defined as an investor‘s exaggerated belief in their own ability to evaluate stock performance, leads to excessive trading and price volatility. Self- attribution bias further fuels this by causing investors to attribute positive outcomes to their skill rather than external factors. The model proposed in the article shows that over time, these biases cause stock prices to deviate from their true value, leading to periods of overreaction followed by correction or underreaction. These findings are particularly important in understanding how market inefficiencies arise and how they can persist over time despite rational arbitrage forces.

The authors also emphasize the role of public and private information in influencing investor behavior. They highlight that when investors receive private information, they tend to overestimate its value, contributing to further mispricing. Public information, in contrast, plays a key role in correcting mispriced stocks, but this process is often slow due to the behavioral biases at play. Their analysis suggests that while rational expectations models assume efficient markets, the presence of psychological biases introduces inefficiencies that can be exploited by more informed investors. The implications of this research challenge the notion of fully rational markets and underscore the need for incorporating behavioral factors into financial models (Daniel et al., 2002).

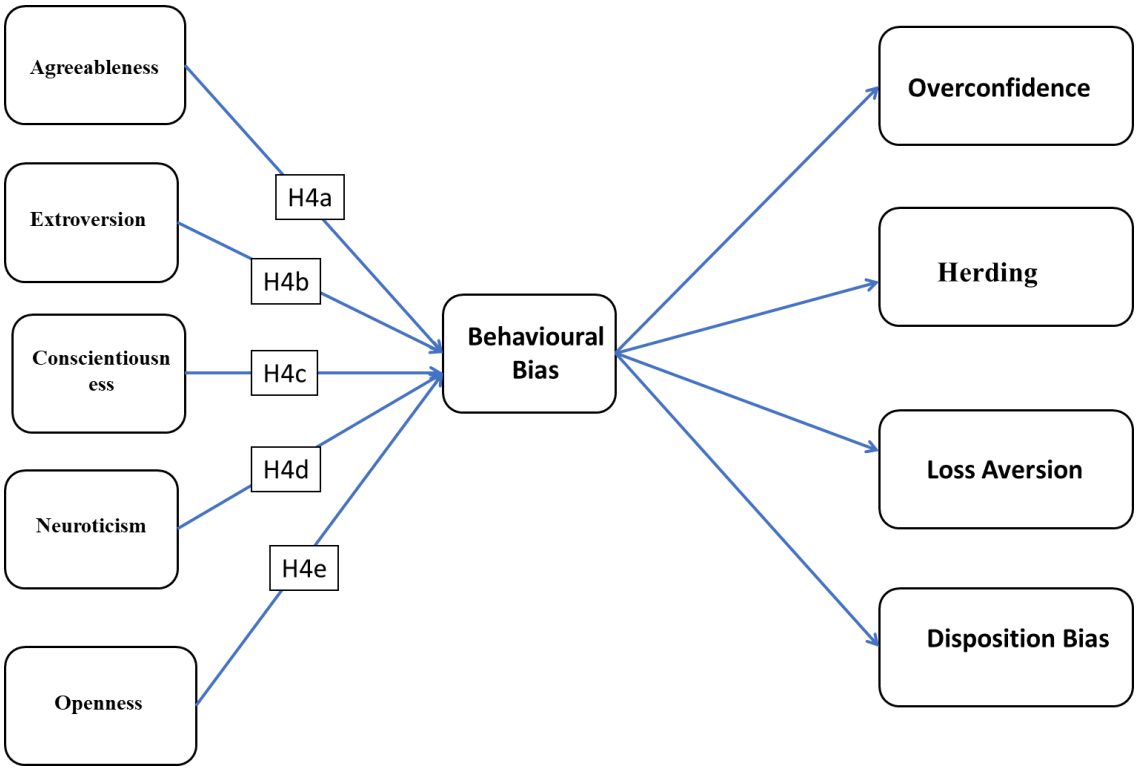
2.5.1 Research hypothesis

Objective 4: To study the relation between the Big Five model of personality traits and behavioural biases of individual mutual fund investors in state of Goa

1. H4a: ―Agreeableness trait of the investor significantly influence their behavioural Bias‖
2. H4b: ―Extroversion trait of the investor significantly influence their behavioural Bias‖

3. H4c:‖ Conscientiousness trait of the personality significantly influences their behavioural Bias.‖
4. H4d: ―Neuroticism trait of the personality significantly influences their behavioural Bias‖
5. H4e: ―Openness trait of the personality significantly influences their behavioural Bias‖

Figure 2.4: Proposed Model for Behavioural Bias and Personality



2. Research in behavioral finance has shown that investors frequently diverge from rational decision-making frameworks due to the impact of psychological and emotional biases such as loss aversion, overconfidence, regret aversion, anchoring, and herding (Tripathy, 2021; Kumar & Chaurasia, 2024; Madaan & Singh, 2019). Although these biases can explain why investors hold onto losing assets, engage in excessive trading, or imitate others, most studies have focused on realized financial behaviors such as portfolio allocation or trading outcomes. The formation of buying intention, which precedes actual investment behavior, remains an underexplored area of research. Given that intention is a central component of theories such as the Theory of Planned Behavior (Ajzen, 1991), understanding how biases influence it is

essential for making more accurate predictions of financial choices than outcome-focused models alone.A significant limitation of existing research is its fragmented and context-specific approach. Many studies focus on individual biases in isolation, examining either emotional or cognitive biases separately, without considering their cumulative and interactive effects on intention. Consequently, the findings vary substantially across different regions, with loss aversion and regret aversion being prominent in the Indian and Nigerian contexts, whereas overconfidence and herding are more pronounced in Indonesia and Nepal. This heterogeneity highlights the need for contextual validation in India, where investment culture is influenced by tax-saving motives, collectivist values, and evolving financial literacy, yet empirical studies in this area are scarce.

Theoretical integration is lacking in explaining how behavioral biases translate into intention. While some research has established a link between personality traits or emotional stability and susceptibility to biases (Singh et al., 2023; Gulzar & Ali, 2023), few studies have applied integrative models such as the Behavioral Reasoning Theory (Westaby, 2005) or the Theory of Planned Behavior (Ajzen, 1991) to elucidate the underlying mechanisms. These frameworks propose that biases could influence attitudes, values, and reasons, which in turn determine intention, but this pathway has not been systematically examined in the Indian context. This study aims to address the conceptual, contextual, and theoretical gaps by investigating how behavioral biases affect the buying intention of mutual fund investors in India, thereby providing a more comprehensive understanding of investment decision-making.

Furthermore, it can contribute to the development of more tailored investment strategies that consider the unique characteristics of individual investors. This study addresses this critical gap by examining the relationship between Buying intention and behavioral biases among Indian mutual fund investors in response to RQ6: Is it possible to understand the relationship between buying intention and behavioral biases of Indian individual mutual fund investors?

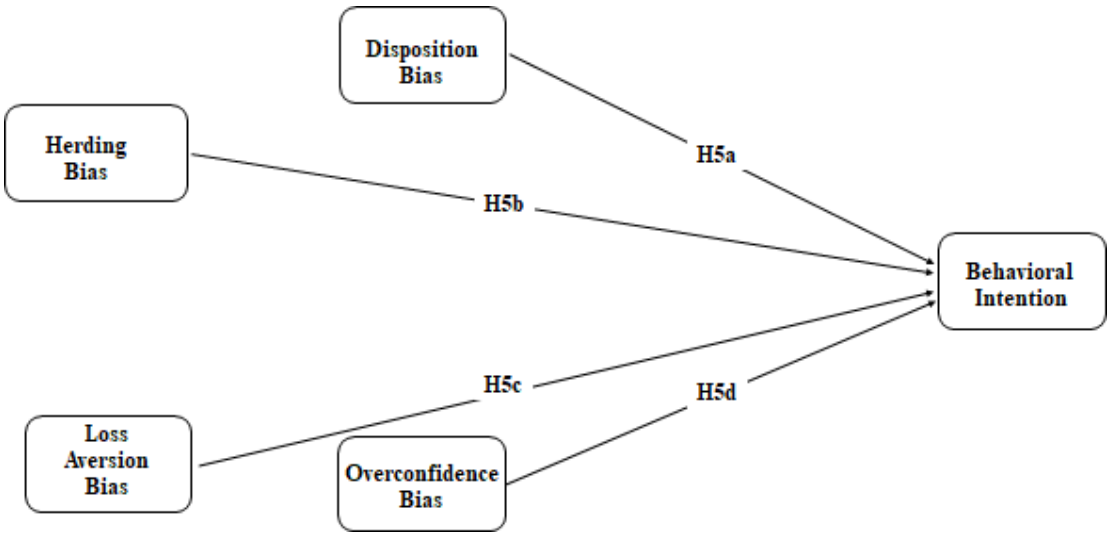
2.5.2 Research hypothesis

Objective 5: To study the relation between the Buying Intention and behavioural biases of individual mutual fund investors in state of Goa.

1. *Hypothesis (H5a): "Disposition bias among the mutual fund investors significantly influencing their buying intention"*
2. *Hypothesis (H5b): "Herding bias among the mutual fund investors significantly influencing their buying intention*
3. *Hypothesis (H5c): "Loss aversion bias among the mutual fund investors significantly influencing their buying intention*
4. *Hypothesis (H5d): "Overconfidence bias among the mutual fund investors significantly influencing their buying intention*

2.5.3 Proposed Model

Figure 2.5: Proposed Model for Behavioural Bias and Buying Intention



2.6 Summary and Research Gap

The literature consistently shows that psychological biases like overconfidence, loss aversion, and regret aversion significantly impact investor decision-making. Investors tend to overestimate their knowledge and abilities, leading to excessive trading and suboptimal outcomes. Loss aversion drives investors to hold onto losing stocks, fearing realized losses. Recognizing these biases is crucial for investors and financial advisors to tailor strategies that mitigate their influence on investment decisions.

Personality traits such as risk tolerance, conscientiousness, and openness directly affect investment behaviors. For example, risk-averse individuals prefer conservative investments, while more venturesome investors are willing to explore higher-risk opportunities. The Big Five Personality Traits model has been useful in analyzing how traits like extraversion and neuroticism influence decisions. Extraverted investors are more likely to take risks, while neurotic individuals lean toward risk aversion.

Behavioral factors, including herd behavior and cognitive dissonance, have broad implications for market dynamics. Investors often follow the crowd, especially during periods of market volatility, leading to irrational behavior and sometimes market inefficiencies. Understanding these group tendencies can provide policymakers with the tools to anticipate market movements and stabilize economic environments during crises.

Mental accounting, where individuals categorize money based on its source or intended use, leads to irrational financial behavior, such as poor resource allocation. Financial cognition— understanding and processing financial information—plays a significant role in personal financial planning. Those with higher financial cognition are more likely to make rational investment decisions, emphasizing the need for financial literacy programs that address cognitive biases in financial planning.

These findings contribute significantly to the field of behavioral finance, emphasizing the need for a combination of psychological understanding and financial education to improve decision-making processes for individual

investors and market outcomes.

The research gap identified from the literature review can be summarized as follows:

1. Limited Geographical Scope

Many studies are limited by the focus on specific regions or countries, such as India and Pakistan which hampers the general applicability of findings across different cultural and economic contexts. Hence additional research is required for a better understanding of investment attitudes being influenced by personality traits at a global level.

2. Sample Size and Diversity

Studies based on relatively small or homogenous sample sizes, which may not accurately represent the broader population. Future research should aim for larger, more diverse samples thereby ensuring findings that are more widely applicable.

3. Longitudinal Studies

The existing research generally is cross-sectional data capture at a single point in time. Longitudinal studies are needed to examine how personality traits influence investment behaviour over long periods of time and through different market conditions.

4. Integration of Additional Psychological Factors

The primary focus on the study of Big-Five personality traits in relation to financial behaviour, leads to less attention to other equally important psychological factors such as emotional intelligence, cognitive biases, and individual differences in financial literacy which are less explored. Hence a more comprehensive understanding of investment behaviour may be possible by including these factors.

5. Impact of Technological Advances

Technology tools like algorithmic trading and robo-advisors, used to moderate interrelations between personality traits and investment decisions, are under-researched. It would be beneficial to explore the role of technological tools in

influencing or interacting with personality-driven investment behaviour.

The existing research on the psychological biases influencing investor behavior, such as overconfidence, loss aversion, and regret aversion, primarily focuses on general investor populations. However, there is limited investigation into how these biases manifest across different demographic segments, including gender, age, and educational background. Additionally, most studies are concentrated on Western or developed market contexts, leaving a gap in understanding these biases within emerging markets like India.

Moreover, while several studies have explored the influence of personality traits (such as the Big Five) on investment decisions, there is still a need for longitudinal studies that track the long- term effects of these traits on investment behaviors. Another gap is the insufficient integration of behavioral theories, such as Behavioral Reasoning Theory (BRT), with other well-established models like the Theory of Planned Behavior (TPB), which could offer a more nuanced explanation of investor decision-making processes.

Lastly, there is a lack of research examining the interplay between short-term speculative motives and long-term financial goals, particularly in how behavioral biases affect these differing investment intentions. Bridging these gaps could provide more comprehensive insights into investor psychology and contribute to more effective financial education programs and investment advisory services.

2.7 Conclusion

The literature review underscores the significant role of psychological factors and personality traits in shaping investor behavior, challenging traditional financial models that assume rational decision-making. By integrating insights from behavioral finance, biases such as overconfidence, loss aversion, and mental accounting often lead to suboptimal financial decisions. This is because these biases can cause investors to make decisions based on emotions rather than logic, resulting in poor investment choices. Personality traits, particularly the Big Five (openness, conscientiousness, extraversion, agreeableness, and neuroticism), further influence individual risk tolerance and investment strategies, making it essential for financial advisors to consider these traits when offering personalized advice.

Despite the growing body of research in behavioral finance, notable gaps remain. These include a lack of longitudinal studies, limited understanding of demographic influences on biases, and insufficient research within emerging markets like India. Furthermore, there is a need for more comprehensive models that integrate theories like Behavioral Reasoning Theory (BRT) and the Theory of Planned Behavior (TPB) to better capture the complexities of investor decision-making.

In conclusion, addressing these research gaps will not only enhance the theoretical understanding of investor behavior but also contribute to the development of more effective financial education and advisory practices. Such efforts can lead to improved investment outcomes by mitigating the impact of psychological biases and aligning financial strategies with individual psychological profiles. This can be achieved by providing investors with a better understanding of their own biases and how they can be managed, ultimately leading to more informed investment decisions.

CHAPTER 3

PERSONALITY TRAITS OF INVESTORS IN MUTUAL FUNDS IN THE STATE OF GOA

3.1 Introduction

This chapter deals with data analysis of the first research objective, i.e., *to identify distinct personality traits of investors in mutual funds in state of Goa*. It includes sections such as the background of the study, research methodology, data analysis and findings, and summary.

The data analysis and findings are divided into four major sections, the **first** section deals with the demographic profile of the respondents investing in mutual funds, the **second** section deals with descriptive statistics of various aspects/constructs of personality of investors investing in mutual funds and the **last** section deals with Structural Model for Personality.

3.2 Background of the study

Personality encompasses enduring psychological characteristics that influence an individual's thought processes, emotional responses, and behavioral patterns across various contexts. In the realm of finance, personality has a significant impact on investor behavior by shaping risk tolerance, decision-making strategies, and susceptibility to behavioral biases. Traditional finance theories, such as the Efficient Market Hypothesis, assume rationality in investor decision-making; however, behavioral finance emphasizes the role of psychology in explaining real-world deviations from these assumptions (Lubis et al., 2015). The assumption of rationality is based on the notion that investors make informed decisions based on available information, but in reality, emotions and cognitive biases often play a significant role in investment choices. This study examines the concept of personality, outlines the Big Five Personality Trait Model, and investigates the effects of personality on investor decision-making.

Personality encompasses consistent patterns of thought, emotion, and behavior that differentiate individuals. It is influenced by both biological predispositions and environmental experiences, providing a framework for understanding variations in motivation, cognition, and interpersonal interaction. This concept is fundamental in explaining why people make disparate financial decisions and how they respond to diverse economic situations. Within finance, personality influences how investors assess risk, process information, and react under uncertainty, making it a critical factor in investment behavior (Ahmad & Maochun, 2019). The impact of personality on investment decisions is evident in the tendency of some individuals to be more risk-averse, while others are more inclined to take on high-risk investments.

The Five Factor Model (FFM), also known as the Big Five, provides a widely accepted framework for assessing personality (Ahmad & Maochun, 2019). The five personality traits are characterized as follows:

1. Openness to Experience: This trait reflects creativity, curiosity, and a willingness to embrace novelty. Investors with high levels of openness often explore unconventional investments, such as start-ups or socially responsible funds. Their openness to new ideas can sometimes lead to a higher risk tolerance, as they are more likely to consider unproven investment strategies.

2. Conscientiousness: This trait denotes organization, diligence, and responsibility. Conscientious investors favor structured, low-risk portfolios and adopt methodical decision-making (Lubis et al., 2015). Their cautious approach to investing is often driven by a desire to minimize potential losses and maintain a stable financial situation.

3. Extraversion: This trait is associated with sociability, assertiveness, and optimism. Extraverted investors are inclined toward dynamic, riskier investments influenced by social interactions (Oehler et al., 2017). Their tendency to seek social validation can sometimes lead them to invest in assets that are popular among their peers, rather than making independent investment decisions.

4. Agreeableness: This trait represents cooperation, empathy, and trust. Agreeable investors often rely on advice and may avoid aggressive strategies, sometimes displaying herding behavior (Yadav & Narayanan, 2021). Their willingness to cooperate with others can sometimes lead to a more collaborative approach to investing, where they work with others to achieve common financial goals.

5. Neuroticism: This trait is linked with anxiety, insecurity, and emotional instability. Neurotic investors exhibit risk-averse behavior and prefer safer assets, such as government bonds (Oehler et al., 2017). Their emotional instability can sometimes lead to impulsive investment decisions, as they may be more likely to act on emotions rather than carefully considering the potential consequences of their actions.

Investor decision-making is significantly influenced by personality traits, with conscientious individuals typically exhibiting disciplined and cautious approaches that align with long-term objectives. Conversely, extraverts may adopt bold strategies, whereas neurotic individuals often avoid risk altogether. Furthermore, personality traits also impact behavioral biases, with

extraversion associated with overconfidence and excessive trading, agreeableness linked with herding and neuroticism with loss aversion (Yadav & Narayanan, 2021). These tendencies directly affect portfolio composition and returns. The influence of personality traits on investment decisions can be attributed to the way individuals process information and make decisions, ultimately impacting their ability to manage risk and achieve their financial objectives

Understanding personality is crucial for financial advisors and fund managers to provide tailored advice. By aligning strategies with clients' psychological profiles, they can reduce biases and improve client satisfaction (Lai, 2019). This approach involves analyzing individual personality traits, such as openness to new experiences, conscientiousness, and other characteristics, to create a more personalized investment plan. Openness can be used to introduce innovative opportunities, while conscientiousness aligns with methodical investment planning. Consequently, integrating personality assessments into the advisory practice enhances outcomes. Furthermore, this approach can also assist advisors in better understanding their clients' risk tolerance and financial objectives, leading to more effective decision-making.

The literature review presented in Chapter 2, Section 2.2, revealed several research gaps in the field of personality psychology as it pertains to consumer behavior. Specifically, the application of personality psychology in investment behavior, particularly in relation to mutual fund buying intentions, has been underexplored. Studies in behavioral finance have primarily focused on external factors such as market trends, product features, and financial literacy, often neglecting the internal psychological mechanisms that guide investment decisions. Although models such as the five-factor model (Costa & McCrae, 1992) provide a comprehensive framework for analyzing personality traits, only a limited number of empirical studies have established a direct link between traits such as extraversion, neuroticism, or conscientiousness and financial decision-making processes. This dearth of research in the area of personality and investment behavior is particularly noteworthy given the complexity of investment decisions, which frequently involve weighing risk and reward. As mutual fund investments involve elements of risk assessment, future orientation, and trust, understanding how stable personality traits influence investors' propensity to buy mutual funds is crucial. This research aims to address this gap by examining whether distinct personality profiles can be statistically associated with investment behaviour, as outlined in Research Question 1.

Research Objective 1: RQ1: How can the Big Five personality traits be modeled as a second-order construct to capture their collective influence on investor behavior in the context of mutual fund investments?

3.3 Research Methodology

The present study aims to identify the distinct personality traits of investors in mutual funds using the Big Five Personality Framework. Given the multi-dimensional nature of the study, the research design was structured to ensure alignment between research objectives, data collection instruments, sampling strategy, and analytical techniques. A descriptive and quantitative research design was employed to capture investors' demographic characteristics and psychological attributes. The use of a structured questionnaire enabled systematic data collection and ensured consistency, reliability, and validity across all responses.

The target population comprised individual investors in mutual funds across Goa, India. A total of 700 structured questionnaires were distributed to respondents aged 18 years and above. Out of these, 667 valid responses were retained after eliminating incomplete or unusable forms, resulting in a final response rate of 95.29%. The study area was purposefully chosen to reflect demographic and socio-economic diversity among mutual fund investors. Fieldwork spanned a period of twelve months, from January 2023 to December 2024, ensuring broad temporal coverage. Due to the absence of a comprehensive sampling frame, a convenience sampling technique was adopted. This approach was appropriate to access participants based on availability and willingness, and was operationalized through both online modes (email surveys, digital forms) and offline methods (personal interviews and physical distribution).

The data were collected using a structured, multi-part questionnaire adapted from validated scales in previous literature. The instrument consisted of four parts, of which Part A captured demographic information (age, gender, education, occupation, income, and investment experience) and Part C assessed the Big Five personality traits—openness, conscientiousness, extraversion, agreeableness, and neuroticism—using 27 items derived from the NEO Five-Factor Inventory (Costa & McCrae, 1992, 2003). Items were measured on a five-point Likert scale ranging from ―strongly disagree‖ to ―strongly agree.‖

Quantitative analysis was undertaken using Structural Equation Modeling (SEM) with SmartPLS software. SEM was employed both to validate the factor structure of the Big Five traits and to classify dominant personality dimensions among respondents. This technique was particularly suitable as it allowed for measurement model validation as well as hypothesis testing, thereby ensuring robustness in interpretation of results.

3.4 Data Analysis and Findings

This section presents the results of the first objective in four sections. **Section 3.4.1** provides the result of demographic characteristics, which is analyzed using the descriptive statistics. **Section 3.4.2** discusses about the contribution of different personality traits investors

3.4.1 Demographic Characteristics

Table 3.1 : Demographic Profile of Investors

Demographics	***Sub Categories***	***Frequency (%)***	
Gender	Male	313	46.9 %
	Female	354	53.1 %
Marital Status	***Single***	***243***	***36.4%***
	Married	***424***	***63.6%***
Age Group	***Less than 30 Years***	***216***	***32.4%***
	30 to 45 Years	***213***	***31.9%***
	Above 45 Years	***238***	***35.7%***
Education	***Graduation***	***285***	***42.7 %***
	Post Graduation	***213***	***31.9 %***
	Professional	***169***	***25.3 %***
Annual Income	***Less than 5 lakhs***	***252***	***37.8 %***
	5 to 10 Lakhs	***217***	***32.5 %***
	Above 10 lakhs	***198***	***29.7 %***
Mode of Investment	***Lumpsum***	***243***	***36.4 %***
	SIP	***424***	***63.6 %***
Occupation	***Professional***	***154***	***23.1 %***
	Business	***216***	***32.4 %***
	Private Employee	***185***	***27.7 %***
	Govt Employee	***112***	***16.8 %***

Source: Compiled from Primary Data

The primary data is collected from the mutual fund investors with different demographic profiles. The primary data is collected from the mutual fund investors with different demographic profiles. The table 4.1 reported the frequency distribution of the selected demographic profiles (Gender, Marital Status, Age Group, Education, Annual Income, Investment mode and Occupation). The table comprises 667 respondents, with a slight predominance of females (53.1%) over males (46.9%). A majority of respondents are married (63.6%), while 36.4% are single. In terms of age, the distribution is relatively balanced: 32.4% are below 30 years, 31.9% between 30–45 years, and 35.7% above 45 years, indicating coverage of all key life-cycle stages relevant to investment decisions. Education-wise, 42.7% are graduates, followed by 31.9% postgraduates and 25.3%

professionals, reflecting a well-educated sample base. Annual income distribution shows 37.8% earn below ₹5 lakhs, 32.5% between ₹5–10 lakhs, and 29.7% above ₹10 lakhs, ensuring representation from lower-middle to higher-income investors. With respect to investment patterns, a majority (63.6%) prefer Systematic Investment Plans (SIP), whereas 36.4% opt for lump sum investments, highlighting a trend toward disciplined investing. Occupationally, the sample is diverse, with businesspersons (32.4%), private employees (27.7%, professionals (23.1%), and government employees (16.8%), reflecting broad socio-economic backgrounds.

Table 3.2 : Preference for mutual funds

Type of Mutual Fund	***Frequency***	***Percentage***
Equity	***281***	***42.1 %***
Debt	***150***	***22.5 %***
Balance	***125***	***18.7 %***
Sector Fund	***111***	***16.6 %***
Total	***667***	***100%***

Source: Compiled from Primary Data

The table 3.2 reported the frequency distribution of the Preference for mutual fund. The 281 (42%) of preferred Equity as mode of investment, 150 (22.5 %) preferred Debt, 125 (18.7 %) preferred balance fund and the remaining 111 (16.6 %) preferred sector specific mutual funds

3.4.2 Personality traits investors

Personality is a pivotal factor influencing both the behavior and performance of investors in the stock market, as highlighted in studies by Borghans et al. (2008) and Sadi et al. (2011). Personality traits, which encompass an individual's cognitive, emotional, and behavioral patterns, shape how they react in specific situations (Roberts, 2009). While existing research often concentrates on specific domains such as portfolio selection, risk tolerance, and financial management, there remains a dearth of studies exploring the link between personality traits and susceptibility to various behavioral biases among stock market participants (Durand et al., 2008; Baddeley et al., 2010; Lin, 2011; Zaidi and Tauni, 2012; Rzeszutek, 2015).

The Big Five personality model enjoys broad acceptance, especially within the fields of management and psychology, as evidenced by studies conducted by Costa and McCrae (1992a), Mayfield et al. (2008), and Bucciol and Zarri (2015). As previously discussed, the fundamental components of the Big Five model encompass neuroticism, extraversion, openness, agreeableness,

and conscientiousness. An individual's score across these dimensions yields a consistent portrayal of their cognitive and emotional tendencies, as highlighted by Rustichini et al. (2012).

3.4.2.1 Agreeableness

The agreeableness personality trait, as outlined in the Big Five model, characterizes individuals who exhibit a tendency towards cooperation, compassion, and consideration in their social interactions. Those scoring high in agreeableness prioritize harmony and interpersonal connections, displaying traits such as empathy, kindness, and a readiness to find middle ground. They are often described as warm, altruistic, and empathetic, valuing teamwork and collaboration in social settings.

Conversely, individuals with lower levels of agreeableness may lean towards skepticism, competitiveness, or a lesser concern for others' welfare. They may prioritize their own interests over those of others and may exhibit less willingness to accommodate differing viewpoints. This trait holds significance across various life domains, including relationships, teamwork, and leadership. Those high in agreeableness tend to foster positive social dynamics, contributing to better outcomes and a more cohesive environment. However, an excessive inclination towards agreeableness may also present challenges, such as difficulty in asserting oneself or vulnerability to exploitation by others. In the realm of investment and finance, agreeableness can shape decision-making processes by influencing risk tolerance, willingness to collaborate, and approaches to negotiation and conflict resolution. Assessing one's level of agreeableness offers valuable insights into their financial decision-making tendencies and their interactions within the financial landscape.

Table 3.3 : Descriptive statistics of construct Agreeableness

Name	Mean	Standard deviation	Excess kurtosis	Skewness
I see myself as helpful and unselfish with others	4.354	1.645	-0.929	-0.158
I see myself as a forgiving nature	4.454	1.686	-0.946	-0.18
I see myself as generally trusting	4.364	1.605	-0.939	-0.144
I see myself as considerate and kind to almost everyone	4.403	1.564	-0.993	-0.123
I see myself as Likes to cooperate with others	4.483	1.615	-0.844	-0.257
I see myself as Tends to find fault with others	4.387	1.661	-0.89	-0.213

Source: Compiled from Primary Data

3.4.2.2 Openness

The personality trait referred to as "Openness to Change" reflects an individual's inclination toward embracing novelty, diversity, and unconventional concepts. This trait, situated within the framework of the Big Five personality model, contrasts with traditionalism and conservatism, showcasing a preference for innovation, experimentation, and adaptability (John et al., 2008).

Individuals scoring high in Openness to Change typically demonstrate traits such as curiosity, imagination, and a willingness to engage with new experiences. They are often eager to challenge established norms and explore alternative perspectives, frequently drawn to creative endeavors, diverse environments, and intellectual pursuits as avenues for personal growth and discovery. Conversely, individuals with lower levels of Openness to Change tend to gravitate toward tradition, stability, and familiarity. They prefer routine, predictability, and conventional ways of thinking, exhibiting hesitance toward embracing change or unconventional ideas.

In the realm of investment and finance, Openness to Change significantly influences investors' willingness to explore new opportunities, adapt to evolving market dynamics, and navigate uncertainty. Acknowledging one's level of Openness to Change can serve as a valuable asset in guiding investment decision-making processes, allowing individuals to align their investment strategies with their personality traits and preferences effectively.

Table 3.4: Descriptive statistics of construct Openness

Name	Mean	Standard deviation	Excess kurtosis	Skewness
I see myself as original, comes up with new ideas	4.693	1.349	-0.566	-0.372
I see myself as curious about many different things	4.87	1.361	-0.389	-0.403
I see myself as ingenious, a deep thinker	4.678	1.352	-0.732	-0.195
I see myself as an active imagination	4.682	1.615	-0.826	-0.267
I see myself as inventive	4.447	1.56	-0.72	-0.042
I see myself as Values artistic, aesthetic experiences	4.406	1.572	-0.802	0.043
I see myself as Likes to reflect, play with ideas	4.355	1.602	-0.623	0.009

Source: Compiled from Primary Data

3.4.2.3 Conscientiousness

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The personality trait of conscientiousness, as delineated within the Big Five model, describes an individual's inclination towards organization, responsibility, and goal-oriented behavior. Conscientious individuals are recognized for their reliability, diligence, and self-discipline in accomplishing tasks and fulfilling objectives (John & Srivastava, 1999). Those scoring high in conscientiousness exhibit a strong sense of duty and dedication to their commitments. They typically approach tasks methodically, emphasizing attention to detail and striving for precision in their work. These individuals actively set and pursue goals, showcasing perseverance and a robust work ethic.

Conversely, individuals with lower levels of conscientiousness may display tendencies towards impulsiveness, disorganization, and a lack of follow-through. They may encounter challenges in maintaining focus and meeting deadlines, leading to a less structured and disciplined approach to responsibilities. In the domain of investment and finance, conscientiousness significantly influences individuals' strategies for financial planning, decision-making, and portfolio management. Investors characterized by high levels of conscientiousness tend to demonstrate organization, attention to detail, and diligence in their financial endeavors.

These individuals are inclined to conduct thorough research and analysis before making investment decisions, carefully weighing the risks and potential returns associated with various opportunities. They adopt a disciplined and systematic approach to constructing their portfolios, prioritizing consistency and reliability. Conscientious investors are also more likely to adhere to long-term investment strategies, resisting impulsive decisions driven by short-term market fluctuations. They prioritize stable and sustainable growth over time, actively monitoring their investments and making informed adjustments as necessary.

On the other hand, investors with lower levels of conscientiousness may struggle with procrastination, disorganization, and impulsivity in their financial decision-making. They may find it challenging to maintain a disciplined investment approach, potentially making impulsive decisions without thorough consideration of risks and rewards. Understanding the role of conscientiousness in shaping financial behavior provides valuable insights for individuals seeking to align their investment strategies with their personality traits and preferences.

Table 3 5 : Descriptive statistics of construct conscientiousness

Name	Mean	Standard deviation	Excess kurtosis	Skewness
I see myself as Does a thorough job	4.507	1.613	-0.549	-0.242
I see myself as a reliable worker	4.589	1.698	-0.718	-0.311
I see myself as Perseveres until the task is finished	4.477	1.671	-0.778	-0.122
I see myself as Does things efficiently	4.529	1.668	-0.672	-0.318
I see myself as Makes plans and follows through with them	4.577	1.66	-0.804	-0.195

Source: Compiled from Primary Data

3.4.2.4 Extraversion

The personality trait of extraversion, as conceptualized within the Big Five model, refers to an individual's inclination towards sociability, assertiveness, and positive emotional expression (John & Srivastava, 1999). Extraverted individuals are characterized by their outgoing demeanour, enthusiasm, and inclination towards seeking social interaction and excitement.

Highly extraverted individuals thrive in social environments, enjoying lively conversations and actively seeking out novel experiences. They are often described as energetic, talkative, and adventurous, showing a preference for engaging with others and participating in group activities. Conversely, individuals with lower levels of extraversion, commonly known as introverts, may prefer solitude or quieter, introspective activities. They may feel more comfortable in smaller, more intimate settings and may require periods of solitude to recharge.

In the context of investment and finance, extraversion can influence decision-making processes, risk tolerance, and networking behaviours. Extraverted investors may be more inclined to seek out social connections and collaborate with others in their investment endeavours. Additionally, they may exhibit greater comfort in taking risks and pursuing opportunities for growth and expansion.

3.4.2.5 Neuroticism

The personality trait of neuroticism, as defined within the Big Five model, reflects an individual's

tendency to experience negative emotions such as anxiety, depression, and insecurity (Costa & McCrae, 1992). Those high in neuroticism often exhibit emotional instability, moodiness, and a heightened sensitivity to stressors.

Table 3 6 : Descriptive statistics of construct Extroversion

Name	Mean	Standard deviation	Excess kurtosis	Skewness
I see myself as talkative	4.535	1.901	-1.128	-0.31
I see myself as full of energy	4.648	1.819	-0.903	-0.439
I see myself as Generates a lot of enthusiasm	4.576	1.859	-1.085	-0.308
I see myself as Has an assertive personality	4.334	1.704	-0.925	-0.123

Source: Compiled from Primary Data

Individuals scoring high in neuroticism are prone to worry, rumination, and irrational fears, leading to difficulties in coping with life's challenges. They may experience frequent mood swings, feelings of sadness, and a general sense of dissatisfaction with themselves and their surroundings. Conversely, individuals with lower levels of neuroticism tend to be more emotionally stable, resilient, and able to maintain a sense of calm and composure in the face of adversity. They are less prone to experiencing intense negative emotions and are better equipped to cope with stressors and setbacks.

In the realm of investment and finance, neuroticism can influence decision-making processes, risk perception, and financial behaviors. Highly neurotic individuals may be more inclined to make impulsive decisions driven by fear or anxiety, leading to potentially harmful financial outcomes. Furthermore, neuroticism may contribute to excessive worry about financial matters, leading to difficulty in making sound investment choices and maintaining a balanced portfolio. These individuals may also be more likely to react emotionally to market fluctuations, leading to erratic buying or selling behavior

Table 3 7 : Descriptive statistics of construct Neuroticism

Name	Mean	Standard deviation	Excess kurtosis	Skewness
I see myself as depressed	3.556	1.452	-0.516	0.137
I see myself as Can be tense	3.36	1.427	-0.454	0.244
I see myself as Worries a lot	3.337	1.458	-0.642	0.158
I see myself as Can be moody	3.375	1.339	-0.18	0.213
I see myself as Gets nervous easily	3.45	1.402	-0.642	0.095

Source: Compiled from Primary Data

3.4.3 Reliability Analysis and Convergent Validity

The reliability analysis conducted on the questionnaire utilized Cronbach's alpha to assess all dimensions of the included personality traits. A Cronbach's alpha value above 0.7 was anticipated. A Cronbach's alpha exceeding 0.7 suggests substantial correlations among the statements measuring each personality trait dimension. The internal consistency reliability analysis results, presented in a table, indicated that the Cronbach's alpha values for all personality trait dimensions exceeded 0.7 (Agreeableness=0.91, Conscientiousness=0.864, Extraversion=0.857, Neuroticism=0.879, and Openness to Change=0.876). Thus, it can be inferred that the responses obtained in the study demonstrate reliable internal consistency.

3.4.3.1 Construct Validity

The construct validity of the personality trait dimensions was assessed using confirmatory factor analysis (CFA), which comprised two main components: convergent validity and discriminant validity. Convergent validity examined the relationship between the selected factors and the statements measuring those factors. This was evaluated through the construct loadings of the questionnaire statements, composite reliability, and the average variance extracted for each factor.

Table 3.8 : Construct loadings of the indicators used in the measurement scale

	Agreeableness	Conscientiousness	Extroversion	Neuroticism	Openness
Aggr1	0.783				
Aggr2	0.764				
Aggr3	0.795				
Aggr4	0.745				
Aggr5	0.851				
Aggr6	0.806				
Cons1		0.656			
Cons2		0.761			
Cons3		0.714			
Cons4		0.732			
Cons5		0.848			
Ext1			0.744		
Ext2			0.745		
Ext3			0.75		

Ext4			0.843		
Neuro1				0.799	
Neuro2				0.903	
Neuro3				0.811	
Neuro4				0.646	
Neuro5				0.667	
Open1					0.633
Open2					0.694
Open3					0.629
Open4					0.748
Open5					0.787
Open6					0.762
Open7					0.702

Source: Compiled from Primary Data

Table 3.9 : Reliability and Validity

	Cronbach's alpha	**Composite reliability (CR)**	**Average variance extracted (AVE)**
Agreeableness	0.91	0.909	0.626
Conscientiousness	0.864	0.861	0.555
Extroversion	0.857	0.854	0.595
Neuroticism	0.879	0.878	0.595
Openness	0.876	0.876	0.505

Source: Compiled from Primary Data

Discriminant validity, on the other hand, assessed the cross-correlations between statements measuring different constructs. It was anticipated that these cross-correlations would be low, indicating minimal relationship between statements of different constructs.

The measurement scale's discriminant validity was evaluated using two methods: the HTMT ratio and the Fornell-Larcker criteria. The HTMT ratio compared the correlations between statements of different constructs with the correlations between statements of the same construct. For discriminant validity, it was expected that the HTMT ratio for all possible pairs of factors would be less than 0.8.

The Fornell-Larcker criteria compared the square root of the average variance extracted (AVE) for each factor with its correlation with the remaining factors. This comparison helped determine whether each factor was more strongly related to its own statements than to those of other factors. The results of the construct validity assessment were presented in tables, indicating the findings related to convergent and discriminant validity.

Convergent validity:

Convergent validity was assessed by examining the construct loadings of statements within the personality trait dimensions questionnaire, alongside the composite reliability and average variance extracted (AVE) of the factors. Results indicated that the majority of statements used in the personality trait dimensions exhibited construct loadings greater than 0.7. Moreover, the composite reliability and AVE for each factor surpassed 0.7 and 0.5, respectively (Agreeableness: CR=0.909, AVE=0.626; Conscientiousness: CR=0.861, AVE=0.555; Extraversion: CR=0.854, AVE=0.595; Neuroticism: CR=0.878, AVE=0.595; Openness to Change: CR=0.876, AVE=0.505). Thus, it can be inferred that the personality trait dimensions met the criteria for convergent validity.

Discriminant validity:

To assess discriminant validity, the dimensions of personality traits in the research were evaluated using both the HTMT ratio and the Fornell-Larcker criteria. The HTMT ratio compared correlations between statements of different constructs to those between statements of the same construct. For discriminant validity, it was expected that all possible pairs of dimensions would have an HTMT ratio of less than 0.8. The Fornell-Larcker criteria compared the square root of the average variance extracted (AVE) for each dimension with its correlation with the remaining factors. The results of both the HTMT ratio and Fornell-Larcker criteria indicated that the required criteria for discriminant validity were met. Therefore, it can be concluded that the measurement scale used for assessing the dimensions of personality traits in the study ensures the presence of discriminant validity.

Table 3.10 : HTMT Ratio

	Agreeableness	Conscientiousness	Extroversion	Neuroticism
Conscientiousness	0.353			
Extroversion	0.243	0.627		
Neuroticism	0.473	0.567	0.522	
Openness to _Change	0.429	0.586	0.513	0.49

Source: Compiled from Primary Data

Table 3.11 : Fornell- Larcker Criteria for discriminant validity

	Agreeableness	Conscientiousness	Extroversion	Neuroticism	Openness to Change
Agreeableness	0.791				
Conscientiousness	0.358	0.745			
Extroversion	0.246	0.644	0.772		
Neuroticism	-0.467	-0.579	-0.54	0.771	
Openness to Change	0.422	0.593	0.522	-0.502	0.71

Source: Compiled from Primary Data

3.4.3.2 Item Multicollinearity

The item multicollinearity is examined with the help of variance inflation factor. The presence of high item multicollinearity indicates the presence of high correlations among the items, which may lead to redundant results. The expected value of VIF for each item is expected to be less than 5. The results of the item multicollinearity of the items included in measuring the dimensions of personality traits is reported in table. The result reported that all the VIF values in the table is found to be less than 3 indicating the absence of item multicollinearity problem.

3.4.3.3 Common method Bias

To assess the presence of bias in the results, the study examined the potential for common method bias (CMB) in the responses using the Harman single factor method. This method involved extracting the proportion of variance in the data explained by a single factor through exploratory factor analysis (EFA) with the constraint of one factor. The results, presented in a table, indicated that the single factor explained 35% of the variance in the responses. Since the estimated variance explained by the single factor was less than 50%, it was concluded that the responses obtained in the study were not affected by common method bias.

Therefore, it can be inferred that the study's conclusions were not biased by common method bias, as indicated by the findings of the Harman single factor method analysis.

Table 3.12 : Item multicollinearity

Item code	Variance Inflation Factor		Item code	Variance Inflation Factor		Item code	Variance Inflation Factor
Aggr1	2.015		Neuro1	2.593		Ext1	2.269
Aggr2	2.692		Neuro2	2.312		Ext2	2.238
Aggr3	2.284		Neuro3	2.394		Ext3	2.139
Aggr4	2.479		Neuro4	2.155		Ext4	1.589
Aggr5	2.311		Neuro5	1.903			
Aggr6	2.173		Open1	1.92			
Cons1	1.938		Open2	2.047			
Cons2	2.166		Open3	2.096			
Cons3	1.962		Open4	2.399			
Cons4	2.029		Open5	2.323			
Cons5	1.565		Open6	2.218			
			Open7	2.279			

. *Source: Compiled from Primary Data*

3.4.4 Personality Traits as a Second Order Construct – Validity Analysis

The study measured personality traits using five dimensions: Agreeableness, Conscientiousness, Extroversion, Neuroticism, and Openness. These dimensions were assessed using various statements included in the questionnaire. The factors were reflective in nature, meaning they were

inferred from observable indicators.

To validate personality as a second-order construct, a structural model was developed Fig 3.1. This model aimed to assess the validity of personality traits by considering them as overarching constructs composed of the five dimensions. The results of the validity analysis for personality traits as second-order constructs are presented in a table 3.14

The results of the validity analysis of the personality traits as a second order construct reported that all the construct loadings of the dimensions are greater than 0.7, CR is 0.855 and AVE is 0.544. Thus it can be concluded that the personality trait as a second order construct is satisfying the criteria of convergent validity

Table 3.13 : Harman single factor method- CMB

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.469	35.069	35.069	9.469	35.069	***35.069***
2	3.279	12.146	47.215			
3	2.160	7.999	55.213			
4	1.649	6.107	61.320			
5	1.589	5.887	67.207			
6	1.093	4.048	71.254			
7	.632	2.340	73.594			
8	.599	2.217	75.812			
9	.530	1.962	77.774			
10	.509	1.885	79.658			
11	.441	1.632	81.290			
12	.424	1.572	82.862			
13	.412	1.527	84.390			
14	.373	1.383	85.773			
15	.367	1.358	87.130			
16	.349	1.292	88.423			
17	.340	1.258	89.680			
18	.335	1.240	90.920			

19	.317	1.174	92.094			
20	.313	1.161	93.256			
21	.297	1.101	94.357			
22	.289	1.070	95.427			
23	.279	1.033	96.459			
24	.255	.945	97.404			
25	.242	.896	98.300			
26	.239	.884	99.185			
27	.220	.815	100.000			
Extraction Method: Principal Component Analysis.						

Source: Compiled from Primary Data

Table 3.14 : Path Coefficient

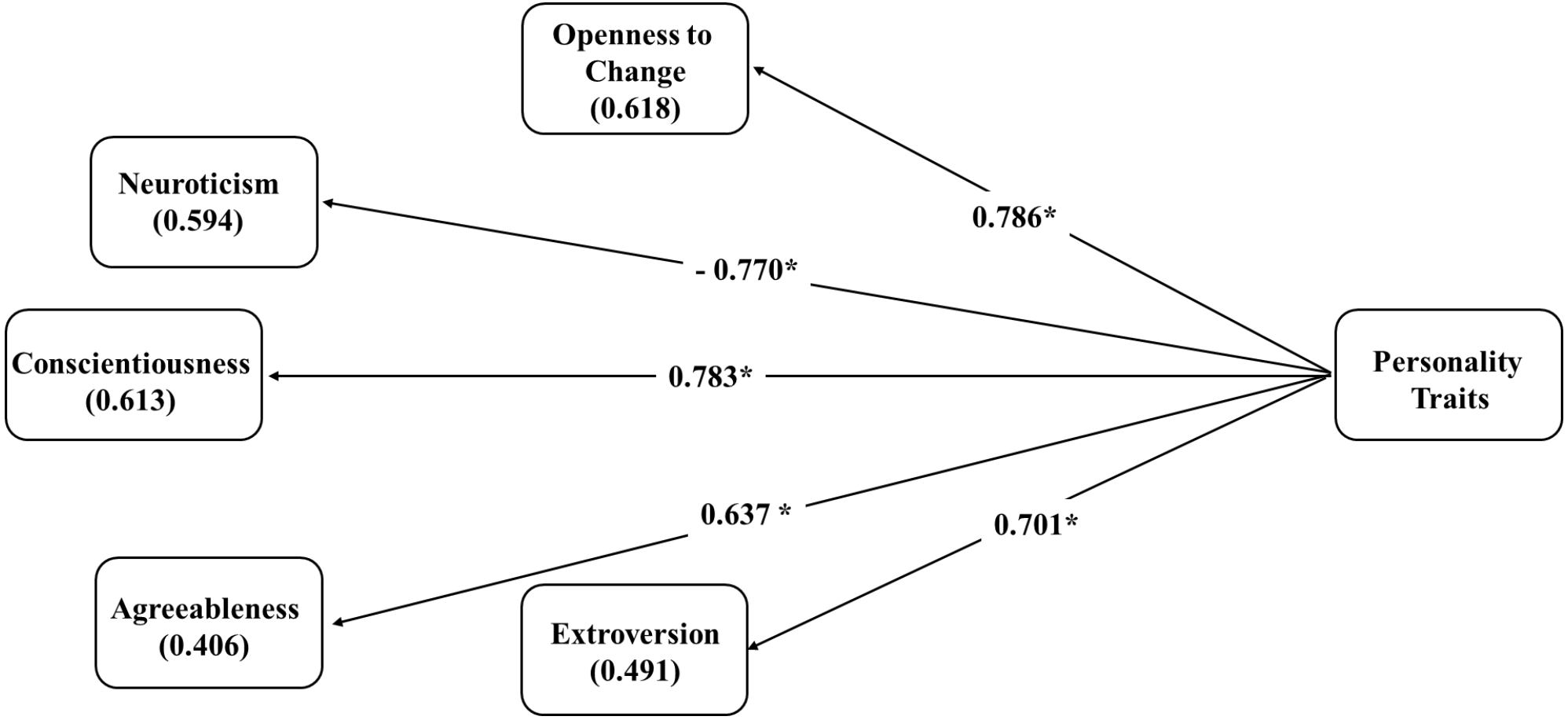
Second Order Construct	***Lower Order Constructs***	***Loadings***	***Standard Error***	***T Stats***	***P values***	***Composite Reliability***	***Average Variance Extracted***
Traits	Agreeableness	0.637	0.034	18.74	0	0.855	0.544
	conscientiousness	0.782	0.021	37.823	0		
	Extroversion	0.701	0.026	27.239	0		
	neuroticism	-0.77	0.022	35.016	0		
	Openness to change	0.787	0.018	42.697	0		

Source: Compiled from Primary Data

3.5 Summary

Personality plays a significant role in shaping investor behavior and stock market performance. It influences cognitive, emotional, and behavioral responses to financial situations. Traditional research has often examined portfolio selection, risk tolerance, and financial management; however, fewer studies have directly linked personality traits to behavioral biases. The Big Five personality model—neuroticism, extraversion, openness, agreeableness, and conscientiousness—offers a comprehensive framework for understanding these dynamics (Costa & McCrae, 1992; Borghans et al., 2008). Trait-Specific Analysis Agreeableness reflects cooperation, empathy, and compassion. Highly agreeable investors often rely on trust, collaboration, and advice from others, which enhances social cohesion but may increase susceptibility to herding and reduce assertiveness in decision-making. Excessive agreeableness can leave investors vulnerable to exploitation. Statistical findings confirmed strong internal consistency, with a Cronbach's alpha of 0.91. Openness to Change denotes curiosity, creativity, and adaptability. Investors high in this trait explore novel opportunities, engage with diverse markets, and embrace innovative products.

Figure 3.1: Structural Model for Personality



CHAPTER 4

PERSONALITY TRAITS AND INVESTOR ATTITUDES IN THE STATE OF GOA

4.1 Introduction

This chapter deals with data analysis of the second research objective, i.e., to investigate how different personality traits contribute to the formation of attitude of investors in state of Goa. It includes sections such as the background of the study, research methodology, data analysis and findings, and summary.

The data analysis and findings are divided into four major sections, the first section deals with the demographic profile of the respondents investing in mutual funds, the second section deals with descriptive statistics of various aspects/constructs of personality of investors and attitude and the last section deals with Structural Model for Personality and attitude

4.2 Background of the study

Personality is a fundamental concept in psychology and behavioral finance, encompassing a set of enduring cognitive, emotional, and behavioral patterns that distinguish individuals (Roberts, 2009). The Big Five model, comprising extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience, is the most widely accepted framework for analyzing personality (Costa & McCrae, 1992a). These traits significantly influence how individuals think, feel, and behave across various contexts, including financial decision-making. For instance, extraverted individuals tend to exhibit confidence and risk-taking behaviors, whereas conscientious individuals adopt careful, long-term planning strategies (Kaur & Goel, 2022; Ahmad, 2020). Attitude, on the other hand, refers to a psychological tendency expressed through the evaluation of particular entities with some degree of favor or disfavor (Ajzen, 1991).

In the investment domain, attitudes shape how individuals perceive risks, opportunities, and financial instruments. Attitudes are not fixed and are influenced by both internal personality traits and external factors such as social norms, cultural context, and market conditions (Rajasekar et al., 2023). The interaction between personality and attitude is particularly significant in financial behavior. Personality provides the baseline predisposition, while

attitudes reflect the situational expression of those dispositions. For example, neurotic individuals may form cautious or negative attitudes toward volatile markets, whereas open individuals may view the same environment as an opportunity for innovation and diversification (De Bortoli et al., 2019).

The relationship between personality and investment attitudes is fundamental to understanding investor behavior. Personality traits, as defined by the Big Five model (Costa & McCrae, 1992a), serve as a stable foundation for how individuals perceive and evaluate financial opportunities. Conversely, investment attitudes reflect the evaluative orientations that guide specific investment choices (Ajzen, 1991). For example, openness to experience is positively correlated with innovative and risk-tolerant investment attitudes. Investors with high openness often exhibit curiosity and a willingness to explore new markets, thereby displaying favorable attitudes toward dynamic and diversified portfolios (Ahmad, 2020; Kaur & Goel, 2022).

In contrast, conscientiousness fosters cautious and methodical decision-making, leading to attitudes that favor long-term, stable, and low-risk investments (Ozer & Mutlu, 2019). Extraversion also influences investment attitudes by promoting confidence and proactivity. Extraverted investors often develop optimistic attitudes toward high-risk, high-return investments, although this may also lead to overconfidence (Kamath et al., 2023). Agreeableness, characterized by cooperation and empathy, shapes attitudes that align with social norms and reliance on external advice, resulting in tendencies toward herding and conformity (Nair, Prabhu, & Garad, 2023). Conversely, neuroticism (low emotional stability) is associated with negative investment attitudes, such as risk aversion and anxiety-driven avoidance of volatile markets (Jiang, Peng, & Yan, 2024). Thus, personality traits act as underlying psychological predispositions, while investment attitudes translate these dispositions into specific orientations toward investments. Understanding this link enables financial advisors to anticipate investor preferences, align strategies, and improve satisfaction with financial outcomes. Recent studies emphasize the importance of examining the link between personality traits and investment attitudes in predicting investor behavior and designing effective financial strategies. Personality provides stable predispositions, while investment attitudes channel these into evaluative orientations toward risk and opportunity.

Research has shown that openness to experience is associated with positive attitudes towards

innovative and risk-oriented investments, whereas conscientiousness is linked to cautious and methodical investment approaches. Building on this, studies by Kaur and Goel (2022) found that extraversion is characterized by optimistic and high-risk attitudes, whereas neuroticism is associated with negative and risk-averse orientations.

Recent research underscores the mediating influence of investor sentiment. Studies by Nair, Prabhu, and Garad (2023) demonstrate that the Big Five personality traits have a significant impact on both short-term and long-term investment attitudes, with sentiment acting as a psychological link between personality and investment behavior. Furthermore, Kamath et al. (2023) found that extraverted investors tend to adopt aggressive attitudes, whereas emotionally stable investors maintain rational and resilient perspectives, even in times of market volatility.

Research conducted globally by Jiang, Peng, and Yan (2024) indicates that emotional stability acts as a buffer against panic-driven attitudes during economic downturns, underscoring the significance of further investigating this relationship. Furthermore, Rajasekar et al. (2023) employed the Theory of Planned Behavior to demonstrate that personality influences attitudes, which in turn drive intentions to hold or sell investments.

Collectively, these studies (2020–2025) highlight the importance of exploring the links between personality and attitudes. This not only explains the heterogeneity in investment preferences but also enables financial advisors and policymakers to develop tailored strategies that align with investors' inherent dispositions, ultimately enhancing investor satisfaction and market stability.

The literature review presented in Chapter 2, Section 2.3, revealed research gaps in personality psychology as it relates to consumer behavior, particularly in investment behavior and mutual fund buying intentions. Personality and attitude are key constructs in behavioral finance, shaping how individuals perceive risk and make investment decisions. While attitude is a well-established predictor of behavior, its antecedents in financial contexts, particularly the role of personality, have received limited attention. Recent studies have shown that personality traits such as openness, conscientiousness, and neuroticism affect investor confidence and decision-making strategies. However, most research has focused on external factors, leaving a gap in understanding the internal psychological mechanisms linking personality to investment attitudes. This study aims to address this gap.

Research Question 3 (RQ3): What is the attitude of investors, and how does personality impact attitude? In line with this objective, five hypotheses are propose as below:

1. Hypothesis 2a (H2a): ―Agreeableness significantly influences the Attitude of the mutual investors‖
2. Hypothesis 2b (H2b): ―Conscientiousness significantly influences the Attitude of the mutual investors‖
3. Hypothesis 2c (H2c): ―Extroversion significantly influences the Attitude of the mutual investors.
4. Hypothesis 2d (H2d): ―Neuroticism significantly influences the Attitude of the mutual investors.
5. Hypothesis 2e (H2e): ―Openness significantly influences the Attitude of the mutual investors.

4.3 Research Methodology

The present study aims to investigate how different personality traits contribute to the formation of attitude of investors in state of Goa. Given the multi-dimensional nature of the study, the research design was structured to ensure alignment between research objectives, data collection instruments, sampling strategy, and analytical techniques. A descriptive and quantitative research design was employed to capture investors' demographic characteristics and psychological attributes. The use of a structured questionnaire enabled systematic data collection and ensured consistency, reliability, and validity across all responses.

The target population comprised individual investors in mutual funds across Goa, India. A total of 700 structured questionnaires were distributed to respondents aged 18 years and above. Out of these, 667 valid responses were retained after eliminating incomplete or unusable forms, resulting in a final response rate of 95.29%. The study area was purposefully chosen to reflect demographic and socio-economic diversity among mutual fund investors. Fieldwork spanned a period of twelve months, from January 2023 to December 2024, ensuring broad temporal coverage. Due to the absence of a comprehensive sampling frame, a convenience sampling technique was adopted. This approach was appropriate to access participants based on availability and willingness, and was operationalized through both online modes (email surveys, digital forms) and offline methods (personal interviews and physical distribution).

The data were collected using a structured, multi-part questionnaire adapted from validated

scales in previous literature. The instrument consisted of four parts, of which Part A captured demographic information (age, gender, education, occupation, income, and investment experience), Part C assessed the Big Five personality traits—openness, conscientiousness, extraversion, agreeableness, and neuroticism—using 27 items derived from the NEO Five-Factor Inventory (Costa & McCrae, 1992, 2003) and Part D: Focused on attitudes. Items were measured on a five-point Likert scale ranging from ―strongly disagree‖ to ―strongly agree.‖ Quantitative analysis was undertaken using Structural Equation Modeling (SEM) with SmartPLS software. SEM was employed both to validate the factor structure of the Big Five traits and to classify dominant personality dimensions among respondents. This technique was particularly suitable as it allowed for measurement model validation as well as hypothesis testing, thereby ensuring robustness in interpretation of results.

This section discusses about the influence of different personality traits namely *agreeableness, conscientiousness, extroversion, neuroticism and openness* on the formation of attitude of investors.

The objective started with descriptive analysis explaining the responses received towards the investors attitude and followed by hypothesis testing using SEM. The importance performance analysis (IPMA) is also explained in the section.

4.4 Data Analysis and Findings

This section presents the results of the first objective in four sections. **Section 4.4.1** provides the result of demographic characteristics, which is analyzed using the descriptive statistics. **Section 4.4.2** discusses about the contribution of different personality traits investors

4.4.1 Demographic Characteristics

Since the same respondents were utilized for the present objective, the demographic characteristics are not repeated here. Readers may refer to Chapter 3, Section 3.1.1 (p.149) for detailed information on the demographic profile of the respondents.

4.4.2 Attitude of investors for mutual fund investment- descriptive analysis

The attitude of investors for mutual fund investment indicates the attitude of the investors for the mutual fund investments. The attitude of investors for mutual fund is measured with the

help of six statements included in the questionnaire. The table provides descriptive statistics and distribution characteristics for six statements related to attitudes toward mutual fund investments. The mean values range from 4.19 to 4.522, indicating a generally positive perception of mutual funds as an investment option, with most responses clustering toward agreement. The standard deviation values, ranging between 1.442 and 1.679, reflect moderate variability in responses, suggesting some diversity in participants' attitudes.

The **kurtosis** values are all negative, ranging from -0.577 to -0.863, indicating a platykurtic distribution, where the response distributions are flatter than a normal distribution and show fewer extreme values. The **skewness** values are close to zero, ranging from -0.101 to 0.132, demonstrating that the data is approximately symmetric with no significant skew in either direction.

Table 4. 1: Descriptive statistics of construct Attitude

Name	Mean	Standard deviation	Kurtosis	Skewness
Att1- Mutual fund investment is a great idea for investment	4.261	1.593	-0.728	0.09
Att2- Mutual fund investment is a wise investment	4.238	1.608	-0.863	0.114
Att3- Mutual fund investment tend to be stable	4.19	1.679	-0.841	0.073
Att4- Mutual fund investment is a good investment opportunity	4.216	1.614	-0.751	0.072
Att5- Mutual fund investment is good for a long-term investment	4.42	1.449	-0.719	0.132
Att6- Mutual fund investment is a smart and sensible option for investment	4.522	1.442	-0.577	-0.101

Source: Compiled from Primary Data

Specifically, the statement "Mutual fund investment is a smart and sensible option for investment" (Att6) has the highest mean (4.522), indicating it is the most positively viewed among the six statements, while "Mutual fund investment tends to be stable" (Att3) has the lowest mean (4.19), showing relatively lower agreement. The standard deviation is lowest for Att6 (1.442), suggesting a more consistent agreement among participants for this statement, whereas Att3 has the highest variability (1.679). These statistics collectively show that participants view mutual fund investments positively, with slight variations in their perceptions of specific aspects.

4.4.3 Reliability and validity analysis

The analysis of the Cronbach's alpha values for the constructs demonstrates high internal consistency, indicating the reliability of the measurement scale. Both Agreeableness (α = 0.91) and Attitude (α = 0.914) exhibit the highest levels of reliability, suggesting that the items effectively measure their respective constructs with minimal error. Constructs such as Conscientiousness (α = 0.864), Extroversion (α = 0.857), and Openness to Change (α = 0.876) also exhibit strong reliability, with values exceeding the commonly accepted threshold of 0.7, signifying robust measurement scales. Neuroticism (α = 0.879) further supports this consistency, demonstrating reliable measurement within the scale. These findings affirm that the items used for each construct are cohesive and provide dependable data, ensuring the scale's suitability for psychological and behavioral research. Overall, the high Cronbach's alpha values validate the reliability of the instrument

4.4.3.1 Construct Validity

The construct validity of the measurement scale is examined with the help of confirmatory factor analysis (CFA). The construct validity of the questionnaire includes two different components namely convergent validity as well as discriminant validity. The convergent validity evaluates the relationship between the selected factors and the statements measuring the factors. The convergent validity is examined with the help of construct loadings of the statements included in the questionnaire, composite reliability and the average variance extracted of the included factors. The discriminant validity of the measurement scale evaluates the cross correlations of the statements measuring different constructs. The cross correlation indicating the relationship between the statements of different constructs is expected to be low. The discriminant validity of the measurement scale included in the research is examined with the help of HTMT ratio and Fornell Larcker criteria. The HTMT ratio compares the correlations between the statements of different constructs and the correlation between the statements of same constructs. The HTMT ratio for all possible pairs of factors included in the measurement scale is expected to be less than 0.8 to satisfy the criteria of discriminant validity. The Fornell Larcker criteria compares the square root of the AVE for each included factor in the measurement scale with its correlation with remaining factors.

4.4.3.2 Convergent validity

The analysis of Composite Reliability (CR) and Average Variance Extracted (AVE) values demonstrates the robustness and validity of the measurement scale. All constructs exhibit CR values above the recommended threshold of 0.7, indicating strong internal consistency and reliability. Attitude (CR = 0.913) and Agreeableness (CR = 0.909) have the highest composite reliability, affirming the cohesiveness of their respective items. Other constructs, such as Conscientiousness (CR = 0.861), Extroversion (CR = 0.854), Neuroticism (CR = 0.878), and Openness to Change (CR = 0.876), also meet the reliability criterion.

Table 4. 2: Reliability and Validity

	Cronbach's alpha	Composite reliability (CR)	Average variance extracted (AVE)
Agreeableness	0.91	0.909	0.626
Conscientiousness	0.864	0.861	0.555
Extroversion	0.857	0.854	0.595
Neuroticism	0.879	0.878	0.595
Openness to Change	0.876	0.876	0.505
Attitude	0.914	0.913	0.638

Source: Compiled from Primary Data

The AVE values further validate the scale by measuring the amount of variance captured by each construct relative to error. All constructs achieve AVE values above the minimum acceptable threshold of 0.5, with Attitude (AVE = 0.638) and Agreeableness (AVE = 0.626) displaying the highest levels of convergent validity. While Openness to Change has the lowest AVE (0.505), it still meets the criterion, indicating sufficient variance is captured. These results confirm the scale's reliability and validity, ensuring that the constructs are measured accurately and provide meaningful data for analysis.

4.4.3.3 Discriminant validity

The Fornell-Larcker criteria were applied to assess the discriminant validity of the constructs,

ensuring that each construct is distinct and measured accurately. The square root of the Average Variance Extracted (AVE) for each construct was found to be greater than its correlations with other constructs, meeting the criteria for discriminant validity. Key results include Attitude (√AVE = 0.799) exceeding its highest correlation (0.697 with Agreeableness) and Agreeableness (√AVE = 0.791) surpassing its correlation with Attitude (0.697). Similarly, Conscientiousness (√AVE = 0.745), Extroversion (√AVE = 0.771), Neuroticism (√AVE = 0.771), and Openness (√AVE = 0.714) all showed higher AVE square roots compared to their correlations. These findings confirm robust discriminant validity, demonstrating that the constructs are effectively distinct and appropriately measured.

Table 4. 3 : Fornell- Larcker Criteria for discriminant validity

Construct	Attitude	Agreeableness	Conscientiousness	Extroversion	Neuroticism	Openness
Attitude	0.799	0.697	0.541	0.467	-0.627	0.552
Agreeableness	0.697	0.791	0.357	0.246	-0.468	0.422
Conscientiousness	0.541	0.357	0.745	0.644	-0.579	0.597
Extroversion	0.467	0.246	0.644	0.771	-0.540	0.516
Neuroticism	-0.627	-0.468	-0.579	-0.540	0.771	-0.500
Openness	0.552	0.422	0.597	0.516	-0.500	0.714

Source: Compiled from Primary Data

4.4.4 Role of Personality traits on formation of attitude of investors

The personality traits of investors are measured with the help of five components namely *agreeableness, conscientiousness, extroversion, neuroticism and openness.* These personality traits are measured with the help of different statements included in the questionnaire. The five components or dimensions of personality traits are reflective in nature and assumed as independent variable in the structural model developed for the purpose of hypothesis testing. The investor's attitude is assumed as dependent variable, reflective in nature as measured with the help of six statements included in the questionnaire. The structural model is developed indicating the relationship between the different components of personality traits and formation of investor's attitude. The following hypothesis are examined with the help of structural equation modelling method using Smart PLS software.

Hypothesis 2a (H_{2a}): *"Agreeableness significantly influences the Attitude of the mutual*

investors"

Hypothesis 2b (H_{2b}): ―Conscientiousness *significantly influences the Attitude of the mutual investors"*

Hypothesis 2c (H_{2c}): ―Extroversion *significantly influences the Attitude of the mutual investors.*

Hypothesis 2d (H_{2d}): ―Neuroticism *significantly influences the Attitude of the mutual investors.*

Hypothesis 2e (H_{2e}): ―Openness *significantly influences the Attitude of the mutual investors.*

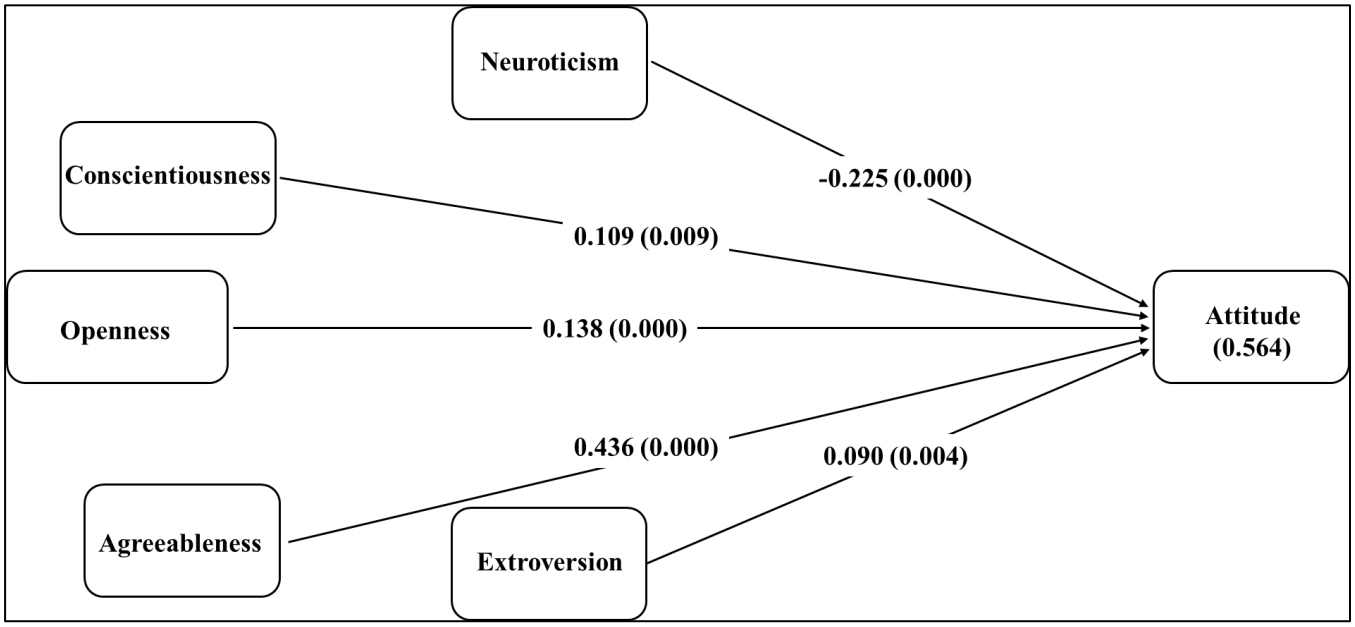
The structural model is shown below in figure 4.1 and the results of hypothesis testing is reported in table 4.6

Table 4. 4 : Structural Model Assessment

Hypothesis	Path Coefficient	Standard Error	T stats	P values	F square	R Square (Q Square)	Remark
Agreeableness -> Attitude	0.436	0.03	14.355	0.000	0.342	57.20%	Supported
Conscientiousness -> Attitude	0.109	0.041	2.666	0.009	0.018		Supported
Extroversion -> Attitude	0.09	0.031	2.917	0.004	0.013	(0.555)	Supported
Neuroticism -> Attitude	- 0.231	0.039	5.712	0.000	0.079		Supported
Openness -> Attitude	0.136	0.036	3.866	0.000	0.029		Supported

Source: Compiled from Primary Data

Fig 4.1: Structural model with path coefficients for Personality and Attitude



Conclusion (H_{2a}): The results of the SEM analysis found ***to support*** the hypothesis that *—Agreeableness significantly influences the attitude of the mutual investors"*. The path coefficient indicating the influence of agreeableness dimension of the personality trait is found to be positive and statistically significant (path coefficient=0.436, t-stats=14.355). Thus, it can be concluded that the agreeableness personality of the investor influences positively in the formation of the investors attitude for investment in mutual funds. The investors with agreeableness personality have positive attitude for the investment in mutual funds.

Conclusion (H_{2b}): The results of the SEM analysis found ***to support*** the hypothesis that *—Conscientiousness significantly influences the attitude of the mutual investors"*. The path coefficient indicating the influence of conscientiousness dimension of the personality trait is found to be positive and statistically significant (path coefficient=0.109, t-stats=2.666). Thus, it can be concluded that the Conscientiousness personality of the investor influences positively in the formation of the investors attitude for investment in mutual funds. The investors with Conscientiousness mindset have positive attitude for the investment in mutual funds.

Conclusion (H_{2c}): The results of the SEM analysis found ***to support*** the hypothesis that *―Extroversion significantly influences the Attitude of the mutual investors"*. The path coefficient indicating the influence of extroversion dimension of the personality trait is found to be positive and statistically significant (path coefficient=0.09, t-stats=2.917). Thus, it can be concluded that the extroversion personality of the investor influences positively in the formation of the investors attitude for investment in mutual funds. The investors with extrovert mindset have positive attitude for the investment in mutual funds.

Conclusion (H_{2d}): The results of the SEM analysis found ***to support*** the hypothesis that *―Neuroticism significantly influences the Attitude of the mutual investors"*. However, the path coefficient indicating the influence of neuroticism dimension of the personality trait is found to be negative and statistically significant (path coefficient=-0.231, t-stats=5.712). Thus, it can be concluded that the neuroticism of the investor influences negatively in the formation of the investors attitude for investment in mutual funds. The investors with neuroticism personality have negative attitude for the investment in mutual funds.

Conclusion (H_{2e}): The results of the SEM analysis found ***to support*** the hypothesis that ―Openness *significantly influences the Attitude of the mutual investors"*. The path coefficient indicating the influence of openness dimension of the personality trait is found to be positive and statistically significant (path coefficient=0.136, t-stats=3.866). Thus, it can be concluded that the openness of the investor influences positively in the formation of the investors attitude for investment in mutual funds. The investors with open mindset have positive attitude for the investment in mutual funds.

Effect size, explanatory power and predictive relevance

The effect size of the independent constructs is examined with the help of F square. The F square is found to be the highest in case of agreeableness (0.342) followed by neuroticism (0.079) and the least f square is found in case of extroversion (0.013). Thus, it can be concluded that the agreeableness has the maximum influence on the formation of investors attitude for mutual fund investments. The explanatory power of the structural model is measured with the help of R square (57.2%). Thus, it can be concluded that the attitude of investors for mutual fund investment can be explained by 57% with the help of structural

model used in the analysis. The predictive relevance of the model is examined with the help of Q square, which is found to be 0.555. Thus, it can be concluded that the structural model has excellent predictive relevance.

4.4.5 Importance-performance analysis (IPMA)

The IPMA is applied in the study in order to examine the level of agreement of the investors on the different dimensions of the personality traits and the comparative influence of the selected dimensions of the personality traits on the attitude of investors for the mutual fund investments. The results of the IPMA is reported in table 4.5

The results of IPMA indicates that the highest level of agreement of the respondents is found in case of openness (60.122), followed by conscientiousness (58.95) and extroversion (58.5%). Thus, majority of the investors are said to be moderately agree on these dimensions of personality traits. The respondents are found to have disagreement on neuroticism dimension of personality trait. The importance analysis discuses about the impact of selected independent variables (dimensions of the personality trait) on the attitude of the investors for mutual fund investment. The results reported that the highest is found in case of agreeableness dimension of the personality trait on the attitude of the investors for mutual fund investment, followed by openness and least but significant in case of neuroticism. The IPMA results is also shown below in table 4.5.

Table 4. 5: Importance and performance analysis

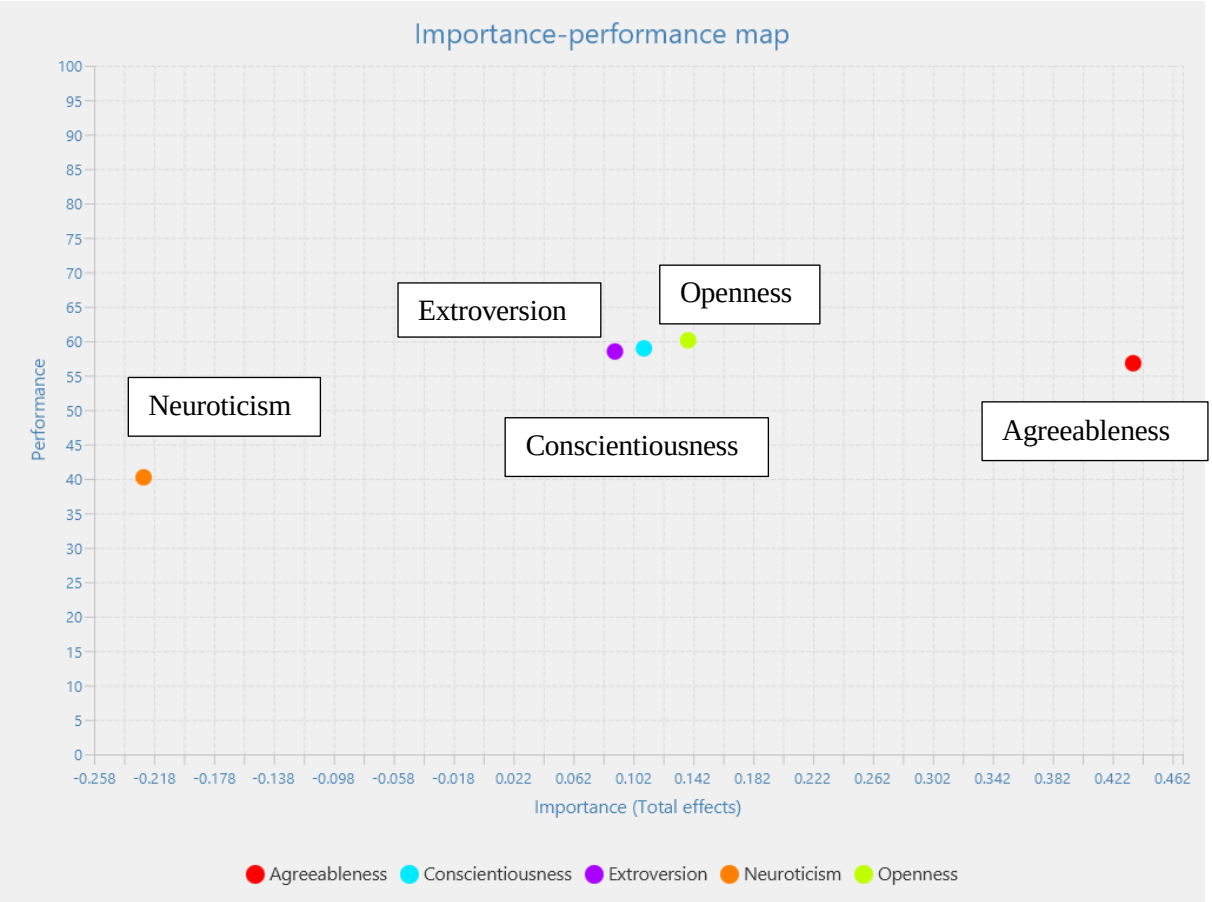
	Performance	Importance
Agreeableness	56.799	0.436
Attitude	55.291	
Conscientiousness	58.952	0.109
Extroversion	58.501	0.09
Neuroticism	40.226	-0.225
Openness	60.122	0.138

Source: Compiled from Primary Data

The results of IPMA indicates that the highest level of agreement of the respondents is found in case of openness (60.122), followed by conscientiousness (58.95) and extroversion

(58.5%). Thus, majority of the investors are said to be moderately agree on these dimensions of personality traits. The respondents are found to have disagreement on neuroticism dimension of personality trait. The importance analysis discuses about the impact of selected independent variables (dimensions of the personality trait) on the attitude of the investors for mutual fund investment. The results reported that the highest is found in case of agreeableness dimension of the personality trait on the attitude of the investors for mutual fund investment, followed by openness and least but significant in case of neuroticism. The IPMA results is also shown below in figure 4.2

Fig 4.2: Importance Performance Map



4.5 Summary

The descriptive analysis of investor attitudes toward mutual fund investments provides important insights into how investors perceive this financial instrument. Attitudes were measured through six statements in the survey, each reflecting a different evaluative aspect of mutual fund investment. The mean values, ranging between 4.19 and 4.522, suggest an overall positive perception of mutual funds. Respondents tended to agree that mutual funds

are a wise, long-term, and sensible investment option, with the strongest endorsement found for the statement ―Mutual fund investment is a smart and sensible option‖ (mean = 4.522). By contrast, the lowest mean was observed for the statement ―Mutual fund investment tends to be stable‖ (mean = 4.19), indicating slightly lower confidence in the stability of such products. Standard deviations (1.442–1.679) show moderate variability, suggesting general consensus with some differences across respondents. Negative kurtosis values indicate platykurtic distributions, while skewness values close to zero confirm that the data are approximately symmetric.

The reliability and validity of the measures were further substantiated through statistical analysis. Cronbach's alpha values exceeded 0.85 for all constructs, with attitude (0.914) and agreeableness (0.91) demonstrating the highest levels of reliability. Composite reliability (CR) values above 0.7 and average variance extracted (AVE) values above 0.5 confirmed strong convergent validity, while the Fornell-Larcker criteria established discriminant validity, indicating that each construct is statistically distinct. These findings collectively support the consistency and validity of the instrument used to measure attitudes and personality traits.

A structural equation modelling (SEM) analysis was conducted to investigate the influence of five personality traits on investor attitudes. The results supported all five hypotheses (H2a–H2e). Agreeableness had the most significant positive effect on investor attitudes, with a path coefficient of 0.436 and a t-statistic of 14.355. This was followed by openness (0.136) and conscientiousness (0.109), while extroversion had a smaller positive influence (0.09). Notably, neuroticism had a significant negative effect (–0.231), indicating that investors with emotional instability tend to form unfavourable attitudes towards mutual fund investments. The structural model accounted for 57.2% of the variance in investor attitudes ($R^2 = 0.572$), with strong predictive relevance ($Q^2 = 0.555$). Effect size analysis (f^2) further highlighted the central role of agreeableness, followed by neuroticism, while extroversion made a minimal contribution.

The importance-performance matrix analysis revealed further insights into the relative performance of personality traits and their influence on attitudes. Results indicated that respondents exhibited the strongest affinity for openness, with a score of 60.12, followed closely by conscientiousness (58.95) and extroversion (58.50). Although conscientiousness and extroversion outperformed agreeableness in terms of performance score (56.80),

agreeableness emerged as the most significant predictor of attitudes. Conversely, neuroticism, with a lower performance score (40.23) and a negative importance rating, was associated with weaker and more pessimistic attitudes.

These findings collectively demonstrate the complex role of personality in influencing attitudes towards mutual fund investment. Investors who are agreeable, open, and conscientious tend to display positive and confident attitudes, whereas neurotic investors are more skeptical and risk-averse. The model's high explanatory power emphasizes that personality traits are not merely secondary factors but rather fundamental determinants of investment attitudes. For practitioners, these results imply that identifying investors' personality traits can enable financial advisors to create more tailored strategies and communication approaches. At the policy level, understanding these psychological underpinnings could facilitate the development of financial literacy programs aimed at increasing investor confidence and market participation.

CHAPTER 5

INTEGRATIVE ANALYSIS OF PSYCHOLOGICAL CONSTRUCTS INFLUENCING MUTUAL FUND INVESTMENT INTENTIONS IN THE STATE OF GOA

5.1 Introduction

This chapter deals with data analysis of the third research objective, i.e., *To examine the impacts of personality traits, attitude, values and reasons on behavioural intention in state of Goa.* It includes sections such as the background of the study, research methodology, data analysis and findings, and summary.

The data analysis and findings are divided into four major sections, the first section deals with the demographic profile of the respondents investing in mutual funds, the second section deals with descriptive statistics of Constructs such as Values, Reasons, and Behavioral Intention in Mutual Fund Investments, The third section deals with Measurement model of above constructs and the last section deals with Structural Model studying the impacts of personality traits, attitude, values and reasons on behavioural intention

5.2 Background of the study

The underlying motivations for individuals to engage in or resist specific behaviors are a primary focus in behavioral science. Established frameworks, such as the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) and the Theory of Planned Behavior (TPB) (Ajzen, 1991), have contributed significantly by linking attitudes, subjective norms, and perceived control to behavioral intentions. Nevertheless, these models often assume a direct relationship between attitudes and intentions, neglecting the complex cognitive processes that underlie decision-making, particularly in situations of ambivalence or conflict. To address these limitations, Westaby (2005) developed the Behavioral Reasoning Theory (BRT), which highlights the pivotal role of reasons as cognitive mediators between values, attitudes, and behavioral intentions. Unlike TRA and TPB, BRT acknowledges that individuals generate both justifications for and against a given behavior, and this balance of competing reasons critically influences attitudes and intentions (Westaby, Probst, & Lee,

2010). By incorporating the processes of justification and cognitive conflict, BRT provides a more comprehensive and dynamic account of decision-making.

BRT is organized around four interrelated components:

1. **Values** – higher-order guiding principles such as tradition, security, or environmental concern.
2. **Reasons for behavior** – supportive justifications (e.g., ―it saves money,‖ ―it protects nature‖).
3. **Reasons against behavior** – deterrents or barriers (e.g., ―it is inconvenient,‖ ―it is risky‖).
4. **Attitudes and Intentions** – evaluative judgments and readiness to act, shaped by the interplay of reasons.

Within Schwartz's (1992) framework of basic human values, power and security are identified as key drivers of mutual fund buying intentions.

a) Power, which encompasses aspirations for control, dominance, and social prestige, motivates investors to pursue wealth creation and status enhancement through investments in equity-based or aggressive growth funds that offer substantial returns, albeit with higher volatility. This value-driven approach prioritizes exclusivity, competitive advantage, and financial gains that reinforce prestige, while concerns about underperformance may undermine investment intentions. Research has shown that investors guided by power display greater risk tolerance when rewards align with their goals (Hirshleifer, 2015).
b) In contrast, security-driven investors prioritize stability, safety, and risk avoidance. They tend to favor debt funds, balanced portfolios, or historically stable options that safeguard wealth and provide predictable returns (Schwartz, 2012; Hoffmann, 2013). The primary motivations for investment among these individuals include protecting family resources, retirement planning, and minimizing uncertainty, whereas concerns about volatility or capital loss may deter investment. During periods of financial instability, security-driven investors often opt for conservative choices (Guiso et al., 2018), and their decision-making is further influenced by financial literacy (Lusardi & Mitchell, 2014).

By situating both values within the Behavioral Reasoning Theory (BRT) (Westaby, 2005), it becomes apparent that power and security shape justifications for and against investment, influencing attitudes and intentions in distinct yet complementary ways.

Further, Behavioral Reasoning Theory (BRT) suggests that individuals are often discouraged from forming positive intentions toward mutual fund investing due to reasons against the behavior. In the context of mutual fund investing, the two primary reasons against are risk and lack of knowledge. These factors can significantly deter individuals from investing in mutual funds.

a) Risk is a substantial barrier to mutual fund investing, with investors frequently fearing financial loss, market volatility, and uncertain returns, which overshadow potential benefits. Research indicates that perceived risk is particularly pronounced among conservative or novice investors. Economic downturns can amplify these concerns, prompting even experienced investors to opt for safer options such as bonds or deposits. Psychological biases such as loss aversion can further intensify these fears, leading investors to avoid mutual funds despite their long-term advantages.
b) The lack of knowledge compounds these risk perceptions, as limited financial literacy prevents many from understanding diversification, risk-return trade-offs, or fund structures. Complex jargon in fund documents and trust deficits in financial advisors can intensify skepticism. Consequently, investors often prefer familiar, low-risk products such as savings accounts.

To address these barriers, it is essential to simplify fund communication, enhance financial literacy, and design investor education programs. By reducing perceived risks and bridging knowledge gaps, mutual funds can become more accessible, thereby fostering positive buying intentions.

Similarly, Behavioral Reasoning Theory (BRT) (Westaby, 2005) emphasizes that the reason behind a behavior significantly influences individuals to form positive intentions. In the context of mutual funds, two primary reasons for investment are returns and tax savings.

a) Returns serve as a primary motivator, with mutual funds offering diversified and competitive returns compared to traditional savings products such as fixed deposits (Kumar, 2021). Equity-oriented funds attract investors seeking long-term capital

appreciation, while debt funds appeal to those preferring stability. The ability of mutual funds to outperform inflation strengthens their role as tools for wealth creation and preservation (Jain & Jain, 2020). Past performance, fund ratings, and benchmarks often guide investment decisions, despite the influence of behavioral biases like optimism and overconfidence on return expectations (Kahneman & Tversky, 1979). Marketing that communicates consistent, risk-adjusted returns enhances investor confidence and trust.

b) Tax savings is another significant reason for investment. Equity Linked Savings Schemes (ELSS) allow investors to claim deductions of up to ₹150,000 under Section 80C, offering both tax efficiency and potential equity growth (Kaur & Kaushik, 2016). With a relatively short three-year lock-in, ELSS balances liquidity with incentives, appealing especially to salaried individuals and young professionals (Lusardi & Mitchell, 2014). Highlighting the dual benefit of wealth accumulation and tax efficiency can significantly strengthen investors' positive behavioral intentions.

Furthermore, the Behavioral Intention construct reflects an individual's conscious decision to engage in a behavior, shaped by reasoning processes and global motives such as values, attitudes, and norms (Westaby, 2005). Within mutual fund investing, behavioral intention represents an investor's planned choice to invest, arising from a balance of positive justifications (e.g., returns, tax savings) and negative ones (e.g., risk, lack of knowledge). As the outcome of these competing cognitive processes, behavioral intention becomes the central mechanism linking underlying motives with actual investment behavior, making it essential for predicting mutual fund participation.

The literature review in Chapter 2, Section 2.4, identified a significant research gap in the lack of integrative models that simultaneously examine personality traits, attitudes, values, and reasons in predicting investment behavior. Existing studies in behavioral finance have primarily focused on isolated constructs such as financial literacy, trust, or risk tolerance, neglecting the interaction between internal psychological factors that shape behavioral intention. While personality and attitudes are well-established predictors of investment decisions, and values provide higher-order motivational guidance, their combined influence through reasoning processes has been under investigated. Behavioral Reasoning Theory (BRT) offers a promising framework, suggesting that reasons mediate the link between values, psychological traits, and behavioral intention (Westaby, 2005). However, its

application in financial decision-making, particularly in mutual fund buying intentions, remains limited. This study addresses this gap by developing a comprehensive BRT-based model that integrates personality, values, attitudes, and reasons to provide a more holistic explanation of investor behavior and addresses Research Question 4.

RQ 4: Is it possible to understand the impacts of personality traits, attitude, values and reasons on behavioral intention?

1. Hypothesis 3a (H_{3a}): *"Reason against significantly influences the Attitude of the mutual investors"*
2. Hypothesis 3b (H_{3b}): ―Reason for significantly *influences the Attitude of the mutual investors.*
3. Hypothesis 3c (H_{3c}): ―Attitude significantly *influences the behavioural intention of the mutual investors*.
4. Hypothesis 3d (H_{3d}): ―Personality traits of the investors *significantly influence the Attitude of the mutual investors*.
5. Hypothesis 3e (H_{3e}): ―Personality traits *significantly influence the behavioural intention of the mutual investors*.
6. Hypothesis 3f (H_{3f}): ―Power significantly *influences the reason for the mutual fund"*
7. Hypothesis 3g (H_{3g}): ―Power significantly *influences the Attitude of the mutual investors*‖.
8. Hypothesis 3h(H_{3h}): ―Security *significantly influences the Attitude of the mutual investors"*.
9. Hypothesis 3i (H_{3i}): ―Security *significantly influences the reason against the mutual fund investments"*.
10. Hypothesis 3j (H_{3j}): ―Reason for significantly *influences the behavioural intention of the mutual investors"*.
11. Hypothesis 3k (H_{3k}): ―Reason against significantly *influences the behavioural intention of the mutual investors*

5.3 Research Methodology

This study aims to investigate the effects of personality traits, attitude, values, and reasons on behavioral intention in the state of Goa. To achieve this goal, a research design was

developed to align the research objectives, data collection methods, sampling strategy, and analytical techniques. A descriptive and quantitative research design was employed to capture the investors' demographic characteristics and psychological attributes. The use of a structured questionnaire facilitated systematic data collection and ensured consistency, reliability, and validity across all responses. The target population consisted of individual investors in mutual funds across Goa, India. A total of 700 structured questionnaires were distributed to respondents aged 18 years and above. After eliminating incomplete or unusable forms, 667 valid responses were retained, resulting in a final response rate of 95.29%. The study area was purposefully chosen to reflect the demographic and socio-economic diversity among mutual fund investors. The fieldwork spanned a period of 12 months, from January 2023 to December 2024, ensuring broad temporal coverage. Due to the absence of a comprehensive sampling frame, a convenience sampling technique was adopted. This approach was suitable for accessing participants based on their availability and willingness and was operationalized through both online modes (email surveys, digital forms) and offline methods (personal interviews and physical distribution). Data were collected using a structured, multi-part questionnaire adapted from the validated scales in the previous literature. The instrument consisted of four parts: Part A, which captured demographic information (age, gender, education, occupation, income, and investment experience); Part C, which assessed the Big Five personality traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism) using 27 items derived from the NEO Five-Factor Inventory (Costa & McCrae, 1992, 2003); and Part D, which focused on attitudes, reasons for investing, reasons against investing, and values (power and security). Items were measured on a five-point Likert scale ranging from "strongly disagree" to "strongly agree".

A quantitative analysis was conducted using SEM with SmartPLS software to examine the impacts of personality traits, attitudes, values, and reasons on behavioral intention. SEM was chosen for this study because of its ability to validate the measurement model, confirm the factor structures of the Big Five personality traits, attitudinal constructs, values, and reasoning dimensions, and classify the dominant personality tendencies among the respondents. Furthermore, SEM enabled the testing of the hypothesized relationships within the structural model, allowing for a comprehensive evaluation of how these psychological constructs collectively influence behavioral intention. The application of this technique ensured methodological rigor and robustness, thereby enhancing the reliability and interpretability of the findings.

5.4 Data Analysis and Findings

This section presents the results of the first objective in four sections. **Section 5.4.1** provides the result of demographic characteristics, **Section 5.4.2 which** is analyzed using the descriptive statistics of various constructs, **Section 5.4.3** discusses the measurement model **and 5.4.4** discusses the structural model and relationship between the constructs

5.4.1 Demographic Characteristics

Since the same respondents were utilized for the present objective, the demographic characteristics are not repeated here. Readers may refer to Chapter 3, Section 3.1.1 p. 149 for detailed information on the demographic profile of the respondents.

5.4.2 Descriptive Analysis of Values, Reasons, and Behavioral Intention in Mutual Fund Investments

Values

The values of **power** and **security** represent two important motivational drivers in mutual fund investing. Power reflects investors' desire for wealth, control, and the influence that financial prosperity can bring, while security emphasizes the need for stability, safety, and a sense of protection in financial decisions. Together, these values highlight how investors balance aspirations for financial growth with concerns for stability and risk avoidance. Both constructs were measured through questionnaire items, and descriptive statistics were applied to analyze the responses. The following tables present the descriptive analysis of power and security.

The power derived as a result of mutual fund investment to investors is measured with the help of four statements included in the questionnaire. The descriptive analysis is applied on the responses received against the statements measuring power and the results are reported in T***able 5.1***. The result of the descriptive analysis indicates the presence of moderate level of agreement of the investors towards the power derived from the mutual fund investments. The mutual funds investors believe the money brings power to buy the desired services and it is necessary for them to be wealthy. The standard deviations indicate the dispersion in the responses. The skewness and kurtosis is found to be less than 1 indicates that the responses are near to the normal.

Table 5. 1: Descriptive Statistics - Power

Name	Mean	Standard deviation	Excess kurtosis	Skewness
Power1: It is important for me to have the power that money can bring.	4.531	1.692	-0.854	-0.222
Power2: It is important for me to be wealthy	4.469	1.776	-0.993	-0.124
Power3: I see financial prosperity as a means to create a positive impact on my life and the lives of others."	4.547	1.727	-0.897	-0.209
Power4: Wealth creation is a key objective for me, and I am committed to making informed decisions to achieve lasting financial success.	4.508	1.71	-0.941	-0.079

Source: Compiled from Primary Data

The descriptive analysis is applied on the responses received against the statements measuring security and the results are reported in ***Table 5.2***. The table presents descriptive statistics for four items measuring the importance of **security values**. The **mean scores** (3.55–3.68) indicate that respondents moderately agree with the importance of security in different life domains, suggesting that security is a valued but not overwhelmingly dominant concern. The **standard deviations** (1.56–1.73) show moderate variability, implying differences among respondents in how strongly they prioritize security. The **excess kurtosis** values are all negative (–0.82 to –0.92), reflecting platykurtic distributions with flatter curves, meaning responses are spread more evenly across the scale rather than tightly clustered around the mean. Finally, the **skewness** values (0.09–0.16) are slightly positive, indicating a marginal tilt toward lower-end responses, though the distributions remain close to symmetrical overall. The result of the descriptive analysis indicates the presence of moderate level of agreement of the investors towards the security value associated from the mutual fund investments. The standard deviations indicate the dispersion in the responses. The skewness and kurtosis is found to be less than 1 indicates that the responses are near to the normal.

Reasons For

Within the Behavioral Reasoning Theory (BRT) framework, **risk** and **lack of knowledge** emerge as major ―reasons against‖ mutual fund investment. Risk reflects investor concerns over volatility, potential losses, and market uncertainty, which often discourage participation

despite attractive returns. Lack of knowledge highlights difficulties in interpreting performance data and understanding fund structures, undermining investor confidence and decision-making ability. Together, these barriers demonstrate how perceptions of uncertainty and complexity weaken positive investment intentions. The following tables present the descriptive analysis of risk and lack of knowledge.

Table 5. 2: Descriptive Statistics - Security

Name	Mean	Standard deviation	Excess kurtosis	Skewness
Security 1 : It is important for me to live in secure surroundings	3.549	1.7	-0.92	0.156
Security 2: It is important for me that the government ensures my safety against all threats	3.553	1.568	-0.825	0.086
Security 3: I prioritize security in my daily life, recognizing its role in fostering a sense of stability and tranquility.	3.652	1.632	-0.864	0.106
Security 4: Feeling secure allows me to focus on personal and professional growth, as it creates a stable foundation for success	3.676	1.729	-0.896	0.097

Source: Compiled from Primary Data

The descriptive analysis is applied on the responses received against the statements measuring risk and the results are reported in ***Table 5.3***. The table presents descriptive statistics for four risk-related statements concerning mutual fund investments. The **mean values** (ranging from 4.04 to 4.24) indicate that respondents generally agree with all statements, reflecting a strong perception of risk awareness in mutual fund investing. The **standard deviations** (around 1.63–1.69) suggest moderate variability, meaning while most respondents lean toward agreement, some variation in perceptions exists. The **excess kurtosis** values are all negative (–0.83 to –0.93), indicating platykurtic distributions with flatter-than-normal curves, suggesting responses are more evenly spread rather than concentrated around the mean. Finally, **skewness** values are close to zero (–0.08 to 0.14), showing near-symmetric distributions without strong leanings toward extreme agreement or disagreement. Overall, the results highlight consistent recognition of risk in mutual fund investments, with relatively stable and balanced response patterns.

Table 5. 3: Descriptive Statistics - Risk

Name	Mean	Standard deviation	Excess kurtosis	Skewness
Risk 1 : Mutual Fund investments are risky investments	4.04	1.634	-0.831	0.142
Risk 2: I consider historical performance as a reliable indicator of the future risk associated with a mutual fund	4.132	1.671	-0.867	-0.003
Risk 3: I am concerned about potential fluctuations in the value of my mutual fund investments	4.18	1.691	-0.929	-0.06
Risk 4: I actively monitor and adjust my mutual fund investments based on perceived risk.	4.244	1.657	-0.91	-0.08

Source: Compiled from Primary Data

The descriptive analysis is applied on the responses received against the statements measuring lack of knowledge and the results are reported in ***Table 5.4***. The table summarizes responses to three items measuring the **lack of knowledge (LOK)** in mutual fund investments. The **mean values** (4.11–4.35) indicate that respondents generally agree that limited knowledge and data complexity hinder their investment confidence and decision-making. This shows that lack of knowledge is perceived as a significant barrier to mutual fund participation. The **standard deviations** (1.70–1.88) suggest moderate to high variability, meaning that while many investors strongly agree, others are less affected by knowledge constraints. The **excess kurtosis** values (–1.00 to –1.22) are negative, reflecting platykurtic distributions with flatter curves, indicating more dispersed responses rather than clustering around the mean. The **skewness values** (–0.03 to –0.18) are slightly negative, suggesting a marginal tilt toward higher agreement, but overall distributions remain nearly symmetrical.

Reasons For

Within the Behavioral Reasoning Theory (BRT) framework, **returns** and **tax savings** stand out as strong ―reasons for‖ mutual fund investment. Returns highlight the appeal of diversification, capital appreciation, and long-term wealth creation, motivating investors to

favor mutual funds over traditional savings. Tax saving underscores the financial advantages of instruments like ELSS, where deductions and efficiency enhance the attractiveness of investing. Together, these factors capture both the growth and fiscal benefits that strengthen positive behavioral intentions. The following tables present the descriptive analysis of returns and tax saving.

Table 5.4: Descriptive Statistics - Lack of Knowledge

Name	Mean	Standard deviation	Excess kurtosis	Skewness
LOK1:I find it challenging to interpret and analyse the performance data provided for mutual funds	4.112	1.813	-1.188	-0.032
LOK2 : My lack of knowledge about mutual funds hinders my confidence in making investment decisions	4.147	1.879	-1.223	-0.106
LOK3 : The complexity of mutual fund performance data is a hindrance to my ability to assess and compare different funds	4.352	1.701	-1.001	-0.179

Source: Compiled from Primary Data

The ***table 5.5*** present descriptive statistics for four items assessing returns as a motivator for mutual fund investment. The mean values (4.28–4.36) indicate strong agreement among respondents, suggesting that the potential for diversification, capital appreciation, and attractive returns plays a major role in shaping investment intentions. The standard deviations (1.85–1.97) are relatively high, reflecting noticeable variation in investor perceptions—while many strongly value returns, some respondents remain less motivated. The excess kurtosis values (–1.06 to –1.26) are negative, indicating platykurtic distributions with flatter shapes, meaning responses are more spread out rather than tightly clustered. The skewness values (–0.24 to –0.32) are slightly negative, suggesting a mild lean toward higher agreement, with more respondents rating at the upper end of the scale.

The ***Table 5.6*** reports descriptive statistics for four items capturing **tax saving as a motivator** for mutual fund investment. The **mean values** (4.08–4.19) show that respondents generally agree that tax benefits significantly influence their investment decisions, reflecting the strong role of tax incentives in shaping behavioral intentions. The **standard deviations** (1.60–1.65) indicate moderate variability, suggesting that while most investors recognize tax

efficiency as an advantage, the strength of this motivation differs across respondents. The **excess kurtosis** values (–0.65 to –0.77) are negative, indicating platykurtic distributions with responses spread more evenly across the scale rather than concentrated around the mean. The **skewness values** (–0.14 to 0.02) are close to zero, showing near-symmetric distributions without strong leaning toward extreme agreement or disagreement.

Table 5. 5 : Descriptive Statistics - Returns

Name	Mean	Standard deviation	Excess kurtosis	Skewness
Ret1 : I see mutual funds as an effective way to diversify my investments and potentially achieve higher returns	4.283	1.97	-1.237	-0.242
Ret2 : I am motivated to invest in mutual funds because of the potential for capital appreciation over time	4.333	1.851	-1.065	-0.322
Ret3 : The potential for attractive returns is a significant motivator for me to invest in mutual funds	4.363	1.966	-1.255	-0.27
Ret4 : The historical track record of mutual funds generating positive returns reinforces my confidence in this investment	4.325	1.964	-1.182	-0.295

Source: Compiled from Primary Data

Table 5. 6 : Descriptive Statistics - Tax Saving

Name	Mean	Standard deviation	Excess kurtosis	Skewness
TS1 : The potential for tax savings is a significant motivator for me to consider mutual fund investments	4.078	1.602	-0.652	-0.02
TS2 : The tax efficiency of certain mutual funds enhances their appeal as an investment option for me	4.148	1.628	-0.749	0.006
TS3 : The potential to reduce my tax liability is an important factor influencing my decision to invest in specific mutual funds	4.18	1.65	-0.766	0.018
TS4: I see mutual fund investments as a tax-efficient way to grow my wealth over time.	4.193	1.638	-0.688	-0.14

Source: Compiled from Primary Data

Behavioural Intention

The ***Table 5.7*** provides descriptive statistics for six items assessing **behavioral intention toward mutual fund investing**. The **mean values** (4.21–4.43) are relatively high, indicating that respondents generally express strong intentions to save, diversify portfolios, conduct research, and actively manage investments. This reflects a positive orientation toward proactive financial behavior. The **standard deviations** (1.57–1.64) suggest moderate variability, showing that while many respondents are strongly committed, others demonstrate less consistency in their intentions. The **excess kurtosis** values (–0.74 to –0.93) are negative, indicating platykurtic distributions with flatter curves, meaning responses are more evenly spread across the scale. The **skewness values** (–0.14 to 0.03) are close to zero, suggesting nearly symmetrical distributions, with no strong leaning toward extreme responses.

Table 5. 7: Descriptive Statistics - Buying Intention

Name	Mean	Standard deviation	Excess kurtosis	Skewness
BI1: I intend to save at least 10% of my gross earnings for investing/saving/retirement purposes.	4.426	1.579	-0.79	-0.136
BI2 : I intend to have a portfolio that focuses on multiple mutual funds	4.349	1.609	-0.86	-0.11
BI3 : I intend to manage my portfolio for maximum gross return rather than tax and cost efficiency.	4.22	1.586	-0.816	0.035
BI4: I intend to engage in portfolio management activities at least twice per week	4.211	1.576	-0.744	-0.045
BI5: I intend to perform my own investment research instead of using outside advice.	4.261	1.592	-0.851	-0.019
BI6: I intend to compare my portfolio performance to that of professional managers.	4.283	1.641	-0.927	-0.042

Source: Compiled from Primary Data

5.4.3 : Reliability and validity analysis

The internal consistency reliability of the responses received against the different factors namely *Agreeableness, Attitude, Behavioural Intention, Conscientiousness, Extroversion, Lack of Knowledge, Neuroticism, Openness, Power, Returns, Risk, Security, Tax and Savings* included in the measurement scale is measured with the help of Cronbach alpha. The expected value of Cronbach alpha for each factor is greater than 0.7 to satisfy the criteria of significant reliability. The result of reliability is reported in ***table 5.9***. The results of reliability analysis reported that the Cronbach alpha for each factor is greater than 0.7

(*Agreeableness=0.91, Attitude = 0.914, Behavioural Intention=0.87, Conscientiousness=0.864, Extroversion=0.857, Lack of Knowledge= 0.877, Neuroticism= 0.879, Openness=0.878, Power=0.868, Returns=0.919, Risk=0.896, Security= 0.872 and Tax Savings=0.931).* Thus, it can be concluded that the responses received in the study is reliable with respect to internal consistency reliability.

Construct Validity

The construct validity of the measurement scale is examined using confirmatory factor analysis (CFA). It includes two components: convergent validity and discriminant validity. Convergent validity evaluates the relationship between selected factors and the statements measuring them. It's examined through construct loadings, composite reliability, and average variance extracted. Discriminant validity evaluates the cross correlations of statements measuring different constructs. It's examined using the HTMT ratio and Fornell Larcker criteria. The HTMT ratio compares correlations between different and same constructs, and the Fornell Larcker criterion compares the square root of AVE with correlations with other factors.

Table 5. 8 : Construct loadings of the indicators used in the measurement scale

	Agreeableness	**Attitude**	**Behavioural Intention**	**Conscientiousness**	**Extroversion**	**Lack of Knowledge**	**Neuroticism**	**Openness**	**Power**	**Returns**	**Risk**	**Security**	**Tax _Savings**
Aggr1	0.782												
Aggr2	0.768												
Aggr3	0.795												
Aggr4	0.751												
Aggr5	0.845												
Aggr6	0.803												
Att1		0.754											
Att2		0.763											
Att3		0.696											
Att4		0.808											
Att5		0.902											
Att6		0.852											
BI1			0.826										
BI2			0.855										

BI3			0.683										
BI4			0.726										
BI5			0.65										
Cons1				0.657									
Cons2				0.762									
Cons3				0.713									
Cons4				0.732									
Cons5				0.847									
Ext1					0.742								
Ext2					0.744								
Ext3					0.749								
Ext4					0.846								
LOK1						0.865							
LOK2						0.843							
LOK3						0.81							
Neuro1							0.795						
Neuro2							0.898						
Neuro3							0.808						
Neuro4							0.654						
Neuro5							0.674						
Open1								0.64					
Open2								0.711					
Open3								0.639					
Open4								0.746					
Open5								0.784					
Open6								0.762					
Open7								0.703					
Power1									0.789				
Power2									0.86				
Power3									0.782				
Power4									0.716				
Ret1										0.86			
Ret2										0.849			
Ret3										0.875			
Ret4										0.858			
Risk1											0.813		
Risk2											0.83		
Risk3											0.831		
Risk4											0.834		
Sec1												0.724	
Sec2												0.787	
Sec3												0.835	
Sec4												0.827	

TS1													0.885
TS2													0.878
TS3													0.891
TS4													0.861

Source: Compiled from Primary Data

Convergent Validity: The convergent validity of the measurement scale was assessed using construct loadings, composite reliability, and the average variance extracted. The results presented in ***Table 5.9*** indicate that most statements included in the scale have constructed loadings greater than 0.7. Furthermore, the composite reliability and average variance extracted for each factor exceeded the thresholds of 0.7 and 0.5, respectively. Specifically, the values obtained were as follows: Agreeableness (CR=0.909, AVE=0.626), Attitude (CR=0.913, AVE=0.638), Behavioral Intention (CR=0.866, AVE=0.566), Conscientiousness (CR=0.864, AVE=0.555), Extroversion (CR=0.854, AVE=0.595), Lack of Knowledge (CR=0.877, AVE=0.705), Neuroticism (CR=0.879, AVE=0.595), Openness (CR=0.878, AVE=0.51), Power (CR=0.867, AVE=0.622), Returns (CR=0.919, AVE=0.74), Risk (CR=0.896, AVE=0.684), Security (CR=0.872, AVE=0.632), and Tax Savings (CR=0.931, AVE=0.772). These findings suggest that the measurement scale meets the criteria for convergent validity.

Table 5. 9 : Convergent validity

	Cronbach's alpha	**Composite reliability**	**Average variance extracted**
Agreeableness	0.91	0.909	0.626
Attitude	0.914	0.913	0.638
Behavioural Intention	0.87	0.866	0.566
Conscientiousness	0.864	0.861	0.555
Extroversion	0.857	0.854	0.595
Lack of _Knowledge	0.877	0.878	0.705
Neuroticism	0.879	0.879	0.595
Openness	0.878	0.879	0.51
Power	0.868	0.867	0.622
Returns	0.919	0.919	0.74
Risk	0.896	0.896	0.684
Security	0.872	0.872	0.632
Tax _Savings	0.931	0.931	0.772

Source: Compiled from Primary Data

Table 5. 10 : HTMT ratio

	Agreeableness	Attitude	Behavioural Intention	Conscientiousness	Extroversion	Lack of _Knowledge	Neuroticism	Openness	Power	Returns	Risk	Security
Attitude	0.699											
Behavioural Intention	0.756	0.718										
Conscientiousness	0.353	0.533	0.455									
Extroversion	0.243	0.46	0.375	0.627								
Lack of _Knowledge	0.087	0.114	0.111	0.037	0.084							
Neuroticism	0.473	0.624	0.594	0.567	0.522	0.111						
Openness	0.428	0.553	0.43	0.59	0.508	0.124	0.488					
Power	0.39	0.608	0.54	0.474	0.386	0.195	0.529	0.367				
Returns	0.371	0.626	0.487	0.527	0.546	0.059	0.531	0.523	0.506			
Risk	0.053	0.151	0.09	0.06	0.064	0.789	0.093	0.143	0.234	0.046		
Security	0.363	0.654	0.518	0.443	0.466	0.253	0.638	0.387	0.524	0.609	0.308	
Tax _Savings	0.351	0.66	0.58	0.55	0.576	0.148	0.655	0.478	0.573	0.682	0.196	0.655

Source: Compiled from Primary Data

Discriminant validity: The discriminant validity of the measurement scale employed in this research was assessed using the HTMT ratio and the Fornell–Larcker criteria. The HTMT ratio evaluates the correlations between statements of different constructs and those of the same constructs. For the discriminant validity to be established the HTMT ratio for all possible pairs of factors included in the measurement scale is expected to be less than 0.8 (refer to Table 5.10). The Fornell–Larcker criteria, on the other hand, compare the square root of the average variance extracted (AVE) for each factor in the measurement scale with its correlation with the remaining factors (***refer to Table 5.11***). The results of both the HTMT ratio and the Fornell–Larcker criteria satisfied the required criteria for discriminant validity. Consequently, it can be concluded that the measurement scale used in this study ensures the presence of discriminant validity.

Table 5. 11 : Fornell Larcker criteria

	Agreeableness	Attitude	Behavioural Intention	Conscientiousness	Extroversion	Lack of _Knowledge	Neuroticism	Openness	Power	Returns	Risk	Security	Tax _Savings
Agreeableness	0.79												
Attitude	0.69	0.79											
Behavioural Intention	0.75	0.73	0.75										
Conscientiousness	0.35	0.54	0.47	0.74									
Extroversion	0.24	0.46	0.39	0.64	0.77								
Lack of _Knowledge	0.06	-0.11	0.09	0.00	0.07	0.84							
Neuroticism	-0.46	-0.62	-0.60	-0.57	-0.54	0.10	0.77						
Openness	0.42	0.55	0.44	0.59	0.51	0.11	-0.5	0.71					
Power	0.39	0.61	0.54	0.47	0.39	-0.19	-0.53	0.36	0.78				
Returns	0.37	0.62	0.49	0.53	0.55	-0.05	-0.53	0.52	0.50	0.86			
Risk	0.03	-0.14	0.07	-0.01	0.05	0.78	0.08	0.08	-0.23	-0.04	0.82		
Security	-0.36	-0.65	-0.52	-0.44	-0.47	0.25	0.64	-0.38	-0.52	-0.60	0.30	0.79	
Tax _Savings	0.35	0.66	0.59	0.55	0.58	-0.14	-0.66	0.48	0.57	0.68	-0.19	-0.65	0.879

Source: Compiled from Primary Data

5.4.4 Impacts of personality traits, attitude, values and reasons on behavioural intention

The selected factors, comprising personality traits (Agreeableness, Conscientiousness, Extroversion, Neuroticism, Openness), Attitude, Reason Against (Lack of Knowledge and Risk), Values (Security and Power), Reason For (Returns and Tax Savings), are assumed to influence the Behavioral Intention of investors to invest in mutual funds. The personality traits of the investors were measured using five components: agreeableness, conscientiousness, extroversion, neuroticism, and openness. These factors are operationalized through various statements included in the questionnaire. As reflective constructs, they are treated as independent variables in the structural model developed for hypothesis testing. Conversely, the behavioral intention of investors to invest in mutual funds is considered a dependent variable, also reflective in nature, and measured using six statements included in

the questionnaire. The structural model illustrates the relationships between the various factors and the behavioral intention of investors to invest in mutual funds. This study employs the structural equation modeling method using the SmartPLS software to examine the following hypothesis..

The structural model is shown below in ***figure 5.1*** and the results of hypothesis testing are reported in ***table 5.12.***

1. Hypothesis 3a (H_{3a}): *"Reason against significantly influences the Attitude of the mutual investors"*
2. Hypothesis 3b (H_{3b}): ―Reason for significantly *influences the Attitude of the mutual investors.*
3. Hypothesis 3c (H_{3c}): ―Attitude significantly *influences the behavioural intention of the mutual investors*.
4. Hypothesis 3d (H_{3d}): ―Personality traits of the investors *significantly influence the Attitude of the mutual investors*.
5. Hypothesis 3e (H_{3e}): ―Personality traits *significantly influence the behavioural intention of the mutual investors.*
6. Hypothesis 3f (H_{3f}): ―Power significantly *influences the reason for the mutual fund"*
7. Hypothesis 3g (H_{3g}): ―Power significantly *influences the Attitude of the mutual investors*‖.
8. Hypothesis 3h(H_{3h}): ―Security *significantly influences the Attitude of the mutual investors"*.
9. Hypothesis 3i (H_{3i}): ―Security *significantly influences the reason against the mutual fund investments"*.
10. Hypothesis 3j (H_{3j}): ―Reason for significantly *influences the behavioural intention of the mutual investors"*.
11. Hypothesis 3k (H_{3k}): ―Reason against significantly *influences the behavioural intention of the mutual investors"*

1. Hypothesis 3a (H3a): "Reason against significantly influences the Attitude of the mutual investors"

Conclusion (H_{3a}): The results of the SEM analysis ***failed to support*** the hypothesis that

"Reason against significantly influences the Attitude of the mutual investors". The path coefficient indicating the influence of reason against is found to be negative, however statistically insignificant (path coefficient=-0.048, t-stats=1.818). Thus, it can be concluded that the reason against mutual fund investment do not influence the formation of the investors attitude for investment in mutual funds.

2. Hypothesis 3b (H_{3b}): ―Reason for significantly *influences the Attitude of the mutual investors*.

Conclusion (H_{3b}): The results of the SEM analysis supported the hypothesis that *"Reason for significantly influences the Attitude of the mutual investors"*. The path coefficient indicating the influence of reason for is found to be positive and statistically significant (path coefficient=0.171, t-stats=2.018). Thus, it can be concluded that the reason for mutual fund investment do influence the formation of the investors attitude for investment in mutual funds.

3. Hypothesis 3c (H_{3c}): ―Attitude significantly *influences the behavioural intention of the mutual investors*.

Conclusion (H_{3c}): The results of the SEM analysis supported the hypothesis that *"*Attitude significantly *influences the behavioural intention of the mutual investors"*. The path coefficient indicating the influence of attitude is found to be positive and statistically significant (path coefficient=0.394, t-stats=7.551). Thus, it can be concluded that the attitude towards mutual fund investment do influence the formation of the behavioural intention for investment in mutual funds.

4. Hypothesis 3d (H_{3d}): ―Personality traits of the investors *significantly influence the Attitude of the mutual investors*.

Conclusion (H_{3d}): The results of the SEM analysis supported the hypothesis that *"*Personality traits of the investors *significantly influence the Attitude of the mutual investors"*. The path coefficient indicating the influence of personality is found to be positive and statistically significant (path coefficient=0.437, t-stats=9.683). Thus, it can be concluded that the Personality traits of the investors do influence the formation of the attitude towards investment in mutual funds.

5. Hypothesis 3e (H_{3e}): ―Personality traits *significantly influence the behavioural intention of the mutual investors*.

Conclusion (H_{3e}): The results of the SEM analysis supported the hypothesis that *"*Personality traits *significantly influence the behavioural intention of the mutual investors."* The path coefficient indicating the influence of personality is found to be positive and statistically significant (path coefficient=0.302, t-stats=5.076). Thus, it can be concluded that the Personality traits of the investors do influence the formation of the behavioural intention towards investment in mutual funds.

6. Hypothesis 3f (H_{3f}): ―Power significantly *influences the reason for the mutual fund"*

Conclusion (H_{3f}): The results of the SEM analysis supported the hypothesis that *"*Power significantly *influences the reason for the mutual fund."* The path coefficient indicating the influence of power is found to be positive and statistically significant (path coefficient=0.54, t-stats=16.06). Thus, it can be concluded that investors driven by power-oriented values play a significant role in shaping the reasons for investing in mutual funds

7. Hypothesis 3g (H_{3g}): ―Power significantly *influences the Attitude of the mutual investors*‖.

Conclusion (H_{3g}): The results of the SEM analysis supported the hypothesis that *"*Power significantly *influences the attitude for the mutual fund."* The path coefficient indicating the influence of power is found to be positive and statistically significant (path coefficient=0.15, t-stats=4.426). Thus, it can be concluded that investors driven by power-oriented values significantly influence the formation of attitudes toward investing in mutual funds

8. Hypothesis 3h(H_{3h}): ―Security *significantly influences the Attitude of the mutual investors"*.

Conclusion (H_{3h}): The results of the SEM analysis supported the hypothesis that *"*Security significantly *influences the attitude for the mutual fund."* The path coefficient indicating the influence of security is found to be negative and statistically significant (path coefficient= -0.158, t-stats=4.209). This outcome highlights that while security is a critical value, its influence may act as a deterrent in the context of mutual fund investments, likely due to perceptions of risk or instability associated with these financial products.

9. Hypothesis 3i (H_{3i}): ―Security *significantly influences the reason against the mutual fund investments"*.

Conclusion (H_{3i}): The results of the SEM analysis supported the hypothesis that *"*Security *significantly influences the reason against the mutual fund investments"*. The path coefficient indicating the influence of security is found to be positive and statistically significant (path coefficient= 0.271, t-stats=7.046). This suggests that security-oriented investors perceive mutual funds as risky or lacking the stability they prioritize, which strengthens their justifications for avoiding such investments.

10. Hypothesis 3j (H_{3j}): ―Reason for significantly *influences the behavioural intention of the mutual investors"*.

Conclusion (H_{3j}): The results of the SEM analysis supported the hypothesis that *"*Reason for significantly *influences the behavioural intention of the mutual investors*‖. The path coefficient indicating the influence of reason for is found to be positive and statistically significant (path coefficient=0.09, t-stats=2.018). Thus, it can be concluded that the reason for mutual fund investment do influence the formation of the investor's *behavioural intention* in mutual funds.

11. Hypothesis 3k (H_{3k}): ―Reason against significantly *influences the behavioural intention of the mutual investors"*.

Conclusion (H_{3k}): The results of the SEM analysis supported the hypothesis that *"*Reason against significantly *influences the behavioural intention of the mutual investors*‖. The path coefficient indicating the influence of reason for is found to be positive and statistically significant (path coefficient=0.133, t-stats=4.762). Thus, it can be concluded that the reason against mutual fund investment do influence the formation of the investor's *behavioural intention* in mutual funds.

Figure 5.1: Structural Model with path coefficients for Buying Intention

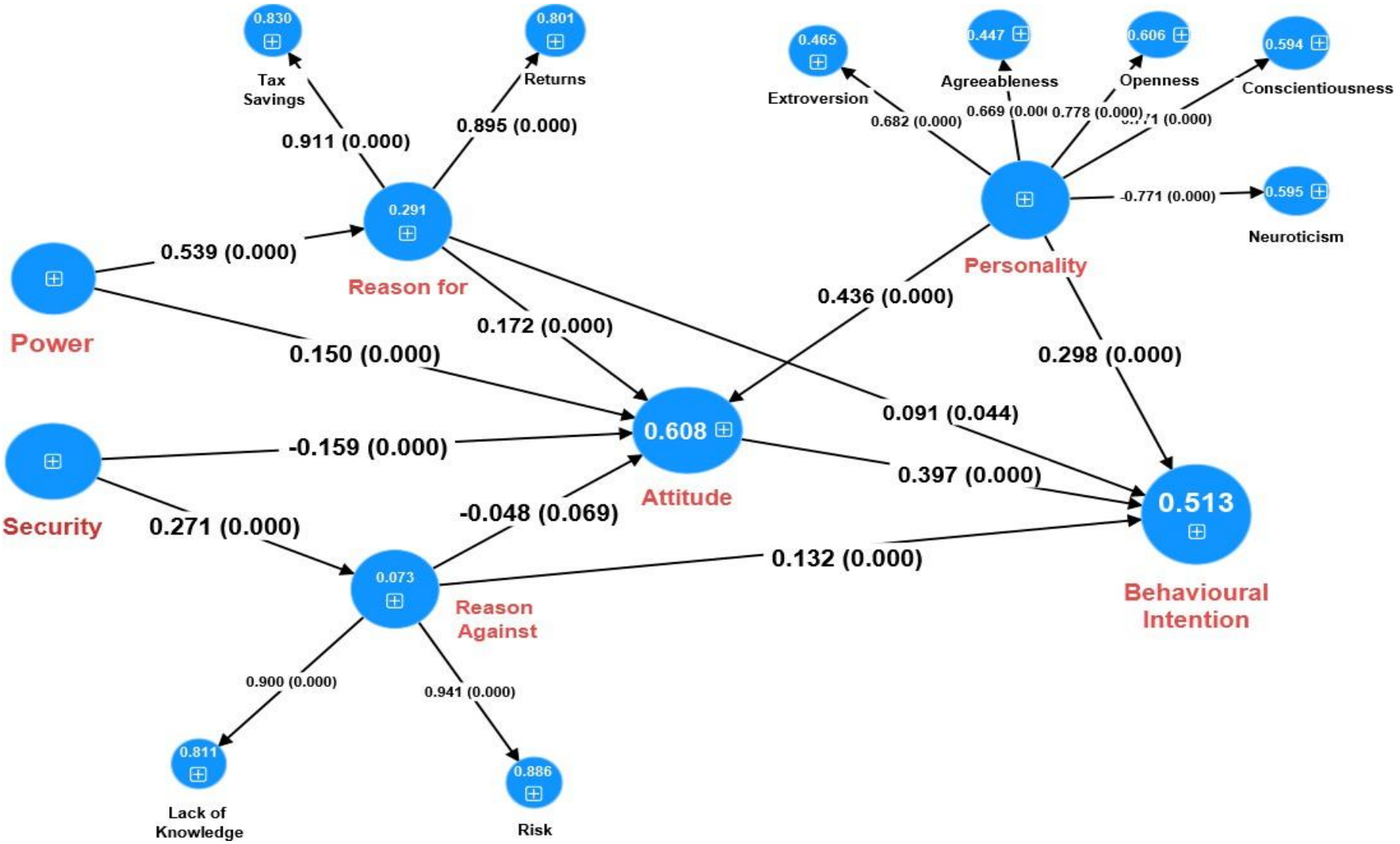


Table 5. 12 : Path Coefficient

Hypothesis	Exogeneous Construct	Endogenous Construct	Path Coefficient	Standard Error	T stats	P values	F Square	R square	Q Square	Remark
H: RA→ Att	Reason Against	Attitude	-0.048	0.026	1.818	0.069	0.007	61.1%	0.582	Not Supported
H: Pr→ Att	Personality		0.437	0.045	9.683	0	0.222			***Supported***
H: Sc→ Att	Security		-0.158	0.038	4.209	0	0.036			***Supported***
H: Pw→ Att	Power		0.15	0.034	4.426	0	0.039			***Supported***
H: Rfor→ Att	Reason for		0.171	0.047	3.676	0	0.033			***Supported***
H: Rfor → BI	Reason for	Behavioural Intention	0.09	0.045	2.018	0.044	0.01	51.7%	0.441	***Supported***
H: Aag → BI	Reason _Against		0.133	0.028	4.762	0	0.035			***Supported***
H: Att→ BI	Attitude		0.394	0.053	7.551	0	0.139			***Supported***
H: Pr→ BI	Personality		0.302	0.059	5.076	0	0.074			***Supported***
H: Pw→ Rfor	Power	Reason for	0.54	0.034	16.06	0	0.418	29.3 %	0.287	***Supported***
H: Sc→ Rag	Security	Reason _Against	0.271	0.038	7.046	0	0.081	7.5 %	0.07	***Supported***

Source: Compiled from Primary Data

5.5 Summary

The results of the first research objective were presented in four distinct components: demographic characteristics of respondents, descriptive analysis of values, reasons, and behavioral intentions, evaluation of the measurement model and analysis of the structural model explaining the relationships among constructs. Collectively, these findings provide a comprehensive understanding of the determinants of mutual fund investment behavior.

Demographic Characteristics

The study surveyed 667 mutual fund investors representing diverse demographic segments. Females comprised a slight majority (53.1%), and most respondents were married (63.6%). The age distribution was balanced, with approximately one-third of the respondents below 30 years, between 30 and 45 years, and above 45 years. Education levels reflected a highly qualified sample, with nearly three-quarters being graduates or postgraduates. Income distribution covered a broad spectrum, ensuring representation from lower-middle to high-income investors. Investment preferences highlighted the popularity of Systematic Investment Plans (63.6%) over lump-sum modes, while occupational backgrounds ranged from businesspersons and professionals to private and government employees. Regarding fund type, equity funds were the most preferred (42.1%), followed by debt, balanced, and sector funds.

Descriptive Analysis

The analysis of the values revealed that power and security represent the central motivators. Investors strongly associated mutual funds with the power to create wealth and improve life circumstances, although the variability in responses indicated differing degrees of conviction. Conversely, security was moderately valued, with respondents recognizing its importance but not prioritizing it overwhelmingly, reflecting the inherent tension between risk-taking and stability in financial decisions. In terms of reasons against investing, risk and lack of knowledge emerged as significant barriers. Respondents widely acknowledged market volatility, potential losses, and uncertainty, which dampened their enthusiasm for mutual funds. Likewise, challenges in interpreting data and insufficient knowledge undermined confidence, reinforcing information asymmetry as a deterrent. However, the reasons for

investing, such as returns and tax savings, were powerful drivers. High mean scores showed strong agreement that diversification, capital appreciation, and fiscal incentives such as ELSS tax deductions motivated participation. Behavioral intention analysis confirmed that investors displayed positive attitudes toward active financial management. Respondents indicated strong intentions to save systematically, diversify across multiple funds, monitor performance, and conduct independent research. This reflects proactive engagement with investment decisions rather than passive reliance on external advice

Measurement Model

Reliability and validity testing confirmed the robustness of the constructs. Cronbach's alpha values for all factors exceeded 0.7, indicating strong internal consistency. Convergent validity was established through satisfactory construct loadings, composite reliability, and the average variance extracted, all exceeding the accepted thresholds. Discriminant validity, evaluated through HTMT ratios and Fornell-Larcker criteria, further validated that the constructs were distinct yet meaningfully related, thereby ensuring the rigor of subsequent structural modeling.

Structural Model

Structural equation modeling revealed complex relationships among values, motivations, personality traits, attitudes, and behavioral intentions. The analysis supported several hypotheses: investment motivations (returns and tax savings) significantly influenced investor attitudes and directly affected behavioral intention, whereas deterrents (risk and lack of knowledge) also impacted behavioral intention, albeit not attitudes. Personality traits emerged as strong predictors of both attitude and intention, underscoring the significance of psychological factors. Power values exhibited a dual influence, positively affecting both investment motivations and overall attitudes, thereby confirming the aspirational dimension of wealth creation. In contrast, security values displayed mixed effects: they negatively influenced attitudes but positively reinforced deterrents, highlighting the cautious stance of security-driven investors. The findings indicate that mutual fund investment behavior arises from a dynamic interplay between demographic characteristics, psychological traits, personal values, and rational assessments of risks and rewards. The model confirms that attractive returns and tax benefits encourage investment, whereas perceived risks and knowledge gaps constrain intentions. Personality and value orientations act as underlying forces shaping how these factors translate into concrete behavioral outcomes.

CHAPTER 6
ASSESSMENT OF RELATIONSHIP OF PERSONALITY TRAITS AND THE BEHAVIORAL BIASES IN THE STATE OF GOA

6.1 Introduction

This chapter deals with data analysis of the fourth research objective, i.e., *to study the relation between the Big Five model of personality traits and behavioural biases of individual mutual fund investors in state of Goa.* It includes sections such as the background of the study, research methodology, data analysis and findings, and summary.

The data analysis and findings are divided into four major sections, the first section deals with the demographic profile of the respondents investing in mutual funds, the second section deals with descriptive statistics of different constructs of behavioural biases (Disposition Bias, Herding, Loss Aversion Bias and Overconfidence Bias). The third section deals with Measurement model of above constructs and the last section deals with Structural Model studying the relationship of personality traits and behavioural biases.

6.2 Background of the study

Investor decision-making is increasingly recognized as being influenced by factors beyond traditional rational considerations. Behavioral finance research has shown that psychological biases, emotional tendencies, and personality traits significantly impact investment choices, often resulting in systematic deviations from rational models. This body of research highlights the role of fear, overconfidence, regret, and social pressures in shaping financial outcomes, which cannot be fully explained by classical theories. A substantial body of literature has identified the influence of behavioral biases on decision-making. A study by Tripathy (2021) identified four key psychological biases—loss aversion, regret aversion, overconfidence, and anchoring—among Indian investors, which drove them toward risk-averse or irrational behaviors, such as holding on to losing stocks or overtrading. A meta-analysis conducted by Kumar and Chaurasia (2024) of 31 empirical studies confirmed that emotional biases strongly correlate with investment decisions, with loss aversion exerting the greatest influence, followed by regret aversion and overconfidence. These findings underscore the central role of emotions in shaping financial strategies, often overriding rational calculations. The significance of behavioral distortions is evident across global

contexts. Research in Poland by Keller and Pastusiak (2016) found that stock recommendations can trigger heuristic responses, where investors either blindly follow or react contrarily, leading to suboptimal outcomes. Similarly, a study by Gulzar and Ali (2023) demonstrated that biases such as anchoring, availability, and the illusion of control significantly affect traders in Pakistan's stock exchange, although emotional stability can mitigate their effects. These studies emphasize that both cognitive and emotional biases are universal phenomena although their intensity may vary with context. Furthermore, the influence of behavioral biases on investment decisions can be attributed to the complex interplay between cognitive and emotional processes. This interplay can lead to systematic deviations from rational models, resulting in suboptimal financial outcomes.

Personality traits have been identified as significant predictors of financial behavior, independent of biases. Research by Pan and Statman (2010) found that conscientiousness and extraversion are associated with risk tolerance, whereas neuroticism increases susceptibility to regret and herding tendencies. Exley (2020) further established a positive correlation between conscientiousness and financial literacy, income, and net worth, while extraversion is linked to increased risk tolerance but not necessarily wealth accumulation. These findings suggest that personality influences how individuals perceive risk and opportunity, making it a crucial aspect of financial psychology. Cultural and demographic factors interact with personality and bias, as demonstrated by the research in South Africa by Dickason and Ferreira (2018). Conservative investors with low risk tolerance are more susceptible to loss aversion and mental accounting, whereas aggressive investors exhibit overconfidence and the gambler's fallacy. Perveen et al. (2020) found that extraversion enhances risk-taking behavior, which is moderated by investment experience. Additionally, Rosales-Pérez et al. (2021) discovered that finance students with lower emotional intelligence and weaker personality traits are more prone to biases than professionals, highlighting the role of training in mitigating these vulnerabilities. Studies have also investigated cognitive mechanisms such as mental accounting. Mahapatra et al. (2017) and Nuha et al. (2024) demonstrated that individuals mentally categorize money, which affects budgeting and spending, sometimes resulting in irrational financial outcomes but also promoting discipline. Khan and Siddique (2021) extended this to household behavior, showing that traits such as self-control and self-efficacy lead to prudent financial practices, while financial anxiety fosters riskier decisions.

In the present context, this study focuses on loss aversion, regret aversion, overconfidence, and anchoring biases because of their direct relevance to mutual fund investments. Mutual funds, by nature, involve long-term commitments, portfolio diversification, and frequent performance evaluations. Loss aversion discourages investors from redeeming underperforming funds, regret aversion prevents them from making timely switches, and overconfidence may lead to frequent portfolio reshuffling and excessive reliance on personal judgment, while anchoring ties decisions to past NAV values or purchase prices rather than current fundamentals. Together, these biases reflect the most common psychological hurdles faced by retail investors in mutual funds, making their study particularly meaningful.

The collective evidence demonstrates that personality and behavioral biases intertwine to influence investment outcomes. Overconfidence, loss aversion, regret, and herding consistently appear as dominant biases across markets (Madaan & Singh, 2019; Armansyah, 2022; Akinkoye & Bankole, 2020). Furthermore, the prevalence of these biases across various markets underscores their significant impact on investment decisions. Personality traits, including conscientiousness, extraversion, and emotional stability, moderate these tendencies, either amplifying or mitigating irrationality. The interplay between personality and behavioral biases highlights the complexity of financial decision-making, emphasizing the need for a more nuanced understanding of investor behavior.

Moreover, the literature suggests that the current paradigm of viewing investors as rational actors is no longer tenable. Instead, investors are complex individuals shaped by emotions, biases, and personality traits. This shift in perspective is crucial for improving financial literacy, designing investor education, and developing advisory strategies tailored to individual differences. By acknowledging the psychological underpinnings of financial behavior, investors and financial professionals can make more informed decisions, reduce market inefficiencies, and promote sustainable wealth creation.

While behavioral biases such as overconfidence, herd behavior, anchoring, and loss aversion are well-documented in the behavioral finance literature (***Chapter 2, Section 2.4***), there is sparse evidence on their personality underpinnings. Most prior research has treated these biases as cognitive heuristics or situation ally learned behaviors, yet emerging insights suggest that stable personality traits may predispose individuals to specific distortions. For instance, Pan and Statman (2010) argue that personality characteristics such as extraversion and conscientiousness shape risk tolerance and susceptibility to regret or overconfidence.

Similarly, Exley (2020) demonstrates that conscientiousness is linked to financial literacy and wealth accumulation, while extraversion is associated with greater risk-taking tendencies, implying potential overlaps with behavioral biases. More recently, Singh et al. (2023) empirically showed that conscientiousness and extroversion are strongly associated with overconfidence and representativeness, whereas neuroticism amplifies herding and disposition effects. Despite these theoretical and empirical insights, such associations remain under-investigated in the Indian investment landscape. Since these biases significantly distort investment outcomes, understanding their personality correlates can inform the design of personalized investment tools, tailored financial advisory services, and targeted investor education programs. To address this gap, the present study examines the relationship between personality traits and behavioral biases among individual mutual fund investors, thereby responding to Research Question 5.

RQ 5: Is it possible to understand the relationship between personality traits and behavioral biases of mutual fund investors?

1. H4a: ―Agreeableness trait of the investor significantly influence their behavioural Bias‖
2. H4b: ―Extroversion trait of the investor significantly influence their behavioural Bias‖
3. H4c:‖ Conscientiousness trait of the personality significantly influences their behavioural Bias.‖
4. H4d: ―Neuroticism trait of the personality significantly influences their behavioural Bias‖
5. H4e: ―Openness trait of the personality significantly influences their behavioural Bias‖

6.3 Research Methodology

This study aims to investigate the relationship between the Big Five model of personality traits and behavioral biases exhibited by individual mutual fund investors in India. To achieve this objective, a research design was developed to align the research objectives, data collection methods, sampling strategy, and analytical techniques. A descriptive and quantitative research design was employed to capture the demographic characteristics and psychological attributes of the investors. A structured questionnaire was used to facilitate systematic data collection and ensure consistency, reliability, and validity across all responses. The target population consisted of individual investors in mutual funds across Goa, India. A total of 700 structured questionnaires were distributed to respondents aged 18 years and above. After eliminating incomplete or unusable forms, 667 valid responses were

retained, resulting in a final response rate of 95.29%. The study area was chosen to reflect the demographic and socio-economic diversity among mutual fund investors. The fieldwork spanned a period of 12 months, from January 2023 to December 2024, ensuring broad temporal coverage. Due to the absence of a comprehensive sampling frame, a convenience sampling technique was adopted. This approach was suitable for accessing participants based on their availability and willingness and was operationalized through both online modes (email surveys, digital forms) and offline methods (personal interviews and physical distribution).

Data were collected using a structured, multi-part questionnaire adapted from the validated scales in the previous literature. The instrument consisted of four parts: Part A, which captured demographic information (age, gender, education, occupation, income, and investment experience); Part B, which assessed behavioral biases (e.g., overconfidence, herding, disposition effect and loss aversion) using 20 items on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), adapted from Baker et al. (2019) and Prosad et al. (2015); and Part C, which assessed the Big Five personality traits (openness, conscientiousness, extraversion, agreeableness and neuroticism) using 27 items derived from the NEO Five-Factor Inventory (Costa & McCrae, 1992, 2003). Items were measured on a five-point Likert scale ranging from "strongly disagree" to "strongly agree".

A quantitative analysis was conducted using SEM with SmartPLS software to investigate the relationship between personality traits and behavioral biases. SEM was selected due to its ability to simultaneously evaluate the measurement model, which validates the factor structure of the Big Five personality traits and key behavioral biases, and the structural model, which tests the proposed relationships between them. This dual capability makes SEM particularly suitable for capturing the complex, multidimensional connections between stable personality dispositions and cognitive biases, ensuring both statistical rigor and robustness in interpretation.

6.4 Data Analysis and Findings

This section presents the results of the first objective in four sections. **Section 6.4.1** provides the result of demographic characteristics, **Section 6.4.2 which** is analyzed using the descriptive statistics of various constructs, **Section 6.4.3** discusses the measurement model **and 6.4.4** discusses the structural model and relationship between the constructs

6.4.1 Demographic Characteristics

Since the same respondents were utilized for the present objective, the demographic characteristics are not repeated here. Readers may refer to Chapter 3, Section 3.1.1 p.149 for detailed information on the demographic profile of the respondents.

6.4.2 Descriptive Analysis of Personality traits and behavioural biases

While the descriptive statistics for the construct of personality were already discussed in earlier chapters, this section presents descriptive statistics for the key behavioral biases investigated in the study, including the Disposition Bias, Herding, Loss Aversion Bias, and Overconfidence Bias. These constructs represent cognitive and emotional distortions that frequently lead investors to deviate from rational decision-making. By examining the mean values, standard deviations, skewness, and kurtosis, the study provides insights into the general tendencies and variability among the respondents. This assessment not only highlights the prevalence of these biases but also indicates the degree of consensus or divergence in investor perceptions. The findings serve as a foundation for further analysis of how these biases interact with personality traits and influence mutual fund investment behavior.

The descriptive statistics for Disposition Bias (***Refer Table 6.1***) reveal consistently high mean values across all items, ranging from 4.50 to 4.66, indicating that respondents generally agree with statements reflecting difficulty in selling losing investments and a tendency to realize gains prematurely. This suggests that the disposition effect is strongly present among mutual fund investors.

The standard deviation values, between 1.66 and 1.79, reflect moderate variability, suggesting that while most respondents show similar tendencies, some diversity of opinion exists within the sample. The excess kurtosis values, from 0.91 to 1.03, are all negative, pointing to platykurtic distributions, which are flatter than the normal curve, indicating fewer extreme responses and more evenly spread opinions. Similarly, the skewness values, between 0.22 and 0.35, were slightly negative, suggesting a mild leftward lean, with more respondents choosing higher agreement levels.

Overall, these results confirm that investors demonstrate a strong disposition bias, as they are reluctant to sell losing investments while preferring to realize gains early. This behavioral bias aligns with findings in behavioral finance literature that highlight the emotional difficulty of realizing losses and the psychological satisfaction of securing immediate profits.

Table 6. 1 : Descriptive Statistics – Disposition Bias

Name	Mean	Standard deviation	Excess kurtosis	Skewness
I will keep holding stocks even though they are losing and will never think about selling the stocks until they balance the losses	4.641679	1.669979	-0.96825	-0.22691
I usually sell profitable stocks to realize gains first when I am in want of money. I buy other stocks and keep holding them to wait for the price of unprofitable stocks to go up	4.502249	1.75562	-0.9827	-0.28847
There is profit from several share transactions for me at times, which could not compensate for one loss.	4.578711	1.791127	-1.03933	-0.35454
I don't have any quick responses to good or bad news and tend sell profitable stocks too early and sell losing stocks too late	4.662669	1.672557	-0.91297	-0.25105
I find it challenging to cut losses in my mutual fund investments, as I hope for a recovery in their value	4.58021	1.708686	-1.00792	-0.2469

Source: Compiled from Primary Data

The descriptive analysis is applied on the responses received against the statements measuring herding and the results are reported in Table 6.2. The table presents descriptive statistics for four items measuring the importance of statements indicating herding behaviour**.**

Table 6. 2: Descriptive Statistics – Herding

Name	Mean	Standard deviation	Excess kurtosis	Skewness
I follow social blogs/ forums before purchasing/selling a security	4.5682	1.80409	-.938	-.379
I follow others in all my investment decisions	4.5982	1.72698	-.825	-.431
When I lose money on an investment, I feel less disappointed if other investors also experienced the same loss	4.5847	1.80005	-1.005	-.369
I prefer to invest in the assets that other investors are buying	4.6732	1.76755	-.934	-.375
I change my opinion regarding investment in a security after hearing conflicting views from analysts	4.2954	1.52694	-.591	-.044

Source: Compiled from Primary Data

The descriptive statistics for Herding Bias reveal that investors generally acknowledge being influenced by the behavior and opinions of others, with mean values ranging from 4.29 to 4.67. The highest level of agreement was observed for the statement "I prefer to invest in the assets that other investors are buying," with a mean of 4.67, indicating a strong inclination toward collective investment behavior. Even for the relatively lower mean of 4.29, which corresponds to the statement "I change my opinion regarding investment in a security after hearing conflicting views from analysts," responses still lean toward agreement, suggesting a broad susceptibility to external influence. The standard deviation values (1.52–1.80) suggest moderate variability, indicating that while the tendency to herd is widespread, the strength of this bias differs across individuals. All items exhibited negative excess kurtosis values (0.59 to 1.00), suggesting platykurtic distributions with flatter curves than normal, implying that the responses were more spread out rather than clustered. The skewness values are mostly negative (0.04 to 0.43), indicating a mild leftward skew where higher levels of agreement dominate.

The findings confirm the presence of herding behavior among mutual fund investors, where decisions are significantly shaped by peer actions, market trends, and analyst opinions. This reflects a psychological reliance on social validation in investment contexts, consistent with behavioral finance theories that highlight how herding can amplify market movements and lead to inefficiencies.

Table 6. 3: Descriptive Statistics – Loss Aversion Bias

Name	Mean	Standard deviation	Excess kurtosis	Skewness
I feel that my experience and knowledge make me less susceptible to losses in mutual fund investments compared to others	4.5682	1.4225	-0.62	-0.138
I never sell an investment at a loss with an expectation that it will eventually improve	4.5922	1.49126		-0.147
Loss of Rs 1,000 is more painful than happiness of Rs 1,000 profit	4.6747	1.5818		-0.167
I avoid taking decisions with the fear of incurring losses	4.7286	1.49969		-0.495
I am more likely to remember and dwell on losses in my mutual fund investments than on gains	4.7286	1.55282	-0.772	-0.297

Source: Compiled from Primary Data

The descriptive statistics for Loss Aversion Bias (***refer to Table 6.3***) reveal consistently high mean values across all items, ranging from 4.56 to 4.72. This suggests that respondents strongly agree with statements indicating greater sensitivity to losses than to equivalent gains. The highest level of agreement was observed for the items "I avoid taking decisions with the fear of incurring losses" and "I am more likely to remember and dwell on losses in my mutual fund investments than on gains," both with mean values of 4.73. This highlights the emotional dominance of loss considerations over profit motives.

The standard deviation values, ranging from 1.42 to 1.58, indicate a relatively moderate variation in responses, yet a consensus toward loss-averse behavior. All items displayed negative excess kurtosis values, ranging from -0.46 to -0.85, indicating platykurtic distributions where the responses were more evenly spread rather than tightly clustered. The skewness values are mildly negative, ranging from -0.13 to -0.49, showing a slight leftward skew, which reflects that higher agreement ratings were more frequent.

These results reinforce the well-established principle in behavioral finance that loss aversion is a pervasive bias among investors. Mutual fund investors in the sample exhibited a strong tendency to avoid realizing losses, dwell on past negative experiences, and prioritize the fear of losses over the pursuit of equivalent gains. Such tendencies may lead to risk-averse decision-making, delayed selling of underperforming assets, and suboptimal portfolio management.

Table 6. 4 : Descriptive Statistics – Over Confidence Bias

Name	Mean	Standard deviation	Excess kurtosis	Skewness
I cannot predict future prices of my investments better than others	4.4078	1.54564	-.550	-.175
I always feel optimistic about the future returns of my investments	4.3673	1.54172	-.677	-.045
I am confident of my ability to make investment decisions better than others	4.4648	1.50571	-.424	-.242
I have complete knowledge of various types of investments	4.4633	1.62093	-.769	-.169
I feel that my experience and knowledge make me less susceptible to losses in mutual fund investments compared to others	4.4633	1.55183	-.625	-.201

Source: Compiled from Primary Data

The descriptive statistics for the Overconfidence Bias (refer to Table 6.4) reveal moderately high mean values across all items, ranging from 4.36 to 4.46. This suggests that respondents generally perceive themselves as knowledgeable, optimistic, and superior in their investment abilities compared to others. The items "I am confident of my ability to make investment decisions better than others" and "I have complete knowledge of various types of investments" exhibit the strongest agreement, with mean values of 4.46, highlighting a strong sense of self-assurance in financial decision-making.

The standard deviation values, ranging from 1.50 to 1.62, indicate moderate variability, suggesting that while many respondents exhibited strong overconfidence, a section of investors remained more cautious or realistic in self-assessment. The negative excess kurtosis values, ranging from -0.42 to -0.77, indicate platykurtic distributions that are flatter than the normal curve, reflecting more evenly spread responses. The slightly negative skewness values, ranging from -0.04 to -0.24, indicate a mild leftward skew, with a concentration of responses at higher agreement levels.

Overall, the results suggest a clear presence of overconfidence among mutual fund investors, characterized by optimism about future returns, belief in superior knowledge, and confidence in outperforming others. While such attitudes may foster proactive market participation, excessive overconfidence can also lead to overtrading, under-diversification, and risk underestimation, outcomes well documented in the behavioral finance literature.

6.4.3 : Reliability and validity analysis

The table displays Cronbach’s alpha values for various psychological and behavioral constructs, indicating their reliability as measurement scales. The biases of Disposition, Herding, Loss Aversion, and Overconfidence exhibited high reliability, with alpha values ranging from 0.841 to 0.877, suggesting consistent measurement. Among the personality traits, Agreeableness showed the highest reliability (0.91), highlighting its robust internal consistency. Conscientiousness (0.864) and Extroversion (0.857) also demonstrated strong reliability, signifying a dependable measurement. Similarly, neuroticism (0.879) and openness (0.878) were highly reliable, indicating the consistency of the items used to assess these traits. The Cronbach's alpha values suggest that the instruments used are statistically reliable for analyzing both biases and personality traits, indicating that the responses received in the study are reliable in terms of internal consistency.

Construct Validity

The construct validity of the measurement scale was evaluated through confirmatory factor analysis (CFA), focusing on two key aspects: convergent validity and discriminant validity. Convergent validity was assessed by examining the correlation between items measuring the same construct, using construct loadings, composite reliability (CR), and average variance extracted (AVE). Construct loadings quantify the strength of the relationship between each item and its corresponding factor, while CR ensures internal consistency, with acceptable values exceeding 0.7. AVE, which represents the variance captured by a construct relative to the error, is considered adequate when above 0.5. Discriminant validity, on the other hand, was evaluated by assessing whether the constructs were distinct from one another. This was done using the heterotrait-monotrait (HTMT) ratio and the Fornell-Larcker criteria. The HTMT ratio examined correlations between items of different constructs, with values below 0.8 indicating adequate discriminant validity. The Fornell-Larcker criteria compared the square root of the AVE for each construct to its correlations with other constructs, where the square root of AVE should exceed these correlations. The results of these validity assessments are presented in tables for further interpretation.

Table 6. 5 : Convergent validity

	Cronbach's alpha	**Composite Reliability**	**Average variance extracted (AVE)**
Disposition Bias	0.864	0.859	0.551
Herding Bias	0.877	0.875	0.584
Loss Aversion Bias	0.872	0.843	0.556
Overconfidence Bias	0.841	0.833	0.503
Agreeableness	0.91	0.909	0.626
Conscientiousness	0.864	0.861	0.555
Extroversion	0.857	0.854	0.595
Neuroticism	0.879	0.878	0.595
Openness	0.878	0.879	0.51

Source: Compiled from Primary Data

Convergent validity: The ***table 6.5*** presents the key reliability and validity statistics for various personality and behavioral biases constructs, as measured by Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE). High Cronbach's alpha

values, ranging from 0.841 to 0.91, indicate strong internal consistency across the constructs. The composite reliability values also demonstrate robust reliability, with all constructs exceeding the acceptable threshold of 0.7. The AVE values, which measure the proportion of variance captured by a construct relative to error, are all above or near the minimum threshold of 0.5, confirming adequate convergent validity. Agreeableness exhibited the highest AVE (0.626), reflecting superior convergent validity, while Overconfidence Bias had the lowest AVE (0.503), meeting the minimum acceptable level. The consistency of the CR values with Cronbach's alpha further supports the reliability of the scales. These results collectively demonstrate that the measurement scales are both reliable and valid for assessing the constructs included in the research**.**

Table 6. 6 : The Fornell Larcker criteria

	Agreeableness	**Behavioural Bias**	**Conscientiousness**	**Disposition Bias**	**Extroversion**	**Herding**	**Loss Aversion Bias**	**Neuroticism**	**Overconfidence Bias**	**Openness**
Agreeableness	0.791									
Behavioural Bias	0.306	0.58								
Conscientiousness	0.355	0.137	0.74							
Disposition Bias	0.171	0.789	0.019	0.751						
Extroversion	0.241	0.109	0.643	-0.004	0.754					
Herding Bias	0.248	0.814	0.176	0.259	0.156	0.764				
Loss Aversion Bias	0.185	0.874	0.083	0.675	0.027	0.372	0.762			
Neuroticism	-0.464	-0.161	-0.539	-0.051	-0.473	-0.195	-0.065	0.704		
Overconfidence Bias	0.338	0.914	0.141	0.401	0.153	0.738	0.496	-0.184	0.725	
Openness	0.415	0.234	0.596	0.11	0.503	0.18	0.191	-0.467	0.237	0.70

Source: Compiled from Primary Data

Discriminant validity was assessed using the Fornell-Larcker criteria and the heterotrait-monotrait (HTMT) ratio. The Fornell-Larcker criteria were applied by comparing the square root of the average variance extracted (AVE) for each construct with its correlations with other constructs. The results (***Refer Table 6.6)*** indicate that the square root of the AVE for each construct exceeds its highest correlation with other constructs, thereby satisfying the Fornell-Larcker criteria. For instance, Agreeableness (square root of AVE = 0.791) is greater than its highest correlation with other constructs (0.415 with Openness). Similarly, conscientiousness (square root of AVE = 0.74) was greater than its highest correlation (0.643 with extroversion). Other constructs such as Herding Bias (square root of AVE = 0.764), Loss Aversion Bias (square root of AVE = 0.762), and Neuroticism (square root of AVE = 0.704) also meet the criteria. This demonstrates that the constructs are distinct from one another and that the measurement scale effectively differentiates between the latent variables included in the study.

The HTMT ratio (***Refer Table 6.7***) was used as an alternative measure of discriminant validity, comparing the correlations between constructs with those within the same construct. To satisfy the HTMT criterion, the ratio for all construct pairs should ideally be less than 0.85 or, in stricter cases, 0.90. The results show that most construct pairs meet the required threshold, indicating adequate discriminant validity. For example, the HTMT value between agreeableness and conscientiousness is 0.353, which is well below the threshold, showing that these constructs are distinct. Similarly, the HTMT ratio for the Loss Aversion Bias and Herding is 0.374, which is also below the acceptable limit. However, some pairs, such as Behavioral Bias and Overconfidence Bias (HTMT = 0.911), marginally exceed the threshold of 0.90, indicating a potential overlap that may require further investigation. Overall, the HTMT ratios confirm that the measurement scale largely maintains adequate discriminant validity across its constructs.

The analysis of variance inflation factor (VIF) values was conducted to assess the presence of multicollinearity among the items used to measure various constructs. Multicollinearity occurs when the predictor variables are highly correlated, which can compromise the reliability of the regression model. A VIF threshold of 5 was employed, where values below this threshold indicate acceptable multicollinearity. The results demonstrate (***Refer Table 6.8)*** that all items across the constructs meet the acceptable VIF criteria, suggesting no significant multicollinearity issues. For agreeableness (Aggr1 to Aggr6), the VIF values range from

2.015 to 2.692, indicating that the items contribute unique variance without redundancy. Similarly, Neuroticism (Neuro1 to Neuro5) showed VIF values between 1.903 and 2.593, indicating independence among the items. Extroversion (Ext1 to Ext4) has VIF values ranging from 1.589 to 2.269, reflecting the good discriminative power of the items. The conscientiousness constructs (Cons1 to Cons5) exhibits VIF values between 1.565 and 2.166, confirming acceptable independence.

Table 6. 7 : HTMT Ratio

	Agreeableness	**Behavioural Bias**	**Conscientiousness**	**Disposition Bias**	**Extroversion**	**Herding**	**Loss Aversion Bias**	**Neuroticism**	**Overconfidence Bias**
Agreeableness									
Behavioural Bias	0.302								
Conscientiousness	0.353	0.157							
Disposition Bias	0.171	0.802	0.084						
Extroversion	0.243	0.138	0.627	0.057					
Herding	0.246	0.812	0.175	0.253	0.155				
Loss Aversion Bias	0.178	0.875	0.086	0.666	0.057	0.374			
Neuroticism	0.473	0.17	0.567	0.069	0.522	0.187	0.097		
Overconfidence Bias	0.341	0.911	0.141	0.401	0.161	0.738	0.511	0.173	
Openness	0.428	0.232	0.59	0.121	0.508	0.178	0.186	0.488	0.233

Source: Compiled from Primary Data

For behavioral biases, such as Herding Bias (Herd1 to Herd5), the VIF values range from 1.342 to 2.661, ensuring distinct contributions from each item. Loss Aversion Bias (LA1 to LA5) shows VIF values between 1.964 and 2.961, with no indication of problematic multicollinearity. The Openness constructs (Open1 to Open7) exhibits VIF values ranging from 1.92 to 2.399, while the Overconfidence Bias (OC1 to OC5) ranges from 1.582 to 3.186. Although OC1 had the highest VIF (3.186), it remained well within the acceptable range. Finally, for the Disposition Bias (DB1 to DB5), VIF values range from 1.586 to 2.576, further supporting the absence of multicollinearity. In conclusion, the analysis indicates that all items in the measurement model are free from significant multicollinearity. This validates the independence and appropriateness of the items for assessing the constructs.

Table 6. 8: Variance inflation factor (VIF)

Item code	Variance Inflation Factor		Item code	Variance Inflation Factor		Item code	Variance Inflation Factor
Aggr1	2.015		Neuro1	2.593		Ext1	2.269
Aggr2	2.692		Neuro2	2.312		Ext2	2.238
Aggr3	2.284		Neuro3	2.394		Ext3	2.139
Aggr4	2.479		Neuro4	2.155		Ext4	1.589
Aggr5	2.311		Neuro5	1.903		Herd1	2.659
Aggr6	2.173		Open1	1.92		Herd2	2.554
Cons1	1.938		Open2	2.047		Herd3	2.661
Cons2	2.166		Open3	2.096		Herd4	2.375
Cons3	1.962		Open4	2.399		Herd5	1.342
Cons4	2.029		Open5	2.323		LA1	1.964
Cons5	1.565		Open6	2.218		LA2	2.101
			Open7	2.279		LA3	2.641
OC1	3.186					LA4	2.852
OC2	2.699		DB1	2.212		LA5	2.961
OC3	2.633		DB2	2.496			
OC4	1.582		DB3	2.576			
OC5	1.697		DB4	2.521			
			DB5	1.586			

Source: Compiled from Primary Data

6.4.4 Impacts of personality traits, attitude, values and reasons on behavioural intention

This section discusses about the *relation between the Big Five model of personality traits and behavioural biases of mutual fund investors.* The objective is fulfilled with the help of SEM applied using Smart PLS software.

The selected factors, including personality traits (Agreeableness, Conscientiousness, Extroversion, Neuroticism, Openness), are assumed to impact the Behavioural Biases of investors to invest in mutual funds. The personality traits of investors are measured using five components: agreeableness, conscientiousness, extroversion, neuroticism, and openness. These factors are assessed through various statements included in the questionnaire, which are reflective in nature and considered independent variables in the structural model developed for hypothesis testing.

The Behavioural Biases (Disposition Bias, Herding Bias, Loss Aversion Bias, and Overconfidence Bias) are assumed to be influenced by the personality traits of investors. The four dimensions of Behavioural Biases are also reflective in nature, measured using statements in the questionnaire, and considered dependent variables in the structural model developed for hypothesis testing.

The following hypotheses are examined using the Structural Equation Modelling method with Smart PLS software:

1. H4a: The Agreeableness trait of the investor significantly influences their Behavioural Bias.
2. H4b: The Extroversion trait of the investor significantly influences their Behavioural Bias.
3. H4c: The Conscientiousness trait of the personality significantly influences their Behavioural Bias.
4. H4d: The Neuroticism trait of the personality significantly influences their Behavioural Bias.
5. H4e: The Openness trait of the personality significantly influences their Behavioural Bias.

The structural model is presented in a ***figure 10***, and the results of hypothesis testing are reported in a ***table 6.9***

Conclusion (H_{2a}): The results (***Refer Table 6.9***) of the SEM analysis found to ***support*** the hypothesis that ―Agreeableness trait of the investor significantly influences their Behavioural Bias‖. The path coefficient indicating the influence of agreeableness personality trait on the behavioural bias of the investors of the mutual fund is found to be positive and statistically significant (path coefficient=0.233, t-stats=5.755). Thus, it can be concluded that the agreeableness personality trait positively influences the behavioural bias of the investors of the mutual fund.

Conclusion (H_{2b}): The results (***Refer Table 6.9***) of the SEM analysis ***failed to support*** the hypothesis that *"Conscientiousness trait of the investor significantly influences their Behavioural Bias"*. The path coefficient indicating the influence of Conscientiousness

personality trait on the behavioural bias of the investors of the mutual fund is found to be statistically insignificant (path coefficient=-0.022, t-stats=0.487). Thus, it can be concluded that the *conscientiousness* personality trait do not influences the behavioural bias of the investors of the mutual fund.

Table 6. 9 : Path Coefficient for Behavioural Bias and Personality

	Path coefficient	***Standard Error***	***T stats***	***P values***	***R Square (Q Square)***
Agreeableness -> Behavioural Bias	***0.233***	***0.041***	***5.755*****	***0.000***	
Conscientiousness -> Behavioural Bias	*-0.022*	*0.05*	*0.487*	*0.62*	
Extroversion -> Behavioural Bias	*0.009*	*0.044*	*0.012*	*0.99*	10% (0.08)
Neuroticism -> Behavioural Bias	*-0.012*	*0.042*	*0.047*	*0.962*	
Openness -> Behavioural Bias	***0.132***	***0.043***	***3.124****	***0.002***	
Behavioural Bias -> DB	***0.703***	***0.026***	***26.835***	***0.000***	
Behavioural Bias -> Herd	***0.728***	***0.025***	***29.626***	***0.000***	
Behavioural Bias -> LA	***0.781***	***0.021***	***37.566***	***0.000***	
Behavioural Bias -> OC	***0.806***	***0.014***	***56.792***	***0.000***	

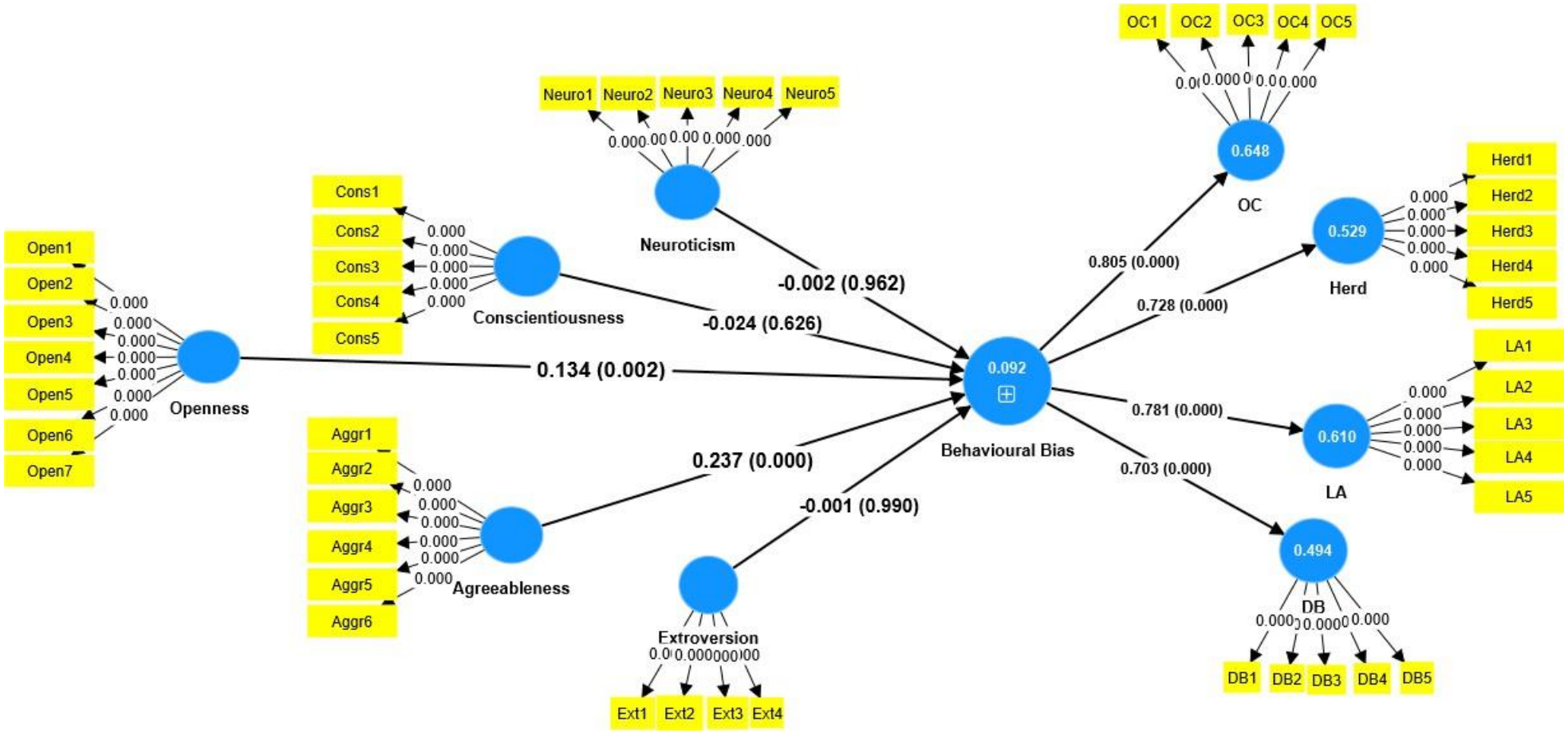
Source: Compiled from Primary Data

Conclusion (H_{2c}): The results (***Refer Table 6.9***) of the SEM analysis ***failed to support*** the hypothesis that *"Extroversion trait of the investor significantly influence their Behavioural Bias"*. The path coefficient indicating the influence of extroversion personality trait on the behavioural bias of the investors of the mutual fund is found to be statistically insignificant (path coefficient=0.009, t-stats=0.012). Thus, it can be concluded that the *extroversion* personality trait do not influences the behavioural bias of the investors of the mutual fund.

Conclusion (H_{2d}): The results (***Refer Table 6.9***) of the SEM analysis ***failed to support*** the hypothesis that *"Neuroticism trait of the investor significantly influence their Behavioural Bias"*. The path coefficient indicating the influence of Neuroticism personality trait on the behavioural bias of the investors of the mutual fund is found to be statistically insignificant (path coefficient=-0.012, t-stats=0.047). Thus, it can be concluded that the *Neuroticism* personality trait do not influences the behavioural bias of the investors of the mutual fund.

Conclusion (H_{2e}): The results (***Refer Table 6.9***) of the SEM analysis found to ***support*** the hypothesis that *"Openness trait of the investor significantly influence their Behavioural Bias"*. The path coefficient indicating the influence of openness personality trait on the behavioural bias of the investors of the mutual fund is found to be positive and statistically significant (path coefficient=0.132, t-stats=3.124). Thus, it can be concluded that the openness personality trait positively influences the behavioural bias of the investors of the mutual fund.

Figure 6.1: Structural model with path coefficients for Behavioural Bias and Personality



6.5 Summary

The second research objective's findings were presented in four interconnected components: demographic characteristics of the respondents, descriptive statistics of key behavioral biases, evaluation of the measurement model, and the structural model examining the relationship between personality traits and behavioral biases. Collectively, these results offer nuanced insights into how individual differences in personality interact with cognitive and emotional distortions, thereby influencing mutual fund investment behavior.

Demographic Characteristics

The study used responses from 667 mutual fund investors, encompassing a diverse range of socio-economic and professional backgrounds. Female respondents comprised a slight majority (53.1%), with married individuals dominating the sample (63.6%). The age distribution was evenly balanced, spanning younger investors under 30 years, middle-aged investors between 30 and 45 years, and older investors above 45 years. Education levels were high, with most respondents holding graduate and postgraduate qualifications (74.6%), while income groups ranged from below ₹5 lakhs to above ₹10 lakhs, ensuring a diverse sample. A significant proportion of investors (63.6%) favored systematic investment plans (SIPs), reflecting a preference for disciplined investing practices, and equity funds were the most popular type of investment (42.1%). The sample also exhibited occupational diversity, with businesspersons, professionals, private employees, and government employees represented in almost equal proportions.

Descriptive Analysis

The analysis of behavioral biases among investors revealed a consistent pattern of decision-making. Disposition bias was particularly pronounced, as indicated by the high mean values, which suggest that investors are reluctant to sell losing investments and prefer to realize gains early. Herding behavior was also evident, with respondents reporting that they often aligned their investment choices with those of their peers, social forums, or analysts. Loss aversion emerged as a dominant bias, with investors exhibiting greater sensitivity to potential losses than equivalent gains, which can lead to risk-averse decision-making. The overconfidence bias was moderately strong, with investors expressing optimism about their future returns and confidence in their superior knowledge. These findings collectively highlight the pervasive

influence of biases on rational investment behavior.

Measurement Model

The reliability and validity analyses demonstrated the robustness of the constructs. Cronbach's alpha and composite reliability values for both personality traits and behavioral biases exceeded the recommended thresholds, indicating internal consistency. The average variance extracted (AVE) values supported convergent validity, whereas discriminant validity was confirmed through the application of the Fornell-Larcker criteria and HTMT ratios. Furthermore, the variance inflation factor (VIF) analysis revealed no signs of multicollinearity, thereby enhancing the rigor of the measurement model. Collectively, these assessments established that the scales employed were both statistically reliable and conceptually valid for examining the hypothesized relationships.

Structural Model

The structural model analysis identified significant relationships between personality traits and behavioral biases. Agreeableness ($\beta = 0.233$, $p < 0.001$) and Openness ($\beta = 0.132$, $p < 0.01$) were found to be significant positive predictors of behavioral biases, indicating that agreeable individuals are more susceptible to conformity-driven distortions such as herding, whereas open individuals are more prone to exploratory tendencies reflected in biases such as overconfidence. Conversely, conscientiousness, extraversion, and neuroticism did not have a significant effect on behavioral biases, suggesting limited explanatory power in the context of mutual fund investments. Behavioral biases, in turn, demonstrated strong predictive power for Disposition Bias, Herding, Loss Aversion, and Overconfidence, with path coefficients ranging from 0.703 to 0.806. This confirms that biases act as key mediators, translating psychological predispositions into concrete investment behaviors.

In summary, the results highlight the role of personality traits, particularly Agreeableness and Openness, in shaping the susceptibility of investors to behavioral biases, which then exert a significant influence on investment decisions. These findings contribute to the field of behavioral finance by integrating personality psychology with cognitive distortions, providing a more comprehensive understanding of the dynamics underlying mutual fund investment behavior.

CHAPTER 7

ASSESSMENT OF RELATIONSHIP OF BUYING INTENTION AND BEHAVIORAL BIASES IN THE STATE OF GOA.

7.1 Introduction

This chapter deals with data analysis of the fifth research objective, i.e., *to study the relation between the Buying Intention and behavioural biases of individual mutual fund investors in state of Goa*. It includes sections such as the background of the study, research methodology, data analysis and findings, and summary.

The data analysis and findings are divided into four major sections, the first section deals with the demographic profile of the respondents investing in mutual funds, the second section deals with descriptive statistics of different constructs of behavioural biases (Disposition Bias, Herding, Loss Aversion Bias and Overconfidence Bias) and buying intention. The third section deals with Measurement model of above constructs and the last section deals with Structural Model studying the relationship of buying intention and behavioural biases.

7.2 Background of the study

Investor behavior has traditionally been viewed through the prism of rational decision-making; however, empirical evidence in the field of behavioral finance suggests that investors are frequently influenced by cognitive and emotional biases, which subsequently impact their purchasing intentions. In contrast to the assumption in traditional finance that investors act logically to maximize wealth, it is often psychological distortions that drive investment outcomes away from reasonable expectations. The intersection of behavioral biases and purchasing intentions provides a significant insight into why investors often make suboptimal decisions.

The literature highlights the significant impact of cognitive biases on investor behavior, with loss aversion, overconfidence, regret aversion, and anchoring being particularly influential factors. Research by Tripathy (2021) in the Indian market demonstrated that these biases substantially distort buying decisions, causing investors to hold onto losing assets due to the fear of realizing losses or to trade excessively based on misplaced confidence in their knowledge. Furthermore, anchoring effects complicate decision-making, as investors often

rely on purchase prices or reference points, leading to inaccurate valuations. These biases not only affect short-term investment choices but also shape long-term investment intentions by reinforcing risk-averse or overly aggressive strategies.

The strength of the relationships between psychological factors and investment decisions is further supported by Meta-analytical evidence. Research by Kumar and Chaurasia (2024) revealed significant positive correlations between loss aversion ($r = 0.492$), regret aversion ($r = 0.401$), and overconfidence ($r = 0.346$) and investment decisions. These findings suggest that investors' buying intentions are often driven more by the need to manage psychological discomfort, such as the fear of losses or regret over poor choices, rather than objective opportunity evaluation. Consequently, emotional biases play a significant role in determining whether investors proceed with or avoid certain investments.

Moreover, biases interact with contextual influences, including stock recommendations and market signals. Keller and Pastusiak's (2016) study demonstrated that investors frequently over-rely on or dismiss expert advice, illustrating how heuristic shortcuts shape buying intentions. Reliance on external cues can lead to biased behaviors, even when information is intended to guide rational decision-making, thereby reinforcing the psychological underpinnings of purchase intentions.

Emotional stability can moderate the impact of biases on decision-making, with individuals possessing higher emotional stability being more effective in resisting biases such as anchoring, availability, and overconfidence, thereby making more rational purchasing decisions. Conversely, unstable investors tend to amplify these biases, resulting in distorted purchase intentions. This relationship between emotional stability and decision-making is supported by broader behavioral finance studies, which demonstrate that personality and emotional regulation significantly influence how biases translate into financial actions (Dickason & Ferreira, 2018; Exley, 2020).

Regional studies provide empirical evidence for this relationship, with Akinkoye and Bankole (2020) finding that herding, loss aversion, and regret aversion drive irrational buying decisions among Nigerian investors. Similarly, Dhungana et al. (2022) reported similar effects in Nepal, where overconfidence and availability bias were the most influential. These findings highlight that behavioral biases are universal in shaping buying intentions, although their intensity may vary across different cultural and market contexts.

Despite the substantial body of research in behavioral finance, significant gaps persist in establishing a clear link between behavioral biases and buying intentions, particularly in the context of investment decisions. While prior studies have extensively documented the presence of cognitive and emotional biases, relatively few have systematically examined how these biases translate into concrete purchase intentions, such as the decision to invest in mutual funds or other financial products. This gap highlights the need for a more in-depth investigation into the mechanisms through which biases influence not only investment behavior in general but also the formation of buying intentions that precede such behavior. To address this gap, researchers must delve deeper into the psychological and emotional factors that drive investment decisions, examining how biases such as overconfidence, loss aversion, and the endowment effect impact the formation of buying intentions. By doing so, they can gain a more nuanced understanding of the complex interplay between cognitive biases and investment behavior. This study examines the relationship between buying intention and behavioral biases among individual mutual fund investors, thereby addressing Research Question 6.

RQ 6: Is it possible to understand the relationship between buying intention and behavioral biases of individual mutual fund investors?

1. Hypothesis (H5a): ―Disposition bias among the mutual fund investors significantly influencing their buying intention‖
2. Hypothesis (H5b): ―Herding bias among the mutual fund investors significantly influencing their buying intention
3. Hypothesis (H5a): ―Loss aversion bias among the mutual fund investors significantly influencing their buying intention
4. Hypothesis (H5a): ―Overconfidence bias among the mutual fund investors significantly influencing their buying intention

7.3 Research Methodology

This study examines the relationship between buying intention and behavioral biases exhibited by individual mutual fund investors in India. To achieve this objective, a research design was developed to align the research objectives, data collection methods, sampling strategy, and analytical techniques. A descriptive and quantitative research design was

employed to capture the demographic characteristics and psychological attributes of the investors.

A structured questionnaire was used to facilitate systematic data collection and ensure consistency, reliability, and validity across all responses. The target population consisted of individual investors in mutual funds across Goa, India. A total of 700 structured questionnaires were distributed to respondents aged 18 years and above. After eliminating incomplete or unusable forms, 667 valid responses were retained, resulting in a final response rate of 95.29%. The study area was chosen to reflect the demographic and socio-economic diversity among mutual fund investors. The fieldwork spanned a period of 12 months, from January 2023 to December 2024, ensuring broad temporal coverage. Due to the absence of a comprehensive sampling frame, a convenience sampling technique was adopted. This approach was suitable for accessing participants based on their availability and willingness and was operationalized through both online modes (email surveys, digital forms) and offline methods (personal interviews and physical distribution). Data were collected using a structured, multi-part questionnaire adapted from the validated scales in the previous literature. The instrument consisted of four parts: Part A, which captured demographic information (age, gender, education, occupation, income, and investment experience); Part B, which assessed behavioral biases (e.g., overconfidence, herding, disposition effect, and loss aversion) using 20 items on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), adapted from Baker et al. (2019) and Prasad et al. (2015); and Part D, which focused on buying intention. Items were measured on a five-point Likert scale ranging from "strongly disagree" to "strongly agree".

A quantitative analysis was conducted using SEM with SmartPLS software to investigate the relationship between personality traits and behavioral biases. SEM was selected due to its ability to simultaneously evaluate the measurement model, which validates the factor structure of the buying intention and key behavioral biases, and the structural model, which tests the proposed relationships between them. This dual capability makes SEM particularly suitable for capturing the complex, multidimensional connections between stable intention and cognitive biases, ensuring both statistical rigor and robustness in interpretation.

7.4 Data Analysis and Findings

This section presents the results of the first objective in four sections. **Section 7.4.1** provides the result of demographic characteristics, **Section 7.4.2 which** is analyzed using the descriptive statistics of various constructs, **Section 7.4.3** discusses the measurement model **and 7.4.4** discusses the structural model and relationship between the constructs

7.4.1 Demographic Characteristics

Since the same respondents were utilized for the present objective, the demographic characteristics are not repeated here. Readers may refer to Chapter 3, Section 3.1.1 p. 149 for detailed information on the demographic profile of the respondents.

7.4.2 Descriptive Analysis of Personality traits and behavioural biases

The descriptive statistics for Buying Intention (***Refer Chapter 5.4.2***) indicate a pronounced inclination among respondents towards proactive financial behaviors in mutual fund investments. The mean values, ranging from 4.21 to 4.43, signify a high level of agreement with statements related to saving, portfolio diversification, research, and active portfolio management. This suggests that investors intend to adopt systematic saving practices, diversify their investments across funds, and remain engaged in monitoring their portfolios. The standard deviations, ranging from 1.57 to 1.64, suggest moderate variation in responses, highlighting consistency among many participants while also indicating weaker intentions among a minority. The negative kurtosis values and near-zero skewness further confirm that the responses are broadly distributed and balanced, underscoring the uniformity of buying intentions without extreme clustering.

The descriptive statistics for Behavioral Bias (***Refer Chapter 3.4.2***) reveal the prevalence of four key distortions—*Disposition Bias, Herding, Loss Aversion, and Overconfidence*—that influence mutual fund investors. The mean values indicate a consistent pattern of behavior, with respondents exhibiting a tendency to hold onto losing investments, rely on peer actions, fear losses more than equivalent gains, and exhibit overconfidence in their investment abilities. The standard deviations suggest moderate variability in the expression of these biases across individuals. The negative kurtosis values indicate platykurtic distributions, while the slightly negative skewness suggests higher agreement levels among respondents.

These findings confirm that investment decisions are often shaped by psychological biases, which can hinder rational financial behavior despite strong buying intentions.

7.4.3 : Reliability and validity analysis

The Cronbach's alpha values (***Refer table 7.1***) for the constructs indicate high internal consistency, confirming the reliability of the measurement scales. Behavioural Intention (α = 0.87) demonstrates a robust level of reliability, indicating consistent measurement of this construct. Similarly, Disposition Bias (α = 0.864), Herding Bias (α = 0.877), and Loss Aversion Bias (α = 0.872) all exhibit strong reliability, with alpha values significantly exceeding the threshold of 0.7. Overconfidence Bias (α = 0.841) also shows reliable internal consistency, though slightly lower than the other biases, it remains within the acceptable range. These results collectively validate the scales used in the study, suggesting minimal measurement error and ensuring that the constructs are effectively captured. This high reliability supports the robustness of the study design and provides confidence in the data's suitability for further statistical analyses.

Construct Validity

The construct validity of the measurement scale was evaluated through confirmatory factor analysis (CFA), focusing on two key aspects: convergent validity and discriminant validity. Convergent validity was assessed by examining the correlation between items measuring the same construct, which was evaluated using construct loadings, composite reliability (CR), and average variance extracted (AVE). Construct loadings measured the strength of the relationship between each item and its corresponding factor, while CR ensured internal consistency, with acceptable values exceeding 0.7. AVE, which quantifies the variance captured by a construct relative to error, was considered adequate when above 0.5. Discriminant validity, on the other hand, was evaluated by assessing whether constructs were distinct from each other, using the Heterotrait-Monotrait (HTMT) ratio and the Fornell-Larcker criteria. The HTMT ratio examined correlations between items of different constructs, with values below 0.8 indicating adequate discriminant validity. The Fornell-Larcker criteria compared the square root of the AVE for each construct to its correlations with other constructs, where the square root of AVE should exceed these correlations. These analyses ensured that the measurement scale effectively captured its intended constructs while maintaining clear distinctions between them. The results of these validity assessments

are presented in tables for further interpretation.

Table 7. 1: Convergent validity

	Cronbach's alpha	***Composite Reliability***	***Average variance extracted (AVE)***
Behavioural Intention	0.87	0.871	0.577
Disposition Bias	0.864	0.859	0.551
Herding Bias	0.877	0.875	0.584
Loss Aversion Bias	0.872	0.843	0.556
Overconfidence Bias	0.841	0.833	0.503

Source: Compiled from Primary Data

Convergent validity: The convergent validity of the measurement scale was evaluated using Composite Reliability (CR) and Average Variance Extracted (AVE) metrics (***Refer table 7.1***). These measures assess internal consistency and the proportion of variance explained by a construct relative to error, respectively. All constructs demonstrated CR values exceeding the recommended threshold of 0.7, indicating robust reliability. Behavioural Intention (CR = 0.871) and Herding Bias (CR = 0.875) displayed the highest reliability among the constructs. The AVE values, which should ideally surpass 0.5 to confirm adequate convergent validity, were also satisfactory for all constructs. Herding Bias (AVE = 0.584) and Loss Aversion Bias (AVE = 0.556) exhibited good convergent validity, while Overconfidence Bias (AVE = 0.503) met the minimum threshold. These findings confirm that the measurement scale effectively captures the variance of the constructs while maintaining low measurement error. The combination of strong CR and AVE values ensures that the constructs are both reliable and valid for further analysis in the study.

Discriminant validity: The Fornell-Larcker criteria (***Refer table 7.2***) were applied to evaluate the discriminant validity of the constructs by comparing the square root of the Average Variance Extracted (AVE) for each construct with its correlations with other constructs. The diagonal elements in the table represent the square root of the AVE, which should exceed the off-diagonal correlations to confirm discriminant validity. Behavioural Intention, with a square root of AVE of 0.759, demonstrates strong discriminant validity, as its square root of AVE is greater than its correlations with all other constructs, including Overconfidence Bias (0.427) and Herding Bias (0.418). Similarly, Disposition Bias, with a square root of AVE of 0.742, satisfies the criteria, with its highest correlation being 0.255 with Herding Bias. Herding Bias, with a square root of AVE of 0.764, and Loss Aversion Bias, with a square root of AVE of 0.745, also exhibit discriminant validity, as their AVE

square roots exceed their correlations with each other and other constructs. Overconfidence Bias, with a square root of AVE of 0.709, meets the minimum requirement, with its highest correlation being 0.736 with Herding Bias, but the AVE square root remains higher, ensuring distinctiveness. Overall, the results confirm that the constructs are sufficiently distinct from one another, validating the measurement model's ability to measure separate theoretical constructs.

Table 7. 2 : The Fornell Larcker criteria

	Behavioural Intention	Disposition Bias	Herding Bias	Loss_Aversion_Bias	Overconfidence Bias
Behavioural Intention	0.759				
Disposition Bias	0.172	0.742			
Herding Bias	0.418	0.255	0.764		
Loss_Aversion_Bias	0.181	0.692	0.348	0.745	
Overconfidence Bias	0.427	0.396	0.736	0.468	0.709

Source: Compiled from Primary Data

The HTMT ratio (***Refer Table 7.3***) was used as an alternative measure of discriminant validity, comparing the correlations between constructs with those within the same construct. To satisfy the HTMT criterion, the ratio for all construct pairs should ideally be less than 0.85 or, in stricter cases, 0.90. The results show that most construct pairs meet the required threshold, indicating adequate discriminant validity. For example, the HTMT value between agreeableness and conscientiousness is 0.353, which is well below the threshold, showing that these constructs are distinct. Similarly, the HTMT ratio for the Loss Aversion Bias and Herding is 0.374, which is also below the acceptable limit. However, some pairs, such as Behavioral Bias and Overconfidence Bias (HTMT = 0.911), marginally exceed the threshold of 0.90, indicating a potential overlap that may require further investigation. Overall, the HTMT ratios confirm that the measurement scale largely maintains adequate discriminant validity across its constructs.

Table 7. 3 : HTMT Ratio

	Behavioural Intention	Disposition Bias	Herding Bias	Loss_Aversion_Bias	Overconfidence Bias
Behavioural Intention					
Disposition Bias	0.17				
Herding Bias	0.165	0.666	0.374		
Loss_Aversion_Bias	0.165	0.666	0.374		
Overconfidence Bias	0.419	0.401	0.738	0.511	

Source: Compiled from Primary Data

The analysis of variance inflation factor (VIF) values was conducted to assess the presence of multicollinearity among the items used to measure various constructs. Multicollinearity occurs when the predictor variables are highly correlated, which can compromise the reliability of the regression model. A VIF threshold of 5 was employed, where values below this threshold indicate acceptable multicollinearity. The results demonstrate (***Refer Table 7.4)*** that all items across the constructs meet the acceptable VIF criteria, suggesting no significant multicollinearity issues. For agreeableness (Aggr1 to Aggr6), the VIF values range from 2.015 to 2.692, indicating that the items contribute unique variance without redundancy. Similarly, Neuroticism (Neuro1 to Neuro5) showed VIF values between 1.903 and 2.593, indicating independence among the items. Extroversion (Ext1 to Ext4) has VIF values ranging from 1.589 to 2.269, reflecting the good discriminative power of the items. The conscientiousness constructs (Cons1 to Cons5) exhibits VIF values between 1.565 and 2.166, confirming acceptable independence.

For behavioral biases, such as Herding Bias (Herd1 to Herd5), the VIF values range from 1.342 to 2.661, ensuring distinct contributions from each item. Loss Aversion Bias (LA1 to LA5) shows VIF values between 1.964 and 2.961, with no indication of problematic multicollinearity. The Openness constructs (Open1 to Open7) exhibits VIF values ranging from 1.92 to 2.399, while the Overconfidence Bias (OC1 to OC5) ranges from 1.582 to 3.186. Although OC1 had the highest VIF (3.186), it remained well within the acceptable range. Finally, for the Disposition Bias (DB1 to DB5), VIF values range from 1.586 to 2.576, further supporting the absence of multicollinearity. In conclusion, the analysis indicates that

all items in the measurement model are free from significant multicollinearity. This validates the independence and appropriateness of the items for assessing the constructs.

Table 7. 4 : Variance inflation factor (VIF)

Item code	Variance Inflation Factor		Item code	Variance Inflation Factor		Item code	Variance Inflation Factor
Herd1	2.659		LA1	1.964		DB1	1.681
Herd2	2.554		LA2	1.984		DB2	2.496
Herd3	2.567		LA3	2.641		DB3	2.429
Herd4	2.375		LA4	2.647		DB4	2.375
Herd5	1.342		LA5	2.672		DB5	1.527
OC1	3.186		BI1	2.143			
OC2	2.699		BI2	2.224			
OC3	2.469		BI3	2.81			
OC4	1.582		BI4	2.912			
OC5	1.697		BI5	2.628			

Source: Compiled from Primary Data

7.4.4 Buying Intention and behavioural biases of individual mutual fund investors

This section discusses about the *relation between the Buying Intention and behavioural biases of individual mutual fund investors.* The objective is fulfilled with the help of SEM applied using Smart PLS software.

The behavioural biases of disposition, herding, loss aversion, and overconfidence are assumed to have a significant impact on the buying intentions of mutual fund investors. The four dimensions of these biases are reflective in nature and were measured using statements included in the questionnaire, serving as independent variables in the structural model developed for hypothesis testing. The investors' buying intention for mutual funds is also reflective in nature and was measured using five statements in the questionnaire, serving as the dependent variable. The structural model illustrates the relationship between the different dimensions of the behavioural biases and the buying intentions of mutual fund investors.

The following hypotheses were examined using structural equation modelling with the SmartPLS software:

1. Hypothesis (H5a): Disposition bias among mutual fund investors significantly influences their buying intention.
2. Hypothesis (H5b): Herding bias among mutual fund investors significantly influences their buying intention.
3. Hypothesis (H5c): Loss aversion bias among mutual fund investors significantly influences their buying intention.
4. Hypothesis (H5d): Overconfidence bias among mutual fund investors significantly influences their buying intention.

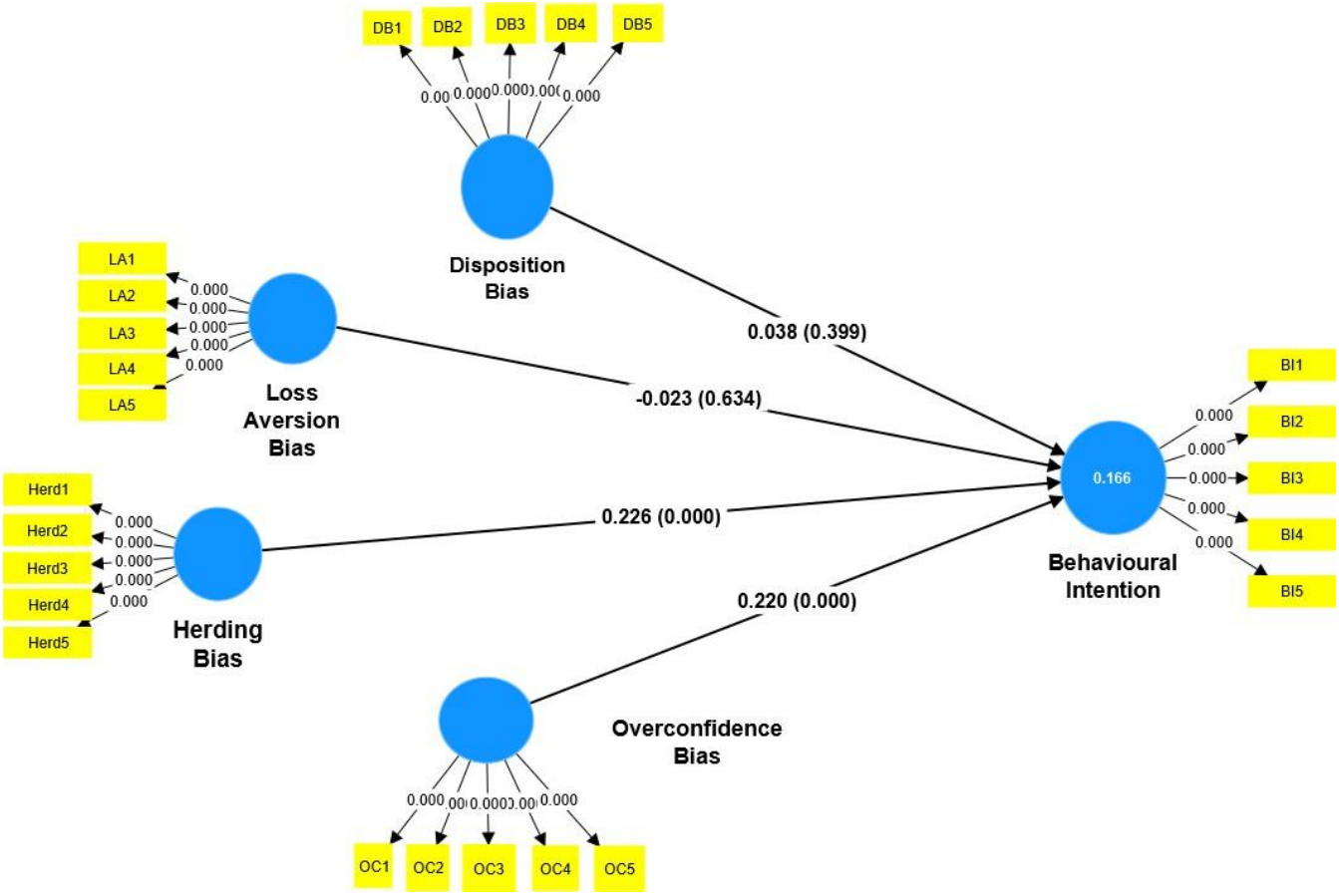
The structural model is presented in a ***figure 7.1***, and the results of hypothesis testing are reported in a ***table 7.5***

Table 7. 5: Path Coefficient for Behavioural Bias and Intention

Hypothesis	Endogenous Construct	Path Coefficient	Standard Error	T stats	P values	Remark
Disposition Bias	Buying Intention	0.038	0.046	0.844	0.399	Not supported
Herding Bias		0.226	0.042	5.433**	0	supported
Loss Aversion Bias		-0.013	0.047	0.477	0.634	Not supported
Overconfidence Bias		0.218	0.051	4.325**	0	supported

Source: Compiled from Primary Data

Figure 7.1: Structural model with path coefficients for Behavioural Bias and Intention



Conclusion (H_{5a}): The findings (***Refer Table 7.5***) of the structural equation modeling (SEM) analysis did ***not provide support*** for the hypothesis ―*that disposition bias has a significant influence on the buying intention of mutual fund investors*‖. The estimated path coefficient (β = 0.038, t = 0.844) was found to be statistically insignificant, suggesting that disposition bias does not have a meaningful effect on the buying intention of mutual fund investors. A possible explanation for this insignificance is that while investors may exhibit psychological reluctance to sell losing assets or realize gains prematurely, these tendencies may be more pronounced in other context

Conclusion (H_{5b}): The findings (***Refer Table 7.5***) of the structural equation modeling (SEM) analysis ***provide evidence to support*** the hypothesis ―*that herding bias among mutual fund investors has a substantial impact on their buying intentions*‖. The estimated path coefficient (β = 0.226, t = 5.433) was found to be statistically significant and positive, indicating a meaningful relationship between herding bias and investors' buying intentions. This association may be attributed to the fact that mutual fund investors often lack complete

information or confidence to independently evaluate complex market conditions, leading them to rely on the observed decisions of peers, analysts, or broader market trends. The social validation derived from this reliance reduces perceived uncertainty, thereby encouraging investors to align their intentions with the majority's behavior. Furthermore, cultural tendencies towards collective decision-making and the influence of financial blogs, forums, and peer networks contribute to the amplification of herding effects, thereby reinforcing the role of this bias in shaping investment intentions

Conclusion (H_{5c}): The findings (***Refer Table 7.5***) of the structural equation modeling (SEM) analysis ***did not support*** the hypothesis ―*that loss aversion bias among mutual fund investors significantly influences their buying intention*‖. The estimated path coefficient (β = –0.013, t = 0.477) was statistically insignificant, indicating that loss aversion bias does not have a meaningful impact on the buying intention of mutual fund investors. A plausible explanation for this insignificance is that loss aversion typically becomes apparent during post-investment evaluation rather than at the pre-investment stage of intention formation. Investors may express concerns about losses when managing or selling assets, but their initial buying decisions are often driven by forward-looking factors such as expected returns, tax benefits, or diversification opportunities. Furthermore, the structured and regulated nature of mutual funds may provide a sense of security, reducing the salience of loss aversion when forming purchase intentions. Additionally, investors may cognitively separate risk concerns from intention-setting, suggesting that loss aversion exerts a stronger role in shaping ongoing behavior than in influencing initial buying choices.

Conclusion (H_{5d}): The findings (***Refer Table 7.5***) of the structural equation modeling (SEM) analysis ***provide support*** for the hypothesis ―***that overconfidence bias among mutual fund investors has a significant impact on their buying intentions***‖. The estimated path coefficient (β = 0.218, t = 4.325) was found to be positive and statistically significant, indicating that overconfidence bias meaningfully influences investors' intentions to invest in mutual funds. A plausible explanation for this relationship is that overconfident investors tend to overestimate their financial knowledge, analytical ability, and capacity to predict market outcomes, leading to an inflated self-perception of their ability to successfully evaluate and control mutual fund investments. Furthermore, overconfidence fosters optimism about future returns and a reduced perception of risk, which encourages investors to commit capital more readily. These tendencies are consistent with prior research in behavioral

finance, which suggests that overconfidence drives excessive trading, under-diversification, and stronger purchase intentions compared to more cautious investors.

7.5 Summary

The fifth research objective's findings were presented in four interconnected components: demographic characteristics of the respondents, descriptive statistics of key behavioral biases and buying intention, evaluation of the measurement model, and the structural model examining the relationship between behavioral biases and buying intention. Collectively, these results offer nuanced insights into how individual differences in personality interact with cognitive and emotional distortions, thereby influencing mutual fund investment behavior.

Demographic Characteristics: The study utilized responses from 667 mutual fund investors, encompassing a diverse range of socio-economic and professional backgrounds. Female respondents comprised a slight majority (53.1%), with married individuals dominating the sample (63.6%). The age distribution was evenly balanced, spanning younger investors under 30 years, middle-aged investors between 30 and 45 years, and older investors above 45 years. Education levels were high, with most respondents holding graduate and postgraduate qualifications (74.6%), while income groups ranged from below ₹5 lakhs to above ₹10 lakhs, ensuring a diverse sample. A significant proportion of investors (63.6%) favored systematic investment plans (SIPs), reflecting a preference for disciplined investing practices, and equity funds were the most popular type of investment (42.1%). The sample also exhibited occupational diversity, with businesspersons, professionals, private employees, and government employees represented in almost equal proportions. This diversity in the sample allowed for a comprehensive analysis of mutual fund investors' behavior and preferences. The study's findings can be generalized to a broader population of mutual fund investors in India.

Descriptive Analysis: The descriptive statistics indicate that mutual fund investors exhibit a strong inclination towards buying, as evidenced by high mean values ranging from 4.21 to 4.43. These values suggest a commitment to saving, diversification, research, and active portfolio management. The moderate standard deviations of 1.57 to 1.64 suggest overall consistency in investor intentions, although a minority of investors demonstrates weaker

buying intentions. Furthermore, the analysis reveals negative kurtosis and near-zero skewness, indicating balanced distributions. In addition, the examination of behavioral biases, including disposition effect, herding behavior, loss aversion, and overconfidence, shows their widespread presence among investors. These biases manifest as investors holding onto losing assets, following their peers, fearing losses, and displaying overconfidence. The presence of negative kurtosis and slight skewness confirms a strong level of agreement among investors, suggesting that psychological distortions significantly influence their decision-making processes, alongside their proactive financial intentions.

Measurement Model: The reliability and validity analyses demonstrated the robustness of the constructs. Cronbach's alpha and composite reliability values for both buying intention and behavioral biases exceeded the recommended thresholds, indicating internal consistency. The average variance extracted (AVE) values supported convergent validity, whereas discriminant validity was confirmed through the application of the Fornell-Larcker criteria and HTMT ratios. Furthermore, the variance inflation factor (VIF) analysis revealed no signs of multicollinearity, thereby enhancing the rigor of the measurement model. Collectively, these assessments established that the scales employed were both statistically reliable and conceptually valid for examining the hypothesized relationships.

Structural Model: The SEM analysis revealed mixed results on the relationship between behavioral biases and buying intention of mutual fund investors. Disposition bias ($\beta = 0.038$, $t = 0.844$) and loss aversion bias ($\beta = -0.013$, $t = 0.477$) were found to be statistically insignificant, suggesting these biases influence post-investment behavior rather than intention formation. In contrast, herding bias ($\beta = 0.226$, $t = 5.433$) and overconfidence bias ($\beta = 0.218$, $t = 4.325$) showed positive and significant effects, indicating that reliance on peers, optimism, and inflated self-belief strongly drive investors' intention to purchase mutual funds.

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CHAPTER 8
FINDINGS, CONCLUSION AND SUGGESTIONS FOR FUTURE RESEARCH

8.1 Findings of chapter 3

Chapter 3 entitled ―Personality traits of investors in mutual funds in the state of Goa‖ dealt with the First Objective of the study, i.e., to identify distinct personality traits of investors in mutual funds in state of Goa. It was undertaken in order to analyze impact of different personality traits on towards investment in mutual funds

The present study identified few research questions were formulated. SEM is applied to find the answer for RQ 1.

Research Objective 1: Do investors have distinct personality traits which drive theirs buying intentions of mutual funds?

Following were the findings of Chapter 3:

a) A demographic analysis of 667 mutual fund investors revealed a diverse and representative sample across various demographic characteristics, including gender, marital status, age, education, income, and occupation. The sample exhibits a slight female majority, with a high proportion of married respondents, suggesting that family considerations play a significant role in investment decision-making. The age distribution is evenly spread across young, middle-aged, and older investors, ensuring comprehensive coverage of all key life-cycle stages. The sample is characterized by a high level of education, with a predominance of graduates, and various incomes, reflecting varied purchasing power. Investment preferences indicate a strong inclination toward systematic investment plans (SIP), signifying disciplined investing, with equity funds being the most popular choice, followed by debt, balanced, and sector-specific funds.

b) The descriptive statistics of personality traits among investors indicate a general tendency toward high levels of agreeableness, openness, conscientiousness, and extraversion, with mean values consistently above 4, suggesting positive self-

perceptions across these dimensions. Traits such as cooperation, curiosity, reliability, and sociability were strongly endorsed, with low skewness and negative kurtosis values indicating balanced yet widely spread responses. Notably, agreeableness and openness exhibit the highest means, reflecting a tendency toward trust, empathy, and adaptability, while conscientiousness underscores discipline and goal orientation. Conversely, neuroticism records comparatively lower means (around 3.3–3.5), highlighting moderate emotional instability among investors, although this trait is not as dominant as the other personality characteristics.

c) The measurement model results indicate that the ***scales used to assess personality traits exhibit both reliability and validity***. Cronbach's alpha values for all dimensions exceeded the 0.7 threshold, with Agreeableness (0.91), Conscientiousness (0.864), Extraversion (0.857), Neuroticism (0.879), and Openness (0.876) demonstrating strong internal consistency. Convergent validity was established as most construct loadings were above 0.7, with composite reliability (CR > 0.7) and average variance extracted (AVE > 0.5) further supporting the robustness of the constructs. Discriminant validity was confirmed using the Fornell-Larcker criteria and HTMT ratio, ensuring that each trait was conceptually distinct. Values of the variance inflation factor (VIF) were below 3, eliminating concerns of multicollinearity, while Harman's single factor test (35% variance < 50%) ruled out common method bias. Overall, ***the model demonstrates strong psychometric soundness, providing a reliable foundation*** for subsequent hypothesis testing.

d) The validity analysis confirmed that personality traits can be effectively modeled as a second-order construct comprising five dimensions: Agreeableness, Conscientiousness, Extraversion, Neuroticism, and Openness. All construct loadings exceeded 0.7, with Agreeableness (0.637), Conscientiousness (0.782), Extraversion (0.701), Neuroticism (-0.770), and Openness (0.787) showing strong contributions. The composite reliability (CR = 0.855) and average variance extracted (AVE = 0.544) surpassed the acceptable thresholds, thereby establishing convergent validity. These results demonstrate ***that the Big Five dimensions collectively form a coherent higher-order construct of personality,*** supporting its use in explaining behavioral outcomes. The Harman's single-factor test further confirmed no significant common method bias, thereby strengthening the robustness of the findings.

8.2 Conclusions of Chapter 3

The findings of Chapter 3 demonstrate that the demographic, personality, and measurement model characteristics of mutual fund investors are both robust and contextually relevant. The demographic profile reveals a preference for disciplined investment strategies, specifically systematic investment plans and equity funds, which is influenced by family and educational background. This is consistent with previous studies that highlight the significance of socio-cultural factors in financial decision-making. Personality analysis indicates high levels of agreeableness, openness, conscientiousness, and extraversion, with relatively lower neuroticism, which aligns with the research by Costa and McCrae (1992) and Mayfield et al. (2008). However, the slightly higher prominence of agreeableness and openness differs from some Western findings, where conscientiousness often dominates financial behavior. The measurement and validity results provide strong support for the Big Five as a second-order construct, echoing earlier behavioral finance studies. Nevertheless, the negative loading for neuroticism suggests cultural or contextual differences, possibly linked to collective decision-making and evolving financial literacy in India. Overall, while the results broadly align with global research, the selective dominance of agreeableness and openness provides a nuanced contribution to understanding investor psychology in emerging markets.

8.3 Findings of chapter 4

Chapter 4 entitled **―Personality traits and investor attitudes in the state of Goa‖** dealt with the Second Objective of the study, i.e., *to investigate how different personality traits contribute to the formation of attitude of investors in state of Goa*. It was undertaken in order to analyze impact of different personality traits on attitude towards investment in mutual funds

Research Questions 4

The present study identified few research questions and appropriate hypothesis were formulated. SEM is applied to find the answer for RQ 3 and hypothesis below.

Research Question 3 (RQ3): What is the attitude of investors, and how does personality impact attitude?

1. Hypothesis 2a (H2a): ―Agreeableness significantly influences the Attitude of the mutual investors‖
2. Hypothesis 2b (H2b): ―Conscientiousness significantly influences the Attitude of the mutual investors‖
3. Hypothesis 2c (H2c): ―Extroversion significantly influences the Attitude of the mutual investors.
4. Hypothesis 2d (H2d): ―Neuroticism significantly influences the Attitude of the mutual investors.
5. Hypothesis 2e (H2e): ―Openness significantly influences the Attitude of the mutual investors.

Following were the findings of Chapter 4:

e) The demographic analysis of 667 mutual fund investors revealed a higher proportion of females compared to males, with most respondents being married. Notably, investors aged 45 years and above comprise a slight majority although all age groups are represented. In terms of educational attainment, graduates constitute the largest group, followed by postgraduates and professionals. The majority of investors earn

less than ₹5 lakhs annually, although those in the middle and higher income brackets are also present. Systematic investment plans are preferred over lump sum investments, indicating a disciplined investment approach. The occupational distribution of the sample is dominated by businesspersons, followed by private employees, professionals, and government employees. Furthermore, equity funds have the highest representation among fund preferences, surpassing debt, balanced, and sector-specific funds. The analysis of investor attitudes toward mutual fund investments reveals a predominantly positive perception, as evidenced by consistently high mean values across all six statements. Investors strongly endorsed mutual fund investment as a smart and sensible option, which received the highest level of endorsement, while the stability of mutual funds was viewed somewhat less favorably but still positively. The relatively moderate standard deviation values indicate some variation in opinions, with stability showing the greatest diversity in responses and sensible investing showing the most consistent agreement. Negative kurtosis values across all items highlight flatter response distributions, suggesting fewer extreme views, while skewness values close to zero confirm balanced perceptions without significant bias.

f) Further, the reliability and validity analysis of the measurement scale for personality and attitude strongly affirms its suitability for behavioral research. Cronbach‘s alpha values across all constructs were well above the accepted threshold, with agreeableness and attitude showing the highest reliability, confirming the internal consistency of the items. This analysis indicates that the measurement scale is a strong tool for research. Convergent validity was established through composite reliability (all above 0.7) and average variance extracted (all above 0.5), with Attitude and Agreeableness again exhibiting the strongest results, while even the lowest AVE for Openness to Change met the criterion. The results of the analysis show that the measurement scale is effective. Discriminant validity, tested through the Fornell-Larcker criteria, confirmed that the square root of AVE for each construct exceeded its correlations with other constructs, ensuring distinctiveness among the factors. These findings confirm that the ***measurement instrument is both reliable and valid***, capturing the intended constructs effectively and providing robust data for further analysis.

g) The structural equation modeling analysis shows that ***personality traits had a significant influence on investors' attitudes toward mutual fund investments***.

Among the Big Five dimensions, agreeableness emerged as the strongest positive predictor, indicating that cooperative and empathetic individuals are more inclined toward favorable investment attitudes. This finding is consistent with Sadi et al. (2011), who reported that agreeable investors demonstrate higher trust and confidence in financial instruments. Conscientiousness, extroversion, and openness also displayed positive and significant relationships with investor attitudes, reflecting that disciplined, sociable, and open-minded investors are more likely to perceive mutual funds as attractive investment avenues. Similar associations have been highlighted in studies by Mayfield, Perdue, and Wooten (2008) and Bucciol and Zarri (2015), who found conscientiousness and openness to be positively linked with prudent financial behavior and long-term investment orientation.

h) ***Neuroticism was found to have a negative influence on investor attitudes***, resulting in emotionally unstable individuals being less confident and more risk-averse toward mutual fund investments. This outcome is consistent with the findings of Durand, Newby, and Sanghani (2008), who noted that neurotic investors often perceive financial markets as uncertain and threatening, thereby reducing their willingness to invest. However, this finding differs from the suggestion of Borghans et al. (2008), who proposed that neuroticism may encourage cautious but systematic saving behavior

8.4 Conclusions of Chapter 4

The findings of this study confirm that personality traits significantly shape investors‘ attitudes toward mutual fund investments, but the strength and direction of these effects appear to be influenced by the unique context of financial markets.

- Agreeableness emerged as the strongest positive predictor, underscoring the role of trust, cooperation, and conformity in a collectivist culture where family and peer influence are central to financial decision-making.
- Conscientiousness, openness, and extroversion also showed positive effects, reflecting how disciplined planning, adaptability, and social interactions enhance favorable attitudes toward structured products like Systematic Investment Plans (SIPs), which dominate the mutual fund landscape.
- In contrast, neuroticism demonstrated a strong negative influence, highlighting how heightened risk perception, market volatility, and lack of comprehensive financial

safety nets lead emotionally unstable investors to adopt unfavorable views.

Compared with findings in Western contexts, where neuroticism sometimes aligns with cautious saving, the divergence in India may be explained by lower financial literacy, evolving regulatory trust, and socioeconomic insecurities. Thus, the results suggest that while the Big Five personality framework remains robust in explaining investment behavior, cultural, institutional, and market-specific factors significantly moderate these relationships, making context-driven interpretations crucial for understanding investor psychology in emerging economies like India.

Theoretical Contribution

The findings of Chapter 4 expand the theoretical application of the Big Five personality framework to the mutual fund context, illustrating the substantial influence of personality traits on investor attitudes. Specifically, agreeableness emerged as the strongest predictor, underscoring the impact of collectivist cultural norms on the relationship between interpersonal trust, conformity, and financial behavior. Furthermore, the study highlights the negative role of neuroticism, demonstrating that psychological instability leads to a reluctance to invest in market-linked products in environments perceived to be volatile. These results contribute to existing behavioral finance theories by situating personality-attitude linkages within a culturally contextualized framework.

Practical Implications

The findings of this study possess significant practical implications for mutual fund companies, financial advisors, and policymakers. By acknowledging that investors with agreeable, conscientious, and open-minded personalities are more likely to adopt a positive outlook toward mutual funds, targeted marketing and personalized advisory strategies can be developed. Investor education programs should focus on managing risk perception, particularly for individuals with neurotic tendencies who may otherwise disengage. Emphasizing structured investment options such as systematic investment plans (SIPs) and reinforcing trust-building through transparency and simplified communication can further attract hesitant investors. By recognizing the psychological underpinnings of investment decisions, industry practitioners can design more effective products and interventions that cater to diverse investor profiles.

Scope for Future Research

Future research can expand upon these findings by investigating the relationships between personality and attitude across various states or countries, facilitating cultural comparisons of investor psychology. Longitudinal studies may also examine how personality traits interact with changing levels of financial literacy, digitalization, and evolving regulatory environments. Furthermore, incorporating behavioral biases such as overconfidence, herding, or anchoring into the model could provide a more nuanced understanding of investor attitudes. Combining quantitative structural equation modeling with qualitative approaches, such as interviews, may further elucidate how investors rationalize their decisions. Such studies would refine the theoretical and practical relevance of personality-driven investment research in emerging economies.

8.5 Findings of chapter 5

Chapter 5 entitled **―Integrative Analysis of Psychological Constructs Influencing Mutual Fund Investment Intentions in the state of Goa‖** dealt with the ***Third Objective*** of the study, i.e., *to examine the impacts of personality traits, attitude, values and reasons on behavioural intention in state of Goa*. It was undertaken in order to study the impacts of personality traits, attitude, values and reasons on behavioural intention.

Research Questions

The present study identified few research questions and appropriate hypothesis were formulated. SEM is applied to find the answer for RQ 4 and hypothesis below.

RQ 4: Is it possible to understand the impacts of personality traits, attitude, values and reasons on behavioral intention?

1. Hypothesis 3a (H_{3a}): *"Reason against significantly influences the Attitude of the mutual investors"*
2. Hypothesis 3b (H_{3b}): ―Reason for significantly *influences the Attitude of the mutual investors.*
3. Hypothesis 3c (H_{3c}): ―Attitude significantly *influences the behavioural intention of the mutual investors.*
4. Hypothesis 3d (H_{3d}): ―Personality traits of the investors *significantly influence the Attitude of the mutual investors*.
5. Hypothesis 3e (H_{3e}): ―Personality traits *significantly influence the behavioural intention of the mutual investors*.
6. Hypothesis 3f (H_{3f}): ―Power significantly *influences the reason for the mutual fund"*
7. Hypothesis 3g (H_{3g}): ―Power significantly *influences the Attitude of the mutual investors‖*.
8. Hypothesis 3h(H_{3h}): ―Security *significantly influences the Attitude of the mutual investors"*.

9. Hypothesis 3i (H_{3i}): ―Security *significantly influences the reason against the mutual fund investments"*.
10. Hypothesis 3j (H_{3j}): ―Reason for significantly *influences the behavioural intention of the mutual investors"*.
11. Hypothesis 3k (H_{3k}): ―Reason against significantly *influences the behavioural intention of the mutual investors*

Following were the findings of Chapter 5:

a) The demographic analysis of 667 mutual fund investors highlights a diverse and representative sample across key characteristics such as gender, marital status, age, education, income, occupation, and investment behavior. Females slightly outnumbered males, and most respondents were married, while the age distribution covered younger, middle-aged, and older investors, ensuring life-cycle representation. The sample was predominantly well-educated, with graduates and postgraduates forming the majority, and income levels ranged from the lower-middle to higher-income brackets, reflecting varied financial capacities. A clear preference for systematic investment plans over lump sum investments indicated a disciplined approach to investing. Occupationally, the sample spanned businesspersons, private employees, professionals, and government employees, capturing diverse socio-economic backgrounds. Regarding fund preferences, equity was the most favored option, followed by debt, balanced funds, and sector-specific funds, suggesting that while growth-oriented investments dominate, diversification across asset classes is also evident.

b) Investors view wealth creation as essential for personal growth and influence but also moderately value security and stability. Risk is a significant deterrent, with many perceiving mutual funds as risky and subject to fluctuations. Limited knowledge hampers confidence, but returns and tax savings are strong motivators. Investors are driven by aspirations for wealth and returns, tempered by concerns over risk and limited knowledge. They exhibit proactive behavioral intentions toward disciplined mutual fund investing.

c) The measurement model was evaluated through reliability and validity analysis to guarantee the robustness of the scale employed in this study. Internal consistency reliability, assessed via Cronbach's alpha, revealed that all constructs exceeded the acceptable threshold

of 0.7, with values ranging from 0.857 to 0.931, indicating strong reliability across factors such as personality traits, motivational drivers, and behavioral constructs. Convergent validity was established using construct loadings, composite reliability, and the average variance extracted (AVE). The majority of item loadings exceeded 0.7, while CR values were above 0.7 and AVE values above 0.5 for all constructs, confirming sufficient variance capture. Notably, returns and tax savings exhibited the highest levels of convergent validity, whereas Openness, although lower, still met the required threshold. Discriminant validity was confirmed through both the HTMT ratio (all below 0.8) and the Fornell-Larcker criteria, where the square root of AVE for each construct was higher than its correlations with other constructs. These results collectively affirm that the ***measurement model demonstrates strong reliability, convergent validity, and discriminant validity***, thereby ensuring the scale's appropriateness for hypothesis testing and structural model analysis.

d) The structural equation modeling (SEM) analysis yields valuable insights into the intricate relationships among personality traits, values, motivations for and against, attitude, and behavioral intention toward mutual fund investments. The findings ***confirm that attitude, personality traits, motivations for investing, and motivations against investing significantly shape investors' behavioral intentions***, with attitude emerging as a particularly strong predictor. Personality traits were found to positively influence both attitude and behavioral intention, highlighting the role of psychological predispositions in investment decision-making. Power-oriented values strongly influenced motivations for investing and also positively shaped attitudes, whereas security values had a dual effect: they negatively influenced attitude but positively contributed to motivations against mutual fund investments, suggesting that security-seeking investors perceive mutual funds as unstable or risky. While motivations for investing, such as returns and tax savings, positively influenced both attitude and BI, motivations against investing, such as risk and lack of knowledge, also exerted a significant positive effect on BI, reflecting that concerns coexist with intentions to invest. Notably, the hypothesis linking motivations against to attitude was not supported, showing that barriers may not directly alter attitudes but instead affect intentions through other pathways. Overall, the SEM results confirm the robustness of the model, with R^2 values indicating substantial explanatory power, thereby underscoring the multifaceted drivers of mutual fund investment behavior.

8.6 Conclusions of Chapter 5

The results of this study reinforce the growing body of evidence that

a) ***Personality traits significantly shape both attitudes and behavioral intentions*** in the investment context. Consistent with previous research by Mayfield, Perdue, and Wooten (2008) and Sadi et al. (2011), traits such as agreeableness, conscientiousness, and openness positively influenced investors' perceptions and intentions, underscoring the role of psychological predispositions in guiding financial decisions. However, this finding contrasts with Durand, Newby, and Sanghani (2008), who found weaker links between personality and actual investment choices, possibly due to cultural collectivism and reliance on peer cues amplifying trait effects more strongly in India than in Western markets.

b) The influence of the values further enriches these findings. ***Power-oriented values strongly reinforced the reasons for investing and shaped positive attitudes***, aligning with Schwartz's (1992) value theory, which links achievement and power to financial ambition. Conversely, ***security values showed a dual effect: negatively influencing attitudes but strengthening reasons against investment***. This pattern contrasts with findings from Bucciol and Zarri (2015), who reported that security-seeking individuals in European markets preferred safer financial instruments without necessarily lowering their investment attitudes. A possible explanation lies in the Indian context, where mutual funds are often perceived as riskier compared to traditional instruments such as fixed deposits or gold, leading security-driven investors to view them with skepticism.

c) The findings on the reasons for and against investment reveal a nuanced dynamic. ***Returns and tax savings positively influenced both attitude and intention***, supporting prior studies such as Zaidi and Tauni (2012), which emphasized fiscal incentives as critical motivators for mutual fund participation.

d) Interestingly, ***reasons against (risk and lack of knowledge) also had a significant positive effect on behavioral intention, even though they did not significantly alter attitudes***. This result diverges from studies such as Lin (2011) and Rzeszutek (2015), which reported that higher perceived risk and lack of knowledge typically reduce investment participation. One possible explanation for this deviation is that Indian investors, despite acknowledging risks and knowledge barriers, are drawn into mutual funds due to social influence, SIP accessibility, and tax-linked schemes, which push them to act on intentions even while concerns persist.

Overall, the study demonstrates that while global theories such as the Big Five and Behavioral Reasoning Theory provide a solid framework, cultural, institutional, and market-specific factors in India—such as collectivist norms, evolving financial literacy, and the dominance of SIP-driven participation—reshape the way personality, values, and reasoning interact to influence investor behavior.

Theoretical Contribution

This study enhances the theoretical comprehension of investor behavior by incorporating personality traits, values, and reasoning dimensions within the BRT framework. By analyzing both ―reasons for‘ and ‗reasons against‖ alongside personality and values, the research expands existing models of investment decision-making, which frequently focus solely on rational or cognitive factors. The results demonstrate that personality traits not only influence investor attitudes but also directly impact behavioral intentions, highlighting the psychological basis of financial decision-making. Furthermore, the dual role of security values adds depth to understanding how contextual factors moderate theoretical constructs.

Practical Implications

This study offers practical insights for financial advisors, mutual fund companies, and policymakers. By acknowledging that agreeableness, conscientiousness, and openness influence positive investment attitudes, firms can develop tailored advisory strategies and communication to match investor personalities. The significant role of returns and tax savings in investment decisions underscores the importance of highlighting these benefits in marketing campaigns while addressing concerns around risk and knowledge gaps through simplified communication, investor education, and transparent disclosures. Furthermore, understanding that security-seeking investors may hold negative attitudes toward mutual funds highlights the need for designing low-volatility or hybrid products to attract more risk-averse segments of investors.

Scope for Future Research

Future research can build upon this study by applying the framework to various geographic locations, allowing for cross-cultural comparisons of how personality traits and values impact investment decisions. Longitudinal studies could be conducted to investigate whether attitudes and intentions change as financial knowledge and market experience increase. The

inclusion of additional behavioral biases, such as overconfidence, anchoring, or herding, in the structural model may enhance the theoretical understanding. Furthermore, qualitative approaches, including interviews or focus groups, could supplement the quantitative findings by examining the complex reasoning processes that investors use when weighing the pros and cons of mutual fund investments.

8.7 Findings of chapter 6

Chapter 6 entitled **―Assessment of relationship of personality traits and the behavioral biases in the state of Goa‖** dealt with the ***Fourth Objective*** of the study, i.e., *To study the relation between the Big Five model of personality traits and behavioural biases of individual mutual fund investors in state of Goa*. It was undertaken in order to study the impacts of personality traits on behavioural bias.

Research Questions

The present study identified few research questions and appropriate hypothesis were formulated. SEM is applied to find the answer for RQ 5 and hypothesis below.

RQ 5: Is it possible to understand the relationship between personality traits and behavioral biases of mutual fund investors?

1. H4a: ―Agreeableness trait of the investor significantly influence their behavioural Bias‖
2. H4b: ―Extroversion trait of the investor significantly influence their behavioural Bias‖
3. H4c:‖ Conscientiousness trait of the personality significantly influences their behavioural Bias.‖
4. H4d: ―Neuroticism trait of the personality significantly influences their behavioural Bias‖
5. H4e: ―Openness trait of the personality significantly influences their behavioural Bias‖

Following were the findings of Chapter 6:

a) A demographic and behavioral analysis of 667 mutual fund investors in India revealed a diverse and representative sample across various demographic characteristics, including gender, age, education, income, and occupation. The results indicate a clear preference for systematic investment plans and equity-oriented funds. Furthermore, descriptive statistics highlight the prevalence of key behavioral biases influencing investment decisions. Notably, a strong disposition bias was observed, as investors tended to hold onto losing investments while selling gains prematurely. Herding behavior was also widespread, with many respondents being influenced by peer

actions, analyst opinions, and market trends. Loss aversion bias emerged as particularly dominant, with investors exhibiting heightened sensitivity to losses compared to equivalent gains, leading to risk-averse tendencies. Additionally, overconfidence bias was present, with respondents displaying optimism, perceived superior knowledge, and confidence in outperforming others. Overall, these findings suggest that while mutual fund investors demonstrate rational preferences for structured products, their decisions are strongly shaped by cognitive and emotional biases that can both encourage participation and lead to suboptimal portfolio management.

b) The reliability and validity analysis of the measurement model confirms that the scales employed in this study possess both statistical soundness and conceptual robustness. High Cronbach's alpha values across all constructs, ranging from 0.841 to 0.91, indicate strong internal consistency, whereas composite reliability (CR) values exceeding 0.7 and average variance extracted (AVE) values above 0.5 demonstrate adequate convergent validity. The Fornell-Larcker criteria and the HTMT ratio support discriminant validity, with only minor overlaps observed, thereby ensuring that the constructs are distinct. Additionally, the variance inflation factor (VIF) analysis confirmed the absence of multicollinearity, validating item independence. Collectively, these results affirm that the ***measurement model effectively captures personality traits and behavioral biases***, providing a reliable foundation for structural equation modeling and subsequent hypothesis testing.

c) A structural model analysis of the relationship between personality traits and behavioral biases among mutual fund investors found that ***only agreeableness and openness had a significant influence on behavioral biases***. Conscientiousness, extroversion, and neuroticism did not demonstrate a significant effect. Investors with high levels of agreeableness displayed stronger behavioral biases, possibly due to their cooperative and trusting nature, making them more susceptible to external influences in financial decisions. Similarly, openness positively contributed to behavioral biases, indicating that individuals with imaginative and flexible mindsets may be more prone to biases when experimenting with diverse investment options. In contrast, conscientious, extroverted, and neurotic investors did not show meaningful associations, suggesting that their tendencies toward discipline, sociability, or emotional instability do not directly translate into biased investment behavior. The structural model also confirmed strong linkages between overall behavioral bias and

specific distortions, including disposition, herding, loss aversion, and overconfidence, highlighting their interrelated nature. These findings suggest that ***personality does not uniformly drive biases but rather shapes them selectively***, with agreeableness and openness emerging as key psychological predictors in the mutual fund context.

8.8 Conclusions of Chapter 6

The results of this study reinforce the growing body of evidence that

a) The findings indicate that ***conscientiousness, extroversion, and neuroticism do not have a significant impact on behavioral biases***, contradicting several previous studies. For example, Mayfield, Perdue, and Wooten (2008) and Bucciol and Zarri (2015) found that conscientious investors exhibit reduced susceptibility to impulsive biases due to their disciplined financial behavior. Conversely, Durand, Newby, and Sanghani (2008) suggested that neurotic investors often display heightened susceptibility to biases due to anxiety and uncertainty. The lack of significance in this context may be attributed to the prevalence of collective decision-making and reliance on external advice, which could mitigate the direct effect of these traits on behavioral distortions.
b) The study discovered that ***agreeableness and openness had a significant impact on behavioral biases***. This finding is consistent with the observations of Sadi et al. (2011), who noted that individuals with agreeable personalities tend to follow social cues and peer influence, making them more susceptible to herding and disposition effects. Similarly, openness, which encompasses curiosity and receptiveness to new ideas, may motivate investors to engage with financial markets but also render them more vulnerable to overconfidence and other cognitive biases, a relationship supported by Rzeszutek (2015).
c) The results indicate that ***personality does not uniformly influence biases, but rather shapes them in a selective manner***. Specifically, agreeableness and openness are identified as key predictors in the mutual fund context. This selective influence may be attributed to India's developing financial ecosystem, where cultural collectivism enhances the role of agreeableness in promoting conformist behaviors, and limited financial literacy amplifies the effect of openness as investors explore new but often high-risk financial opportunities. The divergence from the Western findings highlights

the significance of contextual and cultural factors in moderating the relationship between personality and biases.

Theoretical Contribution

This study provides a substantial theoretical contribution by enhancing the comprehension of the interaction between personality traits and behavioral biases among mutual fund investors. Contrary to previous research that highlighted the uniform effect of the Big Five traits, the findings indicate that only agreeableness and openness significantly predict biases, whereas conscientiousness, extroversion, and neuroticism exhibit no direct impact. This selective influence contests universal assumptions regarding personality-bias linkages and underscores the necessity for culturally nuanced interpretations. This study contributes to behavioral finance theory by illustrating how personality traits shape cognitive distortions in distinct ways within emerging markets.

Practical Implications

The study‘s outcomes have significant practical implications for financial advisors, policymakers, and mutual fund companies in India. By identifying agreeableness and openness as key predictors of behavioral biases, investment managers can develop targeted interventions to mitigate the risks associated with herding, overconfidence, and loss aversion among such investors. Training programs and investor awareness campaigns could focus on enhancing critical thinking, independent decision-making, and financial literacy to reduce susceptibility to external influences. For regulators, the findings underscore the need for investor-protection frameworks that address behavioral distortions, ensuring that biases do not result in suboptimal portfolio management or long-term financial losses.

Scope for Future Research

Future research could build upon these findings by examining the impact of moderating variables, including financial literacy, cultural context, and digital financial behavior, on the relationship between personality and bias. Longitudinal studies may also provide valuable insights into how personality influences biases over time, particularly as India‘s financial markets continue to evolve. Comparative studies between Indian and Western investors could highlight cultural differences in the interaction between personality traits, such as neuroticism or conscientiousness, and biases. Furthermore, integrating neuroeconomics and experimental approaches could offer a more nuanced understanding of the cognitive mechanisms

underlying these biases. This would enhance the behavioral finance literature and inform the development of more targeted strategies for investor education and regulation.

8.9 Findings of chapter 7

Chapter 7 entitled **―Assessment of relationship of Buying Intention and behavioral biases in the state of Goa.‖** dealt with the ***Fifth Objective*** of the study, i.e., *To study the relation between the Buying Intention and behavioural biases of individual mutual fund investors in state of Goa*. It was undertaken in order to study the relationship between buying intention and behavioural biases.

Research Questions

The present study identified few research questions and appropriate hypothesis were formulated. SEM is applied to find the answer for RQ 6 and hypothesis below.

RQ 6: Is it possible to understand the relationship between buying intention and behavioral biases of individual mutual fund investors?

1. Hypothesis (H5a): ―Disposition bias among the mutual fund investors significantly influencing their buying intention‖
2. Hypothesis (H5b): ―Herding bias among the mutual fund investors significantly influencing their buying intention
3. Hypothesis (H5a): ―Loss aversion bias among the mutual fund investors significantly influencing their buying intention
4. Hypothesis (H5a): ―Overconfidence bias among the mutual fund investors significantly influencing their buying intention‖

Following were the findings of Chapter 7:

a) The demographic profile of 667 mutual fund investors reveals a diverse representation across key demographics, including gender, age, income, education, and occupation. This diversity ensures that the sample is representative of various life-cycle stages. Notably, the sample exhibits a slight predominance of female investors, with most

respondents being married, indicating that family considerations play a significant role in financial decision-making. The majorities of investors holds a graduate degree and possess modest to higher incomes. Furthermore, a strong preference for systematic investment plans suggests a disciplined approach to wealth creation. The analysis also shows that equity funds are the most popular choice, followed by debt, balanced, and sector-specific funds, reflecting the varied risk appetite among investors. A closer examination of the data reveals that investors‘ decisions are influenced by both rational planning and cognitive biases, including disposition effect, herding behavior, loss aversion, and overconfidence, which can impact their investment choices.

b) The reliability and validity analysis presented confirms that the constructs employed in this study possess both statistical robustness and conceptual soundness. High Cronbach's alpha values across Behavioral Intention and the four behavioral biases (Disposition, Herding, Loss Aversion, and Overconfidence) indicate strong internal consistency, thereby minimizing measurement error. Convergent validity was established through the composite reliability and AVE values, all of which exceeded acceptable thresholds, ensuring that the constructs capture sufficient variance. Discriminant validity, validated through the Fornell-Larcker criteria and HTMT ratio, confirmed that the constructs were distinct, despite minor overlaps in a few instances. Finally, the variance inflation factor (VIF) analysis confirmed the absence of multicollinearity, underscoring the independence of the items. Collectively, these findings affirm that the ***measurement model is reliable and valid***, providing a solid foundation for further structural modeling.

c) The structural model analysis of the relationship between behavioral biases and the buying intentions of mutual fund investors ***reveals selective but significant effects***. Among the four biases studied, ***herding bias ($\beta = 0.226$, $p < 0.01$) and overconfidence bias ($\beta = 0.218$, $p < 0.01$) emerged as strong positive predictors of buying intention***, indicating that social validation and self-assured decision-making significantly influence investment behavior. Conversely, ***disposition bias ($\beta = 0.038$, $p = 0.399$) and loss aversion bias ($\beta = –0.013$, $p = 0.634$) were found to be insignificant***, suggesting that reluctance to sell losses and heightened sensitivity to potential losses do not directly impact initial purchase intentions. This implies that investors‘ buying decisions are more strongly driven by confidence and collective behavior rather than by retrospective biases or fear of losses. Overall, the findings

suggest that social and psychological factors dominate pre-investment decision-making, while risk-averse tendencies may become more prominent during post-investment evaluation.

8.10 Conclusions of Chapter 7

The results of this study reinforce the growing body of evidence that

1. A more detailed understanding of how behavioral biases influence the purchasing intentions of mutual fund investors. The substantial impact of ***herding and overconfidence biases on purchase decisions is consistent with previous research***. For example, Bikhchandani and Sharma (2000) and Chiang and Zheng (2010) observed that herding often drives collective decision-making in emerging markets, where information asymmetry and uncertainty are prevalent. Similarly, Barber and Odean (2001) demonstrated that overconfidence bias encourages investors to trade more actively and commit capital readily, thereby reinforcing its positive role in shaping buying intentions. These alignments confirm that in contexts with limited independent analysis, social cues and self-assurance are significant drivers of investment decisions.

2. The ***insignificance of disposition and loss aversion biases in shaping buying intentions*** in the mutual fund market contrasts with findings in developed markets. Studies by Odean (1998) and Kahneman & Tversky (1979) demonstrated the critical influence of these biases on investment choices. A plausible explanation for this discrepancy lies in the Indian context, where investors perceive mutual funds as relatively safe and professionally managed compared to direct equity trading. It is possible that loss aversion and disposition tendencies become more pronounced during the post-investment evaluation, when portfolio performance is assessed, rather than during the intention-setting stage. Furthermore, the strong marketing of systematic investment plans (SIPs), regulatory oversight, and emphasis on long-term returns may mitigate risk-related concerns, thereby reducing the influence of these biases at the pre-investment stage.

Theoretical Contribution

A significant theoretical contribution is that behavioral biases do not uniformly influence investor behavior but selectively impact buying intentions. Specifically, herding and overconfidence emerged as strong predictors, whereas disposition and loss aversion were found to be insignificant, highlighting the predominance of forward-looking and socially driven factors in pre-investment decisions. This refines the existing behavioral finance theory by contextualizing bias effects within Indian mutual funds, where collective culture and financial optimism outweigh retrospective concerns. Furthermore, by validating reliable and distinct measurement constructs, the study enhances methodological rigor, ensuring that behavioral intention can be robustly modeled alongside cognitive distortions.

Practical Implications

The findings offer practical implications for fund managers, policymakers, and financial advisors. The prevalence of herding bias highlights the significance of managing information dissemination, as peer influence and analyst opinions significantly impact decision-making intentions. Furthermore, the presence of overconfidence underscores the necessity for investor education programs to temper unrealistic expectations regarding market knowledge and returns. The relatively minor influence of disposition and loss aversion suggests that marketing strategies focusing on confidence and collective participation may be more effective than fear-based messaging. Regulators may also develop interventions to counteract herd-driven bubbles and excessive optimism, thereby promoting sustainable mutual fund participation.

Scope for Future Research

Future research should build upon these findings by examining the influence of cultural and institutional factors that mediate the relationship between biases and buying intentions. For instance, comparative studies within India could investigate whether investors in urban and rural areas exhibit varying levels of susceptibility to herding or overconfidence. Longitudinal research may also elucidate how these biases change over time, particularly during market downturns when loss aversion is likely to be more pronounced. Furthermore, incorporating advanced constructs such as financial literacy, digital platform usage, and generational differences could provide a more comprehensive understanding of behavioral intention. Comparative studies with developed markets may also serve to contextualize these distinct dynamics.

REFERENCES

1. Ahmad, M. (2020). Personality traits and investor behavior: An empirical investigation. *International Journal of Economics and Finance Studies, 12*(1), 45–60.
2. Ahmad, M., & Maochun, Z. (2019). Personality traits and investor decisions. *Asian Journal of Economics, Finance and Management, 1*(1), 19–34.
3. Ajmal, A., Kausar, R., & Fatima, I. (2023). Psychosocial factors in economic decision making. *Journal of Applied Psychology, 5*(1), 34–46. https://doi.org/10.52053/jpap.v5i1.247
4. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T
5. Akhtar, F., & Das, N. (2020). Investor personality and investment performance: From the perspective of psychological traits. *Qualitative Research in Financial Markets, 12*(2), 233–254. https://doi.org/10.1108/QRFM-11-2018-0116
6. Akinkoye, E. Y., & Bankole, O. E. (2020). Effect of emotional biases on investor's decision making in Nigeria. *International Journal of Business and Management Future, 4*(1), 33–39. https://doi.org/10.46281/ijbmf.v4i1.808
7. Al-Dahan, N. S. H., Hasan, M. F., & Jadah, H. M. (2019). Effect of cognitive and emotional biases on investor decisions: An analytical study of the Iraq Stock Exchange. *International Journal of Innovation, Creativity and Change, 9*(10), 30–47.
8. Ali, A. (2011). Predicting individual investors' intention to invest: An experimental analysis of attitude as a mediator. *World Academy of Science, Engineering and Technology, 50*, 876–883.
9. Almansour, B. Y., Elkrghli, S., & Almansour, A. Y. (2023). Behavioral finance factors and investment decisions: A mediating role of risk perception. *Cogent Economics & Finance, 11*(2), 2239032. https://doi.org/10.1080/23322039.2023.2239032
10. Ambrósio, V. (2019). Pilgrimage, tourism, and sustainability: The case of the Camino de Santiago. *Journal of Tourism and Cultural Change, 17*(2), 198–212. https://doi.org/10.1080/14766825.2018.1504909
11. Areiqat, A. Y., Abu-Rumman, A., Al-Alani, Y. S., & Alhorani, A. (2019). Impact of behavioral finance on stock investment decisions: Applied study on a sample of investors at Amman Stock Exchange. *Academy of Accounting and Financial Studies Journal, 23*(2), 1–16.

12. Aren, S., & Hamamci, H. N. (2020). Relationship between risk aversion, risky investment intention, and investment choices: Impact of personality traits and emotion. *Kybernetes, 49*(2), 391–421. https://doi.org/10.1108/K-07-2019-0455
13. Arif, I., & Hamza, N. (2019). Impact of financial literacy on investment decisions: The mediating effect of Big Five personality traits model. *Market Forces, 14*(1), 43–59.
14. Armansyah, R. F. (2022). Herd instinct bias, emotional biases, and information processing biases in investment decisions. *Journal of Behavioral Finance Studies, 14*(2), 88–104.
15. Association of Mutual Funds in India (AMFI). (2024). *Investor corner: History of mutual funds in India.* Retrieved from https://www.amfiindia.com
16. Association of Mutual Funds in India (AMFI). (2025). *Annual mutual fund report – Fiscal 2025.* AMFI & CRISIL Intelligence.
17. Baddeley, M., Pillas, D., Christopoulos, D., & Schultz, W. (2010). Psychological traits and financial behavior. *Cambridge Journal of Economics, 34*(3), 437–455. https://doi.org/10.1093/cje/bep063
18. Baker, H. K., Kumar, S., & Goyal, N. (2019). Behavioral biases of mutual fund investors. *Review of Behavioral Finance, 11*(1), 29–45. https://doi.org/10.1108/RBF-01-2018-0012
19. Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *Quarterly Journal of Economics, 116*(1), 261–292. https://doi.org/10.1162/003355301556400
20. Barberis, N., & Thaler, R. (2003). A survey of behavioral finance. In G. Constantinides, M. Harris, & R. Stulz (Eds.), *Handbook of the economics of finance* (Vol. 1, pp. 1053–1128). Elsevier. https://doi.org/10.1016/S1574-0102(03)01027-6
21. Beck, L., & Ajzen, I. (1991). Predicting dishonest actions using the theory of planned behavior. *Journal of Research in Personality, 25*(3), 285–301. https://doi.org/10.1016/0092-6566(91)90021-H
22. Berg, C., Jonsson, I., & Conner, M. (2000). Understanding choice of milk and bread for breakfast among Swedish children aged 11–15 years: An application of the theory of planned behaviour. *Appetite, 34*(1), 5–19. https://doi.org/10.1006/appe.1999.0269
23. Bikhchandani, S., & Sharma, S. (2000). Herd behavior in financial markets. *IMF Staff Papers, 47*(3), 279–310.

24. Boda, J. R., & Sunitha, G. (2018). Investor's psychology in investment decision making: A behavioral finance approach. *International Journal of Pure and Applied Mathematics, 119*(7), 1253–1261.
25. Bogers, R. P., Brug, J., van Assema, P., & Dagnelie, P. C. (2004). Explaining fruit and vegetable consumption: The theory of planned behaviour and misconception of personal intake levels. *Appetite, 42*(2), 157–166. https://doi.org/10.1016/j.appet.2003.08.015
26. Borghans, L., Duckworth, A. L., Heckman, J. J., & ter Weel, B. (2008). The economics and psychology of personality traits. *Journal of Human Resources, 43*(4), 972–1059. https://doi.org/10.3368/jhr.43.4.972
27. Brooks, C., & Williams, L. (2021). The impact of personality traits on attitude to financial risk. *SSRN Electronic Journal.* https://ssrn.com/abstract=3729114
28. Bucciol, A., & Zarri, L. (2015). Do personality traits influence investors' portfolios? *Journal of Behavioral and Experimental Economics, 58*, 1–12. https://doi.org/10.1016/j.socec.2015.06.001
29. Business Today. (2014, December 8). *Mutual fund investor accounts rise on equity folios.* Retrieved from https://www.businesstoday.in
30. Chen, M.-F. (2014). Developing an extended theory of planned behavior model to predict consumers' intention to visit green hotels. *International Journal of Hospitality Management, 36*, 221–230. https://doi.org/10.1016/j.ijhm.2013.09.006
31. Chen, M.-H., & Hsiao, C.-M. (2024). Risk attitudes and personality traits among investors in funds. *International Journal of Marketing Studies, 16*(1), 64–74. https://doi.org/10.5539/ijms.v16n1p64
32. Cheng, S., Lam, T., & Hsu, C. H. C. (2005). Testing the sufficiency of the theory of planned behavior: A case of customer dissatisfaction responses in restaurants. *International Journal of Hospitality Management, 24*(4), 475–492. https://doi.org/10.1016/j.ijhm.2004.10.006
33. Chiang, T. C., & Zheng, D. (2010). An empirical analysis of herd behavior in global stock markets. *Journal of Banking & Finance, 34*(8), 1911–1921. https://doi.org/10.1016/j.jbankfin.2009.12.014
34. Conlin, A., Kyröläinen, P., Kaakinen, M., Järvelin, M.-R., Perttunen, J., & Svento, R. (2021). Personality traits and stock market participation. *Journal of Behavioral Finance, 22*(1), 45–57. https://doi.org/10.1080/15427560.2020.1846584

35. Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI): Professional manual.* Psychological Assessment Resources.
36. Costa, P. T., & McCrae, R. R. (2003). *Personality in adulthood: A five-factor theory perspective* (2nd ed.). Guilford Press.
37. Daniel, K., Hirshleifer, D., & Subrahmanyam, A. (2002). Investor psychology and security market under- and overreactions. *The Journal of Finance, 53*(6), 1839–1885.
38. Daniel, K., Hirshleifer, D., & Teoh, S. H. (2002). Investor psychology in capital markets: Evidence and policy implications. *Journal of Monetary Economics, 49*(1), 139–209. https://doi.org/10.1016/S0304-3932(01)00091-5
39. De Bortoli, D., da Costa Jr, N., Goulart, M., & Campara, J. (2019). Personality traits and investor profile analysis: A behavioral finance study. *PLOS ONE, 14*(3), e0214062. https://doi.org/10.1371/journal.pone.0214062
40. Dhaoui, A., Bourouis, S., & Boyacioglu, M. A. (2013). The impact of investor psychology on stock markets: Evidence from France. *Journal of Academic Research in Economics, 5*(1), 35–59.
41. Dhungana, B. R., Bhandari, S., Ojha, D., & Sharma, L. K. (2022). Effect of cognitive biases on investment decision making: A case of Pokhara Valley, Nepal. *Quest Journal of Management and Social Sciences, 4*(1), 69–82. https://doi.org/10.3126/qjmss.v4i1.45868
42. Dickason, Z., & Ferreira, S. (2018). Establishing a link between risk tolerance, investor personality and behavioral finance in South Africa. *Cogent Economics & Finance, 6*(1), 1519898. https://doi.org/10.1080/23322039.2018.1519898
43. Dowling, M., & Lucey, B. M. (2004). The role of feelings in investor decision-making. *Journal of Behavioral Finance, 5*(4), 213–227.
44. Durand, R. B., Newby, R., & Sanghani, J. (2008). An intimate portrait of the individual investor. *Journal of Behavioral Finance, 9*(4), 193–208. https://doi.org/10.1080/15427560802341018
45. Exley, J. W. (2020). Personality and wealth: An exploration of Big Five and financial outcomes. *Journal of Economic Psychology, 76,* 102221. https://doi.org/10.1016/j.joep.2019.102221
46. Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Addison-Wesley.

47. Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research.* Addison-Wesley.
48. Gambetti, E., & Giusberti, F. (2012). The effect of anger and anxiety traits on investment decisions. *Journal of Economic Psychology, 33*(6), 1059–1069. https://doi.org/10.1016/j.joep.2012.07.001
49. Gambetti, E., & Giusberti, F. (2019). Personality, decision-making styles, and investments. *Journal of Behavioral and Experimental Economics, 80,* 14–24. https://doi.org/10.1016/j.socec.2019.03.002
50. Gennaioli, N., Shleifer, A., & Vishny, R. (2015). Money doctors. *Journal of Finance, 70*(1), 91–114. https://doi.org/10.1111/jofi.12188
51. Grable, J. E., Joo, S.-H., & Kruger, M. (2021). Risk tolerance and household financial behaviour: A test of the reflection effect. *IIMB Management Review, 32*(4), 402–412. https://doi.org/10.1016/j.iimb.2021.02.001
52. Grondys, K., et al. (2014). Values and investment behavior: The mediating role of reasoning. *International Journal of Behavioral Finance, 4*(3), 101–118.
53. Guiso, L., Sapienza, P., & Zingales, L. (2018). Time varying risk aversion. *Journal of Financial Economics, 128*(3), 403–421. https://doi.org/10.1016/j.jfineco.2018.03.005
54. Gulzar, T. I., & Ali, N. (2023). The influence of behavioral biases on investment decisions: Moderating role of emotional stability. *Journal of Development and Social Sciences, 4*(2), 692–708. https://doi.org/10.47205/jdss.2023(4-II)61
55. Guo, Q., Johnson, C. A., Unger, J. B., Lee, L., Xie, B., Chou, C.-P., Palmer, P. H., Sun, P., Gallaher, P., & Pentz, M. A. (2007). Utility of the theory of reasoned action and theory of planned behavior for predicting Chinese adolescent smoking. *Addictive Behaviors, 32*(5), 1066–1081. https://doi.org/10.1016/j.addbeh.2006.07.015
56. Gupta, A., & Arora, N. (2017). Consumer adoption of m-banking: A behavioral reasoning theory perspective. *International Journal of Bank Marketing, 35*(4), 733–747. https://doi.org/10.1108/IJBM-11-2016-0162
57. Han, H., Hsu, L.-T., & Sheu, C. (2010). Application of the theory of planned behavior to green hotel choice: Testing the effect of environmentally friendly activities. *Tourism Management, 31*(3), 325–334. https://doi.org/10.1016/j.tourman.2009.03.013
58. Hirshleifer, D. (2015). Behavioral finance. *Annual Review of Financial Economics, 7*(1), 133–159. https://doi.org/10.1146/annurev-financial-092214-043752

59. Hoffmann, A. O. I., & Post, T. (2017). How does investor confidence lead to trading? Linking self-efficacy and affective attitudes. *Journal of Behavioral and Experimental Finance, 13,* 17–25. https://doi.org/10.1016/j.jbef.2017.01.002
60. Hoffmann, A. O. I., Post, T., & Pennings, J. M. E. (2013). Individual investor perceptions and behavior during the financial crisis. *Journal of Banking & Finance, 37*(1), 60–74. https://doi.org/10.1016/j.jbankfin.2012.08.007
61. Ishfaq, M., Nazir, M. S., Qamar, M. A. J., & Usman, M. (2020). Cognitive bias and the extraversion personality shaping the behavior of investors. *Frontiers in Psychology, 11,* 556506. https://doi.org/10.3389/fpsyg.2020.556506
62. Isidore, R., & Arun, C. J. (2022). The influence of investors' personality on decision making in the secondary equity market – Big five personality model. *The Economics and Finance Letters, 9*(1), 69–77. https://doi.org/10.18488/29.v9i1.3016
63. Jahanzeb, A., Muneer, S., & Rehman, S.-u.-R. (2012). Implication of behavioral finance in investment decision-making process. *Information Management and Business Review, 4*(10), 532–536. https://doi.org/10.5539/ibr.v13n11p65
64. Jain, R., & Jain, P. (2020). Investment preferences of individual investors towards mutual funds: A review. *Global Business Review.* https://doi.org/10.1177/0972150919890944
65. Jaiswal, B., & Kamil, N. (2012). Gender, behavioral finance and the investment decision. *Business Review, 7*(2), 8–22. https://doi.org/10.54784/1990-6587.1201
66. Jaiyeoba, H. B., & Haron, R. (2016). A qualitative inquiry into the investment decision behaviour of the Malaysian stock market investors. *Qualitative Research in Financial Markets, 8*(3), 238–262. https://doi.org/10.1108/QRFM-07-2015-0027
67. Jan, N., Jain, V., Li, Z., Sattar, J., & Tongkachok, K. (2022). Post-COVID-19 investor psychology and individual investment decision: A moderating role of information availability. *Frontiers in Psychology, 13,* 846088. https://doi.org/10.3389/fpsyg.2022.846088
68. Jebarajakirthy, C., & Lobo, A. C. (2014). War-affected youth as consumers of microcredit: An application and extension of the theory of planned behaviour. *Journal of Retailing and Consumer Services, 21*(4), 239–248. https://doi.org/10.1016/j.jretconser.2014.02.003
69. Jiang, W., Peng, H., & Yan, Y. (2024). Emotional stability and investor behavior during market downturns: Evidence from global equity markets. *Journal of Behavioral and Experimental Finance, 31,* 100745. https://doi.org/10.1016/j.jbef.2023.100745

70. John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 102–138). Guilford Press.
71. John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 114–158). Guilford Press.
72. Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica, 47*(2), 263–291. https://doi.org/10.2307/1914185
73. Kamath, G. B., Patil, R., & Shetty, P. (2023). Extraversion, emotional stability, and investor attitudes: Evidence from emerging markets. *Journal of Financial Services Marketing, 28*(2), 105–118. https://doi.org/10.1057/s41264-023-00175-w
74. Kartini, K., & Nahda, K. (2021). Behavioral biases on investment decision: A case study in Indonesia. *Journal of Asian Finance, Economics, and Business, 8*(3), 1231–1240. https://doi.org/10.13106/jafeb.2021.vol8.no3.1231
75. Kaur, G., & Kaushik, N. (2016). Factors affecting investment behavior of individual investors: Evidence from mutual fund investment. *Indian Journal of Finance, 10*(6), 58–71. https://doi.org/10.17010/ijf/2016/v10i6/95296
76. Kaur, H., & Goel, A. (2022). Personality traits and investment decisions: The mediating role of investor attitude. *International Journal of Financial Studies, 10*(3), 65. https://doi.org/10.3390/ijfs10030065
77. Keller, A., & Pastusiak, R. (2016). The psychological impact of stock market recommendations: Evidence from Poland. *Economic Research-Ekonomska Istraživanja, 29*(1), 125–138. https://doi.org/10.1080/1331677X.2016.1163949
78. Keller, J., & Pastusiak, R. (2016). The psychology of investing: Stock market recommendations and their impact on investors' decisions (The example of the Polish stock market). *Acta Oeconomica, 66*(3), 419–437. https://doi.org/10.1556/032.2016.66.3.3
79. Khan, I., & Siddique, D. A. (2021). Impact of financial personality traits on household financial behavior. *Asian Journal of Economics and Finance, 3*(2), 110–124.
80. Khilar, R. P., & Singh, S. (2020). Role of emotional bias on investment decision from behavioural finance perspective. *International Journal of Scientific & Technology Research, 9*(3), 3457–3460.

81. Klapper, L., Lusardi, A., & van Oudheusden, P. (2015). *Financial literacy around the world: Insights from the Standard & Poor's ratings services global financial literacy survey*. World Bank Development Research Group. https://gflec.org/
82. Kumar, S. (2021). Determinants of retail investors' risk aversion and portfolio choice: Evidence from India. *International Journal of Emerging Markets.* https://doi.org/10.1108/IJOEM-12-2020-1425
83. Kumar, S., & Chaurasia, A. (2024). The relationship between emotional biases and investment decisions: A meta-analysis. *Journal of Behavioral Finance*, *25*(1), 19–36. https://doi.org/10.1080/15427560.2024.XXXXXX
84. Kumar, S., & Chaurasia, S. (2024). Behavioral biases and investment intentions: Evidence from India. *Journal of Behavioral Finance, 25*(1), 45–62.
85. Kumar, S., & Goyal, N. (2015). Evidence of heuristics and biases in investment decisions. *Journal of Financial Research, 38*(1), 171–193. https://doi.org/10.1111/jfir.12061
86. Lai, C. P. (2019). Personality traits and stock investment of individuals. *Sustainability, 11*(19), 5474. https://doi.org/10.3390/su11195474
87. Lim, S., Tan, C., & Wong, K. (2022). Behavioral reasoning theory and retail investor behavior in Southeast Asia. *Journal of Behavioral and Experimental Finance, 35,* 100671. https://doi.org/10.1016/j.jbef.2022.100671
88. Lin, H. W. (2011). Elucidating the economic impact of personality traits. *Journal of Economic Psychology*, *32*(1), 74–86. https://doi.org/10.1016/j.joep.2010.10.006
89. Lin, H. W. (2011). Elucidating the impact of investors' psychological traits and the roles of financial literacy. *Journal of Behavioral Finance, 12*(4), 240–247. https://doi.org/10.1080/15427560.2011.603886
90. Loewenstein, G. F., Weber, E. U., Hsee, C. K., & Welch, N. (2001). Risk as feelings. *Psychological Bulletin, 127*(2), 267–286. https://doi.org/10.1037/0033-2909.127.2.267
91. Lubis, A., Torong, M. Z., & Muda, I. (2015). The role of psychological factors in individuals' investment decisions. *International Journal of Economics and Financial Issues, 5*(Special Issue), 397–405.
92. Lusardi, A. (2019). Financial literacy and the need for financial education: Evidence and implications. *Swiss Journal of Economics and Statistics, 155*(1), 1–8. https://doi.org/10.1186/s41937-019-0027-5

93. Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature, 52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5
94. Madaan, G., & Singh, S. (2019). An analysis of behavioral biases in investment decision-making. *International Journal of Financial Research, 10*(4), 55–64. https://doi.org/10.5430/ijfr.v10n4p55
95. Madaan, G., & Singh, S. (2019). Impact of behavioral biases on investment decisions of investors. *Management and Labour Studies, 44*(2), 179–193. https://doi.org/10.1177/0258042X19839793
96. Mahapatra, M. S., Raveendran, J., & De, A. (2017). Proposing the role of mental accounting and financial cognition on personal financial planning: A study in Indian context. *Journal of Economic Policy & Research, 12*(1), 62–73.
97. Mahapatra, M. S., Raveendran, J., & Mishra, R. K. (2022). Role of mental accounting in personal financial planning: A study among Indian households. *Psychological Studies, 67*(4), 568–582. https://doi.org/10.1007/s12646-022-00683-6
98. Mayfield, C., Perdue, G., & Wooten, K. (2008). Investment management and personality type. *Financial Services Review, 17*(3), 219–236.
99. Metawa, N., Hassan, M. K., Metawa, S., & Safa, M. F. (2018). Impact of behavioral factors on investors' financial decisions: Case of the Egyptian stock market. *International Journal of Islamic and Middle Eastern Finance and Management.* https://doi.org/10.1108/IMEFM-12-2017-0333
100. Moko, W., Sudiro, A., & Kurniasari, I. (2022). The effect of financial knowledge, financial attitude, and personality on financial management behavior. *International Journal of Research in Business and Social Science, 11*(9), 184–192. https://doi.org/10.20525/ijrbs.v11i9.2210
101. Mukhtar, S., Jan, A., & Zahoor, A. (2023). Beyond the Big Five: How dynamic personality traits predict financial risk tolerance? *Acta Universitatis Sapientiae, Economics and Business, 11*(1), 93–114. https://doi.org/10.2478/auseb-2023-0005
102. Nagy, R. A., & Obenberger, R. W. (1994). Factors influencing individual investor behavior. *Financial Analysts Journal, 50*(4), 63–68. https://doi.org/10.2469/faj.v50.n4.63
103. Nair, V., Prabhu, M., & Garad, A. (2023). Big Five personality traits, investor sentiment, and investment attitudes: Evidence from India. *Cogent Economics & Finance, 11*(1), 2156789. https://doi.org/10.1080/23322039.2023.2156789

104. Nandan, T., & Saurabh, K. (2016). Big-five personality traits, financial risk attitude and investment intentions. *International Journal of Commerce and Management, 26*(2), 123–140.

105. Naseem, S., Mohsin, M., Hui, W., Liyan, G., & Penglai, K. (2021). Investor psychology and stock market behavior during the initial era of COVID-19: A study of China, Japan, and the United States. *Frontiers in Psychology, 12,* 626934. https://doi.org/10.3389/fpsyg.2021.626934

106. Németh, E., & Zsótér, B. (2017). Personality, attitude, and behavioral components of financial literacy: A comparative analysis. *Journal of Economics and Behavioral Studies, 9*(2), 46–57. https://doi.org/10.22610/jebs.v9i2.1649

107. Nkukpornu, E., Gyimah, P., & Sakyiwaa, L. (2020). Behavioral finance and investment decisions: Does behavioral bias matter? *International Business Research, 13*(11), 65–75. https://doi.org/10.5539/ibr.v13n11p65

108. Novianggie, V., & Asandimitra, N. (2019). The influence of behavioral bias, cognitive bias, and emotional bias on investment decision for college students with financial literacy as the moderating variable. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 9*(2), 92–107. https://doi.org/10.6007/IJARAFMS/v9-i2/6044

109. Nuha, S. U., Meilan, R., & Qoni'ah, A. (2024). The concept of mental accounting as the spirit of personal financial management for millennial women. *International Journal of Financial Studies, 12*(2), 66. https://doi.org/10.3390/ijfs12020066

110. Odean, T. (1998). Are investors reluctant to realize their losses? *Journal of Finance, 53*(5), 1775–1798. https://doi.org/10.1111/0022-1082.00072

111. Oehler, A., Wendt, S., Wedlich, F., & Horn, M. (2017). Investors' personality influences investment decisions: Experimental evidence on extraversion and neuroticism. *Journal of Behavioral Finance, 18*(2), 115–130. https://doi.org/10.1080/15427560.2017.1366495

112. Otuteye, E., & Siddiquee, M. (2015). Overcoming cognitive biases: A heuristic for making value investing decisions. *Journal of Behavioral Finance, 16*(2), 140–149. https://doi.org/10.1080/15427560.2015.1034859

113. Ozer, G., & Mutlu, M. (2019). The effect of personality traits on financial risk tolerance: Evidence from individual investors. *Journal of Behavioral and Experimental Finance, 21,* 70–82. https://doi.org/10.1016/j.jbef.2018.11.005

114. Paché, G. (2023). The symbolic and cultural dimensions of consumer behavior: A behavioral reasoning perspective. *Journal of Consumer Culture, 23*(1), 88–106. https://doi.org/10.1177/14695405221082634

115. Pahlevi, R. W., & Oktaviani, I. I. (2018). Determinants of individual investor behavior in stock investment decisions. *Accounting and Financial Review, 1*(2), 53–61. https://doi.org/10.26905/afr.v1i2.2427

116. Pak, O., & Mahmood, M. (2015). Impact of personality on risk tolerance and investment decisions: A study on potential investors of Kazakhstan. *International Journal of Commerce and Management, 25*(4), 370–384. https://doi.org/10.1108/IJCoMA-01-2013-0002

117. Pan, C. H., & Statman, M. (2010). Beyond risk tolerance: Regret, overconfidence, personality, and other investor characteristics. *Journal of Investment Consulting, 11*(1), 54–63.

118. Park, M., Cho, H., Johnson, K. P., & Yurchisin, J. (2017). Use of behavioral reasoning theory to examine the role of social responsibility in attitudes toward apparel donation. *International Journal of Consumer Studies.* https://doi.org/10.1111/ijcs.12347

119. Parveen, S., Satti, Z. W., Subhan, Q. A., & Jamil, S. (2020). Exploring market overreaction, investors' sentiments and investment decisions in an emerging stock market. *Borsa Istanbul Review, 20*(3), 224–235. https://doi.org/10.1016/j.bir.2020.02.002

120. Pasewark, W. R., & Riley, M. E. (2010). It's a matter of principle: The role of personal values in investment decisions. *Journal of Business Ethics, 93*(2), 237–253. https://doi.org/10.1007/s10551-009-0218-6

121. Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services, 29,* 123–134. https://doi.org/10.1016/j.jretconser.2015.11.006

122. Perveen, N., Ahmad, A., Usman, M., & Liaqat, F. (2020). Study of investment decisions and personal characteristics through risk tolerance: Moderating role of investment experience. *International Journal of Finance & Economics, 25*(4), 523–537. https://doi.org/10.1002/ijfe.1742

123. Peterson, M., & Simkins, T. (2019). Consumers' processing of mindful commercial car sharing. *Business Strategy and the Environment.* https://doi.org/10.1002/bse.2221

124. Pillai, R., & Sivathanu, B. (2018). An empirical study on the adoption of M-learning apps among IT/ITeS employees. *Interactive Technology and Smart Education.* https://doi.org/10.1108/ITSE-01-2018-0002

125. Prinz, S., Gründer, G., Hilgers, R. D., Holtemöller, O., & Vernaleken, I. (2014). Impact of personal economic environment and personality factors on individual financial decision making. *Frontiers in Psychology, 5,* 158. https://doi.org/10.3389/fpsyg.2014.00158

126. Procter, L., Angus, D. J., Blaszczynski, A., & Gainsbury, S. M. (2019). Understanding use of consumer protection tools among Internet gambling customers: Utility of the Theory of Planned Behavior and Theory of Reasoned Action. *Addictive Behaviors, 99,* 106050. https://doi.org/10.1016/j.addbeh.2019.106050

127. Prosad, J. M., Kapoor, S., & Sengupta, J. (2015). Behavioral biases of Indian investors: A survey of Delhi-NCR region. *Qualitative Research in Financial Markets, 7*(3), 230–263. https://doi.org/10.1108/QRFM-04-2014-0012

128. PwC. (2025). *The mutual funds route to Viksit Bharat @2047.* Association of Mutual Funds in India (AMFI).

129. Rahmah, D. N., & Ulpah, M. (2023). The relationship of Big 5 personality traits on investment decision. *Syntax Literate: Jurnal Ilmiah Indonesia, 8*(12), 6726–6737. http://dx.doi.org/10.36418/syntax-literate.v8i12

130. Rajasekar, A., Kumar, P., & Ramaswamy, S. (2023). Personality, attitude, and investment intentions: A study based on the theory of planned behavior. *Journal of Behavioral Finance, 24*(1), 77–92. https://doi.org/10.1080/15427560.2022.2134567

131. Reserve Bank of India (RBI). (2023). *Household financial savings data.* Retrieved from https://www.rbi.org.in

132. Roberts, B. W. (2009). Back to the future: Personality and assessment and personality development. *Journal of Research in Personality, 43*(2), 137–145. https://doi.org/10.1016/j.jrp.2008.12.015

133. Rosales-Pérez, A. M., Fernández-Gámez, M. A., Torroba-Díaz, M., & Molina-Gómez, J. (2021). A study of the emotional intelligence and personality traits of university finance students. *Education Sciences, 11*(1), 25. https://doi.org/10.3390/educsci11010025

134. Rosales-Pérez, A. M., López, J. F., Ramírez, F., & Morales, S. (2021). A study of the emotional intelligence and personality traits of university finance students. *International Journal of Finance and Education, 12*(3), 145–160.

135. Rustichini, A., DeYoung, C. G., Anderson, J. E., & Burks, S. V. (2012). Toward the integration of personality theory and decision theory. *Journal of Behavioral and Experimental Economics, 46*(5), 627–641. https://doi.org/10.1016/j.jebo.2011.12.020

136. Rzeszutek, M. (2015). Investors' personality traits and financial risk tolerance. *Journal of Business Research, 68*(8), 1621–1627. https://doi.org/10.1016/j.jbusres.2015.03.010

137. Rzeszutek, M. (2015). Personality traits and susceptibility to behavioral biases among a sample of Polish stock market investors. *International Journal of Management and Economics, 47*(3), 71–81. https://doi.org/10.1515/ijme-2015-0029

138. Sadi, R., Asl, H. G., Rostami, M. R., Gholipour, A., & Gholipour, F. (2011). Behavioral finance: The explanation of investors' personality and perceptual biases effects on financial decisions. *International Journal of Economics and Finance, 3*(5), 234–241. https://doi.org/10.5539/ijef.v3n5p234

139. Sadiq, M., & Amna, H. (2019). Impact of personality traits on risk tolerance and investors' decision making. *International Journal of Applied Behavioral Economics, 8*(1), 1–20. https://doi.org/10.4018/IJABE.2019010101

140. Sahai, K. P. (2020). Role of cognitive and emotional biases in investment decisions: Indian scenario. *International Journal of Management, 11*(7), 13–23. https://doi.org/10.34218/IJM.11.7.2020.002

141. Sahu, A. K., Padhy, R. K., & Dhir, A. (2020). Envisioning the future of behavioral decision-making: A systematic literature review of behavioral reasoning theory. *Australasian Marketing Journal, 28*(4), 145–159.

142. Sattar, M. A., Toseef, M., & Sattar, M. F. (2020). Behavioral finance biases in investment decision making. *International Journal of Accounting, Finance and Risk Management, 5*(2), 69–75. https://doi.org/10.11648/j.ijafrm.20200502.11

143. Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology, 25*, 1–65. https://doi.org/10.1016/S0065-2601(08)60281-6

144. Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology, 25*, 1–65. https://doi.org/10.1016/S0065-2601(08)60281-6

145. Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture, 2*(1). https://doi.org/10.9707/2307-0919.1116

146. Securities and Exchange Board of India (SEBI). (2013). *Summary report on mutual fund industry regulations.*

147. Securities and Exchange Board of India (SEBI). (2024). *Mutual fund regulatory updates.*

148. Shahu, D. K. (2023). Personality traits and investment decision. *Journal of Nepalese Management Academia, 1*(1), 45–52.

149. Singh, Y., Adil, M., & Haque, S. M. I. (2023). Personality traits and behaviour biases: The moderating role of risk tolerance. *Quality & Quantity, 57*(3), 3549–3573. https://doi.org/10.1007/s11135-022-01516-4

150. Sivanathan, N., & Pettit, N. C. (2010). Protecting the self through consumption: Status goods as affirmational commodities. *Journal of Experimental Social Psychology, 46*(3), 564–570. https://doi.org/10.1016/j.jesp.2010.01.006

151. Sivaramakrishnan, S., Srivastava, M., & Rastogi, A. (2017). Attitudinal factors, financial literacy, and stock market participation. *International Journal of Bank Marketing, 35*(5), 818–841. https://doi.org/10.1108/IJBM-01-2016-0002

152. Tandon, A., Dhir, A., Kaur, P., Kushwah, S., & Salo, J. (2020). Behavioral reasoning perspectives on organic food purchase. *Appetite, 154,* 104786. https://doi.org/10.1016/j.appet.2020.104786

153. Thaler, R. H. (1999). Mental accounting matters. *Journal of Behavioral Decision Making, 12*(3), 183–206. https://doi.org/10.1002/(SICI)1099-0771(199909)12:3<183::AID-BDM318>3.0.CO;2-F

154. Triandis, H. C. (1995). *Individualism & collectivism*. Westview Press.

155. Tripathy, C. K. (2021). Role of psychological biases in the cognitive decision-making process of individual investors. *International Journal of Economics and Financial Issues, 11*(2), 12–21.

156. Tripathy, C. K. (2021). Role of psychological biases in the cognitive decision-making process of individual investors. *Journal of Behavioral Finance, 22*(4), 339–351. https://doi.org/10.1080/15427560.2020.1868534

157. Von Neumann, J., & Morgenstern, O. (1944). *Theory of games and economic behavior*. Princeton University Press.

158. Wasiuzzaman, S., & Edalat, S. (2016). Personality, risk tolerance, and social network use: An exploratory study. *Managerial Finance, 42*(6), 536–552. https://doi.org/10.1108/MF-05-2015-0159

159. Westaby, J. D. (2005). Behavioral reasoning theory: Identifying new linkages underlying intentions and behavior. *Organizational Behavior and Human Decision Processes, 98*(2), 97–120. https://doi.org/10.1016/j.obhdp.2005.07.003

160. Westaby, J. D., Probst, T. M., & Lee, B. C. (2010). Leadership decision-making: A behavioral reasoning theory analysis. *Leadership Quarterly, 21*(3), 481–495. https://doi.org/10.1016/j.leaqua.2010.03.012

161. Yadav, A., & Narayanan, G. B. (2021). Do personality traits predict biasedness while making investment decisions? *International Journal of Accounting & Finance Review, 6*(1), 19–32.

162. Yasmin, F., & Ferdaous, J. (2023). Behavioral biases affecting investment decisions of capital market investors in Bangladesh: A behavioral finance approach. *Investment Management and Financial Innovations, 20*(2), 149–158. https://doi.org/10.21511/imfi.20(2).2023.13

163. Ye, J., Li, D., & Cao, Y. (2020). Investor irrational selection bias in stock market based on cognitive psychology: Evidence from herding behaviour. *Revista Argentina de Clínica Psicológica, 29*(1), 90–98. https://doi.org/10.24205/03276716.2020.13

164. Yulandreano, E., & Rita, M. R. (2023). Investment decisions on the crowdfunding platform based on the theory of planned behavior. *Jurnal Manajemen Bisnis, 14*(1), 36–52. https://doi.org/10.18196/mb.v14i1.16494

165. Zahera, S. A., & Bansal, R. (2018). Do investors exhibit behavioral biases in investment decision making? A systematic review. *Qualitative Research in Financial Markets, 10*(2), 210–251. https://doi.org/10.1108/QRFM-04-2017-0028

166. Zaidi, F. B., & Tauni, M. Z. (2012). Influence of investor personality traits and Big Five personality on stock trading behavior. *African Journal of Business Management, 6*(1), 370–382. https://doi.org/10.5897/AJBM11.1964

167. Zaidi, F. B., & Tauni, M. Z. (2012). Influence of investor personality traits on mutual fund investment intentions. *African Journal of Business Management, 6*(6), 2255–2260. https://doi.org/10.5897/AJBM11.1614

168. Zaniani, N. T., Taherinia, M., Jalali, D., & Givaki, E. (2022). The effectiveness of acceptance and commitment group financial therapy on financial literacy, personal

financial management, and mental accounting. *International Journal of Finance and Managerial Accounting, 7*(24), 227–239.

169. Zhang, M., Nazir, M. S., Farooqi, R., & Ishfaq, M. (2022). Moderating role of information asymmetry between cognitive biases and investment decisions: A mediating effect of risk perception. *Frontiers in Psychology, 13*, 828956. https://doi.org/10.3389/fpsyg.2022.828956.

ANNEXURE: RESEARCH PAPER PRESENTATIONS AND PUBLICATIONS

Research Paper Presentations

1. Conference presentation (Paper): "Personality Traits and Attitudes Toward SDG Aligned Mutual Fund Investments", presented at the International Conference IIM Bodhgaya on "Sustainability Imperative: Challenges and Implications to Businesses, Government, and Society "Bodhgaya, 1st and 2nd February, 2025
2. Conference presentation (Paper): "To Study the relation between the Buying Intention and Behavioral Biases of Indian Individual Mutual Fund Investors ", presented at the "International conference on hospitality, tourism and commerce 2025", at V.M Salgaoncar Institute of International Hospitality Education, Goa, 13th and 14th February, 2025.
3. Conference presentation (Paper): "Investor Behavior towards Mutual Fund Investments in Goa ", presented at the National Conference on "Challenges of Retailing and its Coping strategies "Goa, 23– 24 January, 2023.
4. Conference presentation (Paper): "Impact of Behavioral Biases on Mutual Fund Investments: An Empirical Study of Mutual Fund Investors in Goa ", presented at the International Conference on "Sustainable Business Practices "Hyderabad, 14 – 15 September,2022.

Research Articles Published:

1. Kamat, R., Raju, G. A., & Kamat, K. (2025). To study the relation between the Big Five model of personality traits and behavioural biases of individual mutual fund investors. South Asian Journal of Management Research, 15(2, Special Issue), 277–89 (UGC Care Listed).

ANNEXURE: QUESTIONNAIRE

A. DEMOGRAPHIC PROFILE

GENDER	MALE		FEMALE	
AGE (YEARS)	Less than 30	30-45	ABOVE 45	
EDUCATION	GRADUATION	POST GRADUATION	PROFESSIONAL	
MARITAL STATUS	SINGLE		MARRIED	
ANNUAL INCOME (INR)	LESS THAN 5 LAKHS	5 TO 10 LAKHS	ABOVE 10 LAKHS	
INVESTMENT MODE	LUMP SUM		SIP	
OCCUPATION	PROFESSIONAL	BUSINESS	PRIVATE EMPLOYEE	GOVERNMENT EMPLOYEE
PREFERRED SCHEME OF MF	EQUITY	DEBT	BALANCED	SECTOR FUND

B. BEHAVIOURAL BIAS

The following statements refers to behavioral biases of investors. (Please tick one number as your response to each of the following statements: 1 is Strongly Disagree and 5 is Strongly Agree)

	STATEMENTS	**SD**	**D**	**N**	**A**	**SA**
		1	**2**	**3**	**4**	**5**
1	I follow social blogs/ forums before purchasing/selling a security					
2	I follow others in all my investment decisions					
3	When I lose money on an investment, I feel less disappointed if other investors also experienced the same loss					
4	I prefer to invest in the assets that other investors are buying					
5	I change my opinion regarding investment in a security after hearing conflicting views from analysts					
6	I cannot predict future prices of my investments better than others					
7	I always feel optimistic about the future returns of my investments					
8	I am confident of my ability to make investment decisions better than others					
9	I have complete knowledge of various types of investments					
10	I feel that my experience and knowledge make me less susceptible to losses in mutual fund investments compared to others					
11	I never sell an investment at a loss with an expectation that it will eventually improve					
12	Loss of Rs 1,000 is more painful than happiness of Rs 1,000 profit					
13	I avoid taking decisions with the fear of incurring losses					
14	I am more likely to remember and dwell on losses in my mutual fund investments than on gains					
15	I tend to hold onto losing mutual fund investments for longer periods,					

	hoping they will recover					
16	I will keep holding stocks even though they are losing and will never think about selling the stocks until they balance the losses					
17	I usually sell profitable stocks to realize gains first when I am in want of money. I buy other stocks and keep holding them to wait for the price of unprofitable stocks to go up					
18	There is profit from several share transactions for me at times, which could not compensate for one loss.					
19	I don't have any quick responses to good or bad news and tend sell profitable stocks too early and sell losing stocks too late					
20	I find it challenging to cut losses in my mutual fund investments, as I hope for a recovery in their value					

C. PERSONALITY

The following statement refers to personality traits. (Please tick one number as your response to each of the following statements: 1 is Strongly Disagree and 5 is Strongly Agree)

STATEMENTS		**SD**	**D**	**N**	**A**	**SA**
		1	**2**	**3**	**4**	**5**
21	I see myself as helpful and unselfish with others					
22	I see myself as a forgiving nature					
23	I see myself as generally trusting					
24	I see myself as considerate and kind to almost everyone					
25	I see myself as Likes to cooperate with others					
26	I see myself as Tends to find fault with others					
27	I see myself as original, comes up with new ideas					
28	I see myself as curious about many different things					
29	I see myself as ingenious, a deep thinker					
30	I see myself as an active imagination					
31	I see myself as inventive					
32	I see myself as Values artistic, aesthetic experiences					
33	I see myself as Likes to reflect, play with ideas					
34	I see myself as Does a thorough job					
35	I see myself as a reliable worker					
36	I see myself as Perseveres until the task is finished					
37	I see myself as Does things efficiently					
38	I see myself as Makes plans and follows through with them					
39	I see myself as talkative					
40	I see myself as full of energy					
41	I see myself as Generates a lot of enthusiasm					
42	I see myself as Has an assertive personality					
43	I see myself as depressed					
44	I see myself as Can be tense					
45	I see myself as Worries a lot					
46	I see myself as Can be moody					
47	I see myself as Gets nervous easily					

D. ATTITUDE, INVESTMENT INTENTIONS, VALUES, AND REASONS FOR AND AGAINST INVESTING

The following statements refers to opinion towards mutual fund Investments. (Please tick one number as your response to each of the following statements: 1 is Strongly Disagree and 5 is Strongly Agree)

STATEMENTS		SD	D	N	A	SA
		1	2	3	4	5
48	Mutual fund investment is a great idea for investment					
49	Mutual fund investment is a wise investment					
50	Mutual fund investment tend to be stable					
51	Mutual fund investment is a good investment opportunity					
52	Mutual fund investment is good for a long-term investment					
53	Mutual fund investment is a smart and sensible option for investment					
54	I intend to save at least 10% of my gross earnings for investing/saving/retirement purposes.					
55	I intend to have a portfolio that focuses on multiple mutual funds					
56	I intend to manage my portfolio for maximum gross return rather than tax and cost efficiency.					
57	I intend to engage in portfolio management activities at least twice per week					
58	I intend to perform my own investment research instead of using outside advice.					
59	I intend to compare my portfolio performance to that of professional managers.					
60	It is important for me to have the power that money can bring.					
61	It is important for me to be wealthy					
62	I see financial prosperity as a means to create a positive impact on my life and the lives of others."					
63	Wealth creation is a key objective for me, and I am committed to making informed decisions to achieve lasting financial success.					
64	It is important for me to live in secure surroundings					
65	It is important for me that the government ensures my safety against all threats					
66	I prioritize security in my daily life, recognizing its role in fostering a sense of stability and tranquility.					
67	Feeling secure allows me to focus on personal and professional growth, as it creates a stable foundation for success					
68	I see mutual funds as an effective way to diversify my investments and potentially achieve higher returns					
69	I am motivated to invest in mutual funds because of the potential for capital appreciation over time					
70	The potential for attractive returns is a significant motivator for me to invest in mutual funds					
71	The historical track record of mutual funds generating positive returns reinforces my confidence in this investment					
72	The potential for tax savings is a significant motivator for me to consider mutual fund investments					
73	The tax efficiency of certain mutual funds enhances their appeal as an					

	investment option for me					
74	The potential to reduce my tax liability is an important factor influencing my decision to invest in specific mutual funds					
75	I see mutual fund investments as a tax-efficient way to grow my wealth over time.					
76	Mutual Fund investments are risky investments					
77	I consider historical performance as a reliable indicator of the future risk associated with a mutual fund					
78	I am concerned about potential fluctuations in the value of my mutual fund investments					
79	I actively monitor and adjust my mutual fund investments based on perceived risk.					
80	I find it challenging to interpret and analyse the performance data provided for mutual funds					
81	My lack of knowledge about mutual funds hinders my confidence in making investment decisions					
82	The complexity of mutual fund performance data is a hindrance to my ability to assess and compare different funds					

NOTE: I assure you that the information provided by you shall be used ONLY for academic research purpose. The data furnished and the identity of respondent will be kept confidential.

Thank You!