



From Bias to Balance

The emergence of Behavioral Economics in Indian Financial Literacy Initiatives.



By
Rujula Joshi
Mentor: Dr. Vikram Bansal
Submitted to
**National Centre
for Good Governance**



National Centre for Good Governance (NCGG)
Department of Administrative Reforms and Public
Grievances, Ministry of Personnel, Public Grievances and
Pensions, Government of India

CERTIFICATE

This is to certify that Ms. Rujula Joshi, a student of St. Xavier's College, Mumbai has satisfactorily concluded the research report titled "**From bias to balance: The Emergence of Behavioral Economics in Indian Financial Literacy Initiatives**" as part of the internship program at the National Centre for Good Governance (NCGG) under my mentorship.

I, Dr. Vikram Bansal hereby validate the successful completion of the internship report within the internship program at the National Centre for Good Governance (NCGG). The report submitted by Ms. Rujula Joshi is an authentic work carried out by him/her under my supervision and guidance. I have reviewed and assessed the intern's performance throughout the internship period.

[Signature of Mentor] [Date]

Prof. Dr Vikram Bansal

**Assistant Professor, Atal Bihari Vajpayee School of Management and
Entrepreneurship, Jawaharlal Nehru University, New Delhi.**

डॉ. विक्रम बंसल
Dr. Vikram Bansal

असिस्टेंट प्रोफेसर / Assistant Professor

अटल बिहारी वाजपेयी प्रबंधन एवं उद्यमिता संस्थान
Atal Bihari Vajpayee School of Management
and Entrepreneurship

जवाहरलाल नेहरू विश्वविद्यालय
Jawaharlal Nehru University
नई दिल्ली / New Delhi-110067



[Handwritten Signature] 3/7/24

Acknowledgment

I would like to express my sincere thanks to Shri V. Srinivas (Director General of the National Centre for Good Governance), and the entire team at NCGG for granting me the opportunity to undertake this research. I would also like to express my special thanks to our program head, Dr. Gazala Hasan (Assistant Professor at National Centre for Good Governance), for providing me with the invaluable opportunity to contribute to this project and for her continuous support in ensuring all necessary resources and facilities were available. I would like to acknowledge and give my warmest thanks to my mentor, Dr. Vikram Bansal (Assistant Professor at Jawaharlal Nehru University), who made this work possible.

I appreciate the help and guidance provided by Ishmeet Singh Sachdeva, Kumarsinh Ajitsinh Dabhi, Megha Tomar, Muskaan Manvar, and Rajat Bhatnagar throughout the project. Lastly, I owe a great deal of gratitude to my friends and family. Their unwavering belief in me has been the driving force behind my success and has kept my hopes high.

Undertaking

I submit that the edifice of this research report titled “From bias to balance: the emergence of Behavioural Economics in Indian Financial Literacy Initiatives” is built on a large number of references based on critical analysis of experts, special reports in journals, articles, and research papers of journals and magazines, internet, newspapers, conceptual anchoring attributable to standard works including books and the vast treasure of secondary information. They have been indexed at the end of this research report.

I further submit that the conceptual underpinnings, hypotheses, interpretations, and analysis leading to significant findings are mine in the primary research process. At the same time, I accept the limitations and inadequacies, if any. I certify that I have not copied any material without citation from published sources. I also certify that I have checked the plagiarism of this thesis, which is under the prescribed limit defined by the UGC, i.e., University Grants Commission (UGC), Government of India.

I certify and declare that I have not been awarded or conferred any employment of any kind by National Centre for Good Governance (NCGG) for the work presented in this research report.



Author's Name - Rujula Joshi

Mentor's Name - Dr. Vikram Bansal

Date - 3rd July, 2024

Place - Delhi, India

Table of Contents

Sr. No	Title	Page
1.	Abstract	10
2.	Introduction <ul style="list-style-type: none">- Objectives- Research gap	12
3.	Literature Review <ul style="list-style-type: none">- Economic Perspectives on Financial Education- Key Stakeholders in Indian Financial Education Initiatives- Psychological Factors in Decision-Making	15
4.	Research Methodology <ul style="list-style-type: none">- Data Collection (Survey, Interview)	29
5.	Findings <ul style="list-style-type: none">- Visual Representation- Descriptive statistics- Theoretical understanding- Thematic analysis	32
6.	Recommendations <ul style="list-style-type: none">- Reactive- Proactive	46
7.	Conclusion	48
8.	Way Forward	49
9.	Plagiarism Report	51
9.	References	52

10.	Bibliography	55
11.	Annexure	56

List of figures

Figure. No	Title	Pg.No
Figure. 1	Financial literacy around the global	16
Figure. 2	Criteria for measuring Financial literacy	19
Figure. 3	Financial Literacy in India - Heat map	20
Figure. 4	Financial Literacy in India - Graph	21
Figure. 5	Age	32
Figure. 6	Gender	32
Figure. 7	Occupation	33
Figure. 8	Education	33
Figure. 9	Income Levels	34
Figure. 10	Location	34
Figure. 11	Are you aware of any government policies or initiatives aimed at promoting financial education in India?	35
Figure. 12	Are you aware of the concept of behavioral biases in decision-making	35
Figure. 13	Do you think behavioral biases can hinder efforts to improve financial literacy?	36
Figure. 14	Before you buy something, do you think about where your money is coming from? Like, is it from your job, your savings, or maybe a gift?	36
Figure. 15	Have you ever set aside some money for a specific thing, like saving up for a vacation or buying a new gadget?	37

Figure. 16	Have you ever felt pressured by friends or others when making a money decision?	37
Figure. 17	How often do your feelings affect your money choices? (excitement, anger, fear, or restlessness)	38
Figure. 18	Can you think of a time when seeing a product advertised as "discounted from ₹1000 to ₹500" made you feel like you were getting a great deal and even though you didn't need it, the fact that it was half off made you think it was a steal.	38
Figure. 19	Do you feel like the first price mentioned in a bargain sets the tone for how much you're willing to spend? Perhaps when you are at a market, and the vendor's starting price seemed so high that even after bargaining, you ended up spending more than you intended.	39
Figure. 20	How often do you find yourself making purchasing decisions based on recommendations from friends or family?	39
Figure. 21	Key Criteria's for Financial Well-Being	50

List of Tables

Table. No	Title	Pg.No
Table. 1	Key Stakeholders relevant to financial education	22
Table. 2	Big Five Inventory and financial behavior	26
Table. 3	Descriptive Statistics	40

List of abbreviations

NCFE	National Centre for Financial Education
RBI	Reserve Bank of India
NSFE	National Strategy for Financial Education
FEPA	Financial Education Programme for Adults
FACT	Financial Awareness and Consumer Training
PFRDA	Pension Fund regulatory and development authority
SEBI	Securities and Exchange Board of India
IRDAI	Insurance Regulatory and Development Authority of India
OECD	Organization for Economic Co-operation and Development
DCCA	Danish Commerce and Companies Agency
BC-BIG	British Columbia Behavioural Insights Group
PRiA	Personnel Research in Action
AFM	Authority for the Financial Markets
SFD	Special Focused Districts
FCA	Financial Conduct Authority
TPB	Theory of Planned Behavior
BFI	Big Five Inventory
BIT	Behavioural Insights Team
FERP	Financial Education Resource Persons FERP
PMJDY	Pradhan Mantri Jan Dhan Yojana PMJDY

Abstract

This study investigates the integration of behavioral economics principles into financial education policies aimed at enhancing financial literacy among citizens of Delhi, India. Despite efforts to promote financial literacy, gaps remain in addressing behavioral biases that influence financial decision-making. Behavioral economics provides insights into how biases impact economic choices, yet current educational frameworks often overlook these psychological factors.

Objectives

1. To identify areas for improving the design and implementation of financial education policies in Delhi.
2. To evaluate the role of behavioral biases in shaping financial decision-making among Delhi's citizens.

Methodology

The study employed survey to assess awareness of behavioral biases among respondents, and interviews were conducted to thoroughly explore the complexities of policymaking.

Results

Findings indicate that biases influence financial decisions among Delhi residents. Social influences and emotional factors were identified as significant determinants affecting financial behaviors. Respondents demonstrated a tendency towards positive savings behaviors but also exhibited impulsive spending tendencies influenced by social networks and emotional states.

Recommendations

The study recommends implementing both reactive and proactive strategies for enhancing financial literacy.

1. Reactive measures should focus on streamlining information consumed by citizens.

2. Proactively, integrating behavioral aspects into the financial education curriculum, aligned with the National Education Policy 2020, is crucial for addressing biases and promoting informed financial decision-making among citizens.

In conclusion, this study underscores the importance of integrating behavioral economics principles into financial education policies in Delhi to improve financial literacy.

Introduction

“Because people are Humans, not Econs, they make predictable errors”

- (Thaler, 2016, p.312)

With only 27% of Indian adults being financially literate, only 24% of women meet the minimum threshold for financial literacy set by the Reserve Bank of India. With only 16.7% of Indian students having a basic understanding of finance and money management, it's evident that there's a critical gap in understanding and managing personal finances. (Spreading the Financial Literacy Wave Across India, 2023)

The National Center for Financial Education's (NCFE)¹ programs and the Reserve Bank of India's (RBI): National Strategy for Financial Education (NSFE)² both rightly emphasize the value of financial education. However there is a noticeable lack of behavioral economic concepts in these activities. It's important to take into account the larger context of governmental actions. Even in the face of admirable efforts by organizations such as NCFE, as demonstrated by programs such as ‘The Financial Education Programme for Adults (FEPA)’ and ‘Financial Awareness and Consumer Training (FACT).’ Regulatory organizations like Pension Fund regulatory and development authority (PFRDA), Securities and Exchange Board of India (SEBI), and Insurance Regulatory and Development Authority of India (IRDAI) are essential in tackling issues with financial literacy. In addition to concentrating on securities, insurance, and pension goods, these organizations also carry out substantial teaching, training, and awareness campaigns. One of the most important ways to understand the complexities of personal financial decision-making is to include behavioral economics ideas into financial literacy programs. As behavioral economics sheds light on the psychological roots of economic decisions, providing important insights into the determinants of human behavior in financial circumstances.

In India, where patriarchal norms still prevail, women often lack complete transparency in making financial decisions. Notably, gender dynamics highlight a global trend where men tend to outperform women in financial literacy, with 35% of men and 30% of women displaying

¹ NCFE is a Section 8 (Not for Profit) Company promoted by RBI, SEBI, IRDAI, PFRDA.

² NSFE 2020-2025, prepared by the National Centre for Financial Education in collaboration with India's financial sector regulators, aims to empower various population segments with financial knowledge, skills, and behavior for better money management and future planning.

competency in making financial decisions independently. (World Bank Development Research Group et al., n.d., p.12). This disparity not only underscores the importance of integrating behavioral economics into financial literacy programs but also the need for understanding and addressing these gender dynamics within the context of financial decision-making. Such programs can empower women with the knowledge and confidence needed to navigate the complexities of the financial landscape. This comprehensive strategy not only promotes greater openness, but also provides individuals with the tools they need to confidently and effectively manage the complexities of today's financial market. Therefore, combining behavioral economics with financial literacy efforts is an important step toward boosting consumer financial empowerment and resilience.

Subsequently, the current study explores the integration of behavioral economics principles into financial education policies aimed at enhancing the financial literacy for citizens of Delhi. By examining the role of behavioral biases in shaping the decision-making processes of individuals within the community, the study aims to identify potential areas for improvement in the design and implementation of financial education initiatives. Behavioral economics seeks to evaluate the impact of these biases on overall financial decision-making among citizens of Delhi.

Objectives

1. To identify potential areas for improvement in the design and implementation within the context of financial education policies targeting citizens of Delhi.
2. To evaluate the role of behavioral biases in shaping the decision-making processes of citizens of Delhi aiming to understand their impact on overall financial decision-making within the community

Research gap

Despite significant strides in promoting financial literacy through various programs and strategies, there remains a notable research gap in the integration of behavioral economics principles within these initiatives. Existing financial literacy programs primarily focus on imparting knowledge and skills, but often neglect the influence of behavioral biases that significantly impact financial decision-making. Behavioral economics highlights how biases, such as social influence, emotional gap, herd behavior, mental accounting biases, can lead to

suboptimal financial behaviors. However, the current financial education frameworks do not adequately address these biases, potentially limiting their effectiveness.

“Greater the integration of behavioral biases into financial literacy programs, higher will be the levels of financial literacy and lower the prevalence of behavioral biases among the citizens of Delhi.” By incorporating insights from behavioral economics, programs can be tailored to not only educate but also reshape attitudes and behaviors towards financial decision making. This integration could lead to more responsible financial behavior, ultimately enhancing financial well-being. Therefore, there is a crucial need for research that explores how behavioral economics can be systematically embedded into financial literacy initiatives to mitigate biases and improve financial outcomes.

Literature review

This literature review is divided into three main sections to provide a thorough exploration ie. Economic Perspectives on Financial Education, Key Stakeholders in Indian Financial Education Initiatives and Psychological Factors in Decision-Making.

Economic Perspectives on Financial Education

“The Question is Not, Do We Have Bias? The Question is, Which are Ours?”

- (Ross, 2014)

We explore behavioral economics, a field influenced by economist Richard H. Thaler's groundbreaking research, as we consider this fascinating subject. Drawn from the classic works of psychologists Daniel Kahneman and Amos Tversky. Thaler questions the accepted economic model of homo economicus³ and delves into the intriguing relationship between theoretical predictions and actual decision-making. Thaler has contributed to the understanding of human conduct in economic circumstances by carefully examining the difference between what people should do and what they actually do. By investigating repercussions of these activities he has considerably expanded our understanding of human behavior in economic understanding. He has also unearthed important insights into the peculiarities and biases that affect our financial decisions. (Witynski, n.d.)

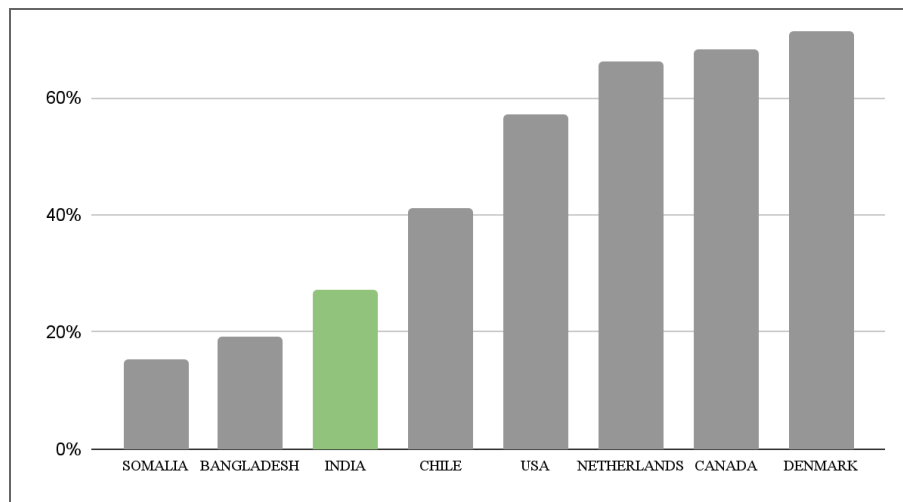
The study of behavioral economics highlights the importance of financial literacy in overcoming these biases by bridging the gap from rational decision making. Behavioral economics questions the conventional assumption of rationality in mainstream finance by acknowledging the influence of emotional, cognitive and behavioral factors on financial decisions. Based on empirical research, there appears to be a correlation between increased financial literacy and a decreased vulnerability to these biases. Behavioral economics challenges the traditional understanding of finance on rationality, recognizing the widespread influence of biases in decision making. (Rasool, 2019)

³ The term homo economicus, or 'economic man', denotes a view of humans in the social sciences, particularly economics, as self-interested agents who seek optimal, utility-maximizing outcomes.

The quest of improving financial literacy goes beyond individual initiatives to incorporate broad national plans to support responsible financial conduct and educated choices. Major advanced economies underscore this trend, evidencing elevated financial literacy rates among those with tertiary education in comparison to counterparts with primary or secondary education backgrounds. (World Bank Development Research Group et al., n.d., p.14)

Figure 1

Financial literacy around the global



Note. According to figure (1), Denmark is the country with the highest level of financial literacy with the scoring of 71% demonstrating that its people are well-versed in financial ideas and procedures. Somalia, on the other hand, is shown to have the lowest degree of financial literacy measuring merely 15%. (Wafula, 2022)

We further analyze studies by the Organisation for Economic Co-operation and Development (OECD)⁴ and the World Bank to explore the strategies employed by the nations with the highest financial literacy scores, and how these tactics contribute to their success.

1. Denmark -

⁴ OECD is an international organisation that works to build better policies for better lives. Their goal is to shape policies that foster prosperity, equality, opportunity and well-being for all.

- a. The Folkeskole Act⁵ and the Executive Orders contains, all municipal primary and lower secondary schools share a common aim, standard requirements concerning the subjects that are to be taught at the specific form levels, standard regulations concerning the so-called Common Objectives for the teaching in the individual subjects, as well as standard regulations concerning the leadership and organisation of the school system. In addition to these initiatives, the Ministry of Education and its associated organizations provide educational tools and resources to increase the effectiveness of instruction and promote a robust education milieu. (National Strategy for Financial Education, 2015)
- b. The Danish Ministry of Industry, Business, and Financial Affairs conducted trials based on behavioral insights. For example, the Danish Commerce and Companies Agency (DCCA) conducted experiments focusing on nudging and behavioral science into its policy solutions of the Danish mortgage market. (Afif et al., 2019)

2. Canada -

- a. Canada's financial education policy is unique in the world since it has a unique governance structure with a designated person in charge of coordinating cooperation and promoting consistency across financial literacy programs. The establishment of the Financial Literacy Leader position, as codified in a Financial Consumer Agency of Canada Act⁶, reflects the main proposal of the Task Force on Financial Literacy, which was made in 2010. (National Strategy for Financial Education, 2015)
- b. Province of British Columbia Behavioural Insights Group (BC-BIG)⁷ is a central research unit whose goal is to tackle behavior-based policy problems by applying

⁵ "The Folkeskole" constitutes the free, public school system as well as the individual municipal schools, that is to say the places where the teaching takes place. On the national level, the Danish Folkeskole is regulated by the Folkeskole Act, which provides the overall framework for the schools' activities.

⁶ The purpose of this Act is to ensure that financial institutions are supervised by an agency of the Government of Canada so as to contribute to the protection of consumers of financial products and services and the public, including by strengthening the financial literacy of Canadians.

⁷ PRiA operationalizes the employment of behavioral insights and nudges in support of personnel policy for the Department of National Defence (DND). PRiA serves as a bridge between personnel research, practice, and policy for the Canadian Armed Forces (CAF), and is supported at very senior levels and embraces the principles of experimentation and iterative design.

ideas and techniques from behavioral science and service design. In order to determine what works and what doesn't, BC-BIG encourages experimentation and, whenever practical, uses the best available data to evaluate ideas before scaling them up. The unit, despite being a relatively young discipline in government, is crucial in encouraging the public sector to use behavioral insights tools and methodologies.

- c. Department of National Defence— Personnel Research in Action (PRiA) operationalizes the use of behavioral insights and nudges to support personnel policy. PRiA focuses on understanding behavioral economics, evaluating programs, blending science with policy, and using iterative design. It brings together people from research, policy, and practical areas to create and assess interventions based on behavioral economics, with a keen eye on measuring their cost-effectiveness. (Afif et al., 2019)

3. Netherlands -

- a. The Dutch Nibud (National Institute for Family Finance Information) applied the five areas of financial literacy established by OECD in its development work on financial literacy assessments. The domains used included financial control, making ends meet, money management, knowledge and comprehension. The goal was to gain new insights on the financial behavior of the Dutch. The study's findings reveal that responsible financial behavior is not a single dimension, but rather a collection of behaviors across at least three mostly independent domains: money management, financial planning, and financial product selection. (National Strategy for Financial Education, 2015)
- b. The Dutch Authority for the Financial Markets (AFM) commenced its operations in 2014 and underwent formalization as a unit in 2016. Embedded within AFM is the Consumer Behaviour Team, which has been integrated into their expertise center since 2016. The primary objectives of this team are to enhance comprehension of consumer financial decision-making processes and to leverage these insights to enhance the efficacy of financial institution supervision. (Afif et al., 2019)

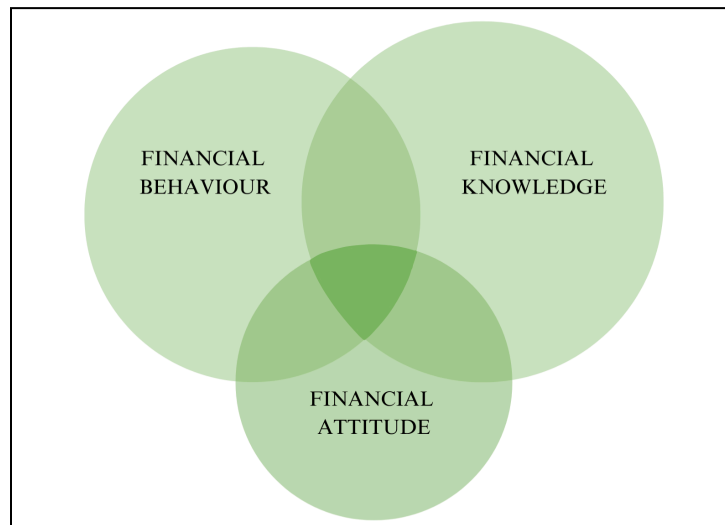
4. South Africa -

Discovery Bank⁸, a digital banking company, has pioneered an innovative strategy known as "behavioural banking" to encourage responsible financial behavior among its customers. The use of an app called Vitality Money is central to this project, since it allows users to set and track financial goals while earning rewards for adhering to excellent financial behaviors. (Sebas & Maytham, 2021) On a global scale, Discovery Bank is the first to look at consumer and financial behaviors that place financial wellness at risk. Through its behavior-change programme, Vitality Money, it's also the first to help people change these behaviors to earn rewards and ultimately achieve improved financial security.

What makes a person financially literate? According to OECD standards, NCFE defines financial literacy through its Financial Literacy and Education Survey.

Figure 2

Criteria for measuring Financial literacy⁹



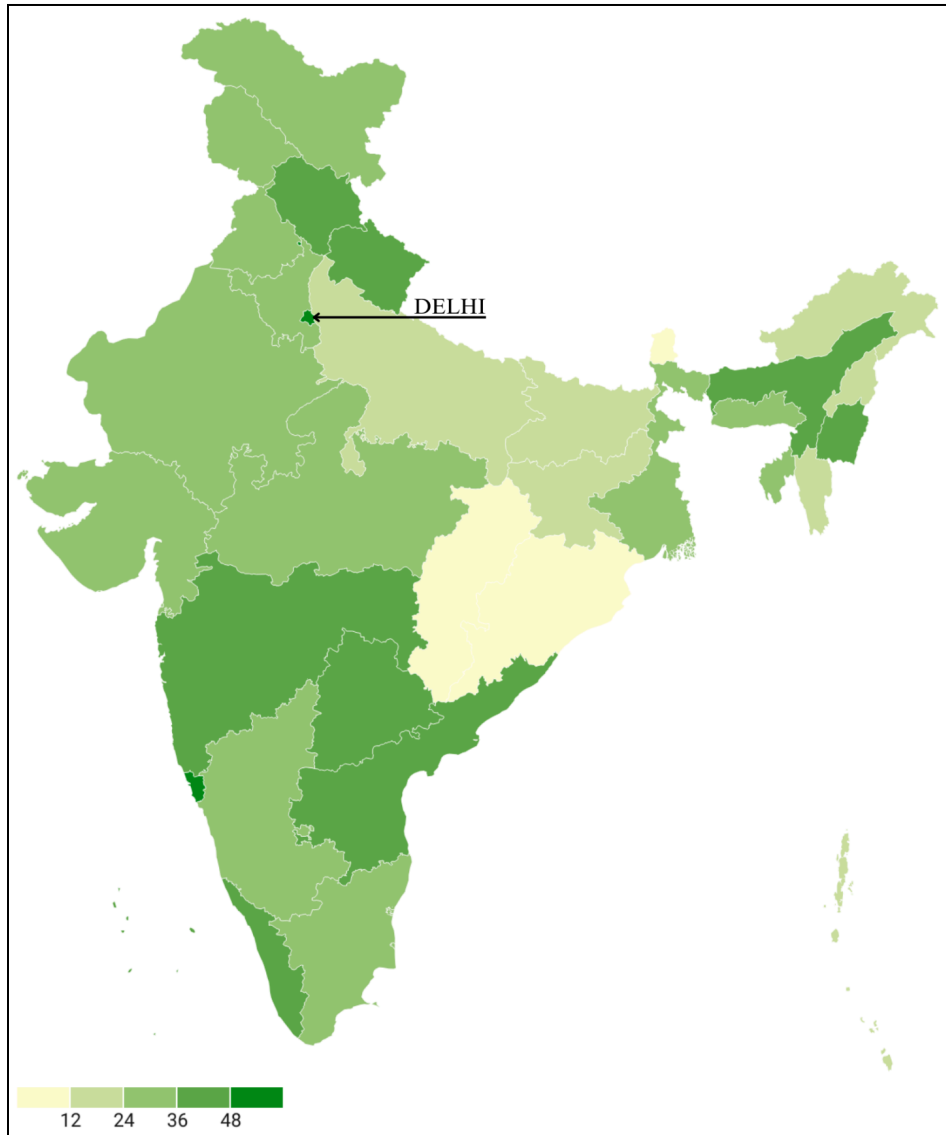
⁸ Discovery bank established in 1992, uses behavioral finance principles to help clients manage their money better by rewarding positive financial behaviors, ultimately improving their financial health and growing their wealth.

⁹According to OECD, financial literacy is defined as a combination of awareness, knowledge, skills, attitude, and behaviors necessary to make sound financial decisions and ultimately achieve individual financial wellbeing. (Atkinson, n.d.)

Note. A person is considered financially literate if they achieve minimum scores of 3 out of 5 points for financial attitude, 6 out of 8 points for financial behavior, and 6 out of 9 points for financial knowledge, totaling at least 15 out of 22 points.

Figure 3

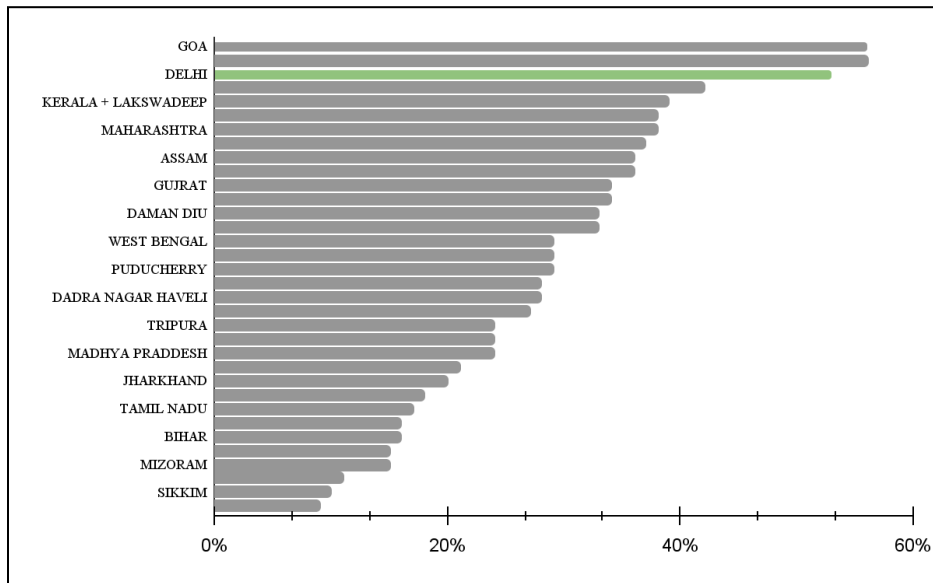
Financial Literacy in India



Note. The heat map (Figure 3) illustrates financial literacy in India, as surveyed by NCFE, across three dimensions: financial behavior, financial attitude, and financial knowledge.

Figure 4

Financial Literacy in India



Note. The graph (Figure 4) illustrates financial literacy in India, as surveyed by NCFE, across three dimensions: financial behavior, financial attitude, and financial knowledge.

Key Stakeholders in Indian Financial Education Initiatives

The National Centre for Financial Education involves creating financial awareness and empowerment through nationwide campaigns. These initiatives include seminars, workshops, conclaves, training programs, campaigns, and discussion forums, potentially with fees, conducted independently or with institutional support. The goal is to provide comprehensive training and create diverse financial education materials, such as electronic and print formats, workbooks, literature, and technical aids, tailored to various target audiences. The focus will be on enhancing financial literacy regarding financial markets and digital financial modes, thereby improving individuals knowledge, understanding, skills, and competence in finance.

NCFE has two main objectives -

1. To promote Financial Education across India for all sections of the population as per the National strategy for Financial Education of Financial Stability and Development Council.

2. To create financial awareness and empowerment through financial education campaigns across the country for all sections of the population through seminars, workshops, conclaves, training, programmes, campaigns, discussion forums with/without fees by itself or with help of institutions, organisations and provide training in financial education and create financial education material in electronic or non-electronic formats, workbooks, worksheets, literature, pamphlets, booklets, flyers, technical aids and to prepare appropriate financial literature for target-based audience on financial markets and financial digital modes for improving financial literacy so as to improve their knowledge, understanding, skills and competence in finance.

Table 1

Key Stakeholders relevant to financial education

Stakeholder	Initiative	Description	Target audience	Delivery Method
National Centre for Financial Education (NCFE)	Financial Education Training Programme (FETP)	Financial education training to school teachers	School teachers	Workshop / seminars
	Financial Education Program for Adults (FEPA)	Directed at offering basic financial education to adults in rural areas	Adults in rural areas	Community workshops
Reserve Bank Of India (RBI)	Basic Financial Education Content	Includes financial literacy guides covering fundamental financial concepts	General public	Booklets, posters
	Financial awareness message	Comprises 11 messages for financial literacy week	General public	Booklets, posters

Securities and Exchange Board of India (SEBI)	Dedicated investor website	Offers educational materials program schedules	General public	Online platforms
	Financial education through resource persons program	Free workshops in local languages covering basic financial concepts	SHG'S, homemakers, middle income groups	Workshops
Insurance Regulatory and Development Authority of India (IRDAI)	Policyholder handbooks and comic series	Book series on insurance to provide accessible and informative	General public	Print material
	Young corner interactive game featurette	Game to engage and educate younger audience about insurance	Youth	Online platforms
Pension Fund regulatory and development authority (PFRDA)	Pension Sanchay Website	Addressing the need for financial literacy in retirement planning	General public	Online platforms
	Annuity Literacy Program available to them upon retirement	Educating subscribers about the various options available to them upon retirement.	General public	Workshops, seminars

Note. Table 1 presents the primary stakeholders engaged in financial education, along with their respective programs and initiatives.

Currently there are two major schemes by NCFE relevant to this study

1. Financial Education Programme for Adults (FEPA) -

NCFE launched FEPA in 2019. This program is an essential tool for educating adults in a variety of fields about financial literacy, such as self-help groups, healthcare workers, farmers, women's groups, and employees of different organizations. In keeping with the goals of the National Strategy for Financial Education, FEPA places a special

emphasis on Special Focused Districts (SFDs)¹⁰ and works to provide people with the information and abilities needed to make wise financial decisions. With more than 5,000 workshops held all throughout the country each year, FEPA hopes to make a major contribution to the goal of developing an informed and capable financial society in India.

2. Financial Awareness and Consumer Training (FACT) -

In today's global landscape, youths are assuming financial roles earlier in life, often making significant decisions like managing credit cards and educational loans. These decisions can have long-term repercussions if not handled wisely. As they transition into the workforce, young adults face increasing financial obligations, underscoring the importance of acquiring essential financial skills, such as goal-setting and risk management. In response to these needs NCFE has launched FACT, a tailored program aimed at providing financial education to recent graduates and postgraduates. By covering issues that are important to this group, FACT gives them the tools they need to make wise financial decisions and improves their overall financial health. FACT helps to raise a generation of financially literate and responsible people by transferring knowledge and skills necessary for responsible money management.

Psychological Factors in Decision-Making.

Emotions wield a significant influence over decision-making processes especially in the realm of financial conduct. Loewenstein's research demonstrates the historical inconsistency between psychologists' identification of the immediate emotional states encountered during decision-making and economists' emphasis on anticipated emotions. Kahneman goes on to explain whether consciously or unconsciously decision-makers frequently rely on their emotional guidance while making decisions. This significant link between emotions and decision-making processes is relevant in the fields of financial inclusion and behavioral finance as emotions inherent decision-making and drives to play a critical role in determining people's financial habits and attitudes, which ultimately influence their level of financial inclusion.

¹⁰ Special Focus Districts (SFD) are identified on the basis of key indicators such as programme indicators (infrastructure gaps, gender gaps, retention rate, OoSC etc) and Social indicators (SC & ST concentrated districts, Minority Concentrated districts, Naxalite affected & Border Area Districts).

Furthermore, within the framework of behavioral finance, acknowledging the impact of emotions on decision-making sheds light on the prevalence of cognitive biases and irrational behaviors in financial markets, influencing techniques for mitigating their negative consequences. Decision-making processes are greatly influenced by psychology, especially when it comes to financial conduct. According to a 2008 survey released by the UK Financial Conduct Authority (FCA)¹¹, innate psychological traits frequently have a greater impact on customers' financial behavior than information or expertise alone. (IOSCO & OECD, 2018)

Psychological theories offer valuable insights into the underlying drivers of human behavior, particularly within the realm of behavioral economics. These theories provide a framework for understanding the intricate interplay between individual psychology and decision-making processes, shedding light on the complexities inherent in financial behaviors. By leveraging these psychological insights, interventions can be tailored to effectively promote financial literacy and cultivate responsible financial habits, ultimately enhancing overall financial well-being.

The following theories have been integral when discussing decision making.

1. Theory of planned behavior -

The Theory of Planned Behavior (TPB) was developed by Icek Ajzen as an attempt to predict human behavior. TPB is based on the idea that intention is what drives behavior the most and that intention is influenced by three main things: attitudes, subjective standards, and perceived behavioral control. Subjective norms include the perceived social pressure to engage in or refrain from the conduct, perceived behavioral control is the perceived ease or difficulty of engaging in the behavior, and attitudes are people's personal assessments of the behavior in question. By using this lens, TPB offers insightful information about the factors that influence financial decision-making, especially in the case of young individuals. By examining their financial attitudes, the influence of social norms, and their perceived ability to exercise control over financial actions, TPB effectively elucidates the motivations behind young adults' financial

¹¹ FCA is an independent public body in the UK that regulates and supervises financial businesses to ensure fair, honest, and competitive financial markets for consumers and the economy.

behaviors, offering valuable guidance for interventions aimed at promoting financial literacy and fostering prudent financial habits. (IOSCO & OECD, 2018)

2. The Big Five Inventory -

In 1998, Oliver John from Berkeley Personality Lab and Verónica Benet-Martinez, psychology professor at University of California at Davis, created the 44-item “Big Five Inventory” (BFI). Extraversion, neuroticism, conscientiousness, agreeableness, and openness to new experiences are recognized as basic aspects of personality in this widely accepted model. Scholars frequently utilize structural equation modeling or multiple regression analysis to investigate the ways in which these attributes as a whole impact different financial actions. The discovery that different personality qualities show different relationships with financial outcomes is noteworthy. The associations between personality qualities and financial behavior are shown in the following table:

Table 2

Big Five Inventory and financial behavior

Personality trait (The big five inventory)	Financial Behavior			
	Debt	Assets	Responsibility	Educational programs
Extraversion	Positive	Negative	-	Positive
Openness	-	Positive	Positive	-

Note. Table 2 states the association between Big Five inventory and financial behavior.

3. EAST framework -

Acknowledging the importance of behavioral insights in formulating policy responses, the Behavioural Insights Team (BIT)¹² unveiled the EAST framework in 2012

¹² The Behavioural Insights Team (BIT) established in 2010 is a global social purpose company, originally founded within the UK government, that applies behavioral science to develop evidence-based policies and solutions to drive positive change and improve outcomes for people, communities, and organizations.

to provide policymakers with a clear-cut, all-inclusive model. The EAST framework highlights four essential ideas: easy, attractive, social, and timely. This acronym emphasizes how crucial it is to optimize timing, increase attraction, leverage social influence, and streamline procedures in order to promote desired behaviors. By coordinating interventions with these principles, governments can encourage people to take actions that will lead to better outcomes.

4. Financial socialization -

Financial socialization refers to the opportunities for learning people have through interactions with friends and family, is one of the main points of emphasis in the report. By leveraging social learning dynamics, financial literacy programs can effectively transmit financial knowledge and skills while also serving as a mitigating factor against potential psychological barriers to sound financial decision-making.

As policymakers navigate the complexities of regulation and governance, the lens through which decisions often reflect inherent biases, particularly regarding the state's intervention in private enterprises. This perspective is deeply rooted in libertarian political discourse, which prioritizes individual liberty and staunchly opposes government coercion. There are observable gaps when policymaking is viewed through the prism of the inherent biases of policymakers, especially when it comes to the state's involvement in regulating private enterprises. This argument is firmly rooted in libertarian political discourse, which values individual liberty above everything else and sees force as incompatible with freedom. Political philosophers have articulated libertarianism, which rejects coercion for either the group's or an individual's personal benefit and holds that people should only be forced to refrain from violating the rights of others.

Thus, under this worldview, government interference is seen as a danger to individual liberty. However, these traditional viewpoints have come under intense scrutiny with the rise of behavioral economics. Behavioral economics highlights the need for government involvement by

explaining examples of irrational behaviors leading to poor outcomes, or behavioral market failures. This paradigm change exposes the shortcomings of depending exclusively on individual reason to achieve efficient market results, which puts the classic libertarian position under pressure. (Kandula & Gupta, 2021)

Research methodology

Data Collection

Data and methodology are integral to any research study, serving as the backbone for analysis and conclusions. Data encompasses a detailed record of quantities and their various values, compiled for analysis or survey purposes. Data collection, an essential aspect of research, can be categorized into two primary types: primary data and secondary data.

Primary data refers to data that a researcher collects firsthand for a specific purpose. These data are considered "pure" because they are original and have not been subjected to any prior statistical manipulations. A quintessential example of primary data is the India Census. Data collection for this research was conducted exclusively through primary methods, and it unfolded in two distinct stages.

1. Survey -

Initially, a meticulously designed Google Form survey was deployed to assess the prevalence of biases in consumer decision-making. This survey targeted a specific demographic, inviting participants to share insights into various cognitive biases such as anchoring, confirmation bias, and loss aversion. Participants were encouraged to provide detailed accounts of their decision-making experiences, allowing for a thorough examination of biases in real-world scenarios. Primary data can be gathered using various methods, including surveys, questionnaires, interviews, and observations.

In the context of this study, the primary data collection method employed was the distribution of an online survey using Google Forms. The target population for this survey comprised individuals aged 20-30 residing in Delhi. Google Forms was chosen due to its capabilities for automatic response recording and its ability to export data to Excel for further analysis. This tool facilitated efficient distribution and data collection, providing valuable insights into the targeted population. The data collected through this method enabled the researcher to draw informed conclusions, significantly contributing to the research objectives. The Google Form created for this research project was meticulously designed to gather primary data across a range of topics.

To collect pertinent information from participants, the form included a variety of questions, encompassing the following areas:

- a. In the Demographic Information section, participants were asked to provide their Name, Age, Gender, Occupation, Education Level, Income Bracket, and Location. This section aimed to gather fundamental participant data to better understand the sample demographics.
- b. The questionnaire included inquiries aimed at evaluating participants' knowledge of the current financial education policies implemented in India.
- c. This questionnaire encompassed an exploration of participants' awareness regarding behavioral biases.
- d. The questionnaire was designed to investigate biases that influence decision-making processes
 - Mental Accounting: This refers to the tendency of individuals to categorize and treat money differently depending on its source or intended use. Mental accounting is a behavioral bias that influences how people perceive and utilize their financial resources based on arbitrary mental accounts.
 - Herd Behavior: This phenomenon occurs when individuals mimic the actions of a larger group, often leading to collective decision-making that feels safe and secure due to the perceived wisdom of the majority.
 - Emotional Gap: Decisions influenced by extreme emotions—such as excitement, anger, fear, or distress—fall under the category of emotional gaps. These emotions often lead to irrational decision-making.
 - Anchoring: Anchoring is a cognitive bias wherein the initial exposure to a number or value serves as a reference point (or anchor) for subsequent decisions. In behavioral finance, anchoring affects how people make financial decisions based on irrelevant initial information.
 - Self-Attribution Bias: This cognitive bias involves individuals attributing their successes to personal abilities while blaming external factors for their failures. This bias is particularly insidious as it is easily recognized in others but often goes unnoticed in oneself.

- **Social Influence:** Social influence encompasses changes in an individual's behavior, feelings, or thoughts that arise from real or imagined social interactions. It includes various processes such as sales, marketing, peer pressure, socialization, persuasion, submission, and even large-scale political and social changes. This concept examines how external social factors can alter personal decision-making and behavior.

The diverse range of questions included in the Google Form allowed for comprehensive data collection on participants' demographic characteristics, financial education awareness, and susceptibility to various cognitive biases. This data was pivotal in providing insights into the targeted population and enabled the researcher to draw informed conclusions that supported the study's objectives.

2. Interview

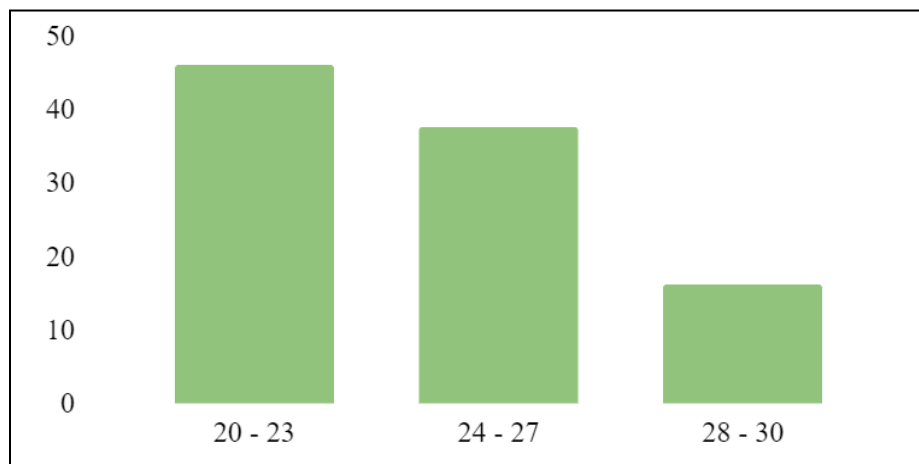
Following the survey, in-depth interviews were conducted with a diverse group of individuals, including academicians and professionals recognized for their expertise in relevant fields. These interviews complemented the quantitative data obtained from the survey by offering qualitative perspectives and anecdotal evidence. Through engaging discussions and reflections, the interviews provided deeper insights into how biases manifest across different contexts, enriching the overall analysis and interpretation.

Findings

By utilizing a combination of descriptive statistics, theoretical insights, and thematic analysis from interviews, this study provides a comprehensive understanding of how different elements shape financial behaviors and literacy. The insights gathered from the data are presented through visual representations, including tables and graphs, to offer a clear and concise depiction of the findings.

Figure 5

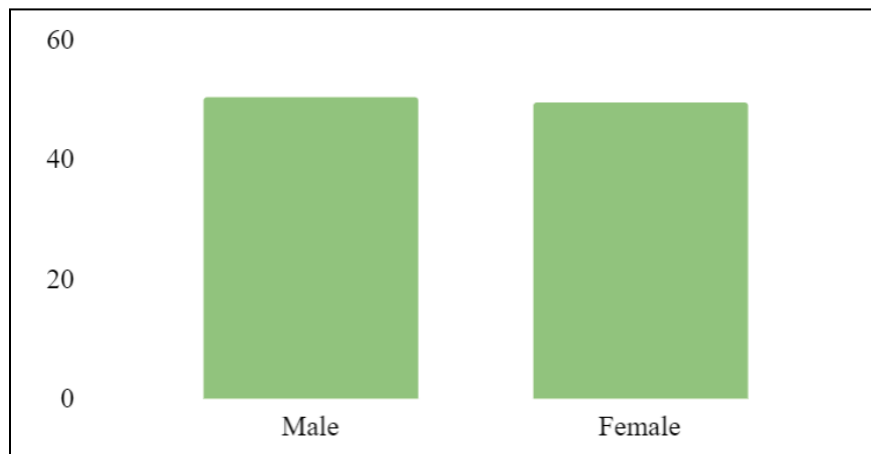
Age



Note. This graph represents the distribution of individuals across three distinct age groups within a population sample. The largest segment is the 20-23 age group, constituting 46.2% of the population. The 24-27 age group follows with 37.6%, while the 28-30 age group comprises 16.2%.

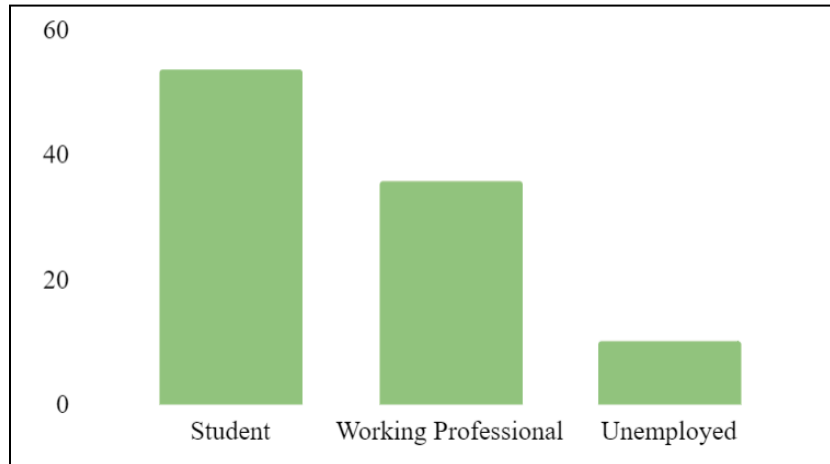
Figure 6

Gender



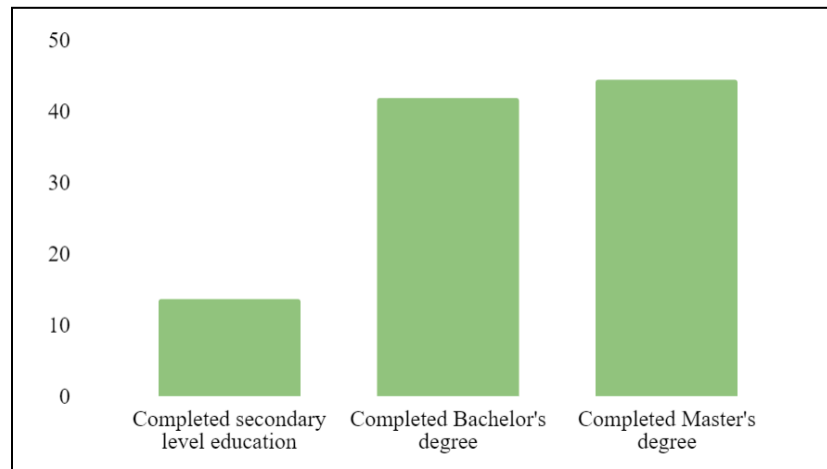
Note. This graph illustrates the gender distribution within the population. Males constitute 50.4% of the population, while females make up 49.6%.

Figure 7
Occupation



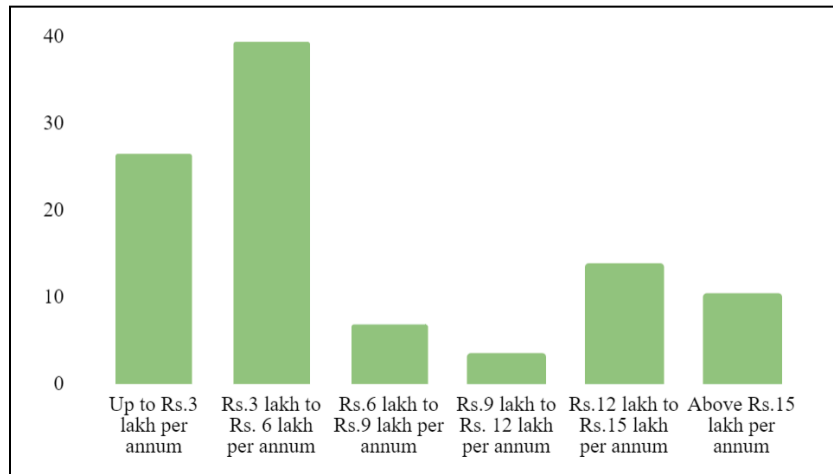
Note. The graph illustrates distribution of individuals by occupation. The largest group is students, comprising 53.8% of the population. This is followed by working professionals, who make up 35.9%. The smallest group is the unemployed, accounting for 10.3% of the total.

Figure 8
Education



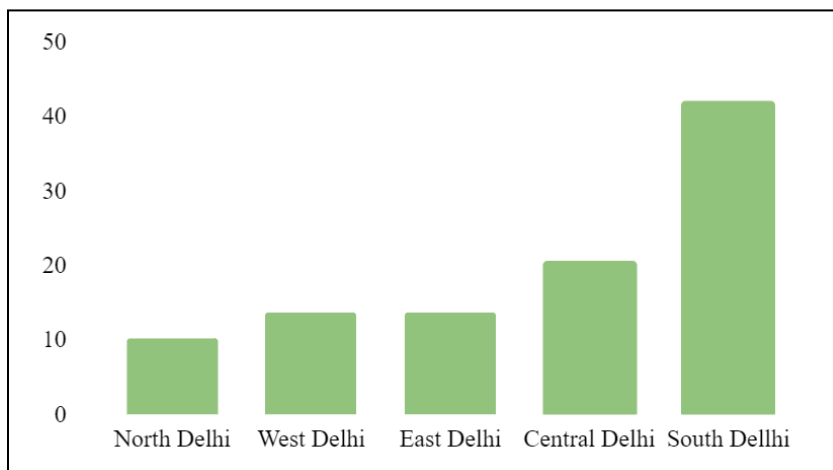
Note. The data on educational attainment shows that a significant majority of the population has achieved higher education. Specifically, 13.7% have completed secondary level education, 41.9% have obtained a Bachelor's degree, and the highest proportion, 44.4%, have completed a Master's degree.

Figure 9
Income Levels



Note. The bar graph depicts the income distribution among respondents, categorized into six income brackets (Income tax department, 2024-2025). The majority of respondents (39.3%) earn between Rs. 3 lakh and Rs. 6 lakh per annum. This is followed by 26.5% of respondents who earn up to Rs. 3 lakh per annum. A smaller percentage of 13.7% earn between Rs. 12 lakh and Rs. 15 lakh per annum, while 10.3% have an income above Rs. 15 lakh per annum. The income brackets of Rs. 6 lakh to Rs. 9 lakh and Rs. 9 lakh to Rs. 12 lakh per annum have the lowest representation, with 6.8% and 3.4% of respondents, respectively. This distribution highlights a concentration of respondents within the lower to middle-income ranges.

Figure 10
Location

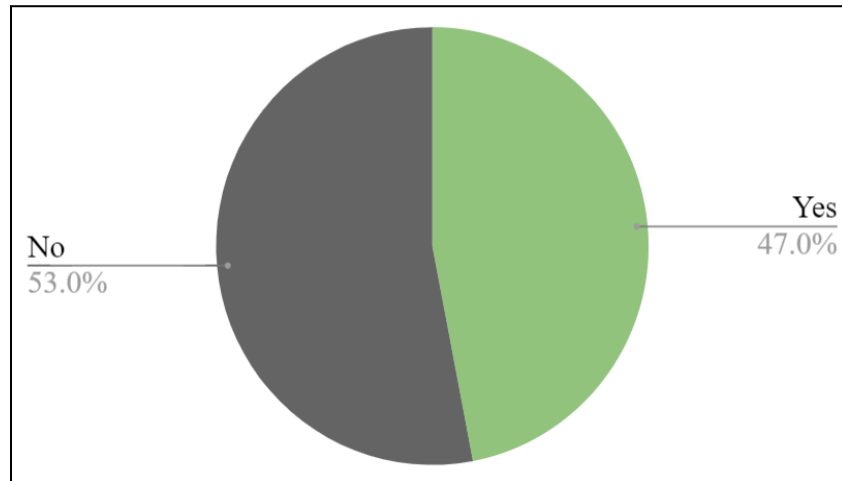


Note. The data shows the percentage distribution of a population across various locations in Delhi. South Delhi has the highest proportion, with 41.9% of the population. Central Delhi

follows with 20.5%. Both East Delhi and West Delhi each account for 13.7%, while North Delhi has the smallest share at 10.3%.

Figure 11

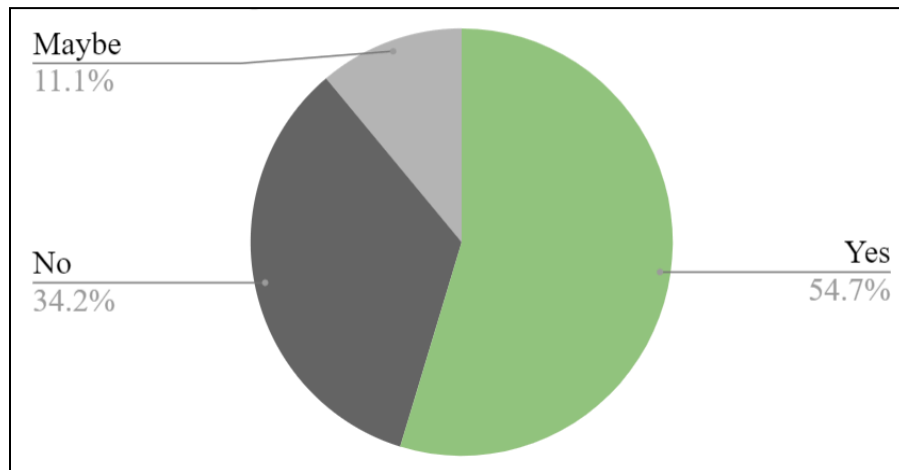
Are you aware of any government policies or initiatives aimed at promoting financial education in India?



Note. This pie chart illustrates the awareness of government policies or initiatives aimed at promoting financial education in India. Among respondents, 47% are aware of such initiatives, while 53% are not.

Figure 12

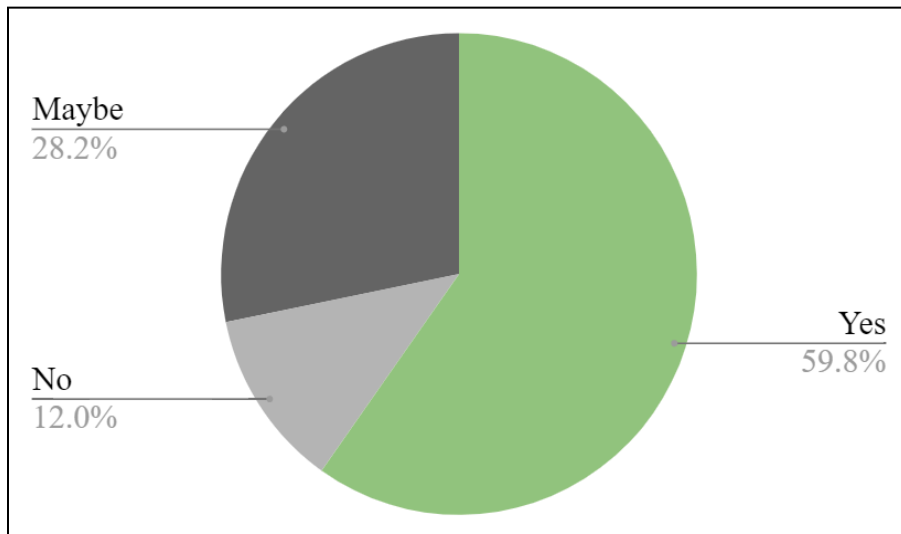
Are you aware of the concept of behavioral biases in decision-making?



Note. This pie chart illustrates awareness levels of behavioral biases in decision-making among respondents: 54.7% are aware, 34.2% are not aware, and 11.1% are uncertain.

Figure 13

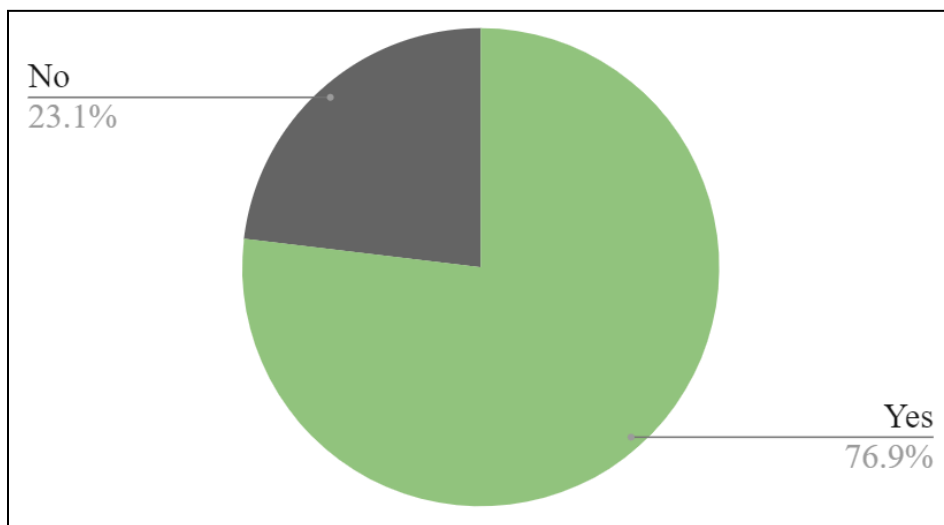
Do you think behavioral biases can hinder efforts to improve financial literacy?



Note. This pie chart depicts the perceptions regarding how behavioral biases affect efforts to improve financial literacy. The responses are categorized into three groups: Yes (59.8%), Maybe (28.2%), and No (12%).

Figure 14

Before you buy something, do you think about where your money is coming from? Like, is it from your job, your savings, or maybe a gift?

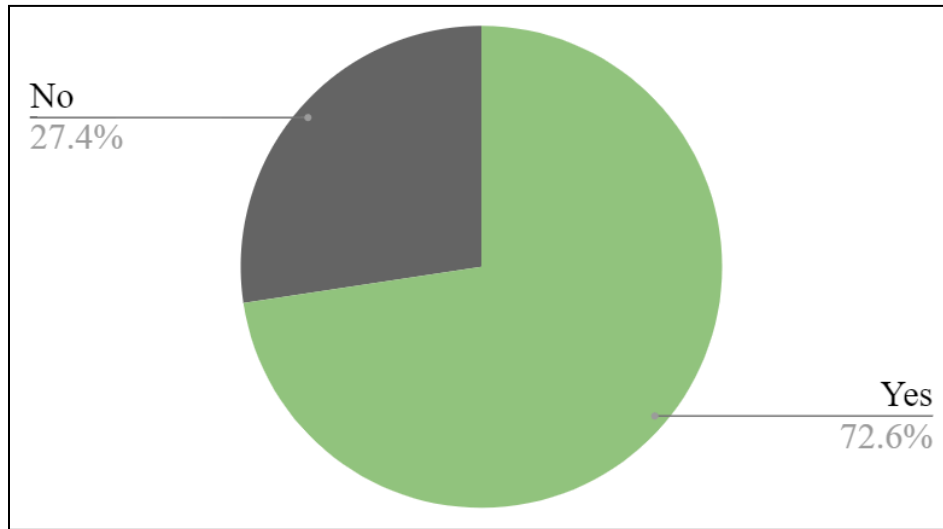


Note. This pie chart illustrates the distribution of sources from which individuals acquire money before making purchases, known as 'Mental accounting bias.' The majority (76.9%) consider the origin of their funds—whether it's from their job, savings, or a gift—before buying something.

Conversely, 23.1% do not actively think about the source of their money before making purchases

Figure 15

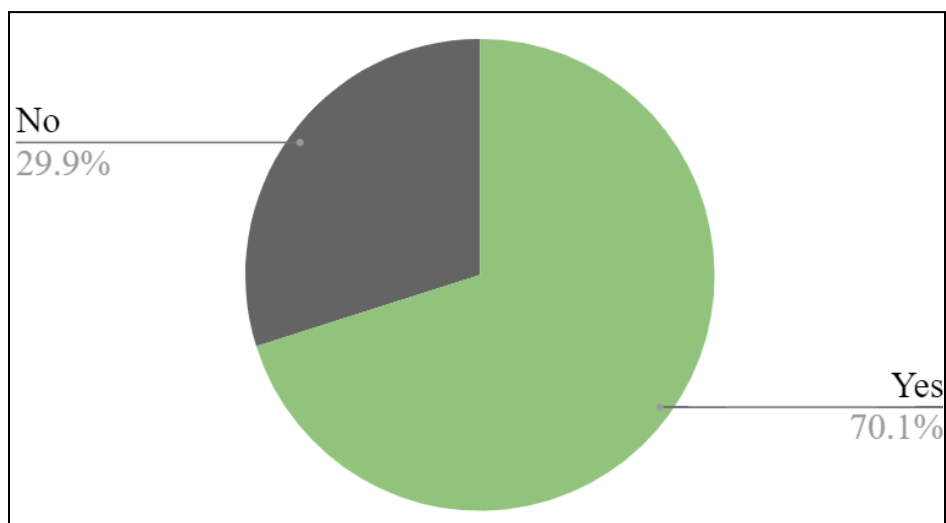
Have you ever set aside some money for a specific thing, like saving up for a vacation or buying a new gadget?



Note. The pie chart illustrates how individuals allocate their savings towards specific goals, another example of mental accounting bias. A significant majority, 72.6%, set aside money for purposes such as vacations, gadgets, or other targeted expenses. In contrast, 27.4% do not earmark savings for any particular goal, opting for more flexible financial management strategies.

Figure 16

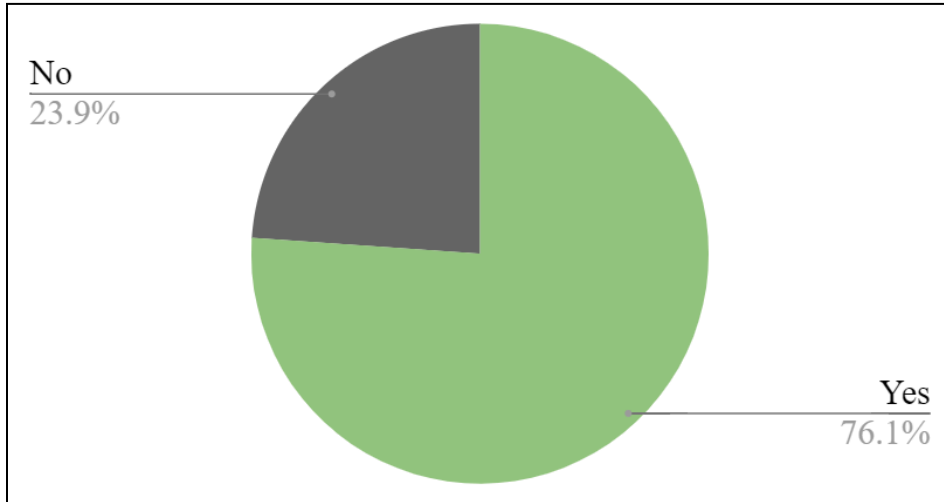
Have you ever felt pressured by friends or others when making a money decision?



Note. The pie chart illustrates the influence of herd behavior bias on financial decisions, revealing that a significant majority, 70.1%, have experienced pressure from friends or others when making money decisions and 29.9% reported not feeling such pressure.

Figure 17

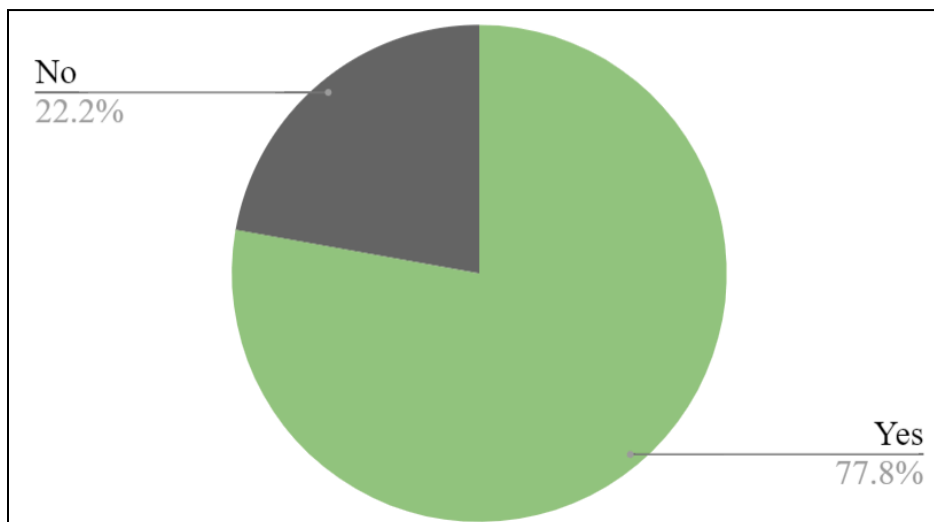
How often do your feelings affect your money choices? (excitement, anger, fear, or restlessness)



Note. This pie chart illustrates the impact of emotions on financial decision-making, highlighting a significant emotional gap bias. According to the data, 79.5% of respondents acknowledge that their feelings, such as excitement, anger, fear, or restlessness, influence their money choices. Conversely, only 20.5% of respondents report that their financial decisions are unaffected by their emotions.

Figure 18

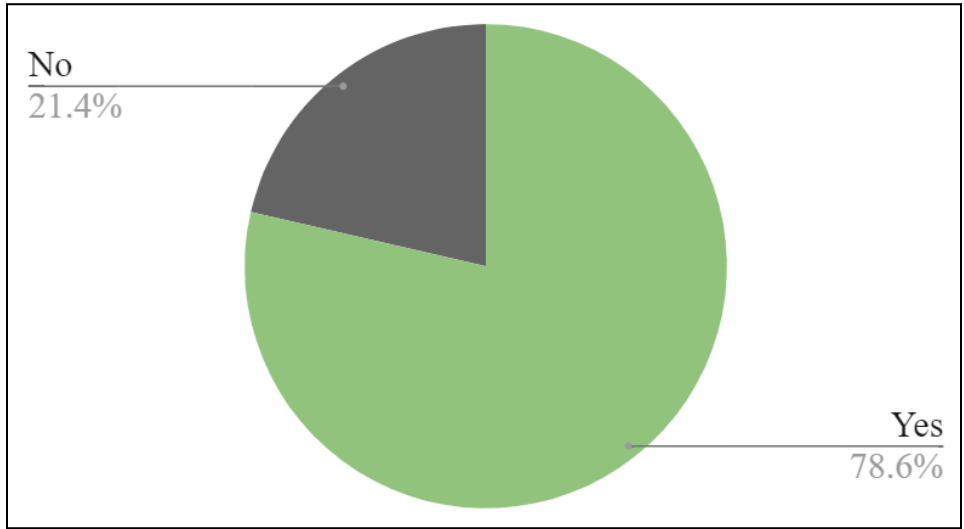
Can you think of a time when seeing a product advertised as "discounted from ₹1000 to ₹500" made you feel like you were getting a great deal and even though you didn't need it, the fact that it was half off made you think it was a steal.



Note. The table illustrates the influence of anchoring bias on consumer perception of discounts. A significant 77.8% of respondents are prone to anchoring bias.

Figure 19

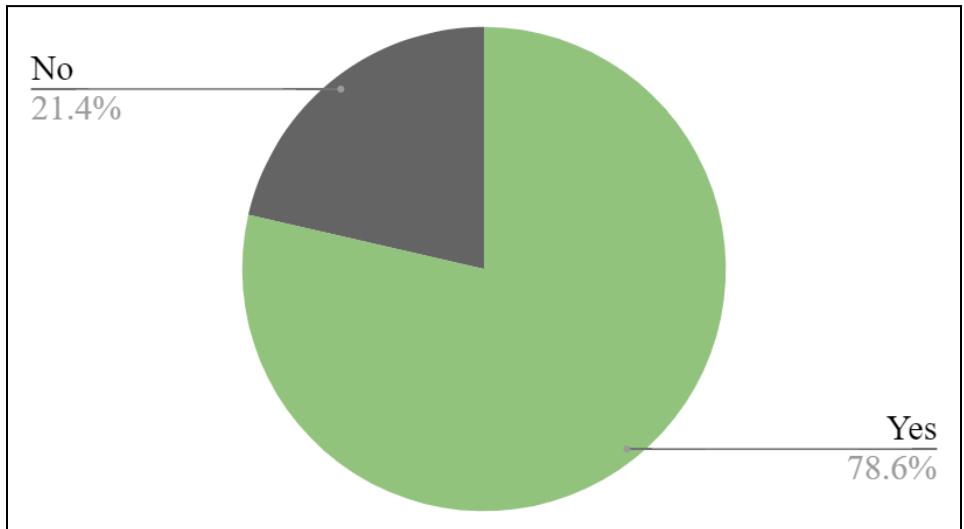
Do you feel like the first price mentioned in a bargain sets the tone for how much you're willing to spend? Perhaps when you are at a market, and the vendor's starting price seemed so high that even after bargaining, you ended up spending more than you intended.



Note. The pie chart illustrates responses to the question of whether the initial price mentioned in a bargain influences how much people are willing to spend. 78.6%, reported that the first price does set the tone, indicating that even after negotiating, they often spend more than they intended.

Figure 20

How often do you find yourself making purchasing decisions based on recommendations from friends or family?



Note. The table demonstrates the impact of social influence on purchasing decisions. It reveals that 76.1% of individuals often make purchases based on recommendations from friends or family, while 23.9% do not rely on such recommendations.

Descriptive statistics

Table 3

Descriptive Statistics

	N	Minimum	Maximum	Mean	Standard Deviation	Skewness		Kurtosis	
						Statistic	Std Error	Statistic	Std Error
Age	117	1	3	1.7	1.7	0.537	0.224	-0.97	0.444
Gender	117	1	2	1.5	1.5	0.017	0.224	-2.035	0.444
Occupation	117	1	4	1.99	1.99	0.451	0.224	-1.453	0.444
Education	117	1	3	2.31	2.31	-0.509	0.224	-0.848	0.444
Income	117	0	5	1.69	1.69	0.848	0.224	-0.72	0.444
location	117	1	5	3.7	3.7	-0.683	0.224	-0.898	0.444
Awareness of policies	117	1	2	1.53	1.53	-0.121	0.224	-2.02	0.444
Awareness Behavioral biases in decision making	117	1	3	1.56	1.56	0.819	0.224	-0.506	0.444
Biases hinder financial literacy	117	1	3	1.68	1.68	0.67	0.224	-1.401	0.444
Mental accounting bias	117	1	2	1.23	1.23	1.295	0.224	-0.33	0.444
Mental	117	1	2	1.27	1.27	1.029	0.224	-0.957	0.444

accounting bias									
Herd Behavior bias	117	1	2	1.3	1.3	0.889	0.224	-1.231	0.444
Emotional Gap bias	117	1	2	1.21	1.21	1.48	0.224	0.192	0.444
Anchoring bias	117	1	2	1.22	1.22	1.354	0.224	-0.171	0.444
Self-attribution bias	117	1	2	1.21	1.21	1.415	0.224	0.003	0.444
Social Influence bias	117	1	2	1.24	1.24	1.238	0.224	-0.476	0.444
Valid N (listwise)	117								

Note. Table 3 highlights significant aspects of financial behavior among respondents. Awareness levels regarding financial policies and behavioral biases in decision-making are notable. Several biases, such as mental accounting, herd behavior, emotional gap, anchoring, self-attribution, and social influence, impact financial behaviors.

The data reveals that respondents have a relatively low awareness of biases affecting their decision-making processes, while biases are perceived to moderately hinder financial literacy. This indicates that although biases are recognized as a factor, they do not overwhelmingly inhibit financial understanding and decision-making. Many respondents exhibit consistent mental accounting practices by categorizing their money in specific ways, and there is a notable tendency towards positive saving behavior rather than impulsive spending. However, external factors significantly influence financial decisions, as many respondents feel pressured when making financial choices. Emotional factors also play a substantial role, with emotions significantly impacting financial behaviors. Temporal considerations strongly impact decision-making, with many respondents influenced by time-limited discounts. Additionally, there is a tendency towards impulsive spending behaviors, with respondents often spending more than they initially intend. Social circles also have a significant influence on financial decisions, as many respondents base their choices on input from friends and family.

Theoretical understanding

Behavioral biases are prominent even among well-educated individuals and financial professionals. These biases can limit the relevance of new information or impact financial

education. Research in behavioral economics and psychology shows that people do not always behave rationally, leading to suboptimal consumer decisions. This irrational behavior often arises from both personal cognitive limitations and social factors, where contextual influences in a person's life impact their financial judgments.

For instance, 78% respondents reported feeling pressured by friends or others when making financial decisions and making decisions based on recommendations from friends or family. This highlights the significant role of social influences in financial behavior.

Exposure to certain social networks can result in more informed consumer decisions, as these networks provide access to information that might be unavailable to others. Many financial literacy surveys reveal that people tend to rely more on the advice of family and friends over professionals. By understanding these influences, we can develop better strategies to improve financial literacy and decision-making, accounting for the significant impact of social and personal biases.

Thematic analysis

The interview's provided a comprehensive exploration of financial literacy, behavioral economics, and the roles of various stakeholders in shaping financial decision-making processes in India. The interview took place with three professionals -

Interviewee 1- CEO at National Centre for Financial Education

Interviewee 2 - Economic Advisor at Ministry of Commerce and Industry

Interviewee 3 - Professor of Behavioral Finance

Here's a thematic analysis derived from the discussion -

1. Government and Regulatory Bodies -

- a. The government, Ministry of Finance, Reserve Bank of India, and Securities Exchange Board of India (SEBI) play pivotal roles in policy-making and regulation. They establish frameworks that guide financial institutions and educational initiatives.
- b. Role in Education: There is a recognized need for integrating financial literacy into formal education systems, from school to university levels. This integration aims to build foundational knowledge and confidence among students, preparing them for responsible financial decision-making.

2. Challenges in Integrating Behavioral Economics -

Integration of behavioral economics faces challenges such as cultural differences in perceptions of financial advice and resistance to changing established financial habits. Overcoming these challenges requires education campaigns that demystify behavioral economics concepts.

3. Private Sector Innovations and Nudging Strategies -
Private sector players, such as credit agencies and investment platforms, leverage technology and behavioral insights to nudge individuals towards better financial behaviors. Examples include personalized tips, gamified interfaces for investing, and cashback incentives.
4. Learning for Financial Literacy Initiatives -
Government initiatives can learn from these approaches by adopting mobile apps, gamification, and interactive tools to make financial education engaging and accessible to a wider audience.
5. Enhancing Financial Education Engagement -
 - a. Methods for Engagement: Suggestions for making financial education more engaging include using mobile apps, social media campaigns, interactive workshops, and gamified learning platforms. These methods aim to move beyond traditional Q&A formats to foster active learning and participation.
 - b. Effectiveness of Interactive Tools: Interactive tools, games, and real-life simulations are identified as effective in promoting understanding and retention of financial concepts among diverse audiences.
6. Role of Behavioral Economics in Financial Literacy -
Behavioral economics helps individuals recognize and mitigate cognitive biases that affect financial decisions. It promotes informed and prudent financial behaviors, thus guarding against fraud and enhancing overall financial literacy.
7. Strategies for Improving Financial Literacy in India -
Recommendations include integrating financial education into school curricula, leveraging technology for widespread dissemination, and collaborating with NGOs for localized educational initiatives. These strategies aim to empower individuals with essential financial skills and knowledge.
8. Integration of behavioral aspect in policy making -
Creating policies in isolation from real-world behaviors doesn't work. Conducting surveys every five years that assess behaviors using behavioral economics theories was proposed. This would help identify gaps between expected and actual behaviors and tailor policies accordingly. Different target groups require different approaches, and solutions should be formulated based on in-depth behavioral studies specific to each group and region, considering India's cultural diversity.

The research study justified that several behavioral biases significantly influence financial decision-making among youngsters in Delhi, which can be categorized as follows -

1. Loss Aversion -
Respondents have a fear of making financial decisions in risky situations or when facing financial problems. The fear of losses leads people to make overly conservative choices, potentially missing out on beneficial opportunities (Kahneman & Tversky, 1979)
2. Cultural Biases -
Differences in cultures also play a critical role as financial practices and attitudes towards money can vary widely across different regions and communities.
3. Ambiguity Biases -
The study found that respondents do not have in-depth knowledge about financial decision-making, affecting their ability to make informed financial decisions. If proper and complete knowledge is provided, they will be able to make efficient financial decisions confidently (Ellsberg, 1961)
4. Herd Effect -
The research found that respondents mimic the financial behaviors of their friends and family without proper knowledge about financial products. This can lead to market bubbles or crashes, as seen in stock market trends (Trotter, 1975, #)
5. Emotional Bias -
The wheel of emotions (Robert Plutchik, 1982) highlights how emotions like fear, greed, and overconfidence can drive irrational financial decisions. This also represents a lack of knowledge about financial products, causing respondents to feel these emotions while making financial decisions.

The research outcome helps to understand these biases to improve financial literacy and assist individuals in making more rational and beneficial financial choices. Thus, the study justified the objectives by showing that respondents in Delhi lack financial literacy and are not well aware of the existing policies and campaigns run by the government.

This survey aimed at understanding biases in financial decision-making also highlighted a significant gap in public knowledge about financial literacy initiatives in India. Key policies like the Financial Education Resource Persons (FERPs) Program, Pradhan Mantri Jan Dhan Yojana (PMJDY), and public awareness campaigns by RBI were mentioned, yet most respondents were unaware of the objectives of that policies. This lack of awareness suggests the need for more robust outreach and education efforts. The implications of low awareness are

substantial, including limited financial inclusion, poor financial decisions, and hindered economic growth.

Recommendations

Recommendations take place in two forms for this research -

1. Reactive

Reactive describes the information that citizens consume and their subsequent reactions to it. Today, any citizen has the fundamental right to speech and expression, to share their views publicly on any social media platform. So, how can we streamline reliable information regarding financial education, stock market etc.

SEBI has recognized ‘influencers’¹³ as legit in this country. It gives clear guidelines for the future influencers of this country to give proper, unbiased advice within the realm of regulation specific to the stock market.

Section 4.2¹⁴ of ‘Consultation paper on Association of SEBI Registered Intermediaries/Regulated Entities with Unregistered Entities (including Finfluencers)’ states that direct stock cannot be promoted by non-registered influencers. (SEBI, 2023)

Even with registered Registered Investment Advisor (RIA)¹⁵ advisors there have been misleading cases. (Manek, 2023)

2. Proactive

Proactive measures involve shaping information in the form of education, initiatives, programs, etc. There are two types of measures that focus on educating people in the realm of financial education -

a. Courses of financial education

As per National Education Policy 2020¹⁶, “At the level of society and the nation, literacy and basic education are powerful force multipliers which greatly enhance the success of all other developmental efforts. Worldwide data on nations indicate extremely high correlations between literacy rates and per capita GDP.” The existing courses relevant to financial education focus on banking, savings, income, expenses, and budgeting. The courses should cover the behavioral

¹³ Financial influencers, commonly called ‘influencers’, are persons who provide information and/or advice on various financial topics such as investing in securities, personal finance, banking products, insurance, real estate investment, etc. through social/digital media platforms/channels, and have the ability to influence the financial decisions of their followers.

¹⁴ No SEBI registered intermediaries/regulated entities or their agents/representatives shall, directly or indirectly, have any association/relationship in any form, whether monetary or non-monetary, for any promotion or advertisement of their services/products, with any unregistered entities (including influencers).

¹⁵ RIA stands for Registered Investment Advisor, which is an individual or firm that provides financial advice to clients and manages their investment portfolios.

¹⁶ The National Education Policy, 2020 aims to transform India's education system by providing high-quality, equitable education rooted in Indian ethos, preparing youth for national and global challenges, and positioning India as a global knowledge superpower, focusing on access, equity, quality, affordability, and accountability across all levels of education.

aspects of financial decision making and personal finance planning. Along with introducing them to theoretical, mathematical and empirical concepts, they should also be taught anomalies and biases that investors face in financial markets. The curriculum should help them explore most common biases and mistakes that individuals make while dealing with money.

Conclusion

The exploration of integrating behavioral economics principles into financial education policies unveils significant potential for enhancing financial literacy among the citizens of Delhi. Behavioral economics encompasses various biases, heuristics, and emotional factors that obscure decision-making processes, both financial and non-financial. However, behavioral economics remains a subject ensconced in obscurity, necessitating its demystification for the populace. People must be informed that behavioral economics is not an esoteric field but one intimately connected to daily life, characterized by common mistakes, fallacies, and errors in judgment.

So Behavioral economics consists of many types of biases, heuristics and emotional factors that cloud decision making both financial as well as non-financial, and largely economic. But behavioral economics is also a subject that is shrouded in unknown area, it needs to be brought out to the people, people need to be told that behavioral economics is not something esoteric; it is something that you can relate to and keep doing in daily life, it consists of mistakes and fallacies, errors that we commit. So the moment we are aware of our own vulnerabilities, of our own blind side, it equips us with the right attitude, not just aptitude.

- *Vishal Nair, Economic Advisor*

The study underscores the necessity of embedding these principles within existing educational frameworks to counteract cognitive biases influencing financial decisions. By comprehending and mitigating these biases, individuals can make more informed and prudent financial choices, thereby fostering a culture of financial well-being and resilience.

Way forward

1. Reactive

In the context of behavioral economics when we focus on making people aware of the concepts of behavioral economics to make informed financial decision, the following approaches can be taken -

- a. Collaborate with Experts: Platforms and organizations can partner with reputable economists, financial experts, and educational institutions to produce and promote content that accurately explains behavioral economics.
- b. Educational Campaigns: Develop engaging and accessible content, such as videos, articles, podcasts, and webinars, that explain key principles of behavioral economics in a straightforward manner.

Interviewee 3 emphasized enhancing financial literacy through several key strategies. These include embedding financial education into school curricula, utilizing technology such as mobile apps and online platforms to engage diverse demographics, and conducting nationwide awareness campaigns. Additionally, collaborating with NGOs is advocated to deliver personalized and localized financial education initiatives, ensuring broader accessibility and relevance across communities.

- c. Community Building: Foster online communities where people can discuss financial topics and behavioral economics, moderated by experts to ensure the accuracy of the information shared.

Interviewee 2 talked about how “behavioral economics or behavioral biases they come out in the open during interactive sessions. So the hurdle here is how to design the curriculum, and how to have the pedagogy or the study approach in such a way that it incorporates group decision making and interaction.”

2. Proactive

Proactive measure focuses on financial education which is structured around three core areas -

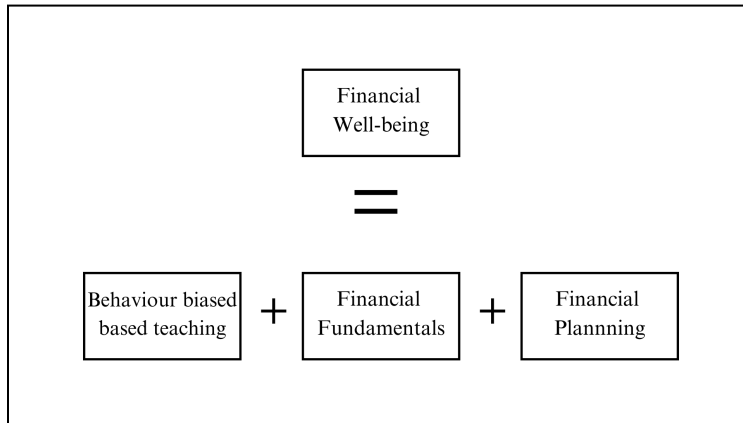
- a. Financial Fundamentals (budgeting, saving, debt management, basic investments)
- b. Financial Planning and Decision Making (goal setting, life event planning, informed choices)
- c. Behavioral Finance and Financial Well-Being (cognitive biases, consumer behavior, mindset shifts for financial health)

This holistic approach equips individuals with essential skills to manage personal finances effectively, strategize for the future, and cultivate overall financial wellness. Integrating cognitive biases into financial policies and interventions ensures these

strategies resonate with human behavior, fostering informed decision-making and sustainable financial habits.

Figure 21

Key Criteria for Financial Well-Being



Note. This figure highlights three critical components essential for achieving financial well-being (Witte, 2023)

Internship Report Final (Rujula Joshi).pdf

ORIGINALITY REPORT

8%

SIMILARITY INDEX

7%

INTERNET SOURCES

3%

PUBLICATIONS

2%

STUDENT PAPERS

PRIMARY SOURCES

1	apply.jaipur.manipal.edu Internet Source	1%
2	documents1.worldbank.org Internet Source	1%
3	doczz.net Internet Source	1%
4	louisdl.louislibraries.org Internet Source	1%
5	www.financialexpress.com Internet Source	1%
6	"International Handbook of Financial Literacy", Springer Nature, 2016 Publication	1%
7	www.behavioraleconomics.com Internet Source	1%
8	www.rbi.org.in Internet Source	1%

References

- Afif, y. Z., Islan, W. W., Calvo - Gonzalez, O., & Dalton, A. (2019). *World Bank Document*.
World Bank Document. Retrieved June 18, 2024, from
<https://documents1.worldbank.org/curated/en/710771543609067500/pdf/132610-REVIS-ED-00-COUNTRY-PROFILES-dig.pdf>
- Atkinson, A. (n.d.). Measuring Financial Literacy.
<https://www.oecd.org/finance/financial-education/48303570.pdf>
- Ellsberg, D. (1961, November). Risk, Ambiguity, and the Savage Axioms. Retrieved June 21, 2024, from <https://academic.oup.com/qje/article-abstract/75/4/643/1913802>
- Income tax department. (2024-2025). *Salaried Individuals for AY 2024-25*. Income Tax.
Retrieved June 20, 2024, from
<https://www.incometax.gov.in/iec/foportal/help/individual/return-applicable-1>
- IOSCO & OECD. (2018). *The Application of Behavioural Insights to Financial Literacy and Investor Education Programmes and Initiatives*.
- Kahneman, D., & Tversky, A. (1979, March). Prospect Theory: An Analysis of Decision under Risk. Retrieved June 21, 2024, from
https://web.mit.edu/curhan/www/docs/Articles/15341_Readings/Behavioral_Decision_Theory/Kahneman_Tversky_1979_Prospect_theory.pdf
- Kandula, S. N., & Gupta, M. (2021). *IPE - IPE JoM (Jan-Jun, 2021) - FINAL.indd*. IPE India.
Retrieved June 18, 2024, from
https://www.ipeindia.org/wp-content/uploads/2021/11/Current-Issue_IJM.pdf

- Manek, S. (2023, August 10). Indore case exemplifies how RIA licence can be misused. *Mint*.
<https://www.livemint.com/money/personal-finance/investment-advisers-scam-clients-sebi-discovers-fraud-in-money-market-manthan-financial-services-11691686790224.html>
- National Strategy for Financial education*. (2015). OECD. Retrieved June 18, 2024, from
<https://www.oecd.org/finance/National-Strategies-Financial-Education-Policy-Handbook.pdf>
- Rasool, N. (2019, May 20th). Financial literacy and behavioural biases of individual investors: empirical evidence of Pakistan stock exchange. Retrieved June 18, 2024, from
<http://www.scielo.org.pe/pdf/jefas/v25n50/2218-0648-jefas-25-50-00261.pdf>
- Robert Plutchik. (1982). *A psychoevolutionary theory of emotions*.
<https://journals.sagepub.com/doi/10.1177/053901882021004003>
- Ross, H. (Writer). (2014, November 17th). Everyday Bias: Identifying and Navigating Unconscious Judgments [TV series episode].
<https://www.youtube.com/watch?v=v01SxXui9XQ>
- Sebas, A., & Maytham, J. (2021, February 23). (PDF) *An application of behavioural finance in banking: The Discovery Bank case*. ResearchGate. Retrieved June 18, 2024, from
https://www.researchgate.net/publication/349564459_An_application_of_behavioural_finance_in_banking_The_Discovery_Bank_case
- SEBI. (2023, August 25). *Consultation Paper on Association of SEBI Registered Intermediaries/Regulated Entities with Unregistered Entities (including Finfluencers)*. SEBI. Retrieved June 18, 2024, from
<https://www.sebi.gov.in/reports-and-statistics/reports/aug-2023/consultation-paper-on-ass>

ociation-of-sebi-registered-intermediaries-regulated-entities-with-unregistered-entities-including-finfluencers-_75932.html

Spreading the financial literacy wave across India: National Finance Olympiad 2023. (2023, December 21). Business Standard. Retrieved June 18, 2024, from https://www.business-standard.com/content/press-releases-ani/spreading-the-financial-literacy-wave-across-india-national-finance-olympiad-2023-123122100732_1.html

Thaler, R. H. (2016). *Misbehaving*. WW Norton.

Trotter, W. (1975). *Instincts of the Herd in Peace and War*. Gale Research Company.

Wafula, P. S. (2022, April 15). *Financial Literacy Around the World | Uillinois*. Blogs. Retrieved June 18, 2024, from <https://blogs.illinois.edu/view/7550/558591870#image-1>

Witte, K. D. (2023, May 5). *Financial literacy in the evolving digital financial landscape*. <https://www.oecd.org/financial/education/financial-literacy-in-the-evolving-digital-financial-landscape-presentations.pdf>

Witynski, M. (n.d.). *What is behavioral economics?* UChicago News. Retrieved June 18, 2024, from <https://news.uchicago.edu/explainer/what-is-behavioral-economics>

World Bank Development Research Group, The George Washington University School of Business, & World Bank Development Research Group. (n.d.). *Financial Literacy Around the World. Financial Literacy Around the World: Insights from the standard and poor's rating services global financial literacy survey*.

Bibliography

1. https://www.indiabudget.gov.in/budget2019-20/economicsurvey/doc/vol1chapter/echap02_vol1.pdf
2. <https://thedecisionlab.com/reference-guide/economics/behavioral-economics>
3. <https://qz.com/1201773/we-took-the-worlds-most-scientific-personality-test-and-discovered-unexpectedly-sexist-results#:~:text=In%201998%2C%20Oliver%20John%20from,in%20academic%20research%20into%20personality.>
4. https://www.oecd.org/daf/fin/financial-education/TrustFund2013_OECD_INFE_Finl_Ed_for_Youth_and_in_Schools.pdf
5. <https://blog.teachmint.com/inclusion-of-rbis-financial-literacy-program-in-school-curriculum/>
6. <https://www.oecd.org/financial/education/financial-literacy-in-the-evolving-digital-financial-landscape-presentations.pdf>
7. <https://www.rbi.org.in/scripts/PublicationReportDetails.aspx?UrlPage=&ID=1156#CH1>
8. <https://www.behavioraleconomics.com/resources/mini-encyclopedia-of-be/homo-economicus/>
9. https://publications.gc.ca/collections/collection_2011/fin/F2-203-2011-eng.pdf
10. https://gflec.org/wp-content/uploads/2015/11/Finlit_paper_16_F2_singles.pdf
11. <https://news.uchicago.edu/explainer/what-is-behavioral-economics#:~:text=Shaped%20by%20the%20field%2Ddefining,the%20consequences%20of%20those%20actions>
12. <https://www.oecd.org/about/>
13. <https://eng.uvm.dk/primary-and-lower-secondary-education/the-folkeskole/about-the-folkeskole>
14. <https://pdf.sciencedirectassets.com/277811/1-s2.0-S1877042813X00254/1-s2.0-S1877042813029236/main.pdf?>
15. <https://www.rbi.org.in/rbioecdflc2017/Downloads/Conference%20PPTs/08th%20Nov%202017/5.%20Session%201.3%20-%20Uma%20Shankar%20-%20Financial%20literacy%20in%20india%20-%20data%20and%20policy.pdf>

Annexure

Survey Questionnaire

1. Name
2. Age
3. Gender
4. Occupation
5. Education Level
6. Income Bracket Location
7. Are you aware of any government policies or initiatives aimed at promoting financial education in India?
8. Name any government policy(ies) or initiative(s) aimed at promoting financial education in India.
9. Are you aware with the concept of behavioral biases in decision-making?
10. What are these behavioral biases: Behavioral biases are a psychological part of human decision-making that can cause people to make irrational choices.
Can you name any specific behavioral biases that you believe may affect financial decision-making?
11. Do you think behavioral biases can hinder efforts to improve financial literacy?
12. Before you buy something, do you think about where your money is coming from? Like, is it from your job, your savings, or maybe a gift?
13. Have you ever set aside some money for a specific thing, like saving up for a vacation or buying a new gadget?
14. Have you ever felt pressured by friends or others when making a money decision?
15. How often do your feelings affect your money choices? (excitement, anger, fear, or restlessness)
16. Can you think of a time when seeing a product advertised as "discounted from ₹1000 to ₹500" made you feel like you were getting a great deal and even though you didn't need it, the fact that it was half off made you think it was a steal.
17. Do you feel like the first price mentioned in a bargain sets the tone for how much you're willing to spend? Perhaps when you are at a market, and the vendor's starting price seemed so high that even after bargaining, you ended up spending more than you intended.
18. How often do you find yourself making purchasing decisions based on recommendations from friends or family?

Interview Questionnaire

1. How different stakeholders influence financial decision making during policy making process?
2. What do you see as the biggest hurdles when it comes to integrating behavioral economics into financial literacy efforts?

3. Have there been any interesting lessons or approaches you've noticed from private industry players like credit agencies or investment platforms?
4. How do you think we can learn from these private sector experiences to enhance our own financial literacy initiatives?
5. Do you think there's room for us to make financial education more engaging or fun? Any ideas on how we could do that? And which methods have you found to be most effective?
Govt reports tend to be boring
6. In your opinion, what role should the government play in promoting financial literacy?
7. What is your take on behavioral economics? How do you think it could help improve financial literacy efforts?