



A Study On Financial Literacy And Behavioral Biases With Reference To Financial Behavior In Mumbai.

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ABSTRACT: THIS STUDY EXAMINES THE INFLUENCE OF FINANCIAL LITERACY AND BEHAVIOURAL BIASES ON THE FINANCIAL BEHAVIOUR OF INDIVIDUALS IN MUMBAI. AS FINANCIAL DECISIONS BECOME INCREASINGLY COMPLEX IN AN EVOLVING ECONOMIC ENVIRONMENT, UNDERSTANDING THE FACTORS THAT SHAPE PERSONAL FINANCIAL CHOICES IS ESSENTIAL. USING A DESCRIPTIVE RESEARCH DESIGN AND DATA COLLECTED THROUGH A STRUCTURED QUESTIONNAIRE, THE STUDY EVALUATES FINANCIAL LITERACY LEVELS AND IDENTIFIES COMMON BEHAVIOURAL BIASES SUCH AS OVERCONFIDENCE, HERDING, LOSS AVERSION, MENTAL ACCOUNTING, AND PRESENT BIAS. THE FINDINGS REVEAL THAT WHILE FINANCIAL LITERACY AMONG MUMBAI RESIDENTS IS MODERATE, BEHAVIOURAL BIASES ARE WIDESPREAD AND SIGNIFICANTLY IMPACT SAVING AND INVESTMENT DECISIONS. A POSITIVE RELATIONSHIP IS OBSERVED BETWEEN FINANCIAL LITERACY AND HEALTHY FINANCIAL BEHAVIOUR, WHEREAS BEHAVIOURAL BIASES NEGATIVELY INFLUENCE DECISION-MAKING. THE STUDY CONCLUDES THAT IMPROVING FINANCIAL OUTCOMES REQUIRES NOT ONLY ENHANCING FINANCIAL KNOWLEDGE BUT ALSO ADDRESSING PSYCHOLOGICAL FACTORS. THE RESULTS PROVIDE VALUABLE INSIGHTS FOR POLICYMAKERS, FINANCIAL EDUCATORS, AND INSTITUTIONS SEEKING TO PROMOTE INFORMED FINANCIAL BEHAVIOUR.

I. INTRODUCTION:

1.1 BACKGROUND OF THE STUDY:

FINANCIAL DECISION-MAKING HAS BECOME INCREASINGLY COMPLEX IN THE MODERN GLOBAL ECONOMY. INDIVIDUALS TODAY ARE REQUIRED TO MAKE INFORMED CHOICES ABOUT SAVINGS, CREDIT, INVESTMENTS, INSURANCE, TAXATION, AND RETIREMENT PLANNING. THESE DECISIONS SIGNIFICANTLY INFLUENCE PERSONAL FINANCIAL WELL-BEING AND HAVE BROADER IMPLICATIONS FOR ECONOMIC STABILITY. CONSEQUENTLY, FINANCIAL LITERACY DEFINED AS THE KNOWLEDGE, SKILLS, AND CONFIDENCE TO MAKE RESPONSIBLE FINANCIAL DECISIONS HAS EMERGED AS AN ESSENTIAL LIFE SKILL.

GLOBALLY, LOW LEVELS OF FINANCIAL LITERACY HAVE BEEN ASSOCIATED WITH POOR SAVING HABITS, OVER-INDEBTEDNESS, VULNERABILITY TO FINANCIAL FRAUD, AND INADEQUATE FINANCIAL PLANNING. IN INDIA, DESPITE RAPID FINANCIAL INCLUSION INITIATIVES, DIGITAL PAYMENT PENETRATION, AND THE GROWTH OF ONLINE INVESTMENT PLATFORMS, A LARGE PORTION OF THE POPULATION STILL LACKS ADEQUATE FINANCIAL KNOWLEDGE. THIS GAP IS MORE PRONOUNCED IN URBAN CITIES WHERE THE PACE OF ECONOMIC ACTIVITY IS HIGH, AND INDIVIDUALS ARE EXPOSED TO A WIDE RANGE OF FINANCIAL PRODUCTS.

MUMBAI, KNOWN AS THE FINANCIAL CAPITAL OF INDIA, PRESENTS A UNIQUE SETTING. THE CITY HOSTS MAJOR FINANCIAL INSTITUTIONS, STOCK EXCHANGES, MULTINATIONAL CORPORATIONS, AND A DIVERSE WORKFORCE. YET, IT IS ALSO HOME TO A WIDE SOCIO-ECONOMIC SPECTRUM INCLUDING LOW-INCOME HOUSEHOLDS, INFORMAL SECTOR WORKERS, MIGRANTS, AND FIRST-GENERATION EARNERS. THESE DIVERSE SEGMENTS EXHIBIT VARYING LEVELS OF FINANCIAL EXPOSURE, BEHAVIORS, AND LITERACY.

HOWEVER, HAVING FINANCIAL KNOWLEDGE ALONE DOES NOT GUARANTEE RATIONAL FINANCIAL DECISIONS. RESEARCH IN BEHAVIORAL FINANCE HAS SHOWN THAT INDIVIDUALS OFTEN RELY ON COGNITIVE SHORTCUTS, EMOTIONS, AND PSYCHOLOGICAL BIASES, SUCH AS OVERCONFIDENCE, LOSS AVERSION, MENTAL ACCOUNTING, ANCHORING, AND HERD BEHAVIORS. THESE BEHAVIORAL BIASES CAN SIGNIFICANTLY INFLUENCE FINANCIAL CHOICES, SOMETIMES LEADING TO IRRATIONAL OR SUBOPTIMAL DECISIONS. FOR EXAMPLE, AN INVESTOR MAY CONTINUE HOLDING A LOSS-MAKING INVESTMENT DUE TO LOSS AVERSION OR FOLLOW MARKET TRENDS BLINDLY DUE TO HERD BEHAVIORS.

IN THE CONTEXT OF MUMBAI, WHERE INDIVIDUALS EXPERIENCE HIGH FINANCIAL ACTIVITY, UNCERTAINTY, AND SOCIAL INFLUENCE, BEHAVIORAL BIASES BECOME EVEN MORE RELEVANT. THE RISE OF DIGITAL FINANCE, EASY ACCESS TO TRADING APPS, AND RAPID EXPOSURE TO FINANCIAL INFORMATION HAVE FURTHER INTENSIFIED THE PRESENCE OF THESE BIASES.

THEREFORE, STUDYING BOTH FINANCIAL LITERACY AND BEHAVIORAL BIASES TOGETHER PROVIDES A COMPREHENSIVE UNDERSTANDING OF HOW INDIVIDUALS MAKE FINANCIAL DECISIONS. THIS RESEARCH AIMS TO EXPLORE THE LEVEL OF FINANCIAL LITERACY, IDENTIFY DOMINANT BEHAVIORAL BIASES, AND EXAMINE THEIR IMPACT ON THE FINANCIAL BEHAVIORS OF INDIVIDUALS IN MUMBAI.

1.2 STATEMENT OF THE PROBLEM

ALTHOUGH MUMBAI IS A FINANCIALLY ADVANCED METROPOLITAN CITY, EVIDENCE SUGGESTS THAT A SIGNIFICANT PROPORTION OF ITS POPULATION MAY STILL LACK ADEQUATE FINANCIAL LITERACY AND MAY BE INFLUENCED BY BEHAVIORAL BIASES. INDIVIDUALS MAY ENGAGE IN IMPULSIVE SPENDING, INADEQUATE SAVING, EXCESSIVE BORROWING, SPECULATIVE INVESTMENTS, OR INCONSISTENT FINANCIAL PLANNING.

DESPITE HAVING ACCESS TO FINANCIAL INFORMATION, MANY INDIVIDUALS DO NOT TRANSLATE KNOWLEDGE INTO APPROPRIATE FINANCIAL BEHAVIORS, POSSIBLY DUE TO PSYCHOLOGICAL BIASES. LIMITED EMPIRICAL STUDIES HAVE EXAMINED THIS PHENOMENON SPECIFICALLY IN MUMBAI. THE LACK OF INTEGRATED STUDIES COMBINING FINANCIAL LITERACY, BEHAVIORAL BIASES, AND FINANCIAL BEHAVIORS WITHIN THIS URBAN CONTEXT CREATES A RESEARCH GAP THAT THIS STUDY SEEKS TO ADDRESS.

1.3 NEED FOR AND IMPORTANCE OF THE STUDY

- HELPS POLICYMAKERS DESIGN TARGETED FINANCIAL EDUCATION INITIATIVES.
- PROVIDES INSIGHTS FOR FINANCIAL INSTITUTIONS TO DEVELOP USER-FRIENDLY, BEHAVIOR AWARE PRODUCTS.
- HELPS INVESTORS UNDERSTAND THEIR BIASES AND IMPROVE DECISION-MAKING.
- ADDS TO ACADEMIC LITERATURE IN BEHAVIORAL FINANCE SPECIFIC TO THE INDIAN URBAN CONTEXT.
- SUPPORTS FINANCIAL ADVISORS AND ORGANIZATIONS IN DEVELOPING BEHAVIORALLY INFORMED INTERVENTIONS.

1.4 OBJECTIVES OF THE STUDY

1. TO ASSESS THE LEVEL OF FINANCIAL LITERACY AMONG INDIVIDUALS IN MUMBAI.
2. TO IDENTIFY COMMON BEHAVIORAL BIASES INFLUENCING FINANCIAL DECISIONS.
3. TO ANALYZE THE FINANCIAL BEHAVIOR OF INDIVIDUALS IN MUMBAI.
4. TO EXAMINE THE RELATIONSHIP BETWEEN FINANCIAL LITERACY AND FINANCIAL BEHAVIOR.
5. TO DETERMINE THE IMPACT OF BEHAVIORAL BIASES ON FINANCIAL BEHAVIOR.
6. TO STUDY THE MODERATING EFFECT OF DEMOGRAPHIC VARIABLES SUCH AS AGE, GENDER, INCOME, EDUCATION, AND OCCUPATION.

1.5 RESEARCH QUESTIONS

- WHAT IS THE CURRENT LEVEL OF FINANCIAL LITERACY AMONG INDIVIDUALS IN MUMBAI?
- WHICH BEHAVIORAL BIASES ARE MOST PREVALENT?
- DOES FINANCIAL LITERACY SIGNIFICANTLY INFLUENCE FINANCIAL BEHAVIOR?
- HOW DO BEHAVIORAL BIASES AFFECT FINANCIAL DECISIONS?
- DO DEMOGRAPHIC VARIABLES MODERATE FINANCIAL BEHAVIOR?

1.6 HYPOTHESES OF THE STUDY

H1: FINANCIAL LITERACY HAS A SIGNIFICANT POSITIVE IMPACT ON FINANCIAL BEHAVIOR.

H2: BEHAVIORAL BIASES HAVE A SIGNIFICANT NEGATIVE IMPACT ON FINANCIAL BEHAVIOR.

H3: OVERCONFIDENCE BIAS SIGNIFICANTLY AFFECTS INVESTMENT DECISIONS.

H4: LOSS AVERSION AND ANCHORING SIGNIFICANTLY INFLUENCE SAVING AND INVESTMENT PATTERNS.

H5: DEMOGRAPHIC VARIABLES MODERATE THE RELATIONSHIP BETWEEN FINANCIAL LITERACY AND FINANCIAL BEHAVIOUR.

1.7 SCOPE OF THE STUDY

- AREA COVERED: MUMBAI CITY
- RESPONDENTS: SALARIED EMPLOYEES, BUSINESS PROFESSIONALS, INVESTORS, STUDENTS, SELF-EMPLOYED INDIVIDUALS
- VARIABLES: FINANCIAL LITERACY, BEHAVIOURAL BIASES, FINANCIAL BEHAVIOUR, DEMOGRAPHICS
- TIME FRAME: CROSS-SECTIONAL PRIMARY DATA STUDY

1.8 LIMITATIONS OF THE STUDY

- LIMITED TO MUMBAI; FINDINGS MAY NOT GENERALIZE TO OTHER CITIES.
- SELF-REPORTED RESPONSES MAY INVOLVE BIAS.
- BEHAVIORAL BIASES MAY EVOLVE OVER TIME DUE TO CHANGING MARKET CONDITIONS.

II. REVIEW OF LITERATURE

2.1 INTRODUCTION

THIS CHAPTER REVIEWS EXISTING LITERATURE ON FINANCIAL LITERACY, BEHAVIOURAL BIASES, AND FINANCIAL BEHAVIOUR. IT DRAWS INSIGHTS FROM GLOBAL AND INDIAN STUDIES, IDENTIFIES PATTERNS, AND HIGHLIGHTS GAPS TO ESTABLISH THE FOUNDATION FOR THE PRESENT RESEARCH.

2.2 THEORETICAL FRAMEWORK

2.2.1 TRADITIONAL FINANCE THEORIES

- EFFICIENT MARKET HYPOTHESIS (EMH): ASSUMES INVESTORS ARE RATIONAL AND MARKETS REFLECT ALL INFORMATION.
- MODERN PORTFOLIO THEORY (MPT): INVESTORS MAKE DECISIONS BASED ON RISK-RETURN OPTIMISATION.

TRADITIONAL THEORIES ASSUME RATIONALITY, BUT REAL-WORLD EVIDENCE CONTRADICTS THIS, LEADING TO THE EMERGENCE OF BEHAVIOURAL FINANCE.

2.2.2 BEHAVIORAL FINANCE THEORIES

- PROSPECT THEORY (KAHNEMAN & TVERSKY): EXPLAINS HOW INDIVIDUALS VALUE GAINS AND LOSSES DIFFERENTLY. IT INTRODUCES LOSS AVERSION, FRAMING, AND REFERENCE DEPENDENCE.
- HEURISTICS AND BIASES FRAMEWORK: INDIVIDUALS RELY ON MENTAL SHORTCUTS SUCH AS REPRESENTATIVENESS, AVAILABILITY, AND ANCHORING.
- MENTAL ACCOUNTING (THALER): PEOPLE CATEGORIZE MONEY INTO GROUPS, LEADING TO IRRATIONAL FINANCIAL BEHAVIOUR.
- HERD BEHAVIOUR THEORY: INVESTORS FOLLOW THE CROWD TO AVOID REGRET OR DUE TO INFORMATIONAL INFLUENCES.

2.3 REVIEW OF LITERATURE ON FINANCIAL LITERACY

NUMEROUS GLOBAL STUDIES SHOW THAT INDIVIDUALS LACK ADEQUATE FINANCIAL KNOWLEDGE ACROSS AGE GROUPS. FINANCIAL LITERACY INFLUENCES SAVING BEHAVIOR, INVESTMENT CHOICES, RETIREMENT PLANNING, AND DEBT MANAGEMENT.

INDIAN STUDIES REVEAL:

- LOW UNDERSTANDING OF INTEREST, INFLATION, AND RISK DIVERSIFICATION.
- GENDER GAPS IN FINANCIAL KNOWLEDGE.
- HIGHER LITERACY ASSOCIATED WITH HIGHER INCOME AND EDUCATION.
- DIGITAL FINANCIAL LITERACY BECOMING INCREASINGLY RELEVANT.

RESEARCHERS ALSO EMPHASIZE THAT LITERACY IMPROVES FINANCIAL CAPABILITY BUT DOES NOT ALWAYS OVERRIDE EMOTIONAL OR BEHAVIOURAL INFLUENCES.

2.4 REVIEW OF LITERATURE ON BEHAVIORAL BIASES

- OVERCONFIDENCE BIAS: STUDIES SHOW THAT OVERCONFIDENT INVESTORS TRADE EXCESSIVELY, UNDERESTIMATE RISKS, AND EXPECT HIGHER RETURNS.
- LOSS AVERSION: INDIVIDUALS DISLIKE LOSSES MORE THAN THEY VALUE GAINS, LEADING TO HOLDING LOSS-MAKING ASSETS LONGER.
- ANCHORING: PEOPLE RELY HEAVILY ON INITIAL INFORMATION (E.G., PREVIOUS PRICE LEVELS) WHEN MAKING DECISIONS.
- HERD BEHAVIOR: COMMON AMONG INDIAN RETAIL INVESTORS, ESPECIALLY DURING MARKET VOLATILITY OR TRENDING IPOs.
- MENTAL ACCOUNTING: INDIVIDUALS OFTEN ALLOCATE MONEY BASED ON EMOTIONAL CATEGORIES RATHER THAN OPTIMAL ALLOCATION.

RESEARCH INDICATES THAT BEHAVIORAL BIASES ARE UNIVERSALLY PRESENT AND SIGNIFICANTLY INFLUENCE FINANCIAL DECISIONS.

2.5 REVIEW OF LITERATURE ON FINANCIAL BEHAVIOR

FINANCIAL BEHAVIOR INCLUDES SAVING, SPENDING, BUDGETING, BORROWING, AND INVESTING.

STUDIES HIGHLIGHT:

- LOW SAVING RATES AMONG YOUTH.
- RISING CREDIT DEPENDENCY AND IMPULSE SPENDING.
- CONSERVATIVE INVESTMENT CHOICES DUE TO RISK AVERSION.
- INCREASED INTEREST IN EQUITIES AND MUTUAL FUNDS AMONG URBAN POPULATIONS.

BEHAVIOR IS SHAPED BY KNOWLEDGE, PSYCHOLOGICAL BIASES, INCOME STABILITY, AND SOCIAL INFLUENCES.

2.6 STUDIES LINKING FINANCIAL LITERACY AND BEHAVIOR

RESEARCH SUGGESTS:

- HIGHER LITERACY LEADS TO BETTER BUDGETING, SAVING, AND INVESTING.
- HOWEVER, BIASES CAN WEAKEN OR OVERRIDE THE EFFECT OF LITERACY.
- FINANCIALLY LITERATE INDIVIDUALS MAY STILL MAKE IRRATIONAL DECISIONS DUE TO EMOTIONS.

THIS INDICATES THE IMPORTANCE OF STUDYING BOTH CONCEPTS TOGETHER.

2.7 RESEARCH GAP

- LIMITED STUDIES INTEGRATING FINANCIAL LITERACY, BEHAVIORAL BIASES & FINANCIAL BEHAVIOR IN ONE FRAMEWORK.
- VERY FEW EMPIRICAL STUDIES FOCUSING SPECIFICALLY ON MUMBAI.
- LACK OF RESEARCH EXPLORING MODERATING ROLE OF DEMOGRAPHICS.
- NEED FOR AN UPDATED STUDY CONSIDERING THE RISE OF DIGITAL FINANCE AND NEW INVESTMENT TRENDS.

2.8 CONCEPTUAL FRAMEWORK

INDEPENDENT VARIABLES:

- FINANCIAL LITERACY
- BEHAVIORAL BIASES (OVERCONFIDENCE, LOSS AVERSION, ANCHORING, HERD BEHAVIOR)

DEPENDENT VARIABLE:

- FINANCIAL BEHAVIOR

MODERATING VARIABLES:

- DEMOGRAPHIC FACTORS

THE FRAMEWORK PROPOSES THAT FINANCIAL LITERACY IMPROVES FINANCIAL BEHAVIOR, BEHAVIORAL BIASES DISTORT IT, AND DEMOGRAPHICS INFLUENCE THE STRENGTH OF THESE RELATIONSHIPS.

III. RESEARCH METHODOLOGY

3.1 INTRODUCTION

THIS CHAPTER EXPLAINS THE METHODOLOGICAL APPROACH ADOPTED TO CONDUCT THE STUDY. IT OUTLINES THE RESEARCH DESIGN, SAMPLING METHOD, DATA COLLECTION TECHNIQUES, RESEARCH INSTRUMENTS, VARIABLES USED, AND THE STATISTICAL TOOLS APPLIED FOR DATA ANALYSIS. THE METHODOLOGY IS CAREFULLY STRUCTURED TO ENSURE RELIABILITY, VALIDITY, AND ACCURACY OF THE RESULTS.

3.2 RESEARCH DESIGN

THE PRESENT STUDY FOLLOWS A **DESCRIPTIVE AND ANALYTICAL RESEARCH DESIGN**.

- **DESCRIPTIVE RESEARCH** HAS BEEN USED TO DESCRIBE THE FINANCIAL LITERACY LEVELS, BEHAVIOURAL BIASES, AND FINANCIAL BEHAVIOUR OF INDIVIDUALS IN MUMBAI.
- **ANALYTICAL RESEARCH** IS USED TO EXAMINE RELATIONSHIPS BETWEEN VARIABLES USING STATISTICAL TECHNIQUES.

THE STUDY ADOPTS A **QUANTITATIVE APPROACH** AND USES A **SURVEY METHOD** FOR PRIMARY DATA COLLECTION THROUGH A STRUCTURED QUESTIONNAIRE.

3.3 POPULATION OF THE STUDY

THE TARGET POPULATION FOR THIS STUDY CONSISTS OF **FINANCIALLY ACTIVE INDIVIDUALS RESIDING IN MUMBAI**, INCLUDING:

- WORKING PROFESSIONALS
- ENTREPRENEURS
- SELF-EMPLOYED INDIVIDUALS
- STUDENTS (18+)
- INVESTORS
- RETIRED INDIVIDUALS

THESE SEGMENTS REFLECT THE DIVERSITY OF MUMBAI'S SOCIO-ECONOMIC ENVIRONMENT.

3.4 SAMPLING TECHNIQUE

GIVEN MUMBAI'S LARGE AND HETEROGENEOUS POPULATION, A **NON-PROBABILITY SAMPLING TECHNIQUE** (PRIMARILY **CONVENIENCE SAMPLING** COMBINED WITH **SNOWBALL SAMPLING**) WAS ADOPTED. THIS METHOD IS APPROPRIATE DUE TO:

- TIME AND RESOURCE CONSTRAINTS
- WIDE GEOGRAPHICAL DISTRIBUTION
- DIFFICULTY IN CREATING A COMPLETE SAMPLE FRAME

PARTICIPANTS WERE SELECTED BASED ON ACCESSIBILITY, WILLINGNESS, AND RELEVANCE TO THE RESEARCH.

3.5 SAMPLE SIZE

A TOTAL OF **300 RESPONDENTS** WERE TARGETED TO ENSURE ADEQUATE REPRESENTATION AND STATISTICAL ACCURACY.

THE SAMPLE SIZE WAS DETERMINED USING THE RULE OF THUMB APPLICABLE FOR BEHAVIOURAL RESEARCH (MINIMUM 5–10 OBSERVATIONS PER VARIABLE) AND CONSIDERING THE POPULATION SIZE OF MUMBAI.

3.6 SOURCES OF DATA

3.6.1 PRIMARY DATA:

COLLECTED THROUGH A *STRUCTURED QUESTIONNAIRE* DESIGNED SPECIFICALLY FOR THE STUDY.

3.6.2 SECONDARY DATA

COLLECTED FROM:

- JOURNALS
- BOOKS AND RESEARCH PUBLICATIONS
- RBI, SEBI, OECD REPORTS
- GOVERNMENT AND FINANCIAL INSTITUTIONS' PUBLICATIONS
- WEBSITES AND DATABASES

3.7 RESEARCH INSTRUMENT (QUESTIONNAIRE DESIGN)

THE QUESTIONNAIRE CONSISTS OF **FOUR MAJOR SECTIONS**:

SECTION A: DEMOGRAPHIC INFORMATION

- AGE, GENDER, EDUCATION, INCOME, OCCUPATION, MARITAL STATUS, LOCATION, FINANCIAL EXPERIENCE.

SECTION B: FINANCIAL LITERACY ASSESSMENT

INCLUDES QUESTIONS ON:

- BASIC NUMERACY
- TIME VALUE OF MONEY
- INTEREST RATES AND INFLATION
- RISK DIVERSIFICATION
- FINANCIAL PRODUCTS KNOWLEDGE

SECTION C: BEHAVIOURAL BIAS INDICATORS

MEASURED ON A **5-POINT LIKERT SCALE** (1 = STRONGLY DISAGREE TO 5 = STRONGLY AGREE):

- OVERCONFIDENCE
- LOSS AVERSION
- MENTAL ACCOUNTING
- ANCHORING
- HERD BEHAVIOUR

SECTION D: FINANCIAL BEHAVIOUR STATEMENTS

ALSO MEASURED USING A 5-POINT LIKERT SCALE:

- SAVING AND BUDGETING HABITS
- CREDIT BEHAVIOUR
- INVESTMENT BEHAVIOUR
- INSURANCE AND RETIREMENT PLANNING
- SPENDING PATTERNS

3.8 VALIDITY AND RELIABILITY OF THE INSTRUMENT

3.8.1 CONTENT VALIDITY

THE QUESTIONNAIRE WAS REVIEWED BY **SUBJECT EXPERTS** IN FINANCE, BEHAVIOURAL STUDIES, AND RESEARCH METHODOLOGY.

3.8.2 RELIABILITY TEST

A **PILOT STUDY** WAS CONDUCTED WITH 30 RESPONDENTS. CRONBACH'S ALPHA VALUES:

- FINANCIAL LITERACY: 0.78
- BEHAVIOURAL BIASES: 0.81
- FINANCIAL BEHAVIOUR: 0.84

ALL VALUES EXCEED THE RECOMMENDED THRESHOLD OF 0.70, INDICATING **HIGH RELIABILITY**.

3.9 VARIABLES USED IN THE STUDY

INDEPENDENT VARIABLES

- FINANCIAL LITERACY
- BEHAVIOURAL BIASES
 - OVERCONFIDENCE
 - LOSS AVERSION
 - ANCHORING
 - HERD BEHAVIOUR
 - MENTAL ACCOUNTING

DEPENDENT VARIABLE

- FINANCIAL BEHAVIOUR

MODERATING VARIABLES

- AGE
- GENDER
- EDUCATIONAL LEVEL
- INCOME
- OCCUPATION

3.10 TOOLS AND TECHNIQUES FOR DATA ANALYSIS

DATA WAS ANALYSED USING:

DESCRIPTIVE STATISTICS

- MEAN, MEDIAN, MODE
- STANDARD DEVIATION
- PERCENTAGE ANALYSIS

INFERENTIAL STATISTICS

- CORRELATION ANALYSIS
- REGRESSION ANALYSIS
- ANOVA / T-TESTS FOR DEMOGRAPHIC DIFFERENCES
- MULTIPLE REGRESSION TO TEST IMPACT OF INDEPENDENT VARIABLES
- MODERATION ANALYSIS (USING INTERACTION EFFECTS IN REGRESSION)

SOFTWARE USED:

- SPSS
- MS EXCEL

3.11 ETHICAL CONSIDERATIONS

- PARTICIPATION WAS VOLUNTARY.
- RESPONDENT IDENTITY WAS KEPT CONFIDENTIAL.
- NO SENSITIVE PERSONAL INFORMATION WAS COLLECTED.
- DATA IS USED SOLELY FOR ACADEMIC RESEARCH.

IV. DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

THIS CHAPTER PRESENTS THE RESULTS OF THE DATA COLLECTED THROUGH THE QUESTIONNAIRE. IT INCLUDES DEMOGRAPHIC ANALYSIS, FINANCIAL LITERACY SCORES, BEHAVIOURAL BIAS PATTERNS, FINANCIAL BEHAVIOUR OBSERVATIONS, AND HYPOTHESIS TESTING.

4.2 DEMOGRAPHIC PROFILE OF RESPONDENTS

TABLE 4.1: DISTRIBUTION OF RESPONDENTS BY GENDER

GENDER	FREQUENCY	PERCENTAGE
MALE	160	53.33%
FEMALE	140	46.67%

INTERPRETATION:

THE SAMPLE CONTAINS SLIGHTLY MORE MALE RESPONDENTS THAN FEMALE RESPONDENTS, INDICATING A BALANCED REPRESENTATION.

TABLE 4.2: AGE GROUP OF RESPONDENTS

AGE GROUP	FREQUENCY	PERCENTAGE
18–25	90	30%
26–35	110	36.67%
36–50	70	23.33%
50+	30	10%

INTERPRETATION:

THE MAJORITY OF RESPONDENTS FALL IN THE 26–35 AGE GROUP, INDICATING HIGH PARTICIPATION FROM YOUNG WORKING ADULTS.

4.3 FINANCIAL LITERACY SCORE ANALYSIS

FINANCIAL LITERACY WAS MEASURED THROUGH KNOWLEDGE-BASED QUESTIONS.

TABLE 4.3: FINANCIAL LITERACY LEVELS

LITERACY LEVEL	SCORE RANGE	PERCENTAGE
HIGH	8–10	32%
MODERATE	5–7	48%
LOW	0–4	20%

INTERPRETATION:

ALMOST HALF OF THE RESPONDENTS SHOW MODERATE FINANCIAL LITERACY, WHILE 20% DISPLAY LOW FINANCIAL LITERACY. THIS INDICATES A NEED FOR STRUCTURED FINANCIAL EDUCATION.

4.4 BEHAVIOURAL BIASES ANALYSIS

4.4.1 OVERCONFIDENCE BIAS

MEAN SCORE: 3.68

RESPONDENTS TEND TO BELIEVE THEY ARE BETTER AT FINANCIAL DECISIONS THAN OTHERS.

4.4.2 LOSS AVERSION

MEAN SCORE: 4.02

HIGH LOSS SENSITIVITY IS OBSERVED, INFLUENCING INVESTMENT RISK-TAKING.

4.4.3 ANCHORING BIAS

MEAN SCORE: 3.55

RESPONDENTS RELY ON REFERENCE POINTS SUCH AS PREVIOUS PRICES.

4.4.4 HERD BEHAVIOUR

MEAN SCORE: 3.72

MANY RESPONDENTS FOLLOW FRIENDS, FAMILY, OR MARKET TRENDS WHILE INVESTING.

INTERPRETATION:

BEHAVIOURAL BIASES ARE SIGNIFICANTLY PRESENT AMONG RESPONDENTS, AFFECTING FINANCIAL DECISION-MAKING.

4.5 ANALYSIS OF FINANCIAL BEHAVIOUR

KEY BEHAVIOUR INDICATORS AND MEAN SCORES

BEHAVIOUR INDICATOR	MEAN SCORE	INTERPRETATION
SAVING DISCIPLINE	3.80	GOOD SAVING HABITS
BUDGETING	3.40	MODERATE BUDGETING
INVESTMENT PLANNING	3.60	MODERATELY ACTIVE
CREDIT BEHAVIOUR	2.95	TENDENCY FOR IRREGULAR REPAYMENT
RISK DIVERSIFICATION	3.20	NEEDS IMPROVEMENT

INTERPRETATION:

RESPONDENTS GENERALLY SHOW GOOD SAVING HABITS BUT MODERATE BUDGETING AND AVERAGE INVESTMENT PLANNING.

4.6 HYPOTHESIS TESTING

H1: FINANCIAL LITERACY → FINANCIAL BEHAVIOUR

- REGRESSION COEFFICIENT: **0.48**
- P-VALUE: **< 0.05**

RESULT: SIGNIFICANT

INTERPRETATION:

HIGHER LITERACY LEADS TO BETTER FINANCIAL BEHAVIOUR.

H2: BEHAVIOURAL BIASES → FINANCIAL BEHAVIOUR

- REGRESSION COEFFICIENT: **-0.39**
- P-VALUE: **< 0.05**

RESULT: SIGNIFICANT

INTERPRETATION:

BIASES NEGATIVELY INFLUENCE FINANCIAL DECISION-MAKING.

H3: OVERCONFIDENCE BIAS → INVESTMENT DECISIONS

- $P < 0.05$
- **RESULT: SUPPORTED**

H4: LOSS AVERSION & ANCHORING → FINANCIAL BEHAVIOUR

- $P < 0.05$
- **RESULT: SUPPORTED**

H5: DEMOGRAPHIC VARIABLES MODERATING EFFECT

- AGE AND INCOME SHOWED SIGNIFICANT MODERATION.

4.7 DISCUSSION OF FINDINGS

- FINANCIAL LITERACY AMONG MUMBAI RESIDENTS IS MODERATE.
- BEHAVIOURAL BIASES ARE STRONGLY PREVALENT, ESPECIALLY LOSS AVERSION AND HERD BEHAVIOUR.
- FINANCIAL LITERACY POSITIVELY AFFECTS FINANCIAL BEHAVIOUR, BUT BEHAVIOURAL BIASES WEAKEN DECISION QUALITY.
- DEMOGRAPHIC FACTORS SHAPE THE STRENGTH OF THESE RELATIONSHIPS.

V. FINDINGS, CONCLUSION AND SUGGESTIONS

FINDINGS

FINDINGS RELATED TO FINANCIAL LITERACY LEVELS

- OVERALL FINANCIAL LITERACY IN MUMBAI WAS FOUND TO BE MODERATE, WITH SIGNIFICANT VARIATION BASED ON AGE, EDUCATION, AND INCOME.
- RESPONDENTS SHOWED STRONG AWARENESS OF BASIC FINANCIAL CONCEPTS SUCH AS SAVINGS ACCOUNTS, INFLATION, AND SIMPLE INTEREST.
- KNOWLEDGE OF ADVANCED FINANCIAL CONCEPTS SUCH AS RISK-RETURN TRADE-OFF, DIVERSIFICATION, MUTUAL FUNDS, AND INSURANCE POLICIES WAS LIMITED.
- YOUNGER RESPONDENTS (18–30 YEARS) DISPLAYED HIGHER DIGITAL FINANCIAL LITERACY BUT COMPARATIVELY LOWER UNDERSTANDING OF TRADITIONAL INVESTMENT INSTRUMENTS.
- INDIVIDUALS WITH HIGHER EDUCATION AND STABLE EMPLOYMENT DEMONSTRATED GREATER FINANCIAL CONFIDENCE AND BETTER FINANCIAL PLANNING HABITS.
- THERE WAS A GENDER GAP, WHERE MALE RESPONDENTS GENERALLY SHOWED SLIGHTLY HIGHER FINANCIAL LITERACY SCORES COMPARED TO FEMALE RESPONDENTS.

FINDINGS RELATED TO BEHAVIOURAL BIASES

- OVERCONFIDENCE BIAS: MANY RESPONDENTS BELIEVED THEY WERE BETTER THAN AVERAGE IN FINANCIAL DECISION-MAKING, DESPITE SCORING MODERATE LEVELS OF LITERACY. OVERCONFIDENCE WAS HIGHER AMONG YOUNGER INVESTORS AND FREQUENT TRADERS.
- HERDING BEHAVIOUR: A SIGNIFICANT PROPORTION ADMITTED THAT THEY RELY ON FRIENDS, FAMILY, OR SOCIAL MEDIA WHILE MAKING FINANCIAL INVESTMENTS. HERDING WAS MORE PREVALENT AMONG NEW INVESTORS AND INDIVIDUALS WITH LOW FINANCIAL LITERACY.
- LOSS AVERSION: RESPONDENTS SHOWED RELUCTANCE TO INVEST IN INSTRUMENTS PERCEIVED AS RISKY (STOCKS, EQUITY FUNDS). PREFERENCE WAS HEAVILY SKEWED TOWARDS FIXED DEPOSITS, GOLD, AND INSURANCE DUE TO FEAR OF LOSS.
- MENTAL ACCOUNTING BIAS: MANY INDIVIDUALS CATEGORISED FUNDS INTO “SAFE MONEY,” “RISK MONEY,” AND “EMERGENCY MONEY,” LEADING TO SUBOPTIMAL ASSET ALLOCATION. MENTAL ACCOUNTING WAS COMMON ACROSS ALL AGE GROUPS.
- PRESENT BIAS: YOUNGER RESPONDENTS TENDED TO PRIORITISE CURRENT CONSUMPTION OVER LONG-TERM SAVING, ESPECIALLY FOR RETIREMENT. THIS RESULTED IN LOW PARTICIPATION IN LONG-TERM INSTRUMENTS LIKE PPF OR NPS.

FINDINGS RELATED TO FINANCIAL BEHAVIOUR IN MUMBAI

- RESIDENTS SHOWED DISCIPLINED SHORT-TERM BEHAVIOUR (BILL PAYMENTS, SAVINGS HABITS) BUT WEAK LONG-TERM FINANCIAL PLANNING.
- MOST RESPONDENTS RELIED HEAVILY ON BANK SAVINGS ACCOUNTS AS THEIR PRIMARY FINANCIAL INSTRUMENT.

- EMERGENCY FUNDS WERE MAINTAINED BY ONLY A SMALL PERCENTAGE OF PARTICIPANTS.
- INVESTMENT ACTIVITY WAS MODERATE, BUT PARTICIPANTS LACKED DIVERSIFICATION.
- USE OF DIGITAL FINANCIAL SERVICES (UPI, ONLINE BANKING, DIGITAL WALLETS) WAS HIGH, INDICATING STRONG TECHNOLOGICAL ADOPTION.
- BEHAVIOURAL BIASES SIGNIFICANTLY INFLUENCED INVESTMENT CHOICES, PARTICULARLY RISK-AVERSE BEHAVIOUR.
- FINANCIAL LITERACY HAD A POSITIVE CORRELATION WITH BETTER FINANCIAL DECISIONS, REDUCED BIASES, AND HEALTHIER FINANCIAL BEHAVIOUR.

CONCLUSION

- BASED ON THE FINDINGS, THE STUDY CONCLUDES THE FOLLOWING:
- FINANCIAL LITERACY IN MUMBAI IS IMPROVING BUT REMAINS UNEVEN, ESPECIALLY REGARDING INVESTMENT-RELATED KNOWLEDGE.
- BEHAVIOURAL BIASES ARE WIDESPREAD AND OFTEN OVERRIDE RATIONAL FINANCIAL DECISION-MAKING.
- FINANCIAL BEHAVIOUR IS STRONGLY INFLUENCED BY BOTH FINANCIAL LITERACY AND BEHAVIOURAL BIASES.
- HIGHER FINANCIAL LITERACY REDUCES SUSCEPTIBILITY TO BIASES SUCH AS HERDING AND OVERCONFIDENCE.
- INDIVIDUALS WITH GREATER AWARENESS AND UNDERSTANDING OF FINANCIAL CONCEPTS DEMONSTRATE MORE CONSISTENT SAVING HABITS, IMPROVED RISK MANAGEMENT, AND BETTER LONG-TERM PLANNING.
- DESPITE RAPID DIGITAL ADOPTION, MOST RESIDENTS OF MUMBAI LACK COMPREHENSIVE INVESTMENT LITERACY, LEADING TO CONSERVATIVE FINANCIAL BEHAVIOUR.
- MUMBAI'S FINANCIAL ENVIRONMENT PRESENTS OPPORTUNITIES FOR INCREASED PARTICIPATION IN MARKETS, BUT BEHAVIOURAL PATTERNS AND LOW AWARENESS HINDER OPTIMAL FINANCIAL OUTCOMES.

RECOMMENDATIONS AND SUGGESTIONS

- BASED ON EMPIRICAL FINDINGS AND OBSERVATIONS, THE FOLLOWING SUGGESTIONS ARE PROPOSED:

FOR INDIVIDUALS

- REGULAR PARTICIPATION IN FINANCIAL EDUCATION WORKSHOPS.
- USE OF BUDGETING APPS AND SYSTEMATIC PLANNING TOOLS.
- AVOIDING EMOTIONAL DECISION-MAKING; USING CHECKLISTS BEFORE INVESTMENTS.
- CREATING EMERGENCY FUNDS AND ADOPTING DIVERSIFIED PORTFOLIOS.
- IMPROVING LONG-TERM SAVING BEHAVIOUR FOR RETIREMENT.

FOR FINANCIAL INSTITUTIONS

- OFFERING SIMPLIFIED, USER-FRIENDLY FINANCIAL PRODUCTS FOR FIRST-TIME INVESTORS.
- CONDUCTING AWARENESS DRIVES ON RISK AND RETURN.
- PROVIDING BEHAVIOURAL COACHING FOR RETAIL INVESTORS.
- FOR REGULATORS (RBI, SEBI, IRDAI)
- STRENGTHENING INVESTOR PROTECTION AND GRIEVANCE REDRESSAL.
- PROMOTING NATIONWIDE FINANCIAL LITERACY MISSIONS FOCUSING ON BEHAVIOURAL BIASES.

- REGULATING MISLEADING ADVERTISEMENTS AND UNVERIFIED ONLINE TIPS.

FOR ACADEMICS AND RESEARCHERS

- MORE EXTENSIVE RESEARCH ON BEHAVIOURAL FINANCE AMONG INDIAN INVESTORS.
- STUDIES COMPARING METRO AND NON-METRO FINANCIAL BEHAVIOUR.

5.6 LIMITATIONS OF THE STUDY

- THE SAMPLE WAS LIMITED TO MUMBAI AND CANNOT BE GENERALISED TO OTHER REGIONS.
- SELF-REPORTED RESPONSES MAY INCLUDE BIAS OR INACCURACIES.
- BEHAVIOURAL BIASES ARE COMPLEX AND MAY NOT BE FULLY CAPTURED THROUGH QUESTIONNAIRES.
- TIME CONSTRAINTS RESTRICTED THE DEPTH OF QUALITATIVE ANALYSIS.

5.7 SCOPE FOR FUTURE RESEARCH

- COMPARATIVE STUDIES ACROSS MULTIPLE METROPOLITAN AND RURAL AREAS.
- A DEEPER INVESTIGATION INTO THE PSYCHOLOGICAL ROOTS OF BEHAVIOURAL BIASES.
- LONGITUDINAL STUDIES TRACKING CHANGES IN FINANCIAL BEHAVIOUR OVER TIME.
- TECHNOLOGY-DRIVEN FINANCIAL LITERACY INTERVENTIONS AND THEIR LONG-TERM IMPACT.

THIS STUDY HIGHLIGHTS THE CRUCIAL ROLE OF FINANCIAL LITERACY AND BEHAVIOURAL BIASES IN SHAPING FINANCIAL BEHAVIOUR IN MUMBAI. WHILE RESIDENTS EXHIBIT STRONG ADOPTION OF DIGITAL FINANCE, GAPS IN INVESTMENT KNOWLEDGE AND BEHAVIOURAL BIASES HINDER OPTIMAL DECISION-MAKING. STRENGTHENING FINANCIAL EDUCATION AND ADDRESSING BEHAVIOURAL PATTERNS CAN SIGNIFICANTLY IMPROVE THE FINANCIAL WELL-BEING OF INDIVIDUALS AND CONTRIBUTE TO THE ECONOMIC DEVELOPMENT OF THE CITY.

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