


Research Article

Exploring Behavioral Finance and Financial Management: Strengthening the Financial Vulnerabilities of Microfinance Borrowers

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Abstract

Purpose - This paper investigates the financial behavior and behavioral financial management among microfinance participants, focusing on such dimensions of behavioral finance as personal accounting, herd behavior, emotional gaps, anchoring, and self-attribution, and their effect on budgeting, savings, and expenditure.

Methodology - The research design is quantitative, descriptive-correlational. The selection of 196 respondents was done using a stratified random sampling technique. A structured questionnaire was used for data collection and was developed and improved by adopting various sources to guarantee validity. Descriptive statistics (frequency counts, percentages, and weighted means) and inferential statistics, especially nonparametric correlation coefficients, were used to analyze relationships between variables.

Findings - The results indicate that most respondents are female, aged 30 to 39 years, married, and engaged in livelihood activities such as copra production, shell harvesting, and other informal-sector activities. The majority of the respondents are secondary school graduates and earn a low monthly income. The microfinance involvement is mainly defined by personal loans, which are used for housing mortgages with short-term repayment plans.

Implications and Value - It reveals substantial differences between financial awareness and real financial practices that require specific financial literacy and capacity-building interventions among microfinance participants. By strengthening these areas, financial vulnerabilities can be minimized, and the overall effectiveness of microfinance services can be improved in an effort to promote sustainable livelihoods. It provides useful lessons for financial institutions, development practitioners, and policymakers to create more effective, behaviorally sensitive financial programs. The research also provides a basis for future studies in order to overcome the financial vulnerabilities and enhance the financial resilience of the marginalized groups.

Keywords: behavioral finance, financial management, financial problem, microfinance.

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1. Introduction

The growth of digital finance, increasing global uncertainties, and market volatility have further highlighted the relevance of behavioral finance. It examines how technology and online platforms affect and influence financial decisions. Behavioral finance scrutinizes the investors' irrational behavior and how psychological, emotional, and cognitive biases influence financial decision-making. According to Paer (2019), mental shortcuts and emotional reactions cause investors to stray from rational decision-making, resulting in less favorable outcomes. Moreover, the cognitive and emotional biases also strongly influence individual financial decisions and financial management. Therefore, behavioral finance provides significant information on how individual mood, perception, and psychological states affect financial planning and financial preparation (Statman, 2019). Hence, behavioral patterns are crucial in financial decision-making to avoid financial constraints. It is also essential to improve financial awareness, financial literacy, promote better decision-making, and foster long-term financial success. Financial management remains a major problem for individuals, particularly borrowers. As Caraballo (2021) stated, many individuals encountered financial difficulties, including low financial literacy, excessive spending, indebtedness, inadequate budgeting, and savings practices. These financial challenges hinder the financial growth and financial success of individuals. Thus, it needs financial education on proper utilization and financial management. Therefore, behavioral finance and financial management are significant for making informed financial decisions and avoiding financial difficulties. In response to this, the study investigates the behavioral finance, financial management practices, financial problems encountered, and the relationship of the main variables of the study. The findings will serve as the basis for strengthening financial vulnerabilities to improved financial strategies, building financial strength, empowering financial decision-making, and reducing financial constraints.

1.1 Objectives of the Study

The study was conducted to determine the respondents' profile; behavioral finance in terms of personal accounting, heard behavior, emotional gaps, anchoring, and self-attribution, as well as the financial management in terms of budgeting, savings, and spending, and the financial problems encountered by the respondents. Moreover, it aimed to identify significant relationships among the respondents' profiles, behavioral finance, and financial management. Additionally, the findings of the research are the basis for enhancing the borrowers' financial vulnerabilities.

1.2 Theoretical Framework

This study finds strong justification for two foundational theoretical insights that underpin behavioral finance: Eugene Fama's (1970) Efficient Market Hypothesis (EMH) and John von Neumann and Oskar Morgenstern's (1944) Expected Utility Theory (EUT). These traditional financial models assume that investors are rational decision-makers who always have complete and accurate information and consistently act to maximize their personal benefit (utility). However, these assumptions often fail to account for real-world phenomena such as market bubbles, crashes, excessive price volatility, and other irrational investor behavior that deviates from purely logical decision-making. According to Fama (1970), the Efficient Market Hypothesis states: "The proposition is that prices reflect all available information, which in simple terms means that since prices reflect all available information, there's no way to beat

the market.” In essence, this means that since market prices already incorporate all relevant information, consistently outperforming the market is not possible. EMH defines three levels of market efficiency: Weak-form efficiency: prices reflect all past trading data, Semi-strong form efficiency: prices reflect all publicly available information, and Strong-form efficiency: prices reflect even private, insider information (Kestas, 2025). Downey (2024) supports this view, stating that if markets are efficient, consistent alpha generation becomes impossible. However, he also suggests that investors must adapt and learn from market behavior to make informed decisions. As Lee (n.d.) notes, while EMH treats markets as fully rational pricing systems, behavioral finance shows that irrational investor behavior can lead to persistent anomalies—such as momentum effects, value premiums, and asset bubbles—which are not easily explained by traditional models and may last long enough to be exploitable. Expected Utility Theory (EUT) is another foundational concept in economics and finance that explains how rational individuals make decisions under uncertainty. Introduced by von Neumann and Morgenstern (1944) and later refined by Savage (1954), EUT offers a normative, mathematical framework for decision-making under risk. According to EUT, if an individual's preferences over risky choices satisfy certain axioms—completeness, transitivity, continuity, and independence—then their behavior can be modeled with a utility function, and they will act as if they are maximizing expected utility (Chen, 2021). This means that when people make logically consistent decisions under uncertainty, their choices can be predicted using a utility model, and they will consistently choose the option with the highest expected utility. However, as Thaler (2016) points out, the limitations of EUT in explaining actual investor behavior led to the development of behavioral finance, which incorporates psychological insights into economic models. Rather than focusing on how people should behave, behavioral finance studies how people actually behave—often influenced by cognitive biases, emotional factors, and mental shortcuts (heuristics). Several pioneers helped reshape economic thinking by addressing the limitations of rational choice theory: Kahneman and Tversky (1979) introduced Prospect Theory, showing that individuals evaluate gains and losses asymmetrically and often violate rational choice assumptions. Their earlier work (1974) introduced the Heuristics and Biases framework, identifying systematic cognitive errors in judgment. Herbert Simon (1955) introduced the concept of bounded rationality, arguing that individuals often “satisfice” rather than optimize due to cognitive limitations. Thaler (1980s–1990s) extended these insights into economics through concepts like mental accounting, self-control, and the endowment effect. Both EUT and EMH, along with the behavioral critiques and extensions of these models, are deeply connected to behavioral finance and financial management. These theoretical insights help practitioners and researchers better understand how systematic biases, psychological influences, and emotional factors affect real-world financial decisions. Ultimately, this integration leads to more realistic, adaptive models that improve risk management, identify investment opportunities, and enhance our understanding of financial behavior and market dynamics.

1.3 Conceptual Framework

The conceptual framework shown in Figure 1 illustrates the financial problems encountered by the respondents and the relationships among demographic profiles, behavioral finance, and financial management. Also, the study aims to strengthen financial vulnerabilities. Through this research, it is expected that the relationship between the variables will be either accepted or rejected.

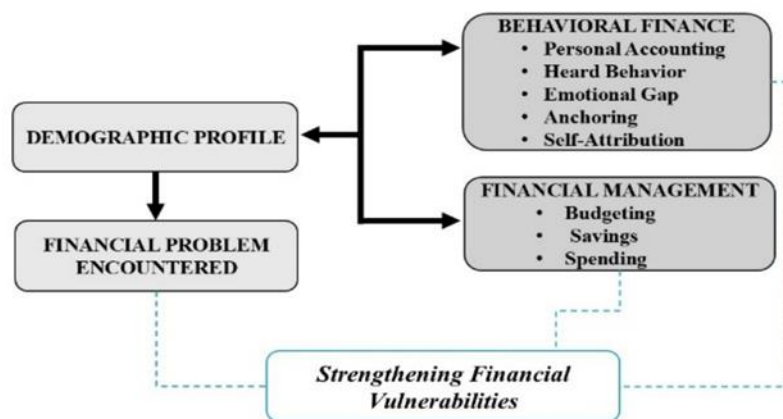


Figure 1: Conceptual Framework.

Source: Author

2. Literature Review

2.1 Behavioral Finance

The impact of biases presents one of the most crucial areas within behavioral finance. These biases arise from psychological and emotional sources of individuals' reactions, perceptions, and knowledge. It also presents the combination of psychological, economic, and other social studies to understand why individuals are rational and irrational in financial decisions. Behavioral finance is the understanding and identification of the various biases that influence financial and investment decisions and affect individuals' financial management. According to Paer (2019), emotions, cognitive, and psychological factors have an impact on investment and financial decisions. As Bhasin (2021) mentioned, behavioral finance focuses on biases such as psychological factors, financial habits, financial decisions, and financial market outcomes that influence individual financial decisions. In addition, Zhang and Zheng (2015) also stated that the application of psychological and sociological principles in behavioral finance affects investors' financial decision-making. This principle helps individuals to inform financial information, make financial judgments, understand financial biases and patterns to enhance investment decisions and improve financial management. As Stupavský (2018) noted, the emotional influences of individuals affect financial behaviors. According to Statman (2019), investment biases are classified into two main categories: cognitive biases (how information is processed) and emotional biases (how one feels). These categories emphasize that financial judgment and decision-making are based on the information and feelings of individuals. Bakshi (2020) mentioned that most investors judge based on emotion rather than rational biases in making financial decisions. This judgment mitigates emotions that lead to financial losses.

Moreover, the theory of Prospect theory, according to Kahneman and Tversky (1979), emphasizes the understanding of how individuals make decisions rationally by evaluating options by comparing expected outcomes that align with behavioral finance. The five fundamental behavioral concepts, such as personal accounting, herd behavior, emotional gap, anchoring, and self-attribution, provide a framework for understanding how psychological influences shape financial behavior that leads to suboptimal investment decisions. In addition, Bhasin (2021), who connects to the Prospect theory, explains the various common financial biases that significantly influence investor behavior, such as self-attribution bias, overconfidence bias, confirmation bias, loss aversion, representative heuristics bias, herding

mentality, anchoring bias, hindsight bias, narrative fallacy, and framing bias. These psychological and emotional biases emphasize the importance of self-awareness and financial discipline when investing money. Without this financial awareness, their judgment leads to a poor investment decision. In support of Hammod (2015), financial biases such as overconfidence and overoptimism, conservatism, availability bias, frame dependence, anchoring, personal accounting, and regret aversion have a vast influence on financial decisions. In contrast to the study of Babatunde (2016), which stated that the behavioral biases such as personal accounting, herd behavior, emotional gap, anchoring, and self-attribution are not significant to the financial decision of the borrowers.

2.2 Financial Management

Financial management is the strategic process of overseeing and directing an individual's financial resources through effective budgeting, saving, investing, spending, and future planning. It involves the practical application of financial principles and financial decisions in achieving financial stability, maximizing resource efficiency, and building long-term wealth. According to Gitman et al. (2017), financial management is the process of managing money to achieve personal economic satisfaction. This process encompasses clear financial goals, evaluating available financial resources, strategic financial decisions, and financial monitoring to progress alignment of financial objectives. Effective financial management helps individuals allocate and utilize financial resources in maintaining financial discipline and control over time. As supported by Savinaa and Merlinob (2015) and Owusu (2016), financial management is a process of planning, implementing, controlling, and making financial decisions on the available financial resources. This process is a significant procedure in developing financial strategies and financial structure to improve skills in budgeting, saving, spending, and investing for individuals. It also ensured that the finances were properly aligned with the financial priorities and functions. In addition, Kapoor et al. (2015) mentioned that keeping track of finances is a part of financial management that allows individuals to be confident in monitoring and evaluating financial resources, also improving strategic financial decisions. As Sharma (2025) noted, financial management has three main types of financial decisions: the investment decision, the financing decision, and the dividend decision. This decision provides the best opportunities in allocating resources and balancing expenditures and assets. Moreover, Strutner (2024) emphasized that financial management encompasses four major areas: planning, budgeting, managing, assessing risk, and procedures. This area guides the management and allocation of finances based on the resources of individuals. Its essentials for effective handling, organizing, controlling, and regulating funds for specific financial purposes.

According to Maison (2019), the core concepts of financial management activities involve credit management, financial planning, investment strategies, insurance coverage, retirement preparation, estate planning, savings goals, and navigating short and long-term loans. In addition, according to Bakar and Ismail (2020), financial management is the financial practices involved in investing, borrowing, lending, and forecasting. These concepts and activities are the overall financial situation and financial path of the individual in managing finances. It is also involved in the application of financial patterns, attitudes, behaviors, and knowledge. Therefore, it's important to determine and analyze the financial strategies used to allocate financial resources in order to avoid financial constraints and challenges. Somehow, financial challenges affect the financial management of individuals, especially borrowers, when

financial resources are not controlled and monitored. This can lead to debt accumulation, lack of savings, missed payment bills, and emotional stress. Consequently, improvement of financial management by controlling debt accumulation, avoiding overspending, and maintaining high savings reserves is significant to achieve financial goals (Donnelly et al., 2012). In support of Gathergood (2012), individuals with a high level of credit awareness are responsible for credit decisions and improve overall financial management. However, a lack of financial awareness can lead to poor financial decisions. Overall, effective financial management helps individuals to make informed financial decisions, avoid unnecessary debt, prepare for emergencies, and plan for future finances.

2.3 Financial Problem

Financial issues are commonly challenging for the individual, especially for borrowers. It affects the financial management, which causes stress and anxiety (Gingras, 2021). According to Blog (2020), the common financial challenges encountered by individual borrowers are over-indebtedness, high interest rates, and poor financial awareness (Raghavendra, 2018). As noted by Puliya Kot (2021), most serious issues of the borrowers fall into over-indebtedness, which makes them unable to meet their repayment obligations. Parker (2022) highlighted that high interest rates and payday loans are also the borrowers' problems. Similarly, Norris (2022) emphasizes that overspending, failure to pay bills on time, and absence of financial plans are also causes of financial problems. Other financial challenges mentioned by Ward (2020) and Fiano (2018) include a lack of collateral, difficulty in accessing credit, multiple microfinance affiliations, unmanageable debt, inadequate savings, insufficient credit lines, rigid payment schedules, limited financial knowledge, and education (Raaji, 2016). These financial problems and issues hinder the individual's ability to achieve financial independence and long-term financial stability; therefore, promoting financial literacy in financial management provides a clear financial framework that establishes planning, monitoring, and controlling financial resources.

2.4 Synthesis of Review Literature

Financial management and understanding of behavioral finance are becoming more significant skills in times of financial complexity. A weak financial foundation of individuals puts them at a higher risk of financial issues, including debt, credit, savings, security, and future opportunities. Financial management is an important factor that helps to empower effective financial planning and financial control in making financial decisions. Meanwhile, behavioral finance complements this process by examining how psychological and emotional factors influence financial decisions. These decisions reflect both rational and irrational influences, such as emotions, habits, and mental shortcuts. Together, financial management and behavioral finance provide significant insight for developing and enhancing practical strategies to strengthen financial stability and avoid financial issues. Despite financial challenges such as excessive debt, poor budgeting, low levels of financial literacy, high interest rates, payday loans, and limited repayment capacity, effective financial management can be attained through financial awareness, financial discipline, planning for savings, and improved decision-making. Integrated behavioral concepts with financial management practices help individuals reduce financial stress, overcome financial constraints, and attain long-term financial well-being.

3. Research Design and Methodology

This study employed a descriptive-correlational quantitative research design to describe the respondents' profiles, behavioral finance, financial management, and financial problems encountered by the respondents, as well as to examine the correlation between the main variables of the study. The data was analyzed using frequency counts, percentages, weighted mean, and the non-parametric test of Kendall's Tau.

3.1 Research Instruments

The research instrument utilized a semi-structured questionnaire, with items carefully developed from a variety of credible sources and undergoing validation from the expert. The instrument consists of four sections: the first part focused on the respondents' profile; the second addressed the behavioral finances in terms of personal accounting, heard behavior, emotional gap, anchoring, and self-attribution; the third examined the financial management in terms of budgeting, savings, and spending; and the fourth determined the financial problems encountered by the respondents. A five-point Likert scale was used to measure the response.

3.2 Respondents

Based on the data collected, there are five (5) microfinance institutions located in Barangay Jolo, Roxas, Palawan, with a total of 384 borrowers. The study used Slovin's formula to determine the exact sample size of 196 borrowers and employed stratified random sampling to appropriately distribute the sample across each institution. It is a sampling technique in which the total population is divided into homogeneous groups (strata) to complete the sampling process (Qualtrics AU., 2022). The following are the distribution of samples: CARD (Center for Agriculture and Rural Development) (94); ASA Philippine Foundation (89); Life Bank (50); CEVI (Community Economic Ventures) (27), and TSKI (Taytay Sa Kauswagan, Inc.) (4).

3.3 Statistical Treatment

The collected data were tabulated and analyzed using frequency counts, percentages, and weighted means to determine the respondents' profiles, financial behavior, financial management, and financial problems encountered by the respondents. The study's hypotheses were tested using the Non-Parametric Test (Kendall's Tau) to determine the significant relationship between the main variables of the study. The null hypothesis was evaluated at a 0.05 level of significance.

4. Result and Discussion

The following information was taken from the interview with the respondents. The 1 presents the demographic profile of the respondents. In terms of sex distribution, it reveals that out of 196 respondents, the majority are female respondents, accounting for 180 individuals at 91.8 percent, while only 16 respondents, at 8.2 percent, are male. In the global survey of microfinance clients, it was reported that 68% of the borrowers are women. In terms of age distribution, it reveals that out of 196 respondents, most of the respondents are within the bracket of 30-39 years old, which comprises 38.3 percent. This is followed by those aged 20-29 years old at 35.2 percent, 40-49 years old at 15.8 percent, 50-59 years old at 7.1 percent, and 60-59 years old, presenting the smallest age group at 3.6 percent. As a result of their civil

status, most of the respondents, 95, are married, which comprises 48.5 percent; 86 are single, which comprises 43.9 percent; 6 are widows, which comprises 3.1 percent; 7 are solo parents, which comprises 3.6 percent; and 2 are others, which comprises 1.0 percent. As a result of the occupation, 52 of the respondents answered others (copra, harvesting shells, lantak, casuyan, depending on the racket, climbing mountains), which comprise 26.5 percent. This is followed by 40 are business, which have 20.4 percent, 36 are not employed, which have 18.4 percent, 32 sources of income are fishing at 16.3 percent, 20 are farming at 10.2 percent, 11 are from piggery at 5.6 percent, 3 are from handicraft at 1.5 percent, and presenting the smallest result, 2 are self-employed, which have 1.0 percent. As the findings of educational attainment 77 of the respondents are secondary graduate which have 39.3 percent, 52 are secondary undergraduate which have 26.5 percent, 31 are elementary graduate which have 15.8 percent, 12 are elementary undergraduate which have 6.1 percent, 9 are college undergraduates which have 4.6 percent, 9 are college undergraduate which have 4.6 percent and 6 answered others (Alternative Learning System Graduate) at 3.1 percent. In terms of the gross family income, 80 of the respondents have estimated monthly income of 3,100-5,699 pesos which have 40.8 percent, followed by 77 have income around 5,700-8,299 pesos which have 39.9 percent, 34 have monthly income around 5,00-3,099 pesos which have 17.3 percent, 4 have monthly income around 8,300-10,899 pesos which have 2.0 percent and 1 of the respondents have monthly income of 10,900-13,499 pesos at 0.5 percent. As the findings in financial products availed by the respondents, the majority of the respondents availed individual loans, accounting for 170 individuals, which have 86.7 percent, 15 availed group loans at 7.7 percent, 5 availed general loans at 2.6 percent, 4 availed housing loans at 2.0 percent, and 1 availed for agricultural loans and educational loans at 0.5 percent. In terms of the purpose of borrowing 64 of the respondents are borrowed money for housing renovation which have 32.7 percent, 39 borrowed for business capital at 19.9 percent, 35 borrowed for tuition fee at 17.9 percent, 24 borrowed for fishing at 12.2 percent, 13 borrowed for farming at 6.6 percent, 12 borrowed for piggery at 6.1 percent and presenting the smallest score of 9 borrowed for others (payment for other debt) which have 4.6 percent. As a result, the mode of payment for the majority of respondents is on a weekly basis, accounting for 192, or 98.0 percent, 1 are answered payable on a daily, monthly, or anytime basis, and others answered that they are payable on the same basis, at 0.5 percent. This finding is supported by Fabian and Strehl (2017), who found that, among borrowers in developing countries, 98% used weekly payments as their primary mode of payment for their loans. In terms of length of microfinance institutions affiliation 84 of the respondents are borrowed for almost 1 to 5 years which have 42.9 percent, 83 are borrowed for 1 year and below which have 42.3 percent, 17 are borrowed around 6 to 10 years at 8.7 percent, 7 are borrowed for 11 years and above at 3.6 percent and presenting the smallest result of 5 answered other which have 2.6 percent. As a result of the number of microfinance institutions affiliation the findings shows that majority of the members answered only 1 microfinance institution accounting of 116 individuals which have 59.2 percent, 64 are members to 2 to 5 microfinance institution which have 32.7 percent, 12 are members to 6 to 10 microfinance institution which have 6.1 percent and 2 are members to 11 and above microfinance institution which have 1.0 percent. The finding supported by Gomber and Schill (2015) is that most members of microfinance institutions have participated in only one affiliation. In terms of the membership of microfinance institutions most of the respondents are membered in CARD accounting of 94 which have 48.0 percent, 89 of the respondents are membered in ASA which have 45.4 percent, 50 are member in LIFE Bank which have 25.5

percent, 28 are membered in ECLOP which have 14.3 percent, 27 are membered in CEVI which have 13.8 percent, 4 are membered in TSKI which have 2.0 percent

Table 1. Profile of the Respondents

Characteristics	Frequency (n=196)	Percentage (%)
Sex		
Female	180	8.2
Male	16	91.8
Age		
30 – 39	75	35.2
20 – 29	69	38.3
40 – 49	31	15.8
50 – 59	14	7.1
60 – 69	7	3.6
Civil Status		
Married	95	43.9
Single	86	48.5
Solo	7	3.1
Widow	6	3.6
Others	2	1.0
Occupation		
Others (<i>Cupra, harvesting shells, lantak, casuyan, depending on the racket, climbing mountains</i>)	52	16.3
Business	40	1.5
Not Employed	36	1.0
Fishing	32	20.4
Farming	20	5.6
Piggery	11	10.2
Handicraft	3	18.4
Self-employed	2	26.5
Educational Attainment		
Secondary Graduate	77	6.1
Secondary Undergraduate	52	15.8
Elementary Graduate	31	26.5
Elementary Undergraduate	12	39.3
College Undergraduate	9	4.6
College Graduate	9	4.6
Others (<i>Alternative Learning System Graduates</i>)	6	3.1
Gross Family Income		
3,100 – 5,699 pesos	80	40.8
5,700 - 8,299 pesos	77	39.3
500 – 3,099 pesos	34	17.3
8,300 – 10,899 pesos	4	2.0
10,900 – 13,499 pesos	1	0.5
Financial Products Availed by the Respondent		
Individual Loan	170	86.7
Group Loan	15	7.7
General Loan	5	2.6
Housing Loan	4	2.0
Educational Loan	1	0.5
Agri Loan	1	0.5
Purpose of Borrowing		
Housing Renovation	64	19.9
Capital	39	17.9
Tuition Fee	35	6.1
Fishing	24	6.6

Farming	13	32.7
Piggery	12	12.2
Others (<i>Payment for Debts</i>)	9	4.6
Mode of Payment		
Weekly	192	98.0
Daily	1	0.5
Monthly	1	0.5
Anytime	1	0.5
Others	1	0.5
Length of Microfinance institution (M.F.I.) membership		
1-5 Years	84	42.3
1 Year Below	83	42.9
6-10 Years	17	8.7
11 Years and Above	7	3.6
Others	5	2.6
The number of Microfinance Institutions (M.F.I.) Affiliation		
Only 1	116	59.2
2 to 5	64	32.7
6 to 10	12	6.1
11 and above	2	1.0
Member of M.F.I.*		
CARD	94	45.4
ASA	89	13.8
LIFE BANK	50	14.3
CEVI	27	25.5
TSKI	4	2.0

Source: Primary data

Table 2, which presents the results of behavioral finance of the respondents in terms of personal accounting. The findings revealed that the statement, as read, "Compute the amount of money to be spent." and "Monitor the amount of income and daily expenses," were agreed upon, and the statement, as read, was as follows: "Calculate the money for basic needs, education, investment, and retirement."

"Know the computation of daily expenses." "Proper utilization of money." "Allocation of money for the specific purposes., "Keeping a record of my earnings and expenses." and "Write out the exceeded expenses." Has ratings of disagree, respectively. Overall, the descriptive rating for behavioral finance in terms of personal accounting disagrees with the mean score of 2.36. The results revealed in the behavioral finance of the respondents, in terms of herd behavior, are stated in the following findings. The findings revealed that the statement as read "Make the financial decision based on the suggestion of friends., "A family member makes financial decisions." "The decision is based on the decision of others., "Observe others' decision-making and recommendations. 'Follow the decision of others.'" "Decide on my own." "Decide based on my knowledge and emotions." and "Listen to others' options in decision making " have respective ratings of disagree. Overall, the descriptive rating for the behavioral finance in terms of heard behavior disagrees with the mean score of 2.18. The results revealed in the behavioral finance of the respondents in terms of emotional gaps are stated in the following findings. The findings revealed that the statement, as read: "Feel confident and assertive in making the decision," was stated as agree, and the statement, as read, was as follows: "Invest emotion before I decide." "The decision is based on my mood." "Decisions are made when I am happy." and "Control my emotion when I decide something." have respective rating of disagree. Overall, the descriptive rating for the variable of behavioral finance in terms of emotional gap disagrees with the mean score of 2.26. The results revealed

in the behavioral finance of the respondents in terms of anchoring are stated in the following findings. The findings revealed that the statement as read: "Get information before I decide on something," "Make the decision based on the new information." "Find other options in my decision." "Get alternative information before making a decision." "Decision-making depends on other information/experiences." "Make decisions according to my experience, not of others." "Match other experiences and my own experience when deciding something." and "Adjustment of new information in making a decision " have ratings of disagree, respectively. Overall, the descriptive rating for behavioral finance regarding anchoring disagrees with the mean score of 2.17. The results revealed in the behavioral finance of the respondents in terms of self-attribution are stated in the following findings. The findings revealed that the statement as read: "Blame others when I get wrong in my decision." was stated as agreed, and the statement as read as follows: "Confident in taking risks in my decision-making." "Blame me when I make wrong decisions." "Smooth in making a decision." "Confident in investing a large amount of money." "Confident in my own decision." "Self-control in making a decision." and "Express experiences in making a decision " have ratings of disagree " respectively. Overall, the descriptive rating for the behavioral finance in terms of self-attribution disagrees with the mean score of 2.19.

Table 2a. Behavioral Finance of the respondents

Statements	Mean	Descriptive Rating
A. PERSONAL ACCOUNTING		
1. Compute the amount of money to be spent.	2.82	Agree
2. Calculate the money for basic needs, education, investment, and retirement.	2.49	Disagree
3. Know the computation of daily expenses	2.22	Disagree
4. Monitor the amount of income and daily expenses.	2.65	Agree
5. Proper utilization of money	2.27	Disagree
6. Allocation of money for the specific purposes	2.26	Disagree
7. Keeping a record of my earnings and expenses.	2.01	Disagree
8. Write out the exceeded expenses	2.16	Disagree
Weighted Mean	2.36	Disagree
B. HERD BEHAVIOR		
1. Make the financial decision based on the suggestion of friends.	2.36	Disagree
2. A family member makes financial decisions.	2.27	Disagree
3. The decision is based on the decision of others.	1.95	Disagree
4. Observe others' decision-making and recommendations.	2.19	Disagree
5. Follow the decision of others.	2.04	Disagree
6. Decide on my own.	2.20	Disagree
7. Decide based on my knowledge and emotions.	2.17	Disagree
8. Listen to others' options in decision-making	2.25	Disagree
Weighted Mean	2.18	Disagree
C. EMOTIONAL GAP		
1. Invest emotion before I decide.	2.19	Disagree
2. The decision is based on my mood.	2.27	Disagree
3. Decisions are made when I am happy.	2.09	Disagree
4. Control my emotions when I decide on something.	1.95	Disagree
5. Feel confident and assertive in making the decision.	2.83	Agree
Weighted Mean	2.26	Disagree
D. ANCHORING		

1. Get information before I decide on something.	2.19	Disagree
2. Make the decision based on the new information.	2.16	Disagree
3. Find other options in my decision.	2.09	Disagree
4. Get alternative information before making a decision.	2.29	Disagree
5. Decision-making depends on other information/experiences.	2.09	Disagree
6. Make decisions according to my experience, not others'.	2.29	Disagree
7. Match other experiences and my own experience when deciding on something.	2.01	Disagree
8. Adjustment of new information in making a decision.	2.21	Disagree
Weighted Mean	2.17	Disagree
E. SELF-ATTRIBUTION		
1. Confident in taking risks in my decision-making.	2.26	Disagree
2. Blame others when I make a wrong decision.	2.55	Agree
3. Blame me when I make wrong decisions.	2.20	Disagree
4. Smooth in making a decision.	2.03	Disagree
5. Confident in investing a large amount of money	2.26	Disagree
6. Confident in my own decision	2.08	Disagree
7. Self-control in making a decision	1.96	Disagree
8. Express experiences in making a decision.	2.19	Disagree
Weighted Mean	2.19	Disagree

Source: Primary data

Table 2b, the summary of the behavioral finance survey results, shows that respondents disagreed with all measured variables, including personal accounting, herd behavior, emotional gaps, anchoring, and self-attribution. This indicates that most respondents do not recognize or consider these behavioral factors when making financial decisions. The results contradict the findings of Kartini and Nahda (2021), which suggest that variables included in behavioral finance, such as anchoring bias, representativeness bias, loss aversion bias, overconfidence bias, optimism bias, and herding behavior, have a significant effect on investment decisions. This result emphasizes the influence of behavioral factors on investors' decisions. It is supported by Sabharwal et al. (2024) that investors' decision-making relies on their emotions. This indicates that financial decisions are basically based on rational or irrational biases and influences.

Table 2b. Summary of Behavioral Finance of respondents

Statements	Mean	Descriptive Rating
Personal Accounting	2.63	Disagree
Heard Behavior	2.18	Disagree
Emotional Gap	2.26	Disagree
Anchoring	2.17	Disagree
Self-Attribution	2.19	Disagree

Table 3 shows the results of financial management in terms of budgeting, savings, and spending of the respondents. The results revealed in the financial management of the respondents in terms of budgeting are stated in the following statement, as read: "Creating a budgeting plan." has a descriptive rating of agree, and the statement, as read, is as follows: "Know the priority in budgeting." "Apply 50/30/20 budgeting strategy.", "Savings and emergency budgeting." "Priority-based budget." "Pay yourself first budgeting." "Spend based on the budget." "Budgeting plan for specific purposes such as education, medical, and

retirement.” and “Set goals for the next budgeting period.” have respective rating of disagree. Overall, the descriptive rating for the financial management in terms of budgeting disagrees with the mean score of 2.31. The results revealed in the financial management of the respondents in terms of savings are stated in the following statement, as read: “Save using envelope budgeting.” “Put money in a piggy bank or savings box.” “Residual savings-not spending a residual part of available budget or income.” “Discretionary savings- to transfer money into a savings account.” “Contractual savings- automatic savings for a predetermined period.” “Repay debt and mortgage savings afterward by decreasing debt.” “Buy products on sale at a lower price to save money.” “Buy more economical goods more cheaply.” “Save for emergency, education, and retirement purposes.” “Save money for expensive things,” and “Save at least a small amount,” have respective ratings of disagree. Overall, the descriptive rating for the financial management in terms of savings disagrees with the mean score of 2.16. The results revealed in the financial management of the respondents in terms of spending are stated in the following statement as read: “Thrifty spending- being careful in spending money.” has a descriptive rating of agree, and the statement as read as follows: “Spend that based on the financial plan., “Live beyond your means.” “Buy things now instead of waiting.” “The one-day millionaire.” “Happy spending.” “Belt tightening-reducing money in order to save.” and “Spendthrift-reckless in spending money, ” have respective descriptive ratings of disagree. Overall, the descriptive rating for the financial management in terms of spending disagrees with the mean score of 2.30.

Table 3a. Financial Management of respondents

Statements	Mean	Descriptive Rating
A. BUDGETING		
1. Creating a budgeting plan.	3.09	Agree
2. Know the priority in budgeting	2.30	Disagree
3. Apply 50/30/20 budgeting strategy	2.19	Disagree
4. Savings and emergency budgeting	2.18	Disagree
5. Priority-based budget	2.23	Disagree
6. Pay yourself first budgeting	2.16	Disagree
7. Spend based on the budget	2.15	Disagree
8. Budgeting plan for specific purposes such as education, medical, and retirement.	2.18	Disagree
9. Set goals for the next budgeting period.	2.29	Disagree
Weighted Mean	2.31	Disagree
B. SAVINGS		
1. Save using envelope budgeting	2.51	Disagree
2. Put money in a piggy bank or savings box	2.15	Disagree
3. Residual savings-not spending a residual part of the available budget or income	2.22	Disagree
4. Discretionary savings- to transfer money into a savings account.	1.96	Disagree
5. Contractual savings- automatic savings for a predetermined period	1.99	Disagree
6. Repay debt and mortgage savings afterward by decreasing debt.	2.07	Disagree
7. Buy products on sale at a lower price to save money.	2.35	Disagree
8. Buy more economical goods at a lower price.	2.09	Disagree

9. Save for emergency, education, and retirement purposes	2.15	Disagree
10. Save money for expensive things	2.16	Disagree
11. Save at least a small amount	2.09	Disagree
Weighted Mean	2.16	Disagree
C. SPENDING		
1. Spend that based on the financial plan.	2.17	Disagree
2. Live beyond your means	2.09	Disagree
3. Buy things now instead of waiting	2.14	Disagree
4. The one-day millionaire	2.13	Disagree
5. Happy spending	2.38	Disagree
6. Thrifty spending- being careful in spending money	2.97	Agree
7. Belt-tightening, reducing money in order to save.	2.38	Disagree
8. Spendthrift-reckless in spending money	2.12	Disagree
Weighted Mean	2.30	Disagree

Source: Primary data

Table 3b presents a summary of the respondents' financial management. The results indicate that respondents generally disagreed with statements related to key financial practices—namely, budgeting, saving, and spending. This suggests that the majority do not actively engage in proper financial management. Consequently, they may experience financial difficulties such as poor financial discipline, lack of awareness, inadequate financial planning, absence of a budgeting strategy, overspending, and insufficient savings. These findings are supported by several studies. Lusardi and Mitchell (2024) observed that a lack of financial literacy has a negative impact on the ability to create and follow budgeting strategies. Similarly, OECD (2020) stated that overconfidence in financial knowledge leads borrowers to neglect practices such as budgeting and savings. In addition, Mian and Sufi (2015) mentioned that high-debt individuals tend to save and spend less.

Table 3b. Summary of Financial Management of Respondents

Statements	Mean	Descriptive Rating
Budgeting	2.31	Disagree
Savings	2.16	Disagree
Spending	2.30	Disagree

Table 4 shows the results of multiple responses regarding the financial problem encountered by the respondents. The data revealed that the majority of problems that they encountered are a lack of a budgetary plan, accounting for 193 individuals, or 98.5 percent. It is followed by 191 respondents that are lack in financial awareness which have 97.4 percent, 186 are lack of financial knowledge which have 94.9 percent, 185 are lack savings which have 94.4 percent, 183 are financial problem are payment schedules which have 93.4 percent, 175 are not paying bills on time which have 89.3 percent, 108 are over-indebtedness which have 55.1 percent and 106 are number of microfinance affiliation which have 54.1 percent. The findings are supported by Mangi and Anand (2016), who reported that most microfinance borrowers experience financial difficulties due to inadequate budgeting skills and a lack of financial awareness. The study also noted that borrowers generally lack financial education and literacy, which contributes to these challenges (Aristei et al., 2024). In addition, Komba (2024) mentioned that limited knowledge of budgeting and a lack of structural financial planning cause repeated borrowing. Also, borrowers who lack financial discipline and financial skills are more prone to mismanagement of funds and financial problems.

Table 4. Financial Problems Encountered by the Respondents

Problems Encountered*	Frequency (n=196)	Percentage (%)
Lack of a budgetary plan	193	98.5
Lack of financial knowledge	186	94.9
Lack of financial awareness	191	97.4
Lack of savings	185	94.4
Not paying bills on time	175	89.3
Number of Microfinance affiliations	106	54.1
Over-Indebtedness	108	55.1
Payment schedules	183	93.4

***Multiple Response

Source: Primary data

As shown in Table 5, which illustrates the correlation between the demographic profile and the behavioral finance of the respondent, the data reveal that the demographic factors- length of microfinance institution membership ($p > 0.001$) and number of microfinance institutions affiliation ($p=0.025$) are statistically significant and thus rejected at the 0.05 level of significance. Meanwhile, sex ($p=0.376$), age ($p=0.679$), civil Status ($p=0.462$), occupation ($p=0.506$), educational attainment ($p=0.519$), gross family income ($p=0.174$), financial products availed by the respondent ($p = 0.988$), purpose of borrowing ($p=0.844$) and mode of payment (0.283) are not statistically significant and therefore accepted at the 0.05 level of significant. The findings indicate that the null hypothesis, which states that there is a significant relationship between behavioral finance and the variables of length of microfinance institution membership and number of microfinance institution affiliations, is supported by the findings. However, sex, age, civil status, occupation, educational attainment, gross family income, financial products availed by the respondents, purpose of borrowing, and mode of payment show no significant relationship concerning the behavioral finance of the respondents. The findings contradict the statement of Xiao and Porto (2027) that profiles such as age, sex, civil status, education, and income are correlated with financial behavior and outcomes. Campbell (2006) also stated that age, education, income, and cognitive ability affect financial decision-making.

Table 5. Correlation between the respondent’s profile and the behavioral finance of the respondents

Demographic Profile	Correlation Coefficient	p-value	Decision
Sex	0.052	0.376 ^{ns}	Accept H_0
Age	-0.02	0.679 ^{ns}	Accept H_0
Civil Status	0.042	0.462 ^{ns}	Accept H_0
Occupation	-0.035	0.506 ^{ns}	Accept H_0
Educational Attainment	0.034	0.519 ^{ns}	Accept H_0
Gross Family Income	0.07	0.174 ^{ns}	Accept H_0
Financial Products Availed by the Respondent	0.001	0.988 ^{ns}	Accept H_0
Purpose of Borrowing	-0.01	0.844 ^{ns}	Accept H_0
Mode of Payment	0.063	0.283 ^{ns}	Accept H_0
Length of Microfinance institution (M.F.I.) membership	0.22	< .001 ^s	Reject H_0

Exploring Behavioral Finance and Financial Management: Strengthening the Financial Vulnerabilities of Microfinance Borrowers

A number of Microfinance Institutions (M.F.I.)			
Affiliation	0.129	0.025 ^s	Reject H_0

**Statistically significant (s) at the 0.01 level ($\alpha = 0.10$)
 **Statistically significant (s) at the 0.05 level ($\alpha = 0.05$)
 *Statistically not significant (ns) at greater than 0.05 level.
 Source: Primary data

As shown in Table 6, which illustrates the correlation between the demographic profile and the financial management of the respondent, the data reveal that the demographic factors-length of microfinance institution membership ($p=0.001$) and number of microfinance institutions affiliation ($p=0.044$) are statistically significant and thus rejected at the 0.05 level of significance. Meanwhile, sex ($p=0.187$), age ($p=0.477$), civil Status ($p=0.455$), occupation ($p=0.136$), educational attainment ($p=0.729$), gross family income ($p=0.658$), financial products availed by the respondent ($p=0.299$), purpose of borrowing ($p=0.096$), and mode of payment (0.219) are not statistically significant and therefore accepted at the 0.05 level of significance. The findings indicate that the null hypothesis, which states that there is a significant relationship between behavioral finance and the variables of length of microfinance institution membership and number of microfinance institution affiliations, is supported by the findings. However, sex, age, civil status, occupation, educational attainment, gross family income, financial products availed by the respondents, purpose of borrowing, and mode of payment show no significant relationship concerning the financial management of the respondents. The findings contradict the statement of Xiao and Dew (2011) that demographic profiles such as education, income, age, gender, and employment status are significantly associated with financial management and financial habits.

Table 6. Correlation between the respondent’s profile and the financial management of the respondents

Demographic Profile	Correlation Coefficient	p-value	Decision
Sex	0.078	0.187 ^{ns}	Accept H_0
Age	-0.035	0.477 ^{ns}	Accept H_0
Civil Status	0.042	0.455 ^{ns}	Accept H_0
Occupation	0.078	0.136 ^{ns}	Accept H_0
Educational Attainment	0.018	0.729 ^{ns}	Accept H_0
Gross Family Income	0.023	0.658 ^{ns}	Accept H_0
Financial Products Availed by the Respondent	0.06	0.299 ^{ns}	Accept H_0
Purpose of Borrowing	-0.087	0.096 ^{ns}	Accept H_0
Mode of Payment	0.072	0.219 ^{ns}	Accept H_0
Length of Microfinance institution (M.F.I.) membership	0.221	< .001 ^s	Reject H_0
A number of Microfinance Institutions (M.F.I.) Affiliation	0.116	0.044 ^s	Reject H_0

**Statistically significant (s) at the 0.01 level ($\alpha = 0.10$)
 **Statistically significant (s) at the 0.05 level ($\alpha = 0.05$)
 *Statistically not significant (ns) at greater than 0.05 level.

5. Conclusion

The summary of the findings from the respondents' demographic profiles indicates that the majority are female, aged 30 to 39, married, their occupation is copra, harvesting shells, lantak, casuyan, climbing mountain, etc., their educational attainment is secondary graduate, with a gross monthly income of 3,100 to 5,699. Additionally, individual loans are the most availed financial products, primarily used for housing renovation and typically repaid on a weekly basis. Furthermore, they have been members of microfinance institutions for one to five years and generally maintain only one microfinance affiliation and membership in the CARD microfinance institution. The findings reveal that the respondents' financial decisions are based on rational biases, logical reasoning, careful planning, and practical financial decisions, and those decisions are not influenced by emotions, impulses, or irrational behavior. Regarding financial management, the results revealed that respondents are not knowledgeable, aware, and well-informed in terms of budgeting, savings, and spending; therefore, most financial problems encountered are a lack of a financial budgeting plan. As the investigation of significant relationships, not all demographic profile variables showed a significant relationship concerning behavioral finance and financial management. To address these issues, the researcher emphasizes the importance of behavioral finance and effective financial management in making financial decisions. The findings reveal a clear need to strengthen borrowers' financial vulnerability, particularly in areas such as budgeting, saving, spending, and financial planning. Additionally, it is important to recognize the influence of irrational biases that may affect financial decision-making. Improving financial management skills, developing structured financial plans, and promoting financial education and awareness are essential steps toward preventing financial problems and enhancing overall financial well-being.

6. Recommendations

Based on the conclusion, the following recommendations are offered:

Although microfinance institutions operate nationwide, this study is limited to a specific location. Therefore, it is recommended that future research explore similar investigations in other barangays or municipalities within Palawan. This would allow for comparative and correlational analyses of the findings. The study also found that financial vulnerabilities are common among respondents, largely due to a lack of financial education and budgeting skills. As a result, there is a need for further investigation into financial management practices and the financial challenges faced by borrowers. Future research should examine both the role of microfinance institutions and the behavior of borrowers to address these issues. Additionally, researchers are encouraged to focus on identifying the factors that contribute to financial vulnerability and how these vulnerabilities impact overall financial management.

Informed Consent Statement: *All subjects in the study were informed of their right to provide informed consent. Participation was voluntary, data were collected anonymously, and no personal data (identifying or sensitive) was recorded.*

Conflicts of Interest: *The authors declare no conflicts of interest.*

References

- Aristei, D., Gallo, M., & Minetti, R. (2024). Financial knowledge and borrower discouragement. (*Cornell University*).
- Armendáriz, B., & Morduch, J. (2005). *The economics of microfinance*. Cambridge, Ma: *Mit Press*.
- Babatunde, O.A. (2016). Behavioral finance and microfinance borrowers: Evidence from Nigeria. *International Journal of Behavioral Economics and Finance*. 4(1), 54–69.
- Bakar, N.B. A & Ismail, S. (2020). Financial Management Accountability Index (FMAI) in the Malaysian public sector: A way forward. *International Review of Administrative Sciences*. 77 (1), 159–190.
- Bakshi, S. (2020). Financial market transition from traditional finance to behavioral finance. *Xxi Annual International Conference Proceedings*.
- Bhasin, H. (2021). Behavioral Finance- Definition, Examples and Concepts.
- Campbell, J. Y. (2006). Household finance. *Journal Of Finance*.
- Caraballo, M.U. (2021). Filipinos worry about financial status. -Study. *In Manila Times Net*.
- Chen, J. (2021, May 7). Expected utility: Definition, calculation, and examples. *Investopedia*.
- Donnelly, G., Iyer, R. & Howell, R.T. (2012). The Big Five Personality Traits, Material Values, And Financial Well-Being of Self-Described Money Managers. *Journal Of Economic Psychology*. 33, 1129–1142.
- Downey, L. (2024, October 3). Efficient Market Hypothesis (EMH): Definition and critique. *Investopedia*.
- Fabian & Strehl (2017). Microfinance outreach, portfolio performance, and growth: Evidence from Indian MFI. *Journal of Banking & Finance*. 58, 218–236.
- Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *Journal of Finance*. 25(2), 383–417.
- Fiano, L. (2018). 3 common credit issues and what you can do to fix them. *Consumer Financial Protection Bureau*.
- Finezza Blog. (2020). 7 challenges faced by Microfinance institutions. *finezza.in/blog*.
- Gathergood, J. (2012). Debt and depression: Causal links and social norm effects. *The Economic Journal*. 122 (563), 1094–1114.
- Ginsberg Gingras. (2021). The causes of financial problems. *ginsberg-gingras.com*.
- Gitman, L. J., Joehnk, M. D., & Billingsley, R. S. (2017). *Personal financial planning* (14th ed.). *Cengage Learning*.
- Gomber, P., & Schill, M. (2015). Member mobility in microfinance institutions: Evidence from the Philippines. *World Development*. 73, 25-36.
- Hammond, R.C. (2015). Behavioral finance: Its history and its future. Selected Honors Theses. Paper 30. *Center for Business Research & Development, Working Paper 2013-05*.
- Hens, T., & Rieger, M. O. (2010). *Financial economics: A concise introduction to classical and behavioral finance*. *Springer*.
- Illiashenko, P. (2017). Behavioral finance: Household investment and borrowing decisions. *Visnyk of the National Bank of Ukraine*, (242), 15–29.
- Kahneman, D., & Tversky, A. (1974). Judgment under uncertainty: *Heuristics and Biases*. *Science*. 185(4157), 1124–1131.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decisions under risk. *Econometrica*. 47(2), 263–291.

- Kapoor, J. R., Dlabay, L. R., & Hughes, R. J. (2015). *Personal finance* (11th ed.). McGraw-Hill Education.
- Kartini, K., & Nahda, K. (2021). Behavioral biases on investment decisions: A case study in Indonesia. *Journal of Asian Finance Economics and Business*. 8(3), 1231–1240.
- Kestas, P. (2025, May 14). Critical Analysis of the Transition from Efficient Market Hypothesis to Behavioural Finance and the Embrace of Cultural and Emotional Complexity - EC Markets. *EC Markets - the Ultimate Trading Experience*.
- Komba, G. V., & Komba, M. M. (2024). Examining microfinance loan repayment challenges and procedures by small business owners: the case of Vikenge Village, Morogoro, Tanzania. *Science Mundi*. 4(2), 107–116.
- Lee, S. (n.d.). *Understanding the efficient market hypothesis in Behavioral Economics*.
- Lusardi, A., & Mitchell, O. S. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*. 52(1), 5–44.
- Maison, D. (2019). *The Psychology of Financial Consumer Behavior, International Series On Consumer Science. Springer Nature Switzerland*.
- Mangi, A., & Anand, R. (2016). Financial awareness and budgetary planning among microfinance borrowers: A study of India. *International Journal of Economics and Financial Issues*. 6(2), 708–716.
- Mian, A., & Sufi, A. (2015). *House of Debt: How they (and you) caused the Great Recession, and how we can prevent it from happening again. University of Chicago Press*.
- Norris, E. (2022). Top 10 most common financial mistakes. *Investopedia*.
- OECD. (2020). *OECD/INFE 2020 International Survey of Adult Financial Literacy*.
- Owusu, E. N. (2016). Assessing The Level of Financial Literacy Among Teachers: A Case Study of Sekyere East District of Ashanti Region of Ghana.
- Paer, J. De St. (2019). *Why Behavioral Finance Is Important In Today's Market Environment*.
- Parker, T. (2022). Unsecured Personal Loans: 8 Sneaky Traps. *Investopedia*.
- Puliyakot (2021). Determinants of overindebtedness among microfinance borrowers: A poverty line-based approach. *Asia Pacific Sustainable Development Journal*, 27(10).
- Raaij, W. F. V. (2016). *Understanding Consumer Financial Behavior, Money Management in An Age of Financial Illiteracy*.
- Raghavendra. (2018, April 9). The 5 Most Common Problems Borrowers Face in India -. *Peer To Peer (P2p) Lending Blog*.
- Sabharwal, K., Beri, S., Agarwal, N., Sah, P., & Yadav (2024). *Emotions, Biases, and The Stock Market. Psychology Group Project 2. Integrated Program in Management. Indian Institute of Management*.
- Savinaa, S. & Merlinob, I. K. (2015). Improving Financial Management System For Multi-Business Companies. *Social And Behavioral Sciences*. 210,136 – 145.
- Sharma, S. (2025, June 18). *Financial decisions: Meaning, types and factors affecting*.
- Simon, H. A. (1955). A Behavioral Model of Rational Choice. *Quarterly Journal of Economics*. 69(1), 99–118.
- Statman, M. (2019). *Behavioral Finance, the second generation. CFA Institute Research Foundation*.
- Strutner, S. (2024, December 6). *Financial management explained: Scope, Objectives & importance. Oracle NetSuite*.
- Stupavský, M. (2018, April). *Behavioral finance foundations for investors [powerpoint slides]. CFA Institute (Slovakia)*.

Exploring Behavioral Finance and Financial Management: Strengthening the Financial Vulnerabilities of Microfinance Borrowers

- Thaler, R. H. (1980s–1990s). Various works on behavioral economics, including mental accounting and the endowment effect.
- Thaler, R. H. (2016). *Misbehaving: The Making of Behavioral Economics*. W. W. Norton & Company.
- Von Neumann, J., & Morgenstern, O. (1944). *Theory of Games and Economic Behavior*. Princeton University Press.
- WARD, S. (2020, OCTOBER 12). Challenges of getting a small business loan. *The Balance Small Business*.
- Xiao, J. J., & Porto, N. (2017). Financial education and financial satisfaction: Financial literacy, behavior, and capability as mediators. *International Journal of Bank Marketing*.
- Zhang, Y., & Zheng, X. (2015). A study of investment behavior based on behavioral finance. *European Journal of Business and Economics*. 10(1), Article 557.