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# FINANCE LITERACY AS A TOOL FOR MICROFINANCING: A LITERATURE REVIEW

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## Abstract

The research goal of this study is to provide a summary of economic research and literature in the domain of financial literacy. There are 1.7 billion people in the world who do not have access to financial services. One of the goals of the UN Sustainable Development Goals is to reduce poverty through financial inclusion. Financial literacy has risen to prominence as a key element for achieving universal financial inclusion. Financial literacy is defined as the knowledge and ability of a person to understand the financial concepts. There is lack of theoretical framework and quantitative instruments for assessing the impact of financial literacy on financial behaviour. Financial literacy is a major policy issue in the realm of social and sustainable finance. The purpose of this study is to look at the existing literature in the realm of financial literacy and develop a comprehensive definition of financial literacy. For this study, the PRISMA methodology of systematic literature review was used. Financial knowledge, according to the research, does not lead to financial behaviour. Financial attitude plays an important role to transform financial knowledge into financial behaviour. There is need for further research to develop a theoretical framework and a quantitative method for measuring financial literacy. For policymakers and academics, this study will provide thorough insights into the meaning, definition and various dimensions of financial literacy as a concept.

*JEL Code: G51, G53, G59*

**Keywords:** Financial knowledge, financial literacy, financial attitude, microfinance.

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## 1. Introduction

The rural finance system in India suffers from financial exclusion. Due to the absence of collateral and knowledge asymmetry, most economically disadvantaged micro borrowers are excluded from the financial system. And they lack financial literacy to access and avail formal financial services and have to rely on informal sources of finance. In the 15th and 16th centuries, merchant banks began offering grain loans to farmers, and modern banking, which serves citizens' financial requirements, migrated from northern Italy to northern Europe. Emerging economies have realized the value of banking in fostering economic growth. Developing economies have accepted the UN Sustainable Development Goal 2030 to enhance financial inclusion and eliminate poverty. With the increasing complexity of bank products, Money management has become highly challenging. However, the lack of financial literacy, Social Intermediation and training prevents the marginalized poor from accessing financial services, jeopardizing Universal Banking. And financially illiterate persons experience increased debt levels due to lack of financial abilities, leading to a vicious debt cycle (Cole & Shastry, 2008).

There is no comprehensive definition of financial literacy, and there is a scarcity of literature that adequately discusses the variables. The term "financial literacy" originally meant "financial knowledge," but there is a lack of a theoretical definition. There are also two types of financial literacy studies: (1) individual program effect evaluations and (2) population-based financial literacy assessments.

*Definitions & Concept of Financial Literacy*

Financial literacy is characterized as a combination of conceptual and operational components (Remund, 2010). The author defined financial literacy as (1) knowledge of financial concepts, (2) ability to communicate financial concepts, (3) aptitude to manage personal finances, (4) skillset required to make appropriate financial concepts, and (5) confidence required to plan effectively, taking into account all review studies conducted till date. Scholars worldwide have recognized the value of financial knowledge, and literature emphasizes that to manage money properly, a certain level of money understanding is required (Braunstein et al., 2007).

In the extant literature, the ability or aptitude to manage personal finances has been identified as the most critical factor impacting financial inclusion. Many researchers define financial literacy as the ability or skill to manage personal finances. (Volpe et al., 1996), have defined Financial literacy as working cash and payment commitments and understanding essential financial and banking services, such as bank accounts and insurance products, using a holistic concept of inclusion and universal financial services (Emmons, 2005).

Financial literacy is described as the ability to successfully and confidently manage one's finances and understand and express financial concepts. Financing skills are becoming more critical in financial literacy. Mortgage ownership and retirement savings are both regarded as indicators of financial capability. The most widely utilized variables to operationalize the concept of financial literacy include budgeting, saving, borrowing, and investing. Literature prescribes the inclusion of risk management, asset transfer, and financial management variables to make the metrics comparable. Financial literacy as a policy framework is essential for banks and governments. Financially illiterate consumers are less able to save and manage their money, which negatively impacts markets. Owing to financial illiteracy, the bankruptcy of the micro borrowers becomes more likely. The primary purpose of financial literacy is to raise financial awareness, and financial literacy projects are much more difficult to evaluate (Carolyn Welch et al., 2002). The ability to understand, assess, manage, and communicate about personal financial problems is defined as financial literacy (Borden et al., 2008).

Financial literacy is assumed to be synonymous with financial knowledge by (Hogarth & Hilgert, 2002). It is defined as knowledge and understanding of financial concepts and risks, as well as the skills, motivation, and confidence to apply such knowledge and understanding to make effective decisions across a range of financial contexts, to improve individuals' and society's financial wellbeing, and to enable participation in economic life, according to (OECD, 2013). The Organization for Economic Cooperation and Development (OECD) focused on three essential areas of financial literacy: financial knowledge, financial behaviour and financial attitude. Financial literacy is viewed differently by researchers. Financial literacy is defined as comprehending basic economic ideas and doing simple calculations (Lusardi & Mitchell, 2011). Financial literacy has been defined as ability to examine new and sophisticated financial products and make informed judgments about which instruments to employ and how much of them to utilize (Mandell & Klein, 2007). Lusardi and Tufano (2009) define debt literacy as the ability to make simple debt decisions and apply interest compounding knowledge to real-life situations, (Van Rooij, 2009), (Mitchell, 2011), (Atkinson, 2012), (Mitchell (Sharma, 2013).The researchers disagree on the notion of financial literacy and the abilities required to use financial services. According to (Herd 2012), financial literacy is described as a person's comprehension of their financial situation, and several types of literature have attempted to construct factors to aid in the measurement of financial literacy. Financial literacy, according to the literature, aids in the understanding of the time value of money (van Rooij, 2009), (Atkinson, 2012), (Agarwalla et al., 2013), risk inflation (Atkinson, 2012), (Agarwalla et al., 2013), (Lusardi & Mitchell, 2011), (Jin Huang, 2013), investment returns (van Rooij, 2009), (Atkinson, 2012), (Agarwalla (Agarwalla et al., 2013).

(Lusardi & Tufano, 2015) define financial literacy as the knowledge of debt products, such as debt literacy, investment returns, relationship risk, and return, the role of diversification in risk reduction and credit working, and self-perceived knowledge. According to current research, Asian countries like Indonesia lag in financial literacy and people's capacity to manage everyday savings, borrowing, budgeting, and investment activities. According to the Study, financial literacy is defined as a combination of financial knowledge, financial behavior, and financial attitude (FINRA, 2003). According to (Moore 2003), financial literacy is defined as an individual's ability to comprehend financial concepts acquired via experience and knowledge integration. On a conceptual level, financial literacy is defined as "familiarity with basic economic principles and facts about the economy, as well as an understanding of key economic terms and principles" (NCFE, 2005).

Policymakers, economists, and financial specialists disagree on how to define financial literacy, and researchers disagree on the impact of financial literacy on financial self-efficacy. Because (1) there is no conceptual definition of financial literacy and (2) there is no assessment tool to measure the influence of financial literacy on self-efficacy. Thus, the measurement of financial literacy poses a two-fold challenge (Remund, 2010). This research aims to discuss the various dimensions and categories of the idea of financial literacy. There is a lack of thorough literature on constructing a standardized instrument to test financial literacy, so this paper discusses the development of a standardized measurement scale to assess financial literacy levels. Earlier definitions of financial literacy focused on the construct's definition, validation, and measurement through a scoring procedure. The operationalization of the construct has been a significant concern in most of the research (Huston, 2010). Even though several conceptual definitions of financial literacy, the methodologies used to assess it differ significantly.

## 2. Research Problem

There is a lack of financial literacy and education among the poorest of the poor, but current financial education initiatives cannot change poor people’s economic behavior. Literature has identified a lack of motivation as a significant element in impoverished people's economic inactivity (Mendell & Schmid Klein, 2007). This means that financial knowledge is insufficient to encourage financial behavior in savings and credit among the rural poor; the poor's economic efficacy must be improved. This research will serve as a repository for academic research in financial literacy assessment, attitude, and behavior, as well as an evaluation of existing financial literacy measurement techniques.

## 3. Theoretical lens

Expectancy theory (Vroom, 1964), also known as the force model and the utility model, has been used to examine the topic of dormant learning without effective results in terms of behavior in the literature (Samuelson, 1967). Furthermore, the incorporation of goal planning is mentioned in part of the strand literature (Hollenbeck, 1987).

According to Locke (1990), the effectiveness of individual goals and objectives determines the task's outcome. We used the theoretical lens of expectation theory in this paper. Expectancy refers to an individual's expectation of what they are capable of achieving or their capability, and the need for training or supervision is determined based on that capability; instrumentality refers to the relationship between performance and rewards; and valency refers to the utility of the outcomes (Vroom, 1964). The efficiency and effectiveness of various measurement models suggested by multiple scholars in measuring the efficacy of financial literacy measurement instruments will be examined in this study. Individuals' financial literacy has been calculated using behavioral models for some time in the existing literature. According to the model, people's use of financial services is determined by their tendency to use them, variables that promote or obstruct their use, and their need for care. The model is a simple one that includes variables such as propensity, enabling use, need, and service (R M Andersen, 1995). Self-efficacy is a psychological theory – Towards a Unifying Theory of Behavioural Change states that an individual's psychological constitution influences the strength of self-efficacy and that these personal efficacy expectations affect whether or not appropriate financial behavior will be undertaken (Bandura, 1977). According to Ajzen's (1991) theory of planned behavior (TPB). Subjective norms or social capital, attitudes, and perceived behavioral control, according to this theory, determine the desire to undertake a behavior. In addition, there is some work on financial literacy as viewed through the lenses of crystallized and fluid intelligence. The employment of critical reasoning and innovative thinking is referred to as fluid intelligence. Crystallized intelligence is more closely related to IQ (Intelligence Quotient). It relates to accumulated information, which alludes to an individual's investment in knowledge through course curriculum and concept development. Some studies look at the impact of various measurement methodologies based on fluid and crystallized knowledge on financial literacy (Willi & Kezdi et al., 2014). Fluid intelligence is defined as solving problems involving arithmetic, comprehension, and the perception of complicated relationships using skills and reasoning. The ability to recall earlier events based on accumulated information is known as crystallized intelligence. A notion of generalized intelligence was created by combining crystallized intelligence and fluid intelligence (Cattell, 1905-1998). Researchers in finance have used this theoretical lens to assess the impact of demographic characteristics such as age on financial decision-making results (Henager and Cude, 2016).

*Theoretical lens for the study*

For this research study, we have adopted the theoretical lens of TPB (Theory of Planned Behaviour), which states that financial behavior is impacted by subjective norms, economic attitudes, and financial knowledge.


Figure 1: Cognitive Theory of Financial literacy
Source: By Authors

## 4. Discussion & Analysis

*a. Financial Knowledge*

There is lack of a comprehensive definition of Financial literacy and the variables and constructions that make it up. Financial literacy was initially described as financial knowledge, and was referred to as theoretical financial literacy comprehension. There are two types of financial literacy studies: (1) effect evaluations of individual financial literacy programs and (2) population-based financial literacy assessments.

According to the poll, socio-demographic traits play a role when it comes to measuring financial literacy (ANZ, 2008). According to the survey, financial literacy is higher among males, older people with college degrees, white-collar workers, and inhabitants of a specific place. The variables addressed in this study were numeracy, financial literacy (understanding risk and return), insurance products and superannuation funds, financial planning and budgeting, and consumer rights and duties. According to this study, financial literacy is not the same as financial knowledge. In general, there is a lack of a conceptual definition of financial literacy. Financial literacy is defined by (Hira & Loibl, 2005) as the ability to prepare for retirement, invest, plan for the future, and handle credit. In contrast to the previous Study (ANZ, 2008), this one focuses on financial literacy in terms of numeracy and consumer rights and obligations. This study employs both fluid and crystallized intelligence to assess financial literacy. Their study designed a survey to determine financial literacy by examining important basic economic concepts, financial markets and instruments,

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financial planning, financial analysis, and insurance and risk management tools, according to (Beal & Delpachitra, 2003). The study's goal was to determine how well respondents understood basic financial concepts. In their research, (Hogarth & Hilgert, 2002) created an instrument to assess people's finance knowledge. Cash flow management, general credit management, savings, investment, mortgages, and other financial management issues are examples of financial knowledge. Income, income management, saving and investing, and spending and debt are all highlighted as the factors of financial literacy (Tennyson & Nguyen, 2001). Their study assessed the participants' knowledge of personal economic themes such as income, savings/investment, spending/debt, and money management. In this study, the researchers found a link between the state curriculum and financial literacy. Inadequate investment knowledge, poor knowledge of personal loans, credit cards, insurance, and investments, and lack of money management are all markers of financial literacy, according to (Volpe et al., 1996).They created the survey tool to assess risk, diversification, financial advisors, tax planning, financial market instruments, global investing, and interest rate charges. This paper focuses on crystallized intelligence in the context of personal investing. Financial knowledge is defined as knowledge about basic concepts in personal finance, such as banking, regulation, consumer rights, credit, financial planning, homeownership financing, taxes, insurance, investing, lending/borrowing, money management, retirement planning, saving money, and spending money, according to the Study (Godsted & McCormick 2007).

(Xiao & O'Neill, 2016) used factors such as financial literacy, financial behavior, and financial self-efficacy to assess people's knowledge of financial education and its relationship to economic competence in their study. The author calculated the economic competence index using the Z scores of the variables in this study. After researching the financial planning curriculum (Danes & Haberman, 2007), study intends to highlight gender variations in the effect size of economic knowledge on self-efficacy and behavior among high school students. Furthermore, the study emphasizes the gender differences in social roles played by family members to enhance financial learning. According to the survey, men are better at budgeting and planning than females regarding financial decision-making. The concept of financial literacy is discussed in this study within the social framework of a family, where learning is a social experience. Curriculum and study materials have become essential tools for providing formal financial education. Financial planning, income level, financial statement, compound interest, tax deductions, knowledge of money market instruments, equity, savings, retirement planning, insurance, and debt have emerged as the primary elements for measuring financial literacy. In the end, (Oanea & Dornean, 2013) disseminated a much broader definition of financial literacy in their study, which encompasses financial knowledge and abilities and skills. The survey design includes measurements of financial markets and instruments. It evaluates financial knowledge of asset liquidity, non-spending tools, and interest rate calculations. Understanding inflation, investing, using personal finance

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products such as checking accounts, savings; credit cards; foreign exchange; insurance; and pensions are other competencies included in the poll. A few of the survey's questions are about risk awareness, behavior, and money management and planning. (Moore, 2004) attempted to establish a link between financial experience, financial knowledge, and financial behaviour in their research. The purpose of the study was to evaluate the participants' involvement in generating financial behavior. The first group employed focus groups to assess the impact of financial education on borrowers who had complained about predatory lending. For the second group, the participants were chosen at random. A test was also conducted to assess the financial literacy of two groups. Victims of predatory loans had significantly lower financial literacy than the general population, according to the study. To evaluate financial literacy policymakers, used complex economic themes such as compound interest, bonds, mortgages, fees, saves, investment, loan repayment, and time worth of money were used.

Many studies and reports, on the other hand, make no distinction between financial literacy and financial knowledge. Through activity and ability, the scholar operationalizes the concept of financial knowledge. Financial literacy requires financial knowledge, according to Chen and Volpe (1996). Savings and borrowing, insurance, and investing information are all part of this financial knowledge architecture. Creditworthiness, consumer credit reports, deposit insurance, checking account overdraft, compound interest, certificate of deposit terms, loan co-sign implications, annual percentage rate, and credit card use are all terminology used by the author to define saves and borrowings. Mutual fund selection, retirement planning, exchange rates, and foreign currency rates are all investments. Banking expertise has grown increasingly important due to technological advancements and the changing environment, (Servon & Kaestner, 2008). Digital technology and ICT skills were identified as significant components for gauging financial comprehension in this research investigation. As a result, financial literacy is defined in this study as the capacity to use economic concepts and computerized banking.

Financial knowledge in the Study (Faulcon Bowen, 2002) in his study aims to highlight the age difference in effect size of financial literacy on financial ability. The study has mentioned understanding key concepts and economic terms as the source of financial expertise. Savings, auto life health insurance, house owner insurance, credit cards, taxes, and investment are among the topics included in the research study. The article's knowledge was tested with taxes, retirement, insurance, credit use, inflation, and budgeting. It also affects how people think about money. The study also considers human social capital, including family discussions about money, family members teaching about life insurance, and financial record keeping.(Robb & Sharpe, 2009)have specifically differentiated between financial knowledge and financial literacy.

The researcher wanted to see how financial education affected revolving credit balances in a sample of more than 20,000 college students. Six questions about debt

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literacy were used to assess his financial knowledge. From the research completed, questions were chosen from the Jump$tart Survey (Chen & Volpe, 1996). (Schwab 2008) examined the perceptions of parents or their thoughts on money management and their concerns about the money management attitudes and behaviors of their teenage children. Financial knowledge is assessed in this survey using questions regarding money management, financial attitude and behavior, and financial independence in terms of savings, spending, earnings, and financial freedom. Budgeting, credit card management, investment, retirement planning, insurance, mortgage, retirement, and taxes have all been used to assess money management ability. Personal finance has been given weighting, with questions about saving, investing, budgeting, and keeping a cashbook. Financial literacy was described as a set of financial abilities by (CFPB 2015) in their research study, and research was undertaken to examine the impact of financial literacy on financial capability. Economic competence is defined as financial wellbeing and financial outcomes in this article. The research study defines financial behavior as money management, research and knowledge seeking, planning and goal-setting, and follow-through. The gap between financial learning or crystallized intelligence and financial decision-making is highlighted in further study. It propagates the idea that factual knowledge is insufficient. There is a need for a shift in behavior or attitude. The term "financial ability" refers to a collection of talents that help people behave better.

And the relationship between knowledge and behavior or competence is mediated by financial attitude. (Courchane & Zorn, 2005) examined the impact of economic knowledge on creditworthiness in their article. The author claims that consumer literacy and experience aid in reducing delinquency among borrowers in the setting of mortgage markets. Lusardi and Mitchelli (2007) used conceptual questions about inflation, interest rates, risk diversification, retirement planning, and savings to assess financial knowledge. This research study (Bernheim & Garrett, 2003) looked at the impact of workplace or employer-assisted financial education on asset building. Furthermore, the survey instrument used to assess the influence of financial knowledge included conceptual questions about saving, earnings, income, pension coverage, workplace retirement education, and economic and financial expertise. (Borden et al., 2008) employed credit or debt literacy as a variable for financial knowledge in their research study, which included questions about credit card APR, payment due date, credit limits, and payment mechanism through cheques.

The impact of the seminar on the participants' financial behavior was examined in this study. (Baron-Donovan et al., 2005) developed an instrument to assess the effect of economic knowledge on trainers' or instructors' efficacy. This research focuses on the trainers' knowledge and ability to instruct. Economic ideas such as awareness of successful tactics for making more intelligent spending, saving, and credit use decisions are included in the financial knowledge construct, (NFCC For, 2018) Their study examined financial literacy using dimensions like budgeting, spending, saving, retirement, credit card debt, and homeownership. There is no distinction between financial literacy and financial knowledge in this poll. (Volpe, 2006) conducted a study to assess employees' financial knowledge in the areas of personal finance, including insurance, planning and budgeting, inflation, time value of money, capital market investing, tax planning, and estate planning. According to the research, employees lack retirement planning, personal finance, investment, and estate planning. (Lyons et al., 2007) employ credit literacy as a measure of financial knowledge, based on the reading and comprehension of credit literacy reports and an understanding of credit ratings.

(Lusardi, 2008) used the basic conceptual knowledge of interest rate, inflation, and risk diversification to measure the financial literacy of participants in their study. (Lusardi & Mitchelli, 2007) designed questions to test consumers' financial knowledge regarding saving decisions, abilities, and skills to make informed decisions and gather information about decision making in an earlier study. In their EBRI Retirement Customer Survey 2001, (Salisbury et al., 2001) explored the basic conceptual knowledge of retirement concepts.

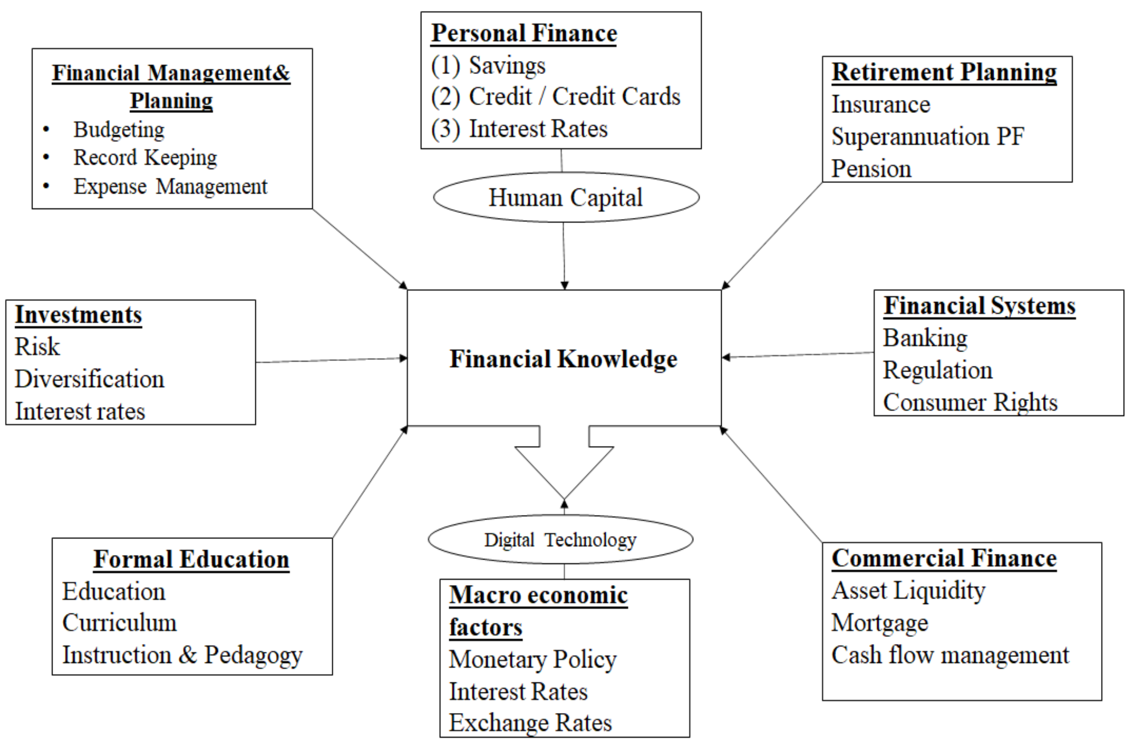


Figure 2: Themes in Financial Knowledge

Source: By the authors

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*b. Financial Attitude*

In his study, (Huston 2010) contends that financial knowledge is not the same as financial literacy. According to the author, financial knowledge is an endogenous concept that will not lead to economic behavior unless and until it results in financial self-efficacy. According to the author, financial literacy is a combination of financial literacy and financial behavior. The term "financial self-efficacy" refers to a set of abilities and mindsets.


Figure 3: Theoretical lens for Financial Self-Efficacy or attitude

Source: By the authors

The concept of financial self-efficacy has not been explicitly examined in the literature. The mediating role of self-efficacy has been discussed in the literature, and it is thought to be influenced by skills, personal and social characteristics, family, culture, experiences, and training. As a result, financial literacy includes a subset of financial knowledge.

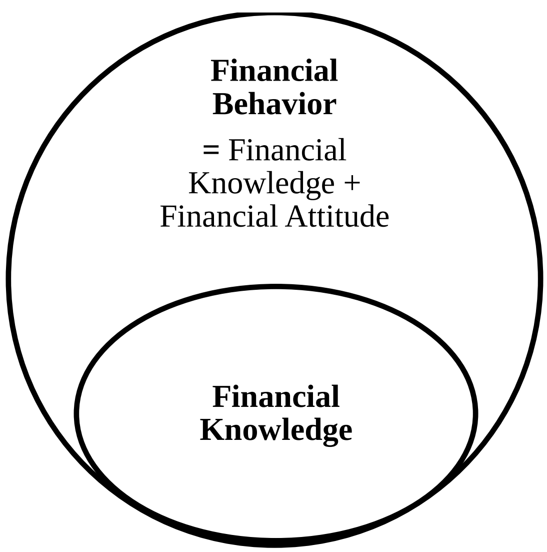


Figure 4: Relationship between Financial Knowledge and Financial Behaviour

Source: By the authors

Their research work (Hung et al., 2009) discusses financial knowledge as a more extensive notion that includes financial education, skills, and capacities. Numeracy was employed in many examinations to assess financial literacy, a form of crystallized intelligence. Financial attitude, according to the author, is distinct from capacity, skills, and competencies. The author also mentions the gap between perceived and actual knowledge, in addition to the financial mentality. The financial mindset, on the other hand, is characterized as distinct from the competencies and capabilities. Their research study (Mandell & Klein, 2009) illustrates the contradiction that financial education does not always lead to financial literacy.

The researchers go on to say that it is the individual's self-efficacy that translates financial knowledge into financial literacy. His research paper (Mandell, 2008) claims that financial education does not lead to financial literacy. The fundamental explanation for the disparity in financial education outcomes, according to him, is a discrepancy in resources. In addition, financial education may not lead to economic behavior, according to Jump $tart polls. (Mandell, 2008) elucidates this issue by claiming that financial education received through curriculum may be dormant, and individuals may be unable to use it owing to a lack of skills and talents. In his research, (Remund 2010) emphasized the difficulty in defining the concept of financial literacy. According to the scholar, financial literacy has been characterized as operationalized and conceptualized within the existing literature.

Individual borrowers' self-efficacy is operationalized to turn financial education into financial literacy. According to the author, financial literacy is much more than financial education or information, and it may be split into five areas. (1) Knowledge of financial concepts, (2) capacity to communicate about financial concepts, (3) aptitude in managing personal money, (4) talent in making proper financial decisions, and (5) confidence in effectively planning are among these categories. According to (Mandell & Klein, 2007), motivation plays a vital role in transferring financial education or information into financial behaviour. In his theory (Lewin, 1938) has advanced the perspective on motivation. (Vroom, V. H, 1964), explains the underlying motivations behind human behavior in terms of instrumentality, expectancy, and valence or utility. This theory defines the difference in performance or outcomes by instrumentality or valence, i.e., through reward and utility, instrumentality or valence. The distinction between financial literacy and financial knowledge has been demonstrated throughout the literature. The paper by offering various examples emphasizes that financial knowledge cannot be equated with financial literacy without skills and talents. Motivation levels, in addition to personal considerations, have an impact on financial literacy.

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Individuals with a higher achievement orientation are more financially savvy. (Burnet, 1965) contends that financial literacy entails more than just understanding economic principles; it also encompasses other personal and psychological traits such as achievement-orientation, decision-making, and leisure hobbies, to mention a few. Individuals make sense of information using a combination of skills and technology, resources, and contextual knowledge to make educated decisions (Repository 2016).

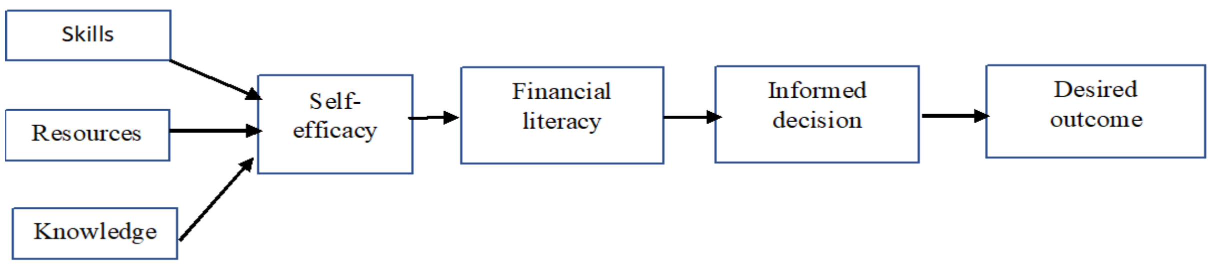


Figure 5: Financial literacy as sense-making

Source: By the authors

Financial literacy is a sense-making process driven by resources, skills, and knowledge in the above diagram. The level of self-efficacy determines understanding and sense-making to enable informed decisions and desired outcomes.

*Measuring Financial Attitude*

The extant literature demarcates research studies in the domain of financial literacy as (1) different forms and types of financial literacy (Mandell & Klein, 2007) (2) studies aimed at evaluating the efficacy of individuals (Huddleston & Danes, 1999). (Shockey 2002) in his study has defined attitude as the ability of a learner to integrate concepts, facts, and emotions to respond positively to contingencies. It's a psychological technique that helps people make better decisions. In this study, preferences and dispositions have been defined as financial attitudes. Three unique questions for measuring financial perspective are included in the questionnaire for testing financial literacy. This is a set of questions about people's expectations and attitudes toward money and planning. (Lusardi 2008) underlined the importance of subjective vs. objective knowledge and the importance of planning to operationalize conceptual expertise in their research study. Their research work, (Van Rooij 2007) highlighted attitude in the form of an individual's appraisal of risks and returns.

According to (Fernandes et al., 2014), Financial literacy is not the same as financial behavior. Highlighting the problem of endogeneity and omitted variable bias, the author argues that psychological traits that have been omitted from the relational equation between financial behavior and education impact the outcomes of financial knowledge. The author recommends taking cognizance of psychological factors impacting financial literacy. (Lusardi & Mitchell, 2011), highlight the importance of planning retirement and financial services to reap the benefits of financial knowledge. It also highlights the importance of psychological factors. (Taft et al., 2013) discussed the importance of psychological factors on financial wellbeing, financial literacy, and financial concern. (Bay et al., 2014), have discussed the concept of the situated financial literacy model that highlights the importance of context. The author argues that financial education is supported by individual-level traits and characteristics, which could be the level of self-confidence or personality. These traits are embedded within the social setting and impact the outcome of financial literacy. Further, (Wagland & Taylor, 2009) have discussed the concept of skills and capability in measuring financial literacy. (Worthington 2006) in their research paper have highlighted the impact of socioeconomic factors, skills, and personal chrematistics on the outcome of financial literacy.(ANZ, 2008) or the ANZ survey was designed to evaluate knowledge and comprehension, behavior, attitudes, perspectives, and awareness, rather than merely skills. (Wagland and Taylor 2009) have also examined the issue of skills and capability in assessing financial literacy. (Worthington 2006) addressed the impact of socioeconomic circumstances, skills, and personal characteristics on the outcome of financial literacy in their research article. The ANZ survey (ANZ, 2008) was designed to evaluate the participants' knowledge, comprehension, behavior, attitudes, views, and awareness. This study refutes the concept that financial literacy is synonymous with financial knowledge, focusing instead on financial attitudes and psychological characteristics. In his research (Mandell, 2008) found that financial education does not always lead to financial literacy. As per the author, attitudinal changes can lead to behavioural changes. In his research work, (Lyons et al., 2007) emphasize the role of individual attitudes in promoting financial behavior. This study was conducted among high school students, and it discovered that socialization aids in developing desired dispositions that lead to behavior. Their research study (Atkinson et al., 2006) emphasizes the importance of financial competence, which includes money management, planning, product selection, and staying ahead of the game as the primary elements that influence financial capability. The authors claim that borrowers' ability to plan has an impact on their financial attitudes, which in turn has an effect on the outcome of financial literacy. Individuals' confidence levels and attitudes toward risk impact the financial products they choose (Bhuvana & Vasantha, 2016). According to the Bank of Ceylon, financial literacy encompasses financial attitudes, knowledge, skill, decision-making, and financial planning (Kumari, 2021). The authors address the Family Resource Management Theory, emphasizing the relevance of values, attitudes, knowledge, and personality traits in impacting and literacy.

In their research, (Kadoya & Rahim Khan, 2020) highlighted the relevance of socio-demographic determinants in shaping financial behavior and attitudes. According to the author, age and gender have a significant impact on financial attitudes, influencing financial behavior.

*Scales for Measurement of Financial Attitudes*

(Shockey, 2002) devised a scale that has been widely utilized in the assessment of financial attitudes. This scale includes questions about income objectives, plans to work in other fields, budgeting for significant expenses, father's schooling, and money management. This scale has been widely utilized in a variety of investigations. In their research, (XIAO et al., 1995) used a 5-point Likert scale to create a scale to measure students' general attitudes toward credit cards. The Cognitive, Affective, Behavioural, and Overall attitudes were all ranked on this scale. In their research, (Furnham Lester, 1984) created a scale to measure money attitudes based on factor analysis. The first factor considers money as a form of security "I sometimes feel superior to those who have less money than myself regardless of our ability and achievement," the second factor measures power and status, "I sometimes feel superior to those who have less money than myself regardless of our ability and achievement," the third-factor measures seemingly conservative but anxious saving," and the fourth-factor measures anxiety about buying through the question. "Whether I can or can't afford it, I always say I can't afford it." (Jorgensen 2007) devised a new scale to assess financial literacy based on two areas of questions. Economic competence was the first, including financial literacy, behavior, skills, self-efficacy, and confidence. There were 17 questions about financial aptitude and four questions about financial planning, control, and bookkeeping.

Their seminal study on money attitudes (Templer, 2010) found five characteristics as the most critical influences on money management: power/prestige, retention time, distrust, quality, and anxiety. His study (Tokunaga, 1993) identified five key characteristics that influence the participants' financial attitudes. These aspects include locus of control, self-efficacy, self-attitude, attitude toward money and risky decision-making, sensation seeking, and background characteristics. (Reknes et al., 2019) in their study designed a measurement scale to assess the impact of internal or external locus of control. Internal locus of control, external locus of power, and psychological strain are all items on this measure. In his seminal research, (Mitchell, Mickel, & Gray, 1998) highlighted seven factors: the value of money, personal involvement with money, time spent thinking about money, knowledge of money, comfort in taking financial risks, ability in handling money, and money as a source of power and prestige. (Rubinstein, 1981) created the Money and Life survey, which was published in Psychology Today. (Tang, 1993) established an ethic scale to assess people's attitudes regarding money as good, bad, achievement, respect, budget freedom, and power in his research.

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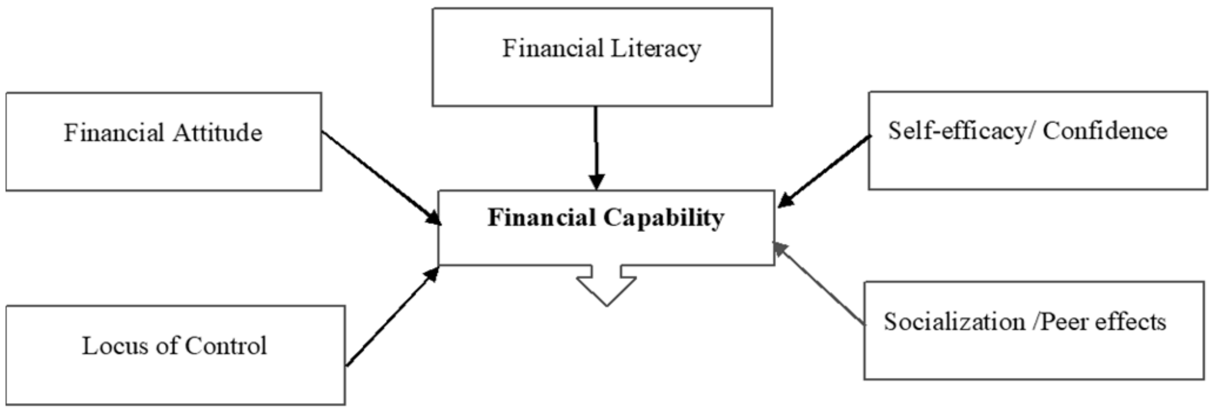


Figure 4: Financial capability

Financial capability is a broader concept than financial literacy. It also includes socialization effects, which refers to the impact of socializing with the family, financial attitude, i.e., psychological dispositions and expectations, self-efficacy of the individuals, and individual's locus of control.

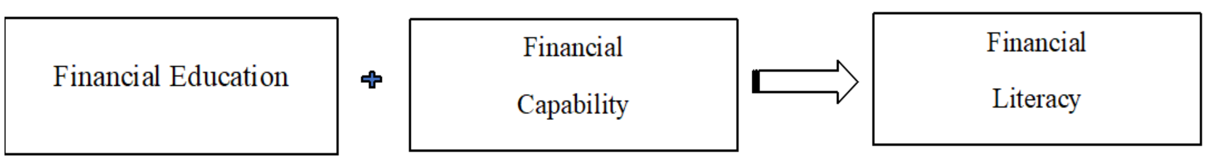


Figure 5: Financial Literacy as a function of financial capability

Source: By the authors

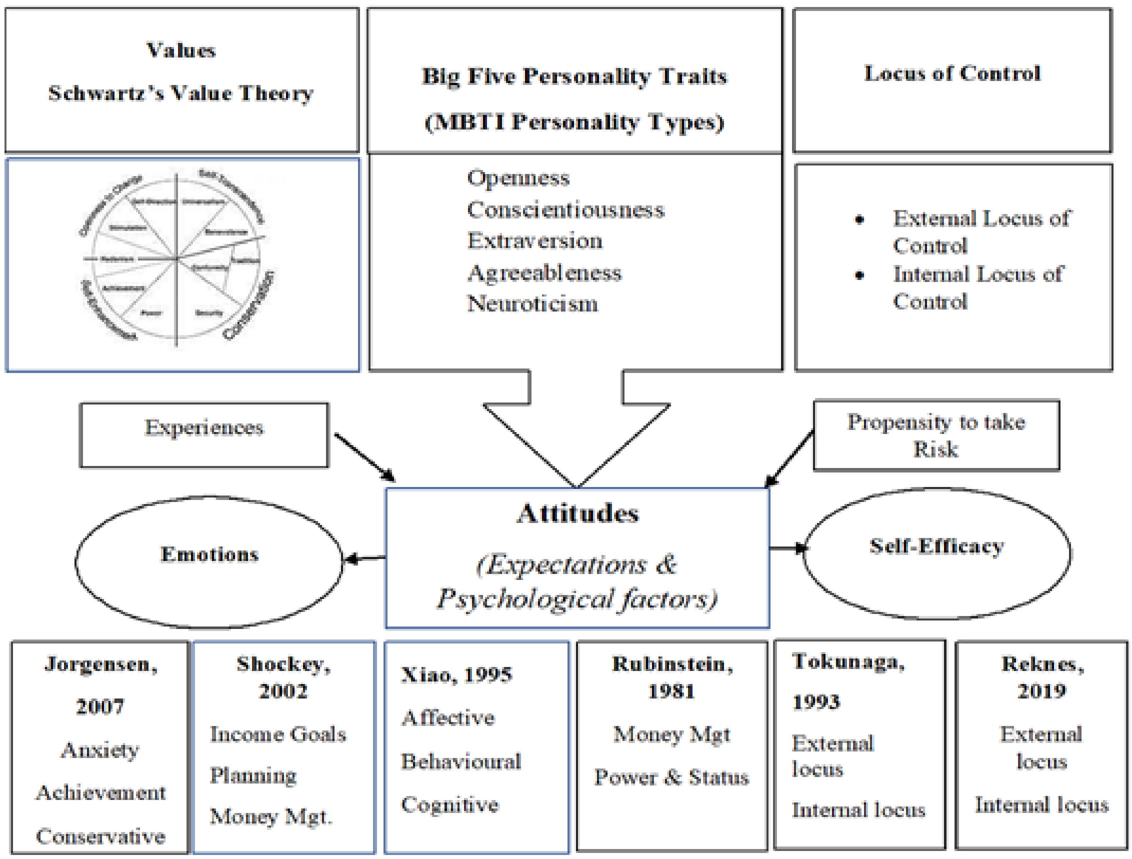


Figure 6 : Scales for measurement of Financial Attitudes

Source : By the authors

## 5. Financial Behavior

According to most research, financial education leads to financial literacy, which leads to sound economic behavior and contentment. Financial behavior refers to the primary strategies to encourage micro borrowers to save, borrow, and participate in the financial system. Their research study, (Scheresberg 2013) identified three critical financial habits that contribute to economic wellbeing: the utilization of high borrowing prices, precautionary saves and planning, and retirements. Financial literacy leads to financial behavior, according to (Menkhoff 2017) in his research report. Borrowing and debt management, budgeting and planning behavior, saving and retirement saving, insurance and risk mitigation, remittance behavior, and bank account conduct are all examples of financial behavior.

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Financial literacy relates to economic behavior such as saving, spending, tracking recurring expenditures, and negotiating payment options, according to (Bruhn et al., 2013). In their research work, (Yahaya et al., 2019) believe that financial knowledge improves financial attitude, which leads to better economic behavior. Financial conduct includes knowledge of credit cards, savings, life insurance, investment loans, retirement and superannuation funds, and an emergency fund, among other things. (Nghia, 2017) examined how financial literacy leads to healthy financial conduct in their research work. Debt, saving, investing, insurance, and tax planning, as well as budgeting and financial guidance, have all been explored. According to (Chaulagain 2017) in their research report, financial literacy leads to changes in economic behavior. Consumption and financing are two more aspects of economic behavior. Financial skills and perceived expertise, according to the author, are just as significant as financial knowledge. Financial knowledge influences financial behavior in the form of budget management, investment, and emergency reserves, according to (Efrata 2020) in his study work, which is characterized by the habit of doing financial planning, paying bills, and managing finances. Financial literacy is defined by financial attitude, financial knowledge, and financial behavior, according to (Watung 2017) in their research report. Economic literature, according to the study, has a favorable and significant influence on economic behavior. Credit management, cash management, and saving management are all examples of economic behavior. According to the Study, positive economic behavior is linked to financial wellbeing.

## 6. Conclusion

The study contributes to the growing body of literature in domain of financial literacy by exploring the various factors that contribute to financial behaviour in form of banking through formal institutions among the microborrowers. The study concludes that there are three major factors that lead to financial literacy – financial knowledge, financial attitude and financial behaviour. We initiated the study by exploring the various dimensions of financial knowledge, which refers to the knowledge about the financial concepts. In this regard we find that mere crystallized intelligence or mere financial knowledge about the financial concepts is a narrower concept and does not transform itself into financial behaviour. From the synthesis of studies we conclude that financial literacy refers to the financial knowledge backed by the ability of individuals. The ability of an individual is impacted by the skills and application orientation. This is often referred to as fluid intelligence. Besides this, the financial attitude or disposition of a person impacts the level of financial literacy. Existing studies highlight the mediating role of financial attitude in transforming the financial knowledge into financial behavior. Some of the literature has devised the concept of financial capability, which comprises of the financial knowledge, skills and dispositions or attitudes. Financial capability is the primary concept that leads to financial literacy, and financial capability comprises of financial attitude, self-efficacy, and locus of control. Through the literature review, it becomes apparent that mere financial knowledge is not sufficient to generate financial behaviour and indeed it is the financial capability and attitude of a person that determines the financial behavior of an individual. In-depth study of literature highlights the importance of social intermediation in building a positive attitude or disposition towards financial behaviour. There is extant literature on conceptual framework for the measurement of financial attitude and most of the literature emphasizes the importance of emotions, achievement orientation, risk taking abilities. There is lack of studies in domain of measurement scale to measure the impact of financial attitude on financial behaviour. There is a lot of scope to conduct future research in the domain of financial literacy to promote conducive financial behaviour among the microborrowers to achieve the goal of sustainable finance and financial inclusion. Also, the policy makers can benefit from this study in designing various interventions such as financial literacy training to achieve the goal of universal financial inclusion. Financial literacy has lot of ramifications in ensuring sustainable development by reducing inequalities and ensuring equitable access to financial services and resource distribution for all.

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