

**FINANCIAL KNOWLEDGE, NUMERACY, AND ATTITUDE ON SAVINGS BEHAVIOR: A SYSTEMATIC REVIEW AND NARRATIVE SYNTHESIS****Jaymark M. Quizon****ORCHID ID - 0009-0000-8233-7720**

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**ABSTRACT**

This systematic review aims to synthesize the empirical evidence on the relationship between the key components of financial literacy and individual savings behavior and the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) was used as a guideline for the systematic literature review with a search coverage set from 2015 to 2025 resulting in 32 included empirical studies meeting the criteria. Analysis of the selected primary studies confirms the core tenets of the tripartite model revealing that knowledge, numeracy and attitude collectively shape savings behavior and identify specific mediation and moderation pathways and there is inconsistency was found where the effect of financial knowledge is often indirect and significantly mediated by financial self-efficacy which offer the definitive explanation for the persistent of knowing-doing gap in practice. Moreover, the relationship is subject to moderation by behavioral biases like overconfidence and crucial factors like irregular income, indication the need for further empirical investigation into how psychological and socio-contextual variables mediate or moderate these relationships. This study attempts to develop a comprehensive understanding of the mechanism of the tripartite model and the moderating role of contextual factors which can serve as a gap and a reference for future researchers designing targeted, effective financial management programs.

**Keywords:**

PRISMA, Financial Literacy, Financial Knowledge, Financial Numeracy, Financial Attitude, Savings Behavior, Systematic Review

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**INTRODUCTION**

Globally, the issue when it comes to financial vulnerability hits significant challenge for both economic stability and individual well-being as it shows critical need for effective financial management capabilities across populations. According to (Rai, Dua, & Yadav, 2019) financial literacy is defined as the essential combination of skills, attitudes, and behaviors required for individuals to make informed financial decisions and achieve financial security. The term “The Big Three” refers to the competency that is measured through basic knowledge as well as concepts such as interest, compounding, inflation and risk diversification even the importance there are reports that shows only one-third of the adults globally are financially literate with substantial disparities based on country, gender, income and education levels. The global financial knowledge deficit contributes directly to fragility such as lack in financial skills lead to poor decision-making(Kumar, Pillai, Kumar, & Tabash, 2023) and studies consistently show that higher financial literacy levels are significantly associated with improved financial well-being, often achieved through enhanced financial self-efficacy (Lone & Bhat, 2022).

In order to mitigate the financial fragility effectively there should have interventions to move beyond simple knowledge transmission and should target the foundational components of the tripartite model of financial literacy in terms of knowledge numeracy and attitude because there are many individuals may possess a basic level of financial knowledge but this is insufficient specially when behavioral biases such overconfidence which affect how the knowledge is applied to an investment choices and risk taking (Darwish, 2025). With this deficiency, it really highlights the needs for a strong foundation when it comes to cognitive specifically the numeracy stands out as

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foundational cognitive skills that is indispensable for interpreting and applying financial knowledge to complex decisions (Kaur, 2025). The problem of financial fragility become worst it is because of the prevalent of low numeracy particularly in low income countries which is linked to poor financial well-being (Bruine de Bruin & Slovic, 2021) There are educational policies designed in order to enhance the financial literacy specially among students that include the targeted efforts and aims to boost numeracy skills that will improve students subsequent financial decision-making capabilities (Jayaraman, Jambunathan, & Counselman, 2018). Furthermore, financial attitude also plays a direct role which is shaped by socialization and experiences as positive financial attitude are linked to better budgeting and saving practices while the negative financial attitude contribute to poor financial control and impulsive spending (Ameliawati & Setiyani, 2018).

The problem of financial capability in terms of inadequacy is acutely felt in the local context specially among economically vulnerable groups like informal sectors were financial fragility among these groups manifests as unstable savings behavior. There are studies among informal sector workers conducted which highlights a statistically significant positive correlation between financial literacy and savings behavior (Sibanda, Muzavazi, Setoboli, & Tshuma, 2025). The reason among these groups often prevents them to have a stable saving habit it's because of their challenges such as irregular income, and limited access to formal financial services. It is also evident in the context of Overseas Filipino Families like effective remittance management, saving and debt management which reinforce household financial instability (Gonzales et al., 2025; M. Kim, Koo, & Jang, 2022). The complexity of savings behavior is further illustrated by the reluctance of agricultural worker to engage in formal pension schemes despite those positive perceptions but due to their irregular employment status as well as limited education (Prasad, Prakash, & Kumar, 2025). In order to address this pervasive global and local financial fragility, it is necessitates a systematic review to understand the elements of financial knowledge, numeracy and attitude interact to influence savings behavior by providing evidence base required for designing targeted and effective financial management programs (Dimaunahan et al., 2025).

The purpose of this systematic review is therefore to synthesize the empirical evidence concerning this tripartite model. This approach is structured according to the PICO Framework where the exposures are Financial Knowledge, Numeracy and Attitude and the outcome is Savings Behavior.

### OBJECTIVES

To fully understand the mechanism on how financial knowledge, financial numeracy and financial attitude shape savings behavior using tripartite financial literacy model, we explored the literature and answered the following questions:

1. How Financial Knowledge, Financial Numeracy, and Financial Attitude individually and interactively affect actual Savings Behavior, and what evidence explains the mechanisms, such as the "knowing-doing gap," that limit the translation of knowledge into practice?
2. How do psychological mechanisms and socio-contextual factors mediate or moderate the relationship between financial literacy components and savings behavior?

### METHODOLOGY

This systematic review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) framework in order to identify, screen, select and synthesize empirical studies that address how financial knowledge, financial numeracy and financial attitude influence savings behavior. The review procedure was designed to be transparent and reproducible and to align with the research questions guiding this study. This review proceeded through four main stages consistent with PRISMA: (1) Comprehensive Data Base searching to identify potentially relevant records, (2) deduplication and title/abstract screening against predefined eligibility criteria, (3) full text retrieval and eligibility assessment and (4) data extraction, critical appraisal and synthesis of included studies. To ensure methodological rigor and minimize reviewer bias, the critical stages of screening, data extraction and risk of bias assessment were performed independently and in duplicate.

#### Data sources and Search Strategy

Electronic databases were selected to capture interdisciplinary research on financial literacy, numeracy, attitude and saving behavior. The following bibliographic databases were searched such as Scopus, Web of Science, ProQuest and

Google Scholar. To capture local research policy and evidences, the author also searched from institutional repositories such as Philippine Government Reports and working paper servers. The search coverage was set from 2015 to 2025 to include contemporary studies on digital finance and numeracy while retaining foundational work. The search was limited to English language publications.

A full Boolean search strategy was applied across databases and adapted to each platforms syntax. This includes the Formulation of search terms aligned with the objectives of the review, particularly the relationship among financial knowledge, financial numeracy, financial attitude, and savings behavior. Keywords used in various combinations included: (“financial literacy” OR “financial knowledge” OR “financial capability”)

AND (“numeracy” OR “financial numeracy”)

AND (“financial attitude” OR “money attitude”)

AND (“savings behavior” OR “saving intention”). The search was last conducted on October 5, 2025.

### Study Selection

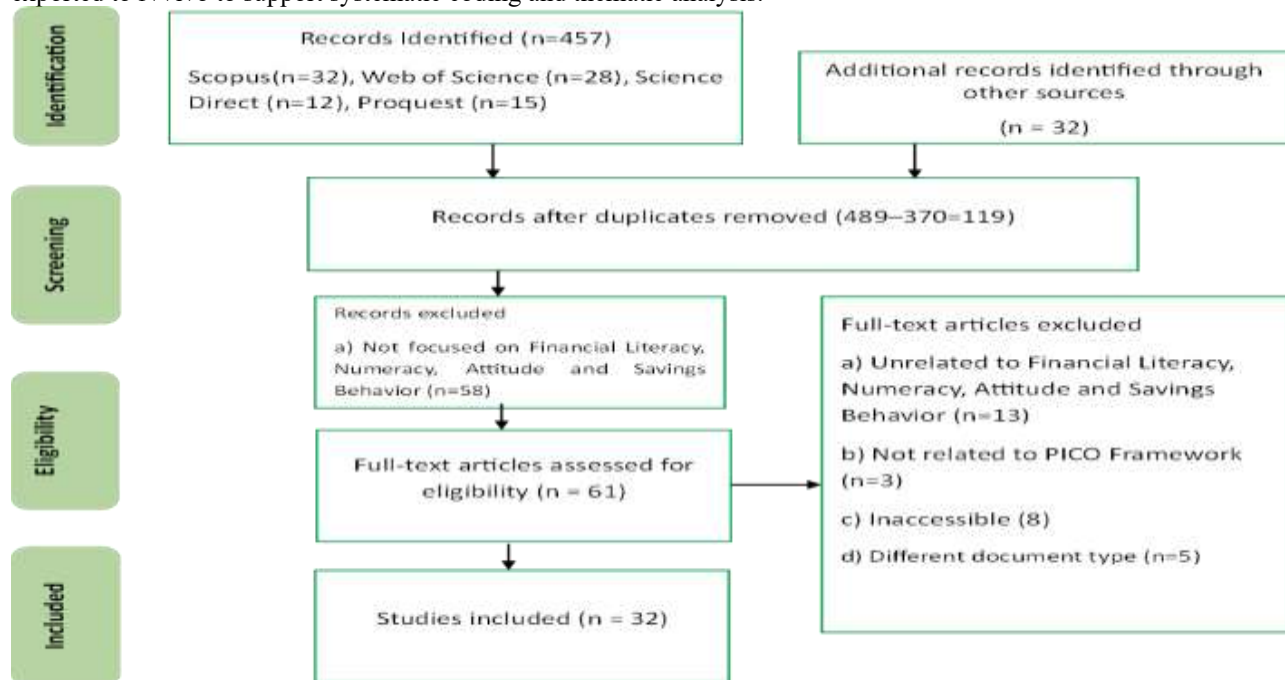
Figure 1 presents the multi-stage screening procedure used to identify, refine, and select studies relevant to the topic. The initial database search produced a large number of articles, many of which did not directly relate to the focus of this review. To address this, a structured search string and conditional filters were applied during Stage 2, allowing a more targeted identification of studies aligned with financial knowledge, numeracy and attitude.

The selection process was conducted in two main phases with all the decisions made independently and in duplicate by two reviewers to minimize bias:

1. **Titles and Abstract Screening.** This systematic review screened titles and abstracts against the full eligibility criteria. Studies were included if they presented empirical, quantitative data on the relationship between at least one financial literacy component and a measure of savings behavior.

2. **Full-Text Screening.** The full texts of potentially relevant articles were retrieved and assessed against the PICO Framework criteria. Any articles in this systematic review did not meet the PICO Framework were excluded.

Disagreements between reviewers at both stages were resolved through consensus or by consulting a third reviewer. For practicality and consistency of analysis, only English language publications were considered. All retrieved articles were imported into Zotero for reference management and automatic duplicate removal. The cleaned database was then exported to NVivo to support systematic coding and thematic analysis.



(Figure 1. The Selection Process)

**Accessing Full-Text Articles**

Following the screening process, a total of 61 full-text articles were retrieved for eligibility assessment. During this stage, several studies were removed due to issues related to relevance and accessibility. Specifically, a group of articles (n = 8) could not be accessed despite attempts to retrieve them through databases and institutional channels. These inaccessible papers were set aside and not included in the eligibility coding.

Additional exclusions were made on the full text assessment for studies determined to be unrelated to Financial Literacy, Numeracy and Attitude, and Savings Behavior (n = 13) or not connected to the PICO Framework (n = 3) and different document type (n = 5). Only articles with complete, accessible, and relevant full texts were included in the final synthesis. After these exclusions, 32 studies met all criteria and were ultimately incorporated into the review.

**Data Items and Extraction Process**

Data extraction and coding were performed independently and in duplicate in this systematic review. The initial coding scheme was deductively anchored to the review's objectives. To ensure that important contextual factors and nuanced findings were captured, an open coding approach was simultaneously employed to identify and code emerging themes, moderators, mediators or factors not originally anticipated. The coded data set that comprised the necessary information for the descriptive overview and serves as the raw data for the subsequent synthesis.

**Synthesis of Results**

As heterogeneity prevented a statistical meta-analysis, a structured narrative synthesis was performed where the coded data set supported the development of thematic categories and subcategories. These themes were structured to provide an in-depth, descriptive overview of the scope, characteristics and distribution of the studies followed by a synthesis of the main findings related to the three key exposures (knowledge, numeracy and attitude). The emerging themes of this systematic review captured during open encoding were utilized to discuss the influence of contextual factors on the core relationships and enriching the final synthesis and interpretation of the evidence.

**Risk of Bias Assessment**

The methodological quality and internal validity of the included studies were assessed independently and in duplicate by the two reviewers. The Newcastle-Ottawa Scale was utilized to evaluate study quality across three broad domains such as the selection of study groups, comparability of the study groups and ascertainment of the exposure and outcome. The findings from this risk of bias assessment informed the final synthesis to ensure that the studies with lower methodological quality were interpreted with appropriate caution.

**RESULTS**

The systematic review synthesized findings from 32 empirical studies, confirming the core tenets of the tripartite financial literacy model and identifying specific mediation and moderation pathways influencing Savings Behavior.

**Financial Knowledge (FK): The Necessary, Mediated Predictor**

The synthesis confirms a robust, yet often indirect, relationship between Financial Knowledge (FK) and effective Savings Behavior (Morgan & Long, 2020; Sibanda et al., 2025). Financial knowledge is defined as the cognitive dimension of financial literacy, which entails comprehension of fundamental concepts such as interest compounding, inflation, and risk diversification (often referred to as "The Big Three") (Lusardi & Klapper, 2015). While a high level of FK is strongly associated with better financial outcomes and is essential for making informed decisions (Setiawan, Hilmiatussadiyah, Hakam, & Istikomah, 2025), the review establishes that simply possessing this knowledge is insufficient to guarantee consistent savings practices.

**The Mediation Pathway**

The most consistent finding across the reviewed literature is that the positive effect of FK on SB is not direct but is significantly mediated by Financial Self-Efficacy or confidence (Farrell, Fry, & Risse, 2016; Lone & Bhat, 2022). Research explicitly shows that financial confidence, or self-efficacy, mediates the relationship between knowledge and behavior, meaning that knowing the facts (FK) only translates into saving if the individual believes they are capable of implementing that knowledge (Farrell et al., 2016). Individuals with higher financial literacy are also experience enhanced financial well-being, partially through this boosted financial self-efficacy (Lone & Bhat, 2022). This essential link is further supported by the finding that better financial behaviors are jointly predicted by financial knowledge, financial confidence, and learning capacity (Morris, Maillet, & Koffi, 2022). Without this belief in one's ability, knowledge may remain inert, failing to lead to effective money management or saving (Farrell et al., 2016).

**The Knowing-Doing Gap Explained**

This mediation pathway provides the definitive explanation for the persistent 'knowing-doing gap' observed in financial behavior studies. If an intervention focuses solely on FK, it fails to address the psychological readiness and behavioral skills required for action (Morris et al., 2022). This gap is evident in various populations; for example, college students may demonstrate general knowledge of financial management and budgeting but exhibit limited understanding or control over complex behaviors such as loan repayment or extravagance (Pascual, 2024). Similarly, students may hold favorable attitudes and general awareness, yet struggle with practical applications, such as managing financial risk (Templa et al., 2025). Furthermore, studies examining saving determinants among employed individuals indicate that financial management practices are often the most proximal and significant predictors of saving behavior, sometimes outweighing the direct influence of Financial Knowledge alone (Roy, Dihan, Haque, Nomani, & Preeti, 2025). The relationship between having specific spending and saving plans (behaviors) and maintaining an emergency fund also underscores the critical role of proximal practices over just knowledge (Henager & Cude, 2016).

**Moderation by Behavioral Biases and Risk Tolerance**

The review also noted that the efficacy of Financial Knowledge is subject to moderation by behavioral biases and risk tolerance. Studies have demonstrated that high FK, when coupled with high risk tolerance or behavioral traits such as overconfidence, can lead to riskier investment choices that may undermine the stability of a savings portfolio (Darwish, 2025; Setiawan et al., 2025). Specifically, Darwish found that overconfidence significantly moderates how knowledge is used, potentially leading individuals with some financial knowledge to behave riskily or make less optimal financial decisions because their confidence exceeds their actual understanding (Darwish, 2025). This highlights that financial education must move beyond teaching facts to address these behavioral biases to ensure that increased knowledge leads to prudent, rather than risky, financial actions (Darwish, 2025).

**Financial Numeracy (FN): The Foundational Analytical Skill**

Financial Numeracy (FN), defined as the foundational cognitive skill necessary for interpreting and applying quantitative skills to complex financial problems, consistently proves to be a powerful and often direct predictor of the quality and rationality of financial decisions (Kaur, 2025). FN is indispensable for understanding economic information and achieving effective decision-making (Kaur, 2025). Within the framework of the Theory of Planned Behavior, FN directly informs an individual's Perceived Behavioral Control (PBC), encompassing the necessary skills and resources that increase confidence (self-efficacy) in their ability to save effectively, thereby boosting intention and subsequent actual savings behavior (Ajzen, 1991).

**Predicting Rationality and Long-Term Planning**

The analytical competence provided by FN is crucial for complex, long-term financial choices. Globally, low numeracy is prevalent, particularly in low-income countries, and is strongly associated with poor financial well-being (Bruine de Bruin & Slovic, 2021). Conversely, research shows that participants with higher numeracy skills are more capable of creating sustainable budgets, avoiding excessive debt, and making informed investment choices, confirming the indispensable nature of numeracy in daily financial activities (Dimaunahan et al., 2025). Furthermore, enhancing factors like financial literacy, which includes numeracy, significantly leads to better financial decision-making and reduced susceptibility to financial challenges among employed populations, such as teachers (Manalo, Uy, & Bayona, 2024). To address this, educational policies aiming to improve financial literacy must include targeted efforts to enhance numeracy skills to significantly boost students' subsequent financial decision-making capabilities (Jayaraman et al., 2018).

**FN as a Protective Mechanism in Vulnerable Contexts**

FN functions as a necessary cognitive shield in economically vulnerable settings where stable income is often absent. Studies among families of Overseas Filipino Workers (OFWs) revealed that the level of financial literacy and numeracy skills directly impacts effective remittance management, saving, investment, and debt management within the household (Gonzales et al., 2025). Workers with higher numeracy skills specifically demonstrate improved outcomes, engaging in better budgeting, avoiding excessive debt, and planning savings, which contributes to improved household welfare (M. Kim et al., 2022). Moreover, the efficacy of daily financial management, including budgeting

and saving, is supported and facilitated when strong financial numeracy works in concert with intrinsic financial motivation (Di Domenico, Ryan, Bradshaw, & Duineveld, 2022).

### **FN and Digital Inclusion**

The importance of FN is magnified in the digital era, as it is increasingly vital for formal savings inclusion and the effective utilization of digital financial services. Digital financial literacy, which requires underlying quantitative skills, significantly influences positive personal financial behaviors, including savings, among urban, educated, employed individuals engaging in digital transaction (Chhillar, Sharma, & Arora, 2025; Kumar et al., 2023). However, the review also indicates that the positive impact of FN in building financial resilience is conditional: numeracy and digital literacy must be accompanied by sound financial habits to achieve genuine financial resilience (Haryati, Suropto, Wardianto, & Pratama, 2024).

### **Financial Attitude (Financial Attitude (FA): The Proximal Driver of Consistency**

Financial Attitude (FA) which encompasses factors such as discipline, self-control, and future orientation—emerged as a crucial and often proximal determinant of actual savings behavior and intention. Financial attitudes are fundamentally influenced by financial socialization, experiences, and literacy levels, and they collectively shape financial management behaviors (Ameliawati & Setiyani, 2018). Notably, attitude is one of the three core components of the Theory of Planned Behavior (TPB), reflecting an individual's positive or negative evaluation of performing a specific behavior like saving (Ajzen, 1991).

### **Direct Path to Intention and Behavior**

Financial attitude directly affects financial management behavior and can also indirectly influence it through financial literacy acting as a mediating factor (Ameliawati & Setiyani, 2018). Studies utilizing the TPB framework confirm that attitude is a powerful predictor of the will to save. For instance, the findings of (Peiris, 2021) who examined employed individuals in Colombo, Sri Lanka, indicated that financial literacy not only positively influences savings behavior directly but also fosters the intention to save more, underscoring the critical role of behavioral willingness. This intentionality, driven by a positive attitude, must precede the actual act of saving (Ajzen, 1991). Furthermore, (Hapsari, 2021) demonstrated that financial literacy, when integrated with TPB components, strongly predicts investment and saving behaviors.

### **FA and Behavioral Consistency**

Positive financial attitudes are intrinsically linked to the behavioral consistency required for successful, long-term savings. Research among public school teachers in the Philippines provides strong evidence of this link. (Tumaliuan, 2025) found that positive financial attitudes significantly enhanced financial practices like saving and planning, even amidst economic hardships. Similarly, (Remis, 2023) observed that favorable financial attitudes positively affected financial management behaviors among public secondary school teachers. This importance extends to younger populations, as (Templa et al., 2025) noted that students, despite having general financial awareness, require targeted educational interventions to help them translate their knowledge into practical budgeting skills, which is often mediated by attitude. Conversely, research reveals that negative attitudes can contribute to impulsive spending and poor financial control, even when knowledge levels are moderate, underlining the need for literacy initiatives that specifically target attitude change (Espiritu, 2025).

### **The Moderating Effect of Discipline**

Financial attitude (FA) is not just an independent predictor; it also significantly moderates the relationship between knowledge and behavior. (Rai et al., 2019) defined financial literacy as the essential amalgamation of awareness, knowledge, skills, attitudes, and behaviors suggesting that the successful application of knowledge depends on the individual's disposition. Supporting this, the study by (Di Domenico et al., 2022) emphasized that intrinsic financial motivation, which is part of financial attitude, positively predicts better budgeting, saving, and overall money management, acting as a prerequisite for sustained financial management. This means that the impact of cognitive knowledge on savings is significantly stronger when the individual already possesses a disciplined and motivated attitude (Di Domenico et al., 2022; Rai et al., 2019).

### **Socio-Demographic and Contextual Factors (Moderators)**

The systematic review confirmed that socio-demographic and contextual factors do not merely describe the population but act as crucial moderating variables that significantly influence the entire relationship between financial literacy

(FL) and Savings Behavior (SB). This necessitates that financial education programs be carefully designed to account for these specific variables (Y. J. Loke, 2017).

#### **Influence of Socio-Demographic Variables**

Socio-demographic variables, including age, income, education, gender, ethnicity, and reliability of income, are found to significantly affect financial practices such as budgeting, preparing for income shock, and managing debt. The level of financial literacy itself exhibits significant disparities globally based on gender, income, and education levels (Lusardi & Klapper, 2015).

**Age and Life Stage:** The savings goals and time horizons differ substantially across life stages. For example, long-term savings often include precautionary or retirement saving, while short-term savings refer to emergency funds or a financial buffer (Henager & Cude, 2016). The reluctance of informal agricultural workers nearing retirement to participate in formal pension schemes, despite positive perceptions, highlights the need for flexible, tailor-made retirement schemes suited to their context (Prasad et al., 2025).

**Income and Dependents:** Family income and the number of economically dependent members of the household are critical household saving variables (Chua, Kiong, Villa, & Paguta, 2016). They indicate a positive relationship between a household's capacity to save and their disposable incomes. Furthermore, research among Overseas Filipino Workers (OFWs) shows that variables like age, number of years working abroad, and the amount of remittance are significantly correlated with the amount saved (Manapol, Lopez, & Sobrejuanite, 2022).

#### **Contextual Barriers for Informal Workers**

The context of employment, particularly the distinction between formal and informal sector work, imposes unique barriers that moderate the application of financial literacy.

**Irregular Income and Access:** Informal sector workers, such as tricycle drivers, face significant challenges, including irregular income and limited access to formal financial services (Sibanda et al., 2025). While higher financial literacy leads to more robust savings behavior among these workers, their specific constraints require targeted financial inclusion initiatives, such as mobile banking.

**Behavioral Strategies:** The irregular income faced by informal workers necessitates a different behavioral strategy compared to the salaried income of formal sector employees (Roy et al., 2025; Sibanda et al., 2025). Studies have shown that even simple behavioral nudges, such as reminders and matched savings incentives, can effectively increase voluntary savings among poor informal workers, suggesting that practical interventions can overcome the structural barriers of irregular income (Akbas, Ariely, Robalino, & Weber, 2016).

#### **Local and Cultural Contexts**

Finally, the review noted that cultural and local contexts influence financial outcomes. For instance, in a study of college students in Davao City, the influence of individual differences like personality traits on responsible financial management was found to be complex and context-dependent, suggesting that local and cultural factors must be considered when designing interventions (Obenza et al., 2024). Furthermore, social influence from family members and peers can significantly affect an individual's decision-making and saving behavior, reinforcing the role of subjective norms in the TPB (Ajzen, 1991; Dangol & Maharjan, 2018).

## **DISCUSSION**

Our systematic review which synthesized finding from 32 empirical studies that aims to explore the relationship between the key components of the financial literacy such as knowledge, numeracy and attitude and individual saving behavior. The review confirmed the core tenets of the tripartite financial literacy model and identified specific mediation and moderation pathways influencing savings behavior.

Our paper revealed a robust but often indirect relationship between financial knowledge and effective savings behavior. The financial knowledge even it is essential for informed decisions (Morgan & Long, 2020; Sibanda et al., 2025) is often insufficient alone to guarantee consistent saving practices. The most consistent finding is that the positive effect of financial knowledge on savings behavior is significantly mediated by financial self-efficacy or confidence (Farrell et al., 2016; Lone & Bhat, 2022) in which this mediation pathway offers the definitive explanation for the persistent knowing-doing gap where knowledge fails to translate into effective money management unless individual believes they are capable of implementation (Farrell et al., 2016). Moreover, the efficacy of financial knowledge is subject to moderation by behavioral biases like overconfidence (Darwish) which can lead to riskier

choices (Darwish, 2025; Setiawan et al., 2025) which highlight the need to address behavior alongside facts in financial education.

Furthermore, our study contributes to understanding the foundational role of financial numeracy as the cognitive skills indispensable for applying quantitative skills to complex financial problems (Kaur, 2025) which is crucial for long term planning, avoiding excessive debt and making informed investment choices (Dimaunahan et al., 2025). Within the theory of planned behavior, financial numeracy directly informs an individuals perceived behavioral control (Ajzen, 1991) boosting their confidence and subsequent intention to save effectively because the problem of financial fragility is exacerbated because low numeracy is prevalent globally and is strongly associated with poor financial well-being (Bruine de Bruin & Slovic, 2021). The importance of financial numeracy is magnified in vulnerable contexts such as among overseas Filipino worker families (Gonzales et al., 2025) where numeracy skills directly impact effective remittance management and saving (G. J. Kim & Hanna, 2017). Therefore, educational policies must include targeted efforts to enhance numeracy skills to significantly boost financial decision-making capabilities (Jayaraman et al., 2018).

Another significant contribution of our paper is providing a coherent picture of the role of financial attitude as the proximal determinant of actual savings behavior and intention because it encompassing discipline and future orientation in which it is one of the three core components of the theory of planned behavior (Ajzen, 1991) and is confirmed as a powerful predictor of the will to save. Attitude directly affects financial management behavior and can also influence it indirectly through financial management behavior and can also influence it indirectly through financial literacy acting as a mediating factor (Ameliawati & Setiyani, 2018). Studies confirm attitude is a powerful predictor of the will to save with the finding indicating that financial literacy fosters the intention to save more (Peiris, 2021). Positive financial attitudes are intrinsically linked to the behavioral consistency required for successful long-term savings. For instance, positive financial attitudes significantly enhanced financial practices like saving and planning among public school teachers (Tumaliuan, 2025). However, research reveals that negative attitudes can contribute to impulsive spending and poor financial control, even when knowledge levels are moderate (Espiritu, 2025). Moreover, financial attitude also moderates the relationship between knowledge and behavior with intrinsic financial motivation positively predicting better budgeting and saving (Di Domenico et al., 2022) that signifies the impact of cognitive knowledge on savings is significantly stronger when the individual already possesses a disciplines and motivated attitude (Di Domenico et al., 2022; Rai et al., 2019).

Furthermore, the review confirmed that socio-demographic and contextual factors (Y.-J. Loke, 2017) such as irregular income for informal workers (Sibanda), age/life stage and social influence (Ajzen, 1991; Dangol & Maharjan, 2018) act as crucial moderating variables that must be accounted for in program design to ensure effectiveness and sustainability. Addressing financial fragility requires moving beyond knowledge-centric models to a comprehensive framework that equally targets the cognitive, analytical and attitudinal components of financial literacy.

## CONCLUSION

This systematic review provided a comprehensive synthesis of the empirical evidence concerning the tripartite model of financial literacy confirming roles of financial knowledge, numeracy and attitude in influencing individual savings behavior. Our findings offer key implications for designing effective financial management programs aimed at mitigating global and local financial fragility.

The literature emphasizes that interventions must move beyond simple knowledge transmission and target the foundational components of the tripartite model as they collectively shape financial well-being and management capabilities specifically program designers and policy makers are guided to acknowledge that financial knowledge is necessary but often mediated, predictor, requiring support that build financial self-efficacy to bridge the persistent “knowing-doing gap”. Moreover, financial numeracy is a foundational analytical skills indispensable for rational decision-making and targeted efforts to boost it are critical to enhance subsequent financial outcomes. Lastly, financial attitude is a proximal driver of consistency and literacy initiatives must specifically target attitude change to prevent negative attitudes from contributing to impulsive spending and poor financial control, even when knowledge is moderate.

Being aware of the factors that impede the translation of literacy into savings behavior such as behavior biases, overconfidence and contextual barriers like irregular income and limited access to formal financial services for

vulnerable groups can support program developers in designing tailored and effective interventions. Although our systematic review provided an extensive view of how financial knowledge, numeracy and attitude individually and interactively influence savings behavior, future investigations are recommended to strengthen our findings. A meta-analysis is desirable if future exhibit less heterogeneity than those synthesized. We also need more empirical research to provide a more rigorous understanding of how psychological variables and socio-contextual factors mediate or moderate the relationships between financial literacy and savings behavior and the effectiveness of targeted interventions designed to simultaneously improve numeracy and attitude in achieving long-term savings behavior specially within economically vulnerable populations like informal worker or families.

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