

Exploring the State of Financial Literacy among Asian University Students: Trends, Gaps, and Research Directions

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Abstract: This literature review explores the current state of financial literacy among university students across Asia, highlighting key trends, thematic concentrations, methodological approaches, and research gaps. Financial literacy is increasingly recognized as a vital life skill, particularly for young adults managing personal finances amid complex economic and digital environments. Through an in-depth analysis of peer-reviewed studies published over the past two decades, this review identifies that while financial knowledge levels vary across countries, a general trend of moderate to low literacy prevails. Key themes include the influence of demographic variables, the role of financial education, and behavioral patterns in saving, spending, and credit use. However, the field remains fragmented, with limited theoretical integration, an overreliance on cross-sectional survey data, and a lack of attention to underrepresented populations and regions. Digital financial literacy, in particular, remains an emerging area with significant potential for future exploration. This review concludes by proposing a comprehensive research agenda that emphasizes longitudinal designs, mixed methods, theoretical refinement, and inclusive sampling. By addressing these gaps, scholars and practitioners can contribute to more effective financial literacy interventions that support young people in making informed, confident financial decisions throughout their lives.

Keywords: Asia; financial education; financial literacy; literature review; university students

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Introduction

In the increasingly complex and dynamic global economy, financial literacy has emerged as a critical life skill necessary for navigating everyday financial decisions, promoting long-term financial well-being, and contributing to sustainable economic growth (Herdinata & Pranatasari, 2020). Financial literacy is broadly defined as the ability to understand and effectively use various financial skills, including personal financial management, budgeting, and investing.

This competency has become even more crucial for younger generations, particularly university students, who are on the threshold of entering the workforce and gaining financial independence (R. Y. Sari, 2019). As such, a growing body of research has explored the state of financial literacy among university students worldwide, with a burgeoning focus on Asian contexts due to the region's rapid economic development, demographic shifts, and evolving higher education landscape. Asia, as the largest and most diverse continent in terms of culture, income levels, and financial systems, presents a unique and complex environment for the development of financial literacy (Siswati, 2019).

The region houses a wide spectrum of economies from highly developed nations such as Japan and Singapore to emerging markets like Indonesia, India, and Vietnam each with distinctive financial education infrastructures and socio-economic dynamics. Despite these differences, a common trend has emerged: financial literacy among university students remains insufficient across most Asian countries. Various studies have revealed alarming gaps in students' understanding of fundamental financial concepts, such as compound interest, inflation, and risk diversification. This situation is particularly concerning in light of increasing financial responsibilities faced by students, including student loans, part-time employment, digital financial services, and early investment activities.

The integration of financial education in formal curricula across Asian universities remains sporadic and inconsistent. While some countries have incorporated financial literacy into national education policies, implementation at the tertiary level is often limited or optional. Consequently, university students tend to rely on informal sources such as peers, family, and online platforms for financial information, which may be inaccurate or incomplete (Muthia, 2021). Moreover, the rise of digital financial services, including e-wallets, fintech applications, and cryptocurrency, has introduced new layers of complexity, requiring students to possess not only basic financial knowledge but also digital financial literacy and critical thinking skills (Gunawan et al., 2015). These challenges underline the urgent need for systematic and comprehensive interventions aimed at enhancing financial literacy among university populations in Asia.

The interest in understanding financial literacy among Asian university students has grown substantially over the past two decades, as reflected in the expanding volume of academic publications, institutional reports, and policy papers on the subject (Sofiyanti et al., 2022). However, despite this proliferation of literature, there remains a lack of coherent synthesis and comprehensive mapping of the research landscape. Existing studies often vary widely in terms of definitions, measurement tools, theoretical frameworks, and contextual focus, making it difficult to draw generalized conclusions or formulate unified strategies (D. E. Sari, 2018). Furthermore, there is limited cross-country comparative research that accounts for cultural, institutional, and economic differences across Asian nations. These gaps hinder the formulation of effective policies and educational programs tailored to the specific needs of diverse student populations (Margaretha & Pambudhi, 2015). Given these challenges, this literature review seeks to provide a systematic and critical synthesis of the existing research on financial literacy among university students in Asia.

The review aims to identify prevailing trends, theoretical underpinnings, methodological approaches, and key findings in the literature. Additionally, it seeks to uncover underexplored areas, theoretical and empirical gaps, and inconsistencies that may impede the advancement of knowledge and practice in this field (Aisyah, 2022). By doing so, this review contributes to the development of a more integrated and contextual understanding of financial literacy within Asian higher education settings.

A preliminary scoping of the literature reveals several key trends. First, the majority of studies adopt a quantitative approach, employing survey-based instruments to assess students' financial knowledge, attitudes, and behaviors (Puspita et al., 2021). While such methods provide valuable descriptive insights, they often overlook deeper psychological, cultural, and structural factors that influence financial decision-making (Nanda et al., 2019). Second, a growing number of studies have begun to incorporate behavioral finance theories—such as the Theory of Planned Behavior, Financial Socialization Theory, and Behavioral Life-Cycle Hypothesis—to explain variations in financial literacy and behavior (Ramdhani et al., 2022). However, these theoretical applications remain fragmented and lack consistency across studies.

Third, there is increasing interest in exploring the impact of digital financial tools and fintech innovations on student financial literacy, though this area remains relatively nascent and under-theorized. Another important observation from the literature is the influence of demographic and socio-economic factors—such as gender, income level, parental education, and field of study—on financial literacy outcomes (Mardiah Mardiah, 2022). For example, several studies have noted that male students tend to exhibit higher levels of financial knowledge than female students, although this finding is not universal across all cultural contexts. Similarly, students from business or economics majors generally demonstrate stronger financial competencies than their peers in other disciplines, highlighting the role of academic exposure and curriculum design. However, these findings often rely on cross-sectional data and self-reported measures, limiting their generalizability and causal interpretation. There is a pressing need for longitudinal and mixed-methods studies that can provide a more holistic and dynamic understanding of financial literacy development over time.

Cultural context also plays a significant role in shaping students' financial attitudes and behaviors. In many Asian societies, family plays a central role in financial decision-making, with intergenerational support and collectivist values influencing how young people perceive money and manage their finances. Religious and ethical considerations—such as Islamic finance principles in Muslim-majority countries—also affect financial preferences and literacy needs. Yet, cultural factors are often underrepresented or treated superficially in the existing literature. A more nuanced exploration of cultural dimensions is essential to designing culturally responsive financial education programs that resonate with students' lived experiences and belief systems.

This review also seeks to address a notable gap in the literature regarding policy and institutional responses to financial literacy challenges. While international organizations such as the OECD and World Bank have emphasized the importance of financial education, there is limited evidence on how Asian governments and higher education institutions have operationalized these recommendations at the national or campus level. Case studies of best practices, program evaluations, and policy analyses are rare, making it difficult to assess the effectiveness of existing interventions. Consequently, this review advocates for more policy-oriented and evaluative research that bridges the gap between theory and practice. In light of the above, this article is structured as follows. The next section outlines the methodology used to conduct the literature review, including database selection, inclusion and exclusion criteria,

The subsequent sections present the findings of the review, organized around key themes such as measurement and assessment, demographic influences, cultural and contextual factors, theoretical frameworks, and digital financial literacy. This is followed by a discussion of the major gaps in the literature and recommendations for future research. Finally, the conclusion summarizes the main insights and highlights the implications for educators, policymakers, and researchers working to advance financial literacy among university students in Asia. By providing a comprehensive and context-sensitive synthesis of the literature, this review seeks to contribute to a more informed, evidence-based, and impactful discourse on financial literacy in Asian higher education. In doing so, it not only supports the academic community in identifying research priorities but also equips policymakers and practitioners with the insights needed to design more effective and inclusive financial education strategies.

Method

To ensure the rigor, transparency, and reproducibility of this literature review, a systematic approach was adopted in line with established guidelines for conducting scholarly reviews in the social sciences. The primary aim of this methodological design was to identify, evaluate, and synthesize peer-reviewed academic studies that investigate financial literacy among university students in Asia. This section outlines the procedures followed in selecting, screening, analyzing, and interpreting the relevant literature, including the databases used, inclusion and exclusion criteria, search strategy, and thematic synthesis framework.

The literature search was conducted across four major academic databases that are widely recognized for their comprehensive coverage of peer-reviewed publications in business, education, and social sciences: Scopus, Web of Science, ScienceDirect, and Google Scholar. These databases were selected due to their relevance and accessibility for sourcing high-quality, empirical, and theoretical studies published in reputable international journals. The search was limited to articles published between January 2000 and December 2022, reflecting the growing academic interest in financial literacy within this time frame and allowing for an analysis of emerging trends over the past two decades.

A combination of Boolean search operators and carefully selected keywords was employed to maximize the relevance and specificity of search results. The following key terms and their combinations were used:

“financial literacy” AND “university students” AND “Asia”

“financial knowledge” OR “financial behavior” AND “higher education” AND “Asian countries”

“student finance” AND “financial education” AND “Asia”
In addition, specific country names (e.g., “Malaysia,” “India,” “South Korea,” “Indonesia,” “China”) were used in secondary searches to capture country-specific literature that may not have been indexed under regional keywords.

Following the initial database search, a total of 612 articles were identified. These records were then subjected to a two-stage screening process to ensure relevance and quality. In the first stage, duplicate entries were removed and titles and abstracts were reviewed to determine thematic alignment with the research objectives. Articles that clearly did not focus on financial literacy, university students, or Asian contexts were excluded at this stage. In the second stage, the full texts of the remaining articles were reviewed to assess their methodological soundness, scope of analysis, and theoretical contribution. Studies were

excluded if they (i) focused exclusively on non-student populations (e.g., high school students or working adults), (ii) lacked empirical data or theoretical grounding, or (iii) were not published in peer-reviewed journals.

Based on these criteria, a final sample of 103 articles was selected for in-depth review and analysis. These studies span a range of Asian countries, academic disciplines, and methodological approaches, providing a rich and diverse foundation for synthesis. The selected articles were then categorized according to several dimensions, including:

Country or regional focus

Research methodology (quantitative, qualitative, or mixed methods)

Theoretical frameworks used

Financial literacy constructs measured (knowledge, behavior, attitude, confidence)

Demographic variables examined (gender, income, major, etc.)

Key findings and implications

To analyze the selected studies, a thematic synthesis approach was employed. This method enables the integration of findings from diverse sources and methodologies by identifying recurring patterns, concepts, and themes across the literature. Thematic synthesis followed three main steps:

Coding of relevant text segments from each article based on conceptual content;

Grouping of codes into broader themes such as “assessment and measurement,” “demographic disparities,” “digital financial tools,” “financial education interventions,” and “cultural influences”;

Interpretive synthesis, wherein relationships among themes were examined to identify trends, gaps, contradictions, and opportunities for future research.

In order to enhance the validity and reliability of the synthesis process, each article was reviewed independently by two researchers, and discrepancies in coding or interpretation were resolved through discussion and consensus. The inclusion of studies from multiple countries and contexts across Asia also allowed for comparative insights, although care was taken not to overgeneralize findings due to differences in cultural, economic, and institutional settings. It is important to acknowledge some limitations of the methodological approach used in this review. First, while every effort was made to capture a comprehensive range of studies, some relevant articles published in local or non-English journals may have been omitted due to language barriers and indexing limitations. Second, the reliance on published journal articles may introduce publication bias, as studies with null or negative findings are less likely to be published.

Third, the heterogeneity of methodologies and measurement instruments across the included studies may limit the comparability of results. Nevertheless, the systematic and transparent procedures adopted in this review enhance its credibility and usefulness as a scholarly resource. The methodology provides a strong foundation for the subsequent analysis and synthesis of trends in financial literacy research among Asian university students. It also establishes a replicable framework for future literature reviews on related topics, particularly in the context of emerging economies and higher education systems.

Result and Discussion

Conceptualization and Measurement of Financial Literacy

Research on financial literacy reveals significant inconsistencies regarding its conceptualization and measurement across various studies. Scholars widely agree on three primary dimensions of financial literacy: knowledge, attitude, and behavior. However, the operationalization of these constructs varies considerably, creating challenges for drawing generalized conclusions and formulating unified strategies Adam et al. (2017) Bongomin et al., 2018). Most quantitative studies rely on self-administered surveys, often adapted from global instruments like the OECD/INFE toolkit or the Jump\$tart Coalition survey, which primarily assess understanding of essential financial concepts such as savings, interest rates, and budgeting (Ramalho & Forte, 2019; Oehler et al., 2017).

It is notable that many studies primarily focus on the cognitive aspect of financial literacy, often neglecting the behavioral and psychological dimensions, including financial self-efficacy and confidence (Zhao & Zhang, 2020; Warmath & Zimmerman, 2019). Furthermore, some studies adopt a unidimensional index for measuring financial literacy, while others break it down into subcomponents, which complicates cross-study comparisons (Białowolski et al., 2022). The emerging trend towards comprehensive models including emotional and psychological responses is reflected in studies from Malaysia, South Korea, and the Philippines, emphasizing that effective financial literacy transcends mere knowledge to encompass the mindset needed for financial action Bire et al., 2019).

However, this multidimensional approach is still underrepresented in research conducted in South Asia and parts of Southeast Asia, where the lack of consensus on definitions and measurement strategies hampers the development of cohesive assessment frameworks (Zhao & Zhang, 2020; Bire et al., 2019). Moving forward, future research would benefit from adopting a multidimensional approach that incorporates both cognitive and non-cognitive factors in financial literacy assessment. Aligning these frameworks with international standards could facilitate cross-country benchmarking and enhance the relevance of findings across diverse cultural and economic contexts (Murta & Gama, 2021).

Demographic and Socioeconomic Influences on Financial Literacy

The literature consistently highlights the influence of demographic and socioeconomic variables on financial literacy outcomes among university students in Asia. Key factors such as gender, family income, parental education, and field of study have emerged as significant predictors of financial literacy levels. Gender disparities are notable, with male students generally reporting higher financial knowledge compared to their female counterparts Xiao & Porto (2017)(Suri & Purohit, 2017). However, this trend is nuanced; while men may exhibit greater confidence and a propensity to engage in riskier financial behaviors, women often show more caution and responsibility in their financial choices. Studies from Japan and India, for instance, indicate that female students may be less confident in their financial decision-making abilities but exhibit responsible saving behaviors (Suri & Purohit, 2017).

Family socioeconomic background also plays a critical role, as students from wealthier or more educated families typically have greater exposure to financial discussions and practices, enhancing their financial literacy. Conversely, those from lower-income backgrounds may have limited access to financial resources and guidance, which can hinder their ability to understand complex financial systems. It is also noted that these students often develop practical financial skills due to early exposure to constraints, a nuance that is sometimes underrepresented in the literature (Morgan & Long, 2019). The field of study is another relevant factor, with students majoring in economics, business, or finance consistently demonstrating higher financial literacy than those in other disciplines.

This suggests that academic exposure significantly influences financial competencies,

raising equity concerns regarding students from non-financial fields who may not receive adequate financial education despite facing similar financial decisions in everyday life (Jayaraman & Jambunathan, 2018; Białowolski et al., 2021). While the insights from demographic analyses are valuable, the limitations of cross-sectional survey designs often hinder causal inference. Few studies explore intersectionality, particularly how gender and socioeconomic status interact to shape financial literacy outcomes. To gain deeper insights into the evolution of financial literacy among different student groups, longitudinal and mixed-method approaches are recommended (Yu et al., 2017).

The Role of Financial Education and Institutional Support

The literature highlights the critical role of formal financial education and institutional support in enhancing financial literacy among university students across Asia. However, findings reveal that financial education remains uneven and often under-prioritized within many higher education systems. Countries like Singapore, Malaysia, and South Korea have pioneered efforts to embed financial education within their curricula and extracurricular offerings.

For instance, Malaysian universities have introduced personal finance courses as electives, and South Korean universities have implemented digital platforms to foster financial awareness. Such initiatives have yielded positive effects on students' financial knowledge and behaviors Kadoya & Khan (2020). Despite these advancements, many universities do not mandate these programs, resulting in unequal access. In contrast, a significant number of countries in South and Southeast Asia still rely on familial models for financial education, leading students to depend heavily on informal sources like peers or social media, which might not always provide accurate information (Brown et al., 2017; Shah et al., 2021). Innovative approaches, such as peer mentoring and gamified learning through mobile applications, have emerged as promising strategies to foster financial literacy, particularly where resources are limited. For example, an initiative in Indonesia using a budgeting mobile app reported improvements in students' financial confidence and savings behavior (Thapa & Jha, 2022).

However, the overall impact of financial education programs is inadequately evaluated. Most studies tend to focus on short-term knowledge gains rather than long-term behavioral changes. Additionally, there is little exploration of how institutional culture, faculty involvement, and administrative support can create environments conducive to financial empowerment (Frankel et al., 2021). Addressing these gaps calls for longitudinal and mixed-methods research to develop a more comprehensive understanding of financial literacy progression and its determinants, thereby creating enabling frameworks for systematic and effective financial education in universities.

Digital Financial Tools and Emerging Technologies

The rise of fintech and digital financial services significantly impacts university students in Asia, introducing both opportunities and risks in financial decision-making. The widespread adoption of mobile banking, e-wallets, and online investment platforms has made financial tools more accessible Wu & Kao (2022). However, despite their high usage rates, many students' understanding of the underlying risks associated with these digital tools remains superficial. For instance, research from China and the Philippines indicates that while students actively use payment apps, they often lack awareness of crucial issues such as data privacy and digital fraud, as well as the implications of credit-based payment systems (Nuangjamnong, 2021; Wang & He, 2020).

Furthermore, digital financial literacy—the ability to critically evaluate and effectively use digital financial tools—is not well-integrated into existing financial education models. This

gap is particularly prominent in lower-income and rural areas where digital infrastructure and competencies may be underdeveloped (Yang et al., 2022). Studies have shown that urban students are generally more familiar with fintech innovations than their rural peers. Additionally, the rise of influencer-led financial advice on platforms like YouTube and TikTok adds complexity to students' financial education, leading them to receive mixed or potentially misleading information (Shaikh et al., 2017; Imam et al., 2022).

Despite some innovative approaches to promoting financial literacy—such as peer mentoring, gamified learning, and mobile applications—most evaluations focus on short-term knowledge gains rather than long-term behavioral changes. Moreover, few studies examine how institutions can create supportive environments for financial literacy initiatives (Ozili, 2020). As the literature remains relatively nascent, there is an urgent need for more focused research on how students interact with digital finance and the competencies necessary for navigating these tools safely, ultimately shaping their overall financial well-being (Li et al., 2022).

Cultural and Contextual Factors

Asia's rich cultural diversity presents both challenges and opportunities in understanding financial literacy among university students. Cultural norms, family dynamics, and religious beliefs significantly influence financial perceptions and decision-making processes. For example, in collectivist societies such as Thailand and Vietnam, financial decisions are often made collaboratively with family members, whereas individual financial independence, a concept more prevalent in Western cultures, is less emphasized (Akça et al., 2018; . This familial influence leads students to view money as a shared family resource, impacting their financial behaviors and attitudes. Moreover, religious beliefs play a crucial role, particularly in South Asian contexts where Islamic finance principles affect attitudes toward concepts such as debt and investment.

These cultural nuances are often overlooked in existing literature, which tends to adopt a Western-centric framework that may not encapsulate local realities (Sawitri, 2021). For instance, studies reveal that while students in some regions actively engage with financial education, their understanding of foundational concepts like budgeting and saving remains shallow, primarily due to an absence of culturally contextualized educational approaches (Kakinuma, 2022). Additionally, societal factors such as regional economic stability and youth employment prospects shape students' financial priorities. In countries grappling with high unemployment or economic volatility, students tend to adopt risk-averse financial behaviors (Wilkinson et al., 2017). Yet, this intersection of cultural and economic contexts is rarely addressed in financial literacy studies, which typically focus on individual knowledge and attitudes.

A more holistic approach that considers these factors could enhance the effectiveness of financial education interventions, making them more relevant for diverse student populations (Simarmata & Chrisinta, 2022). In conclusion, embracing a culturally contextualized framework for financial literacy can inform better educational strategies and policies that resonate more deeply with local traditions and values. By doing so, stakeholders can help empower students to navigate the financial landscape more effectively (Akça et al., 2018; Wilkinson et al., 2017).

Theoretical and Methodological Landscape

The review of financial literacy literature reveals a fragmented theoretical landscape, with varying degrees of adherence to established frameworks. While some studies draw on robust theories such as the Theory of Planned Behavior (TPB) or Social Cognitive Theory, many others remain atheoretical or only superficially engage with these models. This

inconsistency limits analytical depth and the ability to compare results across studies, ultimately hindering cumulative knowledge in the field Simarmata & Chrisinta (2022) Böhm et al., 2021).

Emerging theoretical approaches, particularly from Behavioral Economics and Financial Socialization Theory, represent a promising shift toward more nuanced understandings of financial behaviors. These theories focus on psychological factors that influence decision-making rather than relying solely on rational models "Financial Literacy: A Peep into the Literature and Note for Policy", 2022). However, integration across theoretical frameworks remains limited, and few studies rigorously test these concepts in varying cultural contexts (Yin et al., 2021; "Financial Literacy: A Peep into the Literature and Note for Policy", 2022).

This gap underscores the need for research that not only builds on established theoretical foundations but also adapts them to local realities. Methodologically, the existing literature is predominantly characterized by quantitative cross-sectional surveys, which often employ convenience sampling and yield limited insights into causal relationships or dynamic processes. While these studies are valuable for descriptive insights, they fall short in exploring the complexities of financial literacy development (Rafinda & Gál, 2020; McGarity et al., 2019). Qualitative and longitudinal research is notably lacking, yet such approaches could offer deeper understanding of student experiences with financial literacy and how these evolve over time. Furthermore, there is a scarcity of meta-analyses or comparative studies that synthesize findings across regions, making it challenging to identify whether certain trends are context-specific or indicative of broader regional patterns (Jadoon et al., 2020; Ashaari et al., 2020).

Identified Gaps In The Literature

Despite the growing volume of research on financial literacy among Asian university students, the current body of literature exhibits several notable gaps—both conceptual and empirical—that limit the depth and applicability of existing knowledge. Identifying these gaps is crucial for guiding future research agendas, improving policy relevance, and ensuring that interventions are both evidence-based and contextually sensitive. One of the most salient gaps is the lack of longitudinal and developmental perspectives. The overwhelming majority of studies utilize cross-sectional designs, providing only snapshots of students' financial literacy at a single point in time.

As a result, there is limited understanding of how financial knowledge, behaviors, and attitudes evolve over the course of students' academic careers—or beyond. Longitudinal studies could help capture the influence of key transition periods, such as the shift from dependent living to financial independence, entry into the workforce, or exposure to new financial products and technologies. Another significant limitation lies in the over-reliance on self-reported data. Most quantitative studies depend on students' self-assessment of their knowledge and behavior, which are prone to bias and inaccuracies. Few studies triangulate self-reports with objective measures, such as standardized financial literacy tests or real-world financial outcomes (e.g., credit usage, saving rates, debt levels). Integrating more robust metrics would improve data validity and allow for better benchmarking across populations.

There is also a geographical imbalance in the current literature. While countries such as Malaysia, Indonesia, India, and China are relatively well represented, research from Central Asia, the Middle East, and smaller Southeast Asian nations remains sparse. As a result, the regional understanding of financial literacy is skewed toward certain economic, educational, and cultural contexts. Moreover, within countries, studies often focus on urban universities, with rural or less prestigious institutions receiving limited attention. This urban-centric bias masks important intra-national disparities and limits the inclusiveness of research findings.

Equally problematic is the theoretical fragmentation noted earlier. Many studies either lack a theoretical foundation or apply models inconsistently, leading to difficulties in drawing generalizable conclusions.

Without a clear and consistent application of theory, the ability to explain why financial literacy varies across individuals and contexts is diminished. There is a need for more integrative theoretical frameworks that combine psychological, sociological, and economic dimensions, and that are adaptable to diverse cultural settings. Furthermore, the literature insufficiently addresses the intersectionality of identity factors. While some studies examine gender or income effects in isolation, few investigate how these factors interact with one another or with institutional variables such as curriculum, campus culture, or financial aid structures. For instance, how might a female student from a low-income background studying in a non-financial field experience and approach financial decisions differently compared to her peers? Addressing such questions would enable a more nuanced and equitable understanding of student financial behavior.

The role of technology—though increasingly acknowledged—remains underdeveloped in the literature. Studies often mention the popularity of digital financial tools among students, but rarely delve into how these tools shape financial competencies, habits, or vulnerabilities. There is a lack of in-depth research on digital financial literacy, including students' abilities to assess fintech risks, interpret online financial advice, or safeguard their personal data in a digital ecosystem. In addition, the impact evaluation of financial literacy interventions is underexplored. While some studies report positive associations between financial education and knowledge, few employ rigorous experimental or quasi-experimental designs to determine causal effects.

Long-term behavioral changes and the sustainability of educational interventions are almost never measured. Consequently, it remains unclear which types of interventions are most effective, for whom, and under what conditions. Lastly, there is a shortage of qualitative and mixed-methods research that could provide deeper insight into students' lived experiences, motivations, and socio-cultural constraints. Rich, narrative-based studies could illuminate how young people in different Asian contexts perceive financial responsibility, negotiate familial expectations, or experience financial stress—dimensions often lost in survey-based research.

These identified gaps underscore the need for a more diverse, theoretically grounded, and methodologically robust research agenda. Bridging these gaps will require cross-disciplinary collaboration, regional partnerships, and greater investment in longitudinal and experimental designs. Only then can the field move beyond surface-level assessments toward a comprehensive understanding of financial literacy as a dynamic, socially embedded, and developmentally complex phenomenon.

Directions For Future Research

In light of the thematic findings and identified gaps in the current body of literature, several strategic directions for future research on financial literacy among Asian university students emerge. These directions aim to deepen theoretical insight, enhance methodological rigor, and promote more culturally and contextually relevant knowledge that can inform policy and practice across diverse Asian settings. First and foremost, future research should prioritize longitudinal studies to understand the developmental trajectory of financial literacy. Tracking students over time—from their entry into university to post-graduation—would offer valuable insights into how financial knowledge, behaviors, and attitudes evolve, and how major life transitions (e.g., obtaining a job, moving out, taking loans) influence financial capability.

Such studies could also help distinguish between temporary behavioral shifts and lasting competencies, offering a clearer picture of what constitutes meaningful financial education. Secondly, there is a need to move beyond self-reported data and incorporate objective measures of financial literacy and financial behavior. This could include knowledge tests with standardized questions, analysis of actual financial records (with appropriate privacy safeguards), or behavioral experiments that simulate real-life decision-making scenarios. By triangulating self-perceptions with actual behavior and outcomes, researchers can achieve a more accurate and holistic understanding of student financial capability.

Third, researchers should give greater attention to underserved regions and subpopulations within Asia. This includes students in Central Asian nations, low-income or rural areas, religious minorities, and non-traditional students such as working learners or part-time enrollees. Comparative and cross-national studies, particularly those incorporating diverse cultural and institutional contexts, would be valuable for identifying both shared challenges and unique local patterns. Such inclusivity would strengthen the external validity and generalizability of research findings across the region.

Fourth, future studies should apply integrated theoretical models that account for the complexity of financial decision-making. Combining theories from psychology (e.g., the Theory of Planned Behavior), sociology (e.g., financial socialization), behavioral economics (e.g., bounded rationality), and cultural studies can lead to richer interpretations of financial behavior. Additionally, emerging frameworks such as financial capability and financial well-being should be operationalized and tested in Asian university contexts, offering a more holistic understanding of students' financial lives.

In line with theoretical development, there is also an opportunity to expand qualitative and mixed-methods research. While quantitative approaches dominate the current literature, qualitative methods such as in-depth interviews, focus groups, and ethnographic studies can uncover the lived realities, emotions, and socio-cultural pressures that shape student financial behavior. For example, understanding how students navigate financial decisions in the context of family expectations or religious beliefs can inform more sensitive and targeted interventions. Another key direction involves digital financial literacy. As financial services become increasingly digitized, students must not only understand traditional financial principles but also navigate digital ecosystems safely and effectively.

Research should explore how students engage with fintech platforms, their exposure to online financial misinformation, and the digital competencies required to assess financial risks. Studies can also investigate how digital tools (e.g., budgeting apps, AI-based investment platforms) can be leveraged to enhance financial learning and inclusion, especially in remote or resource-constrained settings. There is also a pressing need for more experimental and intervention-based research. Randomized controlled trials (RCTs), quasi-experiments, and pre-post program evaluations can help determine the actual impact of financial literacy programs on knowledge and behavior. Such studies should go beyond short-term effects and assess longitudinal outcomes, such as sustained saving habits, reduced debt, or improved financial confidence. Moreover, interventions should be tested across different delivery formats—including face-to-face instruction, online modules, gamified platforms, and peer-led initiatives—to identify the most effective approaches for diverse student populations.

In addition, researchers should examine the institutional role of universities in promoting financial literacy. While individual-level factors have been extensively studied, relatively little attention has been paid to how institutional policies, cultures, and support systems facilitate or hinder students' financial development. Studies could explore how different universities embed financial literacy in their curricula, provide access to counseling

or advisory services, or engage students through co-curricular financial activities. Finally, there is scope for greater collaborative and interdisciplinary research.

Addressing financial literacy in all its dimensions requires input from fields such as education, economics, psychology, information systems, and cultural studies. Interdisciplinary collaborations can lead to more comprehensive research designs and innovative intervention models. Additionally, partnerships between researchers, universities, governments, and financial institutions can foster large-scale data sharing, policy relevance, and real-world impact. In conclusion, the next generation of research on financial literacy among Asian university students must be more inclusive, theoretically grounded, methodologically diverse, and technologically attuned. By embracing these directions, scholars can contribute not only to academic advancement but also to the broader goal of empowering young people across Asia to navigate an increasingly complex financial world with confidence, competence, and resilience.

Conclusion

Conclusions Financial literacy has emerged as a critical competency for university students navigating increasingly complex financial landscapes in Asia and beyond. As this review has demonstrated, the topic has garnered growing academic attention over the past two decades, reflecting wider concerns about youth financial vulnerability, economic inequality, and the long-term effects of poor financial decisions. Through a comprehensive synthesis of existing literature, this study has identified key thematic trends, evaluated prevailing theoretical and methodological approaches, highlighted geographic and contextual patterns, and brought to light significant research gaps that must be addressed to advance both scholarly and practical understanding. The reviewed studies consistently point to moderate to low levels of financial literacy among Asian university students, with wide variation across countries, institutions, and demographic groups.

Knowledge deficits are often most pronounced in areas related to credit management, investing, and long-term planning—domains that are crucial for building financial security. Moreover, while certain behavioral tendencies such as budgeting are relatively common, they are not always accompanied by sound financial decision-making or confidence in handling financial matters. These patterns indicate that improving financial literacy is not solely a matter of increasing knowledge, but also of addressing behavioral, emotional, and contextual factors.

A critical observation from this review is the fragmentation of theoretical foundations, the predominance of cross-sectional survey methods, and the underrepresentation of diverse student populations, particularly those in rural, marginalized, or non-elite institutions. Despite the increasing deployment of financial education programs, the evidence on their effectiveness remains inconclusive, largely due to limited use of rigorous evaluation designs and short-term assessment windows. Additionally, emerging issues such as digital financial literacy, financial well-being, and the role of social media and fintech are only beginning to receive scholarly attention, leaving significant knowledge gaps in understanding how young people engage with and are affected by rapidly evolving financial technologies. In response to these findings, this review proposes a set of future research directions aimed at enhancing the relevance, depth, and inclusivity of the field.

These include conducting longitudinal and experimental studies, developing integrated theoretical frameworks, diversifying methodological approaches, and expanding research to include underrepresented regions and populations. Emphasis should also be placed on interdisciplinary collaboration and stakeholder partnerships to ensure that research findings

translate into actionable strategies for universities, policymakers, and financial institutions alike. Ultimately, advancing financial literacy among Asian university students is not merely an academic endeavor; it is an urgent social and economic imperative. As the youth population continues to expand and financial systems become more digitized and decentralized, the ability of students to make informed financial decisions will have profound implications for their personal well-being, national development, and regional financial stability. This literature review contributes to the foundation for a more coordinated and evidence-based approach to understanding and enhancing financial literacy across Asia, and it calls for sustained scholarly attention to empower the next generation of financially capable citizens.

References

- Adam, A., Frimpong, S., & Boadu, M. (2017). Financial literacy and financial planning: implication for financial well-being of retirees. *Business and Economic Horizons*, 13(2), 224-236. <https://doi.org/10.15208/beh.2017.17>
- Agabalinda, C. and Alain, V. (2020). Moderating effects of social learning on the usage of formal financial services in kampala, uganda. *Journal of Economics and International Finance*, 12(3), 120-129. <https://doi.org/10.5897/jeif2020.1043>
- Agyei, S. (2018). Culture, financial literacy, and sme performance in ghana. *Cogent Economics & Finance*, 6(1), 1463813. <https://doi.org/10.1080/23322039.2018.1463813>
- Ahmad, F., White, A., Hiller, K., Amini, R., & Jeffe, D. (2017). An assessment of residents' and fellows' personal finance literacy: an unmet medical education need. *International Journal of Medical Education*, 8, 192-204. <https://doi.org/10.5116/ijme.5918.ad11>
- Ahmed, S., Talib, M., Noor, N., & Jani, R. (2021). Evaluating the efficiency of faculties in university of malaya using data envelopment analysis. *Journal of Physics Conference Series*, 1860(1), 012024. <https://doi.org/10.1088/1742-6596/1860/1/012024>
- Ahunov, M. and Hove, L. (2019). National culture and financial literacy: international evidence. *Applied Economics*, 52(21), 2261-2279. <https://doi.org/10.1080/00036846.2019.1688241>
- Aisyah, M. (2022). Ethos, Pathos, Logos Dan Komunikasi Publik: A Systematic Literature Review. *Jurnal Darma Agung*, 30(3), 442-469. <https://doi.org/10.46930/OJSUDA.V30I3.2066>
- Akça, N., Sönmez, S., Şener, T., & Akca, C. (2018). An evaluation of the effect of financial literacy education on financial literacy among college students. *International Journal of Humanities and Social Science*, 8(8). <https://doi.org/10.30845/ijhss.v8n8p17>
- Akimova, E., Korshunova, N., Fedorov, A., Shatayeva, O., & Shipkova, O. (2021). New challenges in changing times: the digital educational support for financial literacy education. *SHS Web of Conferences*, 98, 05020. <https://doi.org/10.1051/shsconf/20219805020>
- Al-Bahrani, A., Weathers, J., & Patel, D. (2018). Racial differences in the returns to financial literacy education. *Journal of Consumer Affairs*, 53(2), 572-599. <https://doi.org/10.1111/joca.12205>
- Ashaari, N., Yusof, Z., Misiran, M., & Sapiri, H. (2020). Financial literacy among working women: a study on university staff in kedah. *Journal of Science and Mathematics Letters*, 8(2), 100-108. <https://doi.org/10.37134/jsml.vol8.2.12.2020>
- Beckker, K., Witte, K., & Campenhout, G. (2020). The role of national culture in financial literacy: cross-country evidence. *Journal of Consumer Affairs*, 54(3), 912-930. <https://doi.org/10.1111/joca.12306>
- Białowolski, P., Cwynar, A., & Węziak-Białowolska, D. (2022). The role of financial literacy for financial resilience in middle-age and older adulthood. *The International Journal of Bank Marketing*, 40(7), 1718-1748. <https://doi.org/10.1108/ijbm-10-2021-0453>
- Białowolski, P., Cwynar, A., Xiao, J., & Węziak-Białowolska, D. (2021). Consumer financial literacy and the efficiency of mortgage-related decisions: new evidence from the panel study of income dynamics. *International Journal of Consumer Studies*, 46(1), 88-101. <https://doi.org/10.1111/ijcs.12646>

- Bire, A., Sauw, H., & Fragaki, M. (2019). The effect of financial literacy towards financial inclusion through financial training. *International Journal of Social Sciences and Humanities*, 3(1), 186-192. <https://doi.org/10.29332/ijssh.v3n1.280>
- Böhm, P., Böhmová, G., Šimková, V., & Gazdíkova, J. (2021). The impact of secondary education on the level of financial literacy: the case of slovakia. *Problems of Education in the 21st Century*, 79(1), 13-33. <https://doi.org/10.33225/pec/21.79.13>
- Bollars, C., Sørensen, K., Vries, N., & Meertens, R. (2019). Exploring health literacy in relation to noncommunicable diseases in samoa: a qualitative study. *BMC Public Health*, 19(1). <https://doi.org/10.1186/s12889-019-7474-x>
- Bongomin, G., Munene, J., Ntayi, J., & Malinga, C. (2018). Nexus between financial literacy and financial inclusion. *The International Journal of Bank Marketing*, 36(7), 1190-1212. <https://doi.org/10.1108/ijbm-08-2017-0175>
- Brown, M., Henchoz, C., & Spycher, T. (2017). Culture and financial literacy. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2916636>
- Drábeková, J., Rumanová, L., & Pavlovičová, G. (2022). Numeracy as a part of financial literacy: student case study in slovakia. *International Journal of Emerging Technologies in Learning (Ijet)*, 17(10), 186-199. <https://doi.org/10.3991/ijet.v17i10.29659>
- Er, F., Özdemir, A., Okur, M., Kostakoglu, S., Temizel, F., & Sönmez, H. (2017). Financial literacy among university students: a case study for open education students in anadolu university, turkey. *Literacy Information and Computer Education Journal*, 8(1), 2544-2552. <https://doi.org/10.20533/licej.2040.2589.2017.0337>
- Erari, A., Patma, K., & Lamba, R. (2021). Financial literacy on small and micro business of the indigenous people of papua in jayapura city. *Modern Management Review*, 26(4), 37-46. <https://doi.org/10.7862/rz.2021.mmr.23>
- Fauziyah, A., Nurfitriya, M., & Ruhayati, S. (2022). Financial education to face the new normal era.. <https://doi.org/10.4108/eai.17-11-2021.2318643>
- Frankel, K., Fields, S., & Ward, A. (2021). From tutoring to mentoring: centering adolescents' identities as readers and mentors in a high school literacy class. *Literacy Research Theory Method and Practice*, 70(1), 231-251. <https://doi.org/10.1177/23813377211025320>
- Gong, Y. and Song, Z. (2021). An empirical analysis of the influence of financial literacy on family cultural consumption – based on the data from cfps. *Proceedings of Business and Economic Studies*, 4(6), 39-45. <https://doi.org/10.26689/pbes.v4i6.2828>
- Gunawan, O. :, Cahyono, H., Kom, S., & Abstrak,). (2015). MENGENAL ELEKTRONIK BANKING. Swara Patra : Majalah Ilmiah PPSDM Migas, 5(1). <https://ejurnal.ppsdmmigas.esdm.go.id/sp/index.php/swarapatra/article/view/125>
- Herdinata, C., & Pranatasari, F. D. (2020). Literasi Keuangan Berbasis Fintech Bagi Usaha Mikro Kecil Dan Menengah. *Lecture Papers National Published Articles*. <https://dspace.uc.ac.id/handle/123456789/5867>
- Huang, F. and Marginson, S. (2018). Higher education research in the asia-pacific. *International Journal of Educational Development*, 63, 1-3. <https://doi.org/10.1016/j.ijedudev.2017.10.008>
- Ibrohim, I., Triana, L., & Nopianti, R. (2022). Faktor-faktor yang berperan pada literasi keuangan mahasiswa muslim di kota serang. *Owner*, 6(4), 4187-4198. <https://doi.org/10.33395/owner.v6i4.1084>
- Imam, T., McInnes, A., Colombage, S., & Grose, R. (2022). Opportunities and barriers for fintech in saarc and asean countries. *Journal of Risk and Financial Management*, 15(2), 77. <https://doi.org/10.3390/jrfm15020077>
- Jadoon, U., Shah, S., Abro, S., & Chuhan, O. (2020). Analysis of financial literacy level among undergraduate students. *RJFA*. <https://doi.org/10.7176/rjfa/11-14-03>
- Jayakumar, K., Larkin, D., Ginzberg, S., & Patel, M. (2017). Personal financial literacy among u.s. medical students. *Mededpublish*, 6, 35. <https://doi.org/10.15694/mep.2017.000035>
- Jayaraman, J. and Jambunathan, S. (2018). Financial literacy among high school students: evidence from india. *Citizenship Social and Economics Education*, 17(3), 168-187. <https://doi.org/10.1177/2047173418809712>

-
- Johnston-Rodriguez, S. and Henning, M. (2019). Pre-service teachers' perception of financial literacy curriculum: national standards, universal design, and cultural responsiveness. *Education Sciences*, 9(1), 34. <https://doi.org/10.3390/educsci9010034>
- Kadoya, Y. and Khan, M. (2020). Financial literacy in japan: new evidence using financial knowledge, behavior, and attitude. *Sustainability*, 12(9), 3683. <https://doi.org/10.3390/sur2093683>
- Kakinuma, Y. (2022). Financial literacy and quality of life: a moderated mediation approach of fintech adoption and leisure. *International Journal of Social Economics*, 49(12), 1713-1726. <https://doi.org/10.1108/ijse-10-2021-0633>
- Karakurum-Ozdemir, K., Kokkizil, M., & Uysal, G. (2018). Financial literacy in developing countries. *Social Indicators Research*, 143(1), 325-353. <https://doi.org/10.1007/s11205-018-1952-x>
- Khalisharani, H., Sabri, M., Johan, I., Burhan, N., & YUSOF, A. (2022). The influence of parental financial socialisation and financial literacy on university student's financial behaviour. *International Journal of Economics and Management*, 16(3), 351-364. <https://doi.org/10.47836/ijeam.16.3.06>
- Khan, M., Rabbani, N., & Kadoya, Y. (2020). Is financial literacy associated with investment in financial markets in the united states?. *Sustainability*, 12(18), 7370. <https://doi.org/10.3390/sur2187370>
- Kirui, C. (2022). Development of marketing techniques in women-owned enterprises through credit and training: a perspective from smep microfinance bank program in nakuru town, kenya. *The International Journal of Business & Management*, 10(2). <https://doi.org/10.24940/theijbm/2022/v10/i2/bm2202-022>
- Lethepa, A., Matemane, R., & Dhlembeu, N. (2020). Bankers and financial advisers in an emerging economy: are they financially literate?. *Banks and Bank Systems*, 15(2), 16-27. [https://doi.org/10.21511/bbs.15\(2\).2020.02](https://doi.org/10.21511/bbs.15(2).2020.02)
- Li, Y., Wang, M., Liao, G., & Wang, J. (2022). Spatial spillover effect and threshold effect of digital financial inclusion on farmers' income growth—based on provincial data of china. *Sustainability*, 14(3), 1838. <https://doi.org/10.3390/sur14031838>
- Lusardi, A. (2019). Financial literacy and the need for financial education: evidence and implications. *Swiss Journal of Economics and Statistics*, 155(1). <https://doi.org/10.1186/s41937-019-0027-5>
- Mändmaa, S. (2019). Analyzing the factors influencing university students' financial literacy. *International Journal for Innovation Education and Research*, 7(7), 465-497. <https://doi.org/10.31686/ijer.vol7.iss7.1628>
- Mändmaa, S. (2019). Financial literacy – what and why should we improve. *Eurasian Journal of Social Sciences*, 7(2), 12-28. <https://doi.org/10.15604/ejss.2019.07.02.002>
- Mardiah Mardiah. (2022). Pengaruh Tingkat Literasi Keuangan Dan Faktor Demografi Terhadap Perencanaan Keuangan (Studi Kasus Pada Pegawai Kantor Sekretariat Daerah Kota Parepare). *DECISION: Jurnal Ekonomi Dan Bisnis*, 3(1), 88-98. <https://doi.org/10.31850/DECISION.V3I1.1501>
- Margaretha, F., & Pambudhi, R. A. (2015). TINGKAT LITERASI KEUANGAN PADA MAHASISWA S-1 FAKULTAS EKONOMI. *Jurnal Manajemen Dan Kewirausahaan*, 17(1), 76-85. <https://doi.org/10.9744/JMK.17.1.76-85>
- McGarity, S., Okech, D., Risler, E., & Clees, T. (2019). Assessing financial capability among people with disabilities. *Journal of Social Work*, 20(5), 657-672. <https://doi.org/10.1177/1468017319860308>
- McKillip, R., Ernst, M., Ahn, J., Tekian, A., & Shappell, E. (2018). Toward a resident personal finance curriculum: quantifying resident financial circumstances, needs, and interests. *Cureus*. <https://doi.org/10.7759/cureus.2540>
- Meo, S., Sattar, K., ullah, C., Alnassar, S., Hajjar, W., & Usmani, A. (2019). Progress and prospects of medical education research in asian countries. *Pakistan Journal of Medical Sciences*, 35(6). <https://doi.org/10.12669/pjms.35.6.1147>
- Morgan, P. and Long, T. (2019). Determinants and impacts of financial literacy in cambodia and viet nam. *Journal of Risk and Financial Management*, 12(1), 19. <https://doi.org/10.3390/jrfm12010019>
- Mudzingiri, C. (2021). The impact of financial literacy on risk seeking and patient attitudes of university students. *Development Southern Africa*, 38(5), 845-861. <https://doi.org/10.1080/0376835x.2021.1945431>
-

- Murta, F. and Gama, P. (2021). Does financial literacy “grease the wheels” of the loans market? a note. *Studies in Economics and Finance*, 39(2), 331-341. <https://doi.org/10.1108/sef-05-2021-0216>
- Muthia, S. (2021). Faktor Yang Mempengaruhi Niat Mahasiswa Akuntansi Untuk Melakukan Kecurangan Akademik Pada Sistem Pembelajaran Daring/Online (Studi Kasus Pada Mahasiswa Akuntansi S1 Di Yogyakarta). Universitas Islam Indonesia. <https://dspace.uui.ac.id/handle/123456789/31772>
- Nanda, T. S. F., Ayumiati, A., & Wahyu, R. (2019). Tingkat Literasi Keuangan Syariah: Studi Pada Masyarakat Kota Banda Aceh. *Jihbiz: Global Journal of Islamic Banking and Finance*, 1(2), 141-152. <https://doi.org/10.22373/JIHBIZ.V1I2.8573>
- Nuangjamnong, C. (2021). Investigation of factors influencing students’ intention to use banking services through smartphone devices during covid-19 pandemic. *International Journal of Economics and Business Administration*, IX(Issue 1), 331-346. <https://doi.org/10.35808/ijebe/676>
- Oehler, A., Horn, M., Wendt, S., Reisch, L., & Walker, T. (2017). Young adults and their finances: an international comparative study on applied financial literacy. *Economic Notes*, 47(2-3), 305-330. <https://doi.org/10.1111/ecno.12110>
- Ono, S., Yuktadatta, P., Taniguchi, T., Iitsuka, T., Noguchi, M., Tanaka, S., ... & Kadoya, Y. (2021). Financial literacy and exercise behavior: evidence from japan. *Sustainability*, 13(8), 4189. <https://doi.org/10.3390/sur3084189>
- Ozili, P. (2020). Contesting digital finance for the poor. *Digital Policy Regulation and Governance*, 22(2), 135-151. <https://doi.org/10.1108/dprg-12-2019-0104>
- Pahrudin, P., Hakim, I., & Shollina, S. (2019). Analysis of student financial literation levels hamzanwadi university and its affecting factors. *Jpek (Jurnal Pendidikan Ekonomi Dan Kewirausahaan)*, 2(2), 118. <https://doi.org/10.29408/jpek.v2i2.1069>
- Pavlov, A. and Levin, Y. (2020). Research of the far eastern financial center: problem analysis and outlook.. <https://doi.org/10.2991/aebmr.k.200312.329>
- Poon, E., Bissonnette, P., Sedighi, S., MacNevin, W., & Kulkarni, K. (2022). Improving financial literacy using the medical mini-mba at a canadian medical school. *Cureus*. <https://doi.org/10.7759/cureus.25595>
- Puspita, A. T., Lubis, D., & Muthohharoh, M. (2021). Faktor-Faktor yang Memengaruhi Tingkat Literasi Keuangan Syariah pada Mahasiswa Muslim di Bogor. *AL-MUZARA’AH*, 9(1), 1-20. <https://doi.org/10.29244/JAM.9.1.1-20>
- Rafinda, A. and Gál, T. (2020). Financial literacy of economics and non-economics students. *International Review of Management and Marketing*, 10(3), 35-38. <https://doi.org/10.32479/irmm.8974>
- Rahim, N., Ali, N., & Adnan, M. (2022). Students' financial literacy: digital financial literacy perspective. *Global Conference on Business and Social Sciences Proceeding*, 13(1), 1-1. [https://doi.org/10.35609/gcbssproceeding.2022.1\(9\)](https://doi.org/10.35609/gcbssproceeding.2022.1(9))
- Rahim, N., Ali, N., & Adnan, M. (2022). Students' financial literacy: digital financial literacy perspective. *Gatr Journal of Finance and Banking Review*, 6(4), 18-25. [https://doi.org/10.35609/jfbr.2022.6.4\(2\)](https://doi.org/10.35609/jfbr.2022.6.4(2))
- Ramalho, T. and Forte, D. (2019). Financial literacy in brazil – do knowledge and self-confidence relate with behavior?. *Rausp Management Journal*, 54(1), 77-95. <https://doi.org/10.1108/rausp-04-2018-0008>
- Ramdhani, F. B., Ibrahim, M. Y., Masruhen, M. F. Bin, & Fadhiyah, N. (2022). Pengaruh Literasi Keuangan Syariah terhadap Perilaku Keuangan Masyarakat Binaan Pondok Pesantren Daarut Tauhid Kabupaten Bogor. *Al-Tasyree: Jurnal Bisnis, Keuangan Dan Ekonomi Syariah*, 14(02), 80-101. <https://journal.ptiq.ac.id/index.php/altasyree/article/view/345>
- Ranteallo, A., Herawati, N., & Mulyani, A. (2022). Education for financial literacy on children educationnal fund among housewives in west jakarta. *Jiip - Jurnal Ilmiah Ilmu Pendidikan*, 5(12), 5304-5307. <https://doi.org/10.54371/jiip.v5i12.1233>
- Rozari, P., Jati, H., & Makatita, R. (2022). Cultural effect on financial literacy (learn from wulandoni barter market trader in lembata regency). *Journal of Social Science*, 3(3), 567-575. <https://doi.org/10.46799/jss.v3i3.347>

- Sari, D. E. (2018). Pendidikan Literasi Keuangan Melalui Program Kemitraan Dengan Bank Untuk Mengurangi Perilaku Konsumtif Pada Mahasiswa. *Jurnal Pendidikan Ilmu Sosial*, 28(1), 22–30. <https://doi.org/10.2317/JPIS.V28I1.6769>
- Sari, R. Y. (2019). Literasi Keuangan Pelaku Ekonomi Umkm Perempuan Di Kecamatan Patrang Kabupaten Jember. *Prosiding Seminar Nasional & Call For Paper*, 0(0), 038–048. <https://jurnal.unmuhjember.ac.id/index.php/sncp/article/view/1992>
- Sawitri, A. (2021). The financial position of youth employee: pinning-up of financial capability and income. *Jurnal Akuntansi*, 25(1), 1. <https://doi.org/10.24912/ja.v25i1.721>
- Ševčík, K. (2021). Comparison of financial literacy concept in projected curricula of selected countries. *Lifelong Learning*, 11(3), 243–272. <https://doi.org/10.11118/lifele20211103243>
- Shah, M., Murugiah, L., & Ahmad, N. (2021). Saving model under financial literacy. *International Journal of Academic Research in Business and Social Sciences*, 11(2). <https://doi.org/10.6007/ijarbss/v11-i2/8612>
- Shaikh, A., Glavee-Geo, R., & Karjaluoto, H. (2017). Exploring the nexus between financial sector reforms and the emergence of digital banking culture – evidences from a developing country. *Research in International Business and Finance*, 42, 1030–1039. <https://doi.org/10.1016/j.ribaf.2017.07.039>
- Shcherbakova, I. and Lagunova, Y. (2022). Financial literacy of students and its improvement through the application of interactive learning methods. *Bulletin of Udmurt University Series Economics and Law*, 32(6), 1042–1047. <https://doi.org/10.35634/2412-9593-2022-32-6-1042-1047>
- Simarmata, J. and Chrisinta, D. (2022). A structural equation modelling approach for college students financial literacy. *Journal of Research in Mathematics Trends and Technology*, 4(2), 1–5. <https://doi.org/10.32734/jormtt.v4i2.15849>
- Siswati, A. (2019). Eksperiental Learning Pelatihan Financial Life Skills Pada Mahasiswa Universitas Merdeka Malang. *Jurnal Bisnis Dan Manajemen*, 6(2). <https://doi.org/10.26905/JBM.V6I2.3673>
- Sofiyanti, V., Hafid, R., & Mahmud, M. (2022). Hubungan Literasi Keuangan Terhadap Keputusan Belanja Mahasiswa. *Jurnal Ilmiah Bisnis Dan Ekonomi Asia*, 16(2), 336–344. <https://doi.org/10.32815/JIBEKA.V16I2.1046>
- Spataro, L. and Corsini, L. (2017). Endogenous financial literacy, saving, and stock market participation. *Finanzarchiv Public Finance Analysis*, 73(2), 135. <https://doi.org/10.1628/001522117X14877521353555>
- Suparti, M., Juliardi, D., Rafsanjani, M., & Praherdhiono, H. (2018). Determinant of consumptive behavior: study on accountancy colleger.. <https://doi.org/10.2991/icli-17.2018.34>
- Suri, A. and Purohit, S. (2017). An analysis of personal financial literacy among expatriates in the united arab emirates. *Contemporary Review of the Middle East*, 4(3), 278–296. <https://doi.org/10.1177/234779891711073>
- Surmanidze, N., Tabagari, K., Mushkudiani, Z., & Akhvlediani, M. (2022). Financial literacy exchange and its challenges in post-soviet georgia. *Knowledge and Performance Management*, 6(1), 87–99. [https://doi.org/10.21511/kpm.06\(1\).2022.08](https://doi.org/10.21511/kpm.06(1).2022.08)
- Thapa, K. and Jha, N. (2022). What are the factors that influence saving behavior of university students?. *Samridhi J. Devpt. Stud.*, 8(1), 9–13. <https://doi.org/10.3126/sjds.v8i1.60979>
- Vovchenko, N., Galazova, S., DANCHENKO, E., Ivanova, O., & Kostoglodova, E. (2018). Improvement of financial literacy as a crucial factor of economic development. *European Research Studies Journal*, XXI(Special Issue 1), 16–24. <https://doi.org/10.35808/ersj/1154>
- Wang, X. and He, G. (2020). Digital financial inclusion and farmers' vulnerability to poverty: evidence from rural china. *Sustainability*, 12(4), 1668. <https://doi.org/10.3390/sur2041668>
- Warmath, D. and Zimmerman, D. (2019). Financial literacy as more than knowledge: the development of a formative scale through the lens of bloom's domains of knowledge. *Journal of Consumer Affairs*, 53(4), 1602–1629. <https://doi.org/10.1111/joca.12286>
- Watanapongvanich, S., Binnagan, P., Putthinun, P., Khan, M., & Kadoya, Y. (2020). Financial literacy and gambling behavior: evidence from japan. *Journal of Gambling Studies*, 37(2), 445–465. <https://doi.org/10.1007/s10899-020-09936-3>
- Wilkinson, A., Pettifor, A., Rosenberg, M., Halpern, C., Thirumurthy, H., Collinson, M., ... & Kahn, K.

- (2017). The employment environment for youth in rural south africa: a mixed-methods study. *Development Southern Africa*, 34(1), 17-32. <https://doi.org/10.1080/0376835x.2016.1259986>
- Wu, A. and Kao, D. (2022). Mapping the sustainable human-resource challenges in southeast asia's fintech sector. *Journal of Risk and Financial Management*, 15(7), 307. <https://doi.org/10.3390/jrfm15070307>
- Xiao, J. and Porto, N. (2017). Financial education and financial satisfaction. *The International Journal of Bank Marketing*, 35(5), 805-817. <https://doi.org/10.1108/ijbm-01-2016-0009>
- Yang, Z., Liu, T., & Xiao, Y. (2022). Digital finance and migrant workers' urban integration: the mediation effect of the gender-earning gap. *Frontiers in Public Health*, 10. <https://doi.org/10.3389/fpubh.2022.1076783>
- Yin, K., Watson, D., & Yusof, R. (2021). The efficacy of promoting financial literacy with mooc among economics pre-service teachers. *International Journal of Learning Teaching and Educational Research*, 20(8), 18-35. <https://doi.org/10.26803/ijlter.20.8.2>
- Yu, L., Wilson, R., Han, S., Leurgans, S., Bennett, D., & Boyle, P. (2017). Decline in literacy and incident ad dementia among community-dwelling older persons. *Journal of Aging and Health*, 30(9), 1389-1405. <https://doi.org/10.1177/0898264317716361>
- Zhao, H. and Zhang, L. (2020). Talking money at home: the value of family financial socialization. *The International Journal of Bank Marketing*, 38(7), 1617-1634. <https://doi.org/10.1108/ijbm-04-2020-0174>