Journal of
Risk and Financial Management

MDPI

Article

The Moderating Role of Trust in Financial Institutions in the Relationship Between Financial Capability and Financial Management Behavior During Economic Uncertainty

Khaled Hutaibat [1], Krayyem Al-Hajaya [2], Ahmed Eltweri [3,4,*] and Abdussalam Mahmoud Abu Tapanjeh [5]

[1] Accounting Department, Business School, Mutah University, Mutah 61710, Karak, Jordan; hutaibat@mutah.edu.jo
[2] Department of Accounting, College of Business Administration, American University of the Middle East, Egaila 54200, Kuwait; krayyem.al-hajaya@aum.edu.kw
[3] Liverpool Business School, Liverpool John Moores University, Liverpool L1 9DE, UK
[4] Department of Accounting, The Higher Institute of Sciences and Technology, Al-Aziziya, Libya
[5] Department of Accounting, College of Business and Economics (CBE), Qassim University, Buraydah 52571, Saudi Arabia; a.abutapanjeh@qu.edu.sa
* Correspondence: a.m.eltweri@ljmu.ac.uk or ahmedeltweri@gmail.com

Abstract

Financial capabilities may support effective financial management behaviour, but their relationship with behaviour may depend on individuals' trust in financial institutions. This study examines whether institutional trust moderates the relationships between financial literacy, financial education, access to financial information, and financial management behaviour in Jordan. Drawing on institutional trust reasoning, the study analyses an online survey of 535 Jordanian adults collected in July 2026 through convenience and snowball sampling, using partial least squares structural equation modelling. Financial literacy ($\beta = 0.218$, $p = 0.001$), financial education ($\beta = 0.231$, $p = 0.001$), and access to financial information ($\beta = 0.298$, $p = 0.001$) were positively associated with financial management behaviour, with information access showing the largest reported direct coefficient. The moderation effect results indicate that these relationships were stronger at higher levels of institutional trust. Positive interactions were reported for access to financial information ($\beta = 0.157$, $p < 0.001$) and financial literacy ($\beta = 0.134$, $p = 0.002$). The interaction involving financial education was smaller and borderline significant ($\beta = 0.109$, $p = 0.048$), warranting cautious interpretation. The model explained 38.9% of the variance in financial management behaviour. The study contributes by examining institutional trust as a boundary condition linking financial capabilities with financial behaviour in the surveyed sample. The findings suggest that financial capability initiatives should consider institutional credibility and the perceived reliability of financial services and information. However, non-probability sampling design utilized may limit generalizability of the findings.

Keywords: trust in financial institutions; financial management behavior; financial literacy; financial education; access to financial information; Jordan; economic uncertainty; institutional trust

Check for updates

Academic Editors: Minxing Sun and Maryna Murdock

Received: 2 September 2026
Revised: 21 October 2026
Accepted: 24 October 2026
Published: 1 November 2026

Copyright: © 2026 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license.

1. Introduction

Effective financial management has become increasingly important as individuals navigate rising living costs, digital financial services, changing market conditions, and economic uncertainty. Financial literacy, financial education, and access to reliable financial

information are widely recognized as capabilities that support sound financial decision-making and behavior (Lusardi & Mitchell, 2014; Klapper et al., 2015; Fernandes et al., 2014). However, possessing financial knowledge and information does not necessarily translate into effective financial management behavior (FMB). Individuals may understand financial concepts while remaining reluctant to apply their knowledge or engage with formal financial institutions, suggesting that institutional conditions may influence the capability–behavior relationship.

Trust in financial institutions may represent an important boundary condition. Financial decisions often require individuals to rely on institutions for information, products, transaction security, and protection of their financial interests. When financial institutions are perceived as competent, reliable, and acting with integrity, individuals may be more willing to use institutional information and apply their financial knowledge. Previous research demonstrates the importance of trust in investment decisions, financial markets, and financial institutions (Guiso et al., 2008; Pevzner et al., 2015; Kanagaretnam et al., 2019).

Abdelsalam et al. (2024) provide an important basis for examining this relationship. Using cross-national evidence, they found that societal trust is associated with lower banking market risk, with stronger effects under weaker institutional conditions. Although their analysis focuses on societal trust and banking risk at the macro level, their findings raise an important individual-level question: whether trust in financial institutions influences the extent to which financial capabilities are associated with FMB.

Jordan provides a relevant setting for examining this question. The Central Bank of Jordan reported gross foreign reserves of USD 25.5 billion at the end of December 2025, equivalent to around nine months of imports (Central Bank of Jordan, 2026), while the banking sector continues to develop and digitalise (Association of Banks in Jordan, 2025). However, Jordan remains exposed to regional and economic uncertainty. Institutional trust is also relevant to financial inclusion, with 13.9% of unbanked Jordanians identifying distrust of financial institutions as a reason for not holding a formal financial account (World Bank, 2025). These conditions provide a context for examining how financial capability relates to institutional trust in the surveyed sample.

Existing research has extensively examined financial literacy and financial behavior (Lusardi & Mitchell, 2014; Klapper et al., 2013), as well as financial education and access to financial information (Fernandes et al., 2014; Miller et al., 2015; Klapper et al., 2015). Sawaya et al. (2026), for example, found that financial literacy, formal financial education, and access to financial information are positively associated with personal financial management in Lebanon during economic crisis. However, limited empirical attention has been given to whether institutional trust strengthens or weakens the relationships between these financial capabilities and FMB.

Accordingly, this study has two objectives. First, it examines whether financial literacy, financial education, and access to financial information are positively associated with FMB among Jordanian adults. Second, it examines whether trust in financial institutions strengthens these relationships. In doing so, the study positions institutional trust as a potential boundary condition in the capability–behavior relationship.

This study contributes to the financial behaviour literature by examining institutional trust as a potential boundary condition in the relationship between financial capabilities and financial management behaviour. It distinguishes financial literacy, financial education, and access to financial information, and examines whether their relationships with behaviour vary according to trust in financial institutions. This extends the focus beyond the separate relationships of capability and trust with financial behaviour towards their interaction. Building on the institutional trust reasoning of Abdelsalam et al. (2024), the study brings this perspective to an individual-level analysis in Jordan, complementing research conducted

in other institutional settings. Its contribution is therefore a context-specific examination of conditional relationships within the surveyed sample, rather than evidence of causal effects or population-wide patterns.

The remainder of the paper is organised as follows. Section 2 reviews the literature and theoretical background, Section 3 develops the hypotheses and conceptual model, Section 4 describes the methodology, Section 5 presents the results, and Section 6 discusses the findings. Section 7 concludes, followed by a subsection outlining the limitations and directions for future research.

2. Literature Review and Theoretical Background

2.1. Financial Literacy

Financial literacy refers to an individual's knowledge and understanding of financial concepts and the ability to use that knowledge when making financial decisions. It encompasses areas such as saving, borrowing, interest rates, inflation, investment, budgeting, and financial risk (Aoun et al., 2026; Lichtenberg et al., 2024). Financially literate individuals tend to demonstrate stronger saving, retirement planning, debt management, and long-term financial decision-making (Haag & Brahm, 2025; Bellocchi & Travaglini, 2025).

The digitalization of financial services has broadened the capabilities required for effective financial decision-making. Individuals increasingly need to evaluate digital financial products and information while recognizing associated cybersecurity and information risks (Chhillar et al., 2025). This is relevant in Jordan, where digital financial services have expanded through platforms such as Orange Money and MyMal.

Financial literacy should nevertheless be distinguished from financial behavior. Knowledge provides the capacity to evaluate financial choices but does not ensure that this knowledge will be translated into action. This distinction provides the basis for examining conditions that may influence the relationship between financial literacy and financial management behavior.

Recent longitudinal and cross-country studies show that the knowledge–behaviour relationship varies with the outcome, analytical specification, and context. Using three-wave panel data from 4389 adults in Poland, Białowolski et al. (2026) compared cross-sectional, random-effects, long-difference, and random-intercept cross-lagged models. Broad positive associations in cross-sectional and random-effects estimates narrowed in the latter specifications; changes in knowledge were associated with only five behaviours, mainly deliberative ones, and the study found no significant behaviour-to-knowledge pathway. In a separate survey of 400 respondents in Lebanon and the United Arab Emirates, Jabbour Al Maalouf and Sfeir (2026) used PLS-SEM and measurement-invariance testing before multi-group comparisons. They found positive associations of financial literacy and FinTech adoption with financial behaviour in both settings, with financial attitude mediating both relationships; the reported structural relationships were generally comparable across countries. These studies support examining capability–behaviour relationships while showing that estimates depend on modelling choices and that attitudinal pathways and context may matter. Neither tests whether trust in financial institutions moderates the relationship studied here.

A related study by Aoun et al. (2026), based on a structured questionnaire completed by 390 Lebanese millennials and analysed with structural equation modelling, found positive associations between financial literacy, FinTech adoption, and financial behaviour, with financial attitudes mediating the relationships. The focus on millennials in one crisis-affected economy limits direct generalisation to other demographic and institutional settings. Unlike that study, the present analysis examines whether institutional trust conditions the capability–behaviour association.

2.2. Financial Education

Financial education refers to structured learning activities designed to improve financial knowledge, skills, awareness, and decision-making capability. It represents the process through which financial capabilities are developed, whereas financial literacy reflects the knowledge and understanding individuals possess.

Financial education can improve understanding of financial products and strengthen individuals' ability to manage financial decisions (Hishamudin et al., 2025). Financial capability may also develop through practical experience and informal learning (FaXing & Loang, 2024), while applied financial education can support saving, borrowing, budgeting, and debt management (Yasman, 2024).

Financial education has received increasing institutional attention in Jordan through initiatives supported by the Central Bank of Jordan and programs involving organizations such as UN Women (Central Bank of Jordan, 2023; UN Women, 2025). However, exposure to financial education does not necessarily ensure its application. Its behavioral value may partly depend on the institutional environment in which acquired financial knowledge is subsequently used.

Financial education also involves constraints that may affect participation and its practical value. Bellocchi and Travaglini (2025) conceptualise financial literacy as a knowledge asset acquired through investment in financial education. Their theoretical model shows that uncertainty and irreversible education costs can encourage households to postpone this investment. This contribution distinguishes the decision to acquire financial capabilities from their subsequent application. Although their model does not examine institutional trust, it highlights the importance of considering the conditions surrounding financial education. The present study addresses the application stage by examining whether the relationship between perceived financial education and financial management behaviour varies with institutional trust.

Using 2022 PISA data on 94,704 15-year-old students across 19 countries, Ho et al. (2026) applied path analysis and multigroup confirmatory factor analysis. They found that financial literacy education was associated with adolescents' use of digital financial services largely indirectly, through confidence in managing digital transactions. The very large sample gives broad cross-country coverage, but the population and outcome differ from this study's adult sample and measure of general financial management behaviour. The study nevertheless identifies confidence as one mechanism through which education may relate to financial action.

Two 2025 studies provide further evidence on pathways between financial education and financial behaviour. Tan et al. (2025) analysed an online survey of 850 Chinese college students who reported budgeting, drawn from 80 universities, using structural equation modelling and bias-corrected bootstrapping. Financial education, measured by the frequency and intensity of finance and economics courses, was directly associated with budgeting behaviour ($\beta = 0.139$, $p < 0.01$). The indirect pathway through budgeting attitudes and intentions was also significant ($\beta = 0.002$, SE = 0.001, 95% CI [0.001, 0.004]), accounting for 10% of the total effect. Because the survey was cross-sectional, these results indicate associations rather than causal effects. Gerrans et al. (2025) used pre- and post-unit survey data from 869 students at a large Australian university: 535 took a semester-long personal financial management unit and 334 eligible students did not. Their latent transition analysis identified six financial-literacy profiles. Unit participation was associated with more favourable transitions; for example, the reported coefficient for moving from the "Vulnerable" profile to "On Top of It" was 11.98 (adjusted $p < 0.05$). Greater confidence in searching for financial information was associated with a lower likelihood of moving from "Need Help" to "Vulnerable" (coefficient = −1.45, adjusted $p < 0.05$). As students elected

to take the unit, unobserved differences between groups may remain. These studies suggest that attitudes and information-search confidence may help explain financial behaviour, but their student samples differ from the present adult sample, and neither tests institutional trust as a moderator.

2.3. Access to Financial Information

Access to financial information (AFI) refers to the extent to which individuals can obtain timely, relevant, understandable, and useful information for financial decision-making, including information concerning interest rates, fees, exchange rates, loan conditions, financial products, and economic developments (Klapper et al., 2015; Lusardi & Mitchell, 2014).

Information access differs conceptually from financial literacy and financial education. Financial literacy concerns knowledge, financial education concerns the development of financial capabilities, and information access concerns the availability of resources that can support current financial decisions. Digitalization has expanded these resources in Jordan through platforms such as MyMal and other financial-sector initiatives (MyMal, 2025; Association of Banks in Jordan, 2025).

However, access alone does not guarantee use. Individuals must also consider financial information sufficiently credible and reliable before incorporating it into their decisions. Institutional trust may therefore be particularly relevant when information originates from banks, regulators, or other formal financial institutions.

In a cross-sectional survey of 479 adults in Lebanon analysed with PLS-SEM, Sawaya et al. (2026) found that financial literacy, financial education, and access to financial information were significantly associated with personal finance management; access to information had the strongest association among the three predictors. The study concerns one crisis-affected national setting and does not establish causal effects or population-wide generalisability. Its relevance here is the overlap in constructs. The present study examines a different question: whether trust in financial institutions conditions the association between information access and financial management behaviour among the surveyed Jordanian adults.

2.4. Financial Management Behaviour

Financial management behavior (FMB) refers to the actions individuals undertake to organize and manage their financial resources, including budgeting, saving, borrowing, credit management, financial planning, and risk management (Antoniuk et al., 2024). Effective FMB has been associated with stronger saving, responsible borrowing, improved financial planning, and greater financial well-being (Lusardi & Mitchell, 2014; Shi et al., 2025; Imjai et al., 2025).

FMB is conceptually distinct from the financial capability factors examined in this study. Financial literacy, financial education, and access to financial information represent resources or capabilities that may support financial decision-making, whereas FMB represents the actions through which these capabilities are applied. This distinction is central to examining the conditions under which financial capabilities are more strongly associated with behavior.

The expansion of digital financial services has also increased attention to capabilities beyond conventional financial knowledge. Imjai et al. (2025), using questionnaire data from 145 Thai micropreneurs and PLS-SEM, reported significant relationships involving financial literacy, digital financial literacy, and financial planning and control. Their findings broaden the capability perspective, but business financial management among micropreneurs differs from personal financial management among adults. This evidence therefore provides

contextual support for a broader capability perspective while identifying digital financial literacy as a factor outside the present model.

Recent studies connect financial capability and financial management behaviour with broader financial outcomes. Sharma et al. (2026) analysed purposively sampled survey responses from 493 young professionals in Northern India using PLS-SEM. They reported positive associations of digital financial literacy, financial self-efficacy, and personal financial management behaviour with financial well-being; self-efficacy and management behaviour partially mediated the literacy–well-being relationship, both separately and serially. Öztürk et al. (2026) combined Bayesian-network analysis and structural equation modelling using data from 2405 students enrolled in open and distance education in Türkiye. They reported generational differences in pathways from financial cognition through behaviour to well-being. These studies identify mediating pathways and population differences, but their outcomes and samples differ from this study, and neither tests institutional trust as a moderator.

Using European data for 16,988 respondents, Tahir (2026) estimated logistic regression and mediation models and reported positive associations of subjective financial knowledge, objective financial literacy, and financial behaviour with financial resilience. Comfort with digital financial services partially mediated these relationships, and the reported findings remained stable across sensitivity, subsample, and endogeneity checks. The outcome is resilience rather than the financial-management measure used here, and the study does not test institutional-trust moderation; it nevertheless provides recent large-sample evidence that capability, behaviour, and access to digital services can be linked through intermediate mechanisms.

A 2026 PLS-SEM study of 175 employees at an Indonesian government agency by Risfandy et al. (2026) found that financial behaviour was negatively associated with presenteeism ($\beta = -0.223$, $t = 2.092$, $p = 0.037$), whereas the direct literacy association was not significant ($\beta = -0.132$, $p = 0.552$). Financial well-being mediated the literacy–presenteeism association ($\beta = -0.163$, $p = 0.038$), but did not mediate the behaviour relationship. Presenteeism is a workplace outcome rather than financial management behaviour, and the single-agency sample limits comparison; the study nevertheless illustrates that literacy and behaviour may relate differently to downstream outcomes.

2.5. Trust in Financial Institutions

Trust in financial institutions refers to individuals' confidence that financial institutions are competent, reliable, honest, and capable of acting responsibly toward customers and other stakeholders. Trust can reduce perceived uncertainty by increasing confidence in financial information, products, and institutional processes (Luhmann, 1979; Zucker, 1986).

Trust is particularly relevant in financial relationships because individuals cannot independently verify every aspect of institutional performance or financial information. Confidence in institutional competence and integrity may therefore influence willingness to engage with formal financial services and rely on institutionally provided information.

Abdelsalam et al. (2024) provide an important framework for understanding this relationship. Their findings indicate that societal trust is associated with lower banking market risk, particularly where formal institutional protections are weaker. Although their analysis operates primarily at the macro level, it demonstrates the broader importance of trust in financial environments.

The present study applies this reasoning to trust in financial institutions at the individual level. This concerns individuals' confidence in institutional competence, integrity, reliability, and customer orientation. Trust is particularly relevant in Jordan, where consumer protection and transparency initiatives have developed alongside continuing concerns about

financial inclusion and institutional confidence (Central Bank of Jordan, 2023; Association of Banks in Jordan, 2025; World Bank, 2025). Previous Jordanian evidence also associates trust with fintech adoption and digital banking outcomes (Al-Habashneh, 2026; Al-Majali & Al-Habashneh, 2025).

Trust may also be sensitive to experience with financial institutions and markets. Kosová and Michaelides (2026) analysed surveys of 610 investors directly exposed to losses following the failures of LCF, Lendy, and the Woodford Fund, alongside a comparison survey of 90 students who read about the failures. Among investors, the share reporting high or very high trust in financial markets fell from 69% before investment to 3% after the failures. Regression analyses also linked reported trust loss with lower willingness to invest in the future. The study concerns recalled trust in financial markets, regulators, and audit firms after specific UK corporate failures, rather than the financial-institution trust construct or moderation tested here. It therefore provides contextual evidence about trust and financial decisions, not a direct test of the present hypotheses.

Despite this evidence, limited research has examined whether institutional trust changes the strength of the relationships between financial capabilities and FMB. The present study therefore considers trust as a potential boundary condition rather than solely as an independent determinant of financial behaviour. Haran Rosen et al. (2026) used a trust module administered to 1286 respondents in the 2020 US Health and Retirement Study. They estimated logit models for retirement-account ownership and stockholding and median regressions for household net wealth, controlling for demographic, economic, health, cognitive, and risk-tolerance characteristics. A one-unit increase in trust in financial institutions was associated with 2.1- and 2.4-percentage-point increases in the probabilities of holding a retirement account and stocks, respectively, and with $17,800 higher net household wealth. The associations varied by race and ethnicity, and trust in government programmes showed a different pattern. These findings concern older US respondents and retirement outcomes and estimate associations rather than the capability–by-trust interactions tested here. They therefore motivate attention to the type of trust and outcome without establishing the present study's moderation hypotheses.

A different perspective emerges from Wang et al. (2026), who analyse nationally representative US household data. They find that financial literacy is negatively associated with fairness-based trust in banks, whereas financial education is positively associated with that trust. Their findings challenge the assumption that greater financial knowledge necessarily produces greater institutional confidence. More knowledgeable consumers may evaluate financial institutions more critically, making literacy and trust analytically distinct.

Together, these studies support examining trust alongside financial capabilities without assuming that the two necessarily increase together. The present study addresses a specific question: whether the associations of financial literacy, financial education, and information access with financial management behaviour vary according to institutional trust. This conditional relationship differs from examining either trust as an outcome of financial capability or its separate association with financial behaviour.

2.6. Theoretical Framework

The theoretical framework draws on institutional trust reasoning, informed by Abdelsalam et al. (2024). The study examines whether individuals' trust in financial institutions conditions the relationships between financial capabilities and financial management behaviour. Although this reasoning recognises that trust operates at different levels, the empirical analysis concerns individual perceptions of financial institutions and does not test a multilevel model.

2.6.1. Multi-Level Trust Framework

The multi-level trust perspective recognizes that trust operates across societal, organizational, and individual levels. At the societal level, formal institutional arrangements and generalized trust can reduce uncertainty and support financial participation (Shleifer & Vishny, 1997; La Porta et al., 1998). At the organizational level, trust reflects confidence in institutional competence, reliability, and intentions (Nooteboom, 1996; Gambetta, 1988). At the individual level, trust may influence financial decisions by reducing perceived uncertainty associated with financial institutions, products, and information (Das & Teng, 2004).

Building on Abdelsalam et al. (2024), the present study examines whether trust in financial institutions acts as an enabling condition that strengthens the relationships between financial literacy, financial education, access to financial information, and FMB. It does not directly test whether trust substitutes for weak formal institutions.

2.6.2. Integrating Institutional Trust and Financial Capability

Financial literacy, financial education, and access to financial information represent distinct capabilities relevant to financial management behaviour. Financial literacy concerns perceived financial knowledge and capability, financial education concerns perceived educational experiences and benefits, and information access concerns resources available for financial decisions. Institutional trust may condition the application of these capabilities by influencing confidence in financial institutions and the information they provide. This proposed conditional relationship forms the basis for the moderation hypotheses. The mechanisms through which trust might operate are offered as theoretical explanations rather than directly measured processes.

3. Hypotheses Development

The hypotheses specify theoretically proposed directional effects within the structural model as shown in Figure 1. The term "effect" refers to the modelled relationship between constructs and does not imply that causality is established by the cross-sectional survey design. The empirical findings are therefore interpreted as conditional associations consistent with the proposed relationships.

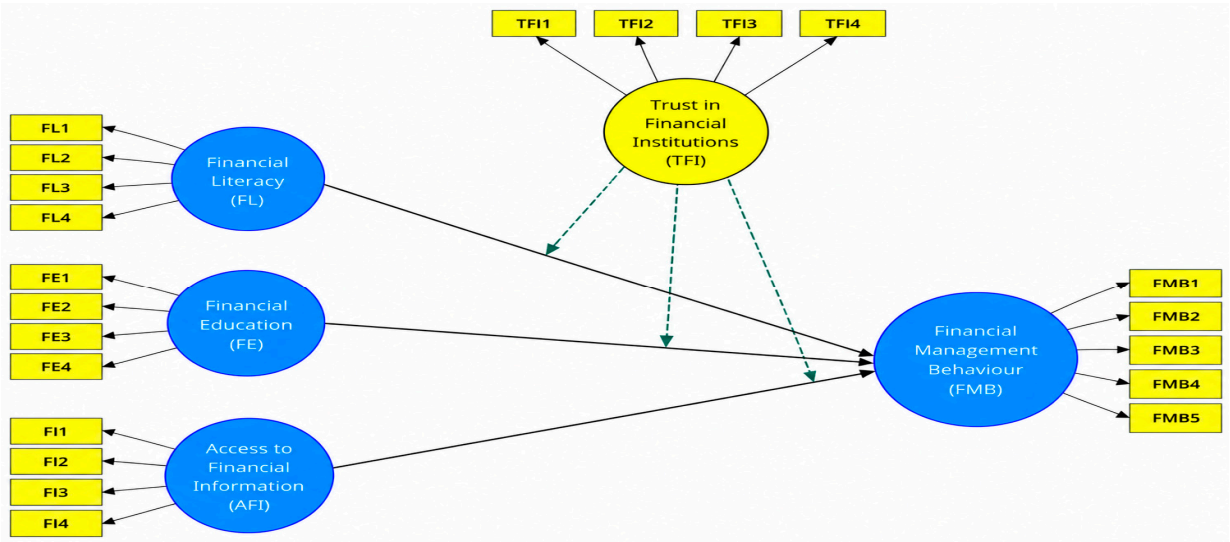


Figure 1. Conceptual model. Note: Arrows from each construct to its indicators represent measurement relationships. Solid arrows show the hypothesised direct relationships from FL, FE, and AFI to FMB (H1–H3). Dashed arrows from TFI to these paths represent the hypothesised moderation effects (H4–H6).

3.1. Direct Effects

3.1.1. Financial Literacy and Financial Management Behavior

Financial literacy provides individuals with the knowledge required to understand financial concepts, evaluate alternatives, and make informed decisions regarding saving, borrowing, budgeting, and investment. Individuals with stronger financial literacy are generally better able to assess financial risks, understand the consequences of financial choices, and manage financial resources more effectively.

Previous research provides consistent evidence that financial literacy is positively associated with financial behavior. Lusardi and Mitchell (2014) show that individuals with greater financial literacy tend to demonstrate stronger financial planning and decision-making. Financial literacy has also been associated with improved budgeting, emergency and retirement saving, and more responsible debt management (Atkinson & Messy, 2012; Lu et al., 2024). These findings suggest that greater financial knowledge provides individuals with an important capability that can support effective financial management.

In Jordan, financial literacy has received increasing policy attention through initiatives supported by the Central Bank and other financial-sector organizations. These initiatives reflect the broader expectation that improving financial knowledge can strengthen individuals' ability to manage their financial resources effectively. Based on the theoretical and empirical evidence, the following hypothesis is proposed:

H1. *Financial literacy has a positive effect on financial management behaviour.*

3.1.2. Financial Education and Financial Management Behavior

Financial education represents a structured process through which individuals acquire financial knowledge, practical skills, and greater awareness of financial decision-making. By improving individuals' understanding of budgeting, saving, credit, borrowing, and financial planning, financial education can strengthen their ability to manage financial resources more effectively.

Previous studies generally support a positive relationship between financial education and financial behavior. Lusardi and Mitchell (2014) emphasize the importance of financial knowledge and education for financial decision-making, while Sabri et al. (2022) found that individuals exposed to financial education demonstrate stronger budgeting behavior and more responsible use of credit. Soomro et al. (2023) similarly identify financial education as important for strengthening financial self-efficacy and coping behavior.

Financial education is also relevant in Jordan, where financial literacy and education initiatives have been promoted by the Central Bank and through programs such as those delivered by the Oasis Centres and other institutional partnerships. These initiatives seek to strengthen individuals' ability to make informed financial decisions and manage financial resources effectively. Accordingly, the following hypothesis is proposed:

H2. *Financial education has a positive effect on financial management behaviour.*

3.1.3. Access to Financial Information and Financial Management Behaviour

Access to timely, accurate, and relevant financial information can improve individuals' ability to evaluate financial alternatives and respond to changing financial conditions. Information regarding interest rates, fees, exchange rates, borrowing conditions, investment alternatives, and broader economic developments can support more informed financial decision-making.

Existing research indicates that access to financial information is associated with stronger financial management outcomes. Lusardi et al. (2020) emphasize the impor-

tance of relevant financial information for financial decision-making, while Klapper et al. (2015) demonstrate that access to financial knowledge and information can help individuals avoid costly financial mistakes and make more informed decisions.

Access to information is particularly important in an increasingly digital financial environment. In Jordan, platforms such as MyMal and Orange Money have expanded the channels through which individuals can obtain financial information and access financial services. Greater access to financial information may therefore help individuals compare products, evaluate financial conditions, and make more informed decisions regarding saving, borrowing, and financial planning.

From a behavioral perspective, access to relevant information may reduce uncertainty and improve individuals' ability to evaluate available financial options. Accordingly, individuals with stronger access to useful financial information are expected to demonstrate stronger financial management behavior. Therefore:

H3. *Access to financial information has a positive effect on financial management behaviour.*

3.2. Moderating Role of Trust in Financial Institutions

The direct relationships proposed above assume that financial literacy, financial education, and access to financial information provide individuals with resources that can support financial decision-making. However, the extent to which these capabilities are translated into financial behavior may depend on the institutional environment in which financial decisions are made.

The multi-level trust framework of Abdelsalam et al. (2024) provides the primary theoretical basis for this argument. Their findings show that trust is associated with financial outcomes and may become particularly important where institutional conditions increase uncertainty. Although the present study does not directly test whether trust substitutes for weak formal institutions, the underlying reasoning suggests that trust can reduce uncertainty and shape how individuals respond to financial institutions and information.

At the individual level, trust in financial institutions may therefore operate as a boundary condition affecting whether financial capabilities are translated into financial management behavior. When trust is high, individuals may be more willing to rely on institutionally provided information, use financial services, and apply financial knowledge within the formal financial system. When trust is low, individuals may remain reluctant to act on available knowledge or information, even when they possess relatively strong financial capabilities.

Accordingly, this study proposes that trust in financial institutions strengthens the relationships between financial literacy, financial education, access to financial information, and financial management behavior.

3.2.1. Trust as a Moderator of the Relationship Between Access to Financial Information and Financial Management Behavior

Access to financial information can only support financial decision-making when individuals consider that information sufficiently credible and reliable. This is especially relevant when financial information is provided by banks, regulators, digital financial platforms, or other formal institutions. Individuals may have access to extensive financial information but choose not to rely on it if they distrust its source.

Institutional trust can therefore influence the behavioral value of information access. When individuals trust financial institutions, they are more likely to regard institutionally provided information as credible, accurate, and useful for decision-making. This may increase the likelihood that available financial information is incorporated into saving, borrowing, budgeting, or investment decisions. Conversely, when trust is low, individuals

may question the reliability of the information and may be less willing to use it in financial decision-making.

This argument is consistent with the broader trust framework of Abdelsalam et al. (2024), which shows that trust can reduce perceptions of risk and uncertainty in financial settings. Al-Habashneh (2026) also identifies trust as an important factor associated with fintech adoption in Jordan, suggesting that institutional confidence can influence whether individuals engage with financial technologies and institutionally provided services.

The moderating role of trust may be particularly important during periods of economic uncertainty, when individuals face greater difficulty evaluating financial information and may place greater emphasis on source credibility. Accordingly, the positive association between access to financial information and financial management behavior is expected to be stronger among individuals who report higher trust in financial institutions.

H4. *Trust in financial institutions positively moderates the effect of access to financial information on financial management behaviour, such that the effect is stronger at higher levels of trust.*

3.2.2. Trust as a Moderator of the Relationship Between Financial Literacy and Financial Management Behavior

Financial literacy provides individuals with the knowledge required to understand financial concepts and evaluate financial choices. However, possessing financial knowledge does not necessarily guarantee that individuals will apply that knowledge within the formal financial system. The behavioral application of financial literacy may depend partly on whether individuals have confidence in the institutions through which financial products and services are provided.

When institutional trust is high, financially literate individuals may be more willing to use formal banking services, rely on financial products, and implement financial decisions based on their knowledge. Trust may reduce concerns about institutional competence, integrity, and reliability, thereby creating an environment in which financial knowledge can be applied more confidently.

When trust is low, however, financially knowledgeable individuals may remain cautious about using financial institutions or institutionally provided products. In such circumstances, knowledge alone may not translate as strongly into observable financial management behavior. The fact that some unbanked Jordanians identify distrust of financial institutions as a reason for remaining outside the formal financial system illustrates the potential importance of this institutional condition.

Abdelsalam et al. (2024) demonstrate that trust is particularly relevant when uncertainty regarding institutions is greater, while Haran Rosen et al. (2026) link institutional trust with financial behaviors related to retirement security. Taken together, this evidence suggests that trust may strengthen the behavioral application of financial literacy. Accordingly:

H5. *Trust in financial institutions positively moderates the effect of financial literacy on financial management behaviour, such that the effect is stronger at higher levels of trust.*

3.2.3. Trust as a Moderator of the Relationship Between Financial Education and Financial Management Behavior

Financial education provides individuals with knowledge and skills that may improve their ability to manage financial decisions. However, the effectiveness of financial education may also depend on whether individuals have confidence in the institutional environment in which those skills are subsequently applied.

This relationship requires a distinction between trust in the provider of financial education and trust in the financial institutions within which financial knowledge is used. The present study focuses on the latter. Individuals may receive financial education from universities, public institutions, community organizations, or other sources, but the practical application of acquired knowledge often requires interaction with banks, lenders, investment providers, or digital financial institutions.

When individuals trust financial institutions, they may be more willing to apply the knowledge gained through financial education when selecting financial products, borrowing, saving, or planning for the future. Greater trust may reduce concerns about institutional reliability and make the practical use of acquired financial skills more attractive. In contrast, distrust may reduce willingness to engage with formal financial services even among individuals who have received relevant financial education.

Abdelsalam et al. (2024) emphasize the broader importance of organizational and societal trust in shaping financial risk perceptions, while Al-Habashneh (2026) demonstrates that trust is associated with engagement with financial technology in Jordan. These findings support the expectation that institutional trust may strengthen the relationship between financial education and financial management behavior. Therefore:

H6. *Trust in financial institutions positively moderates the effect of financial education on financial management behaviour, such that the effect is stronger at higher levels of trust.*

4. Methodology

4.1. Research Design

This study adopts a quantitative, cross-sectional survey design, and employs deductive approach to examine the relationships among financial literacy, financial education, access to financial information, trust in financial institutions, and financial management behavior. Survey designs have been widely applied in financial behavior research, including studies conducted in uncertain economic contexts (Klapper et al., 2013; Mahendru et al., 2022; Sawaya et al., 2026). The design enables the simultaneous examination of direct and moderating relationships among the study constructs. Given its observational and cross-sectional nature, the study identifies associations rather than causal relationships.

4.2. Study Setting

Jordan provides a relevant context for examining financial behaviour during economic uncertainty. The Central Bank of Jordan reported gross foreign reserves of USD 25.5 billion at the end of December 2025, equivalent to around nine months of imports (Central Bank of Jordan, 2026), while the banking sector continues to develop and digitalise (Association of Banks in Jordan, 2025). Digital financial services such as Orange Money and the MyMal platform have expanded access to financial products and information (MyMal, 2025; Orange Jordan, 2025).

Financial literacy and inclusion initiatives are also promoted by the Central Bank and organisations including UN Women and German Sparkassenstiftung (Central Bank of Jordan, 2023; UN Women, 2025; German Sparkassenstiftung, 2025). At the same time, 13.9% of unbanked Jordanians identify distrust as a reason for not holding a formal financial account (World Bank, 2025). These conditions provide the study context; they do not make the convenience sample representative of Jordanian adults. Economic uncertainty is treated as the broader context of the study rather than as a construct included in the empirical model.

4.3. Population and Sampling

4.3.1. Population

The target population comprised Jordanian adults aged 18 years and above who make or influence personal or household financial decisions, including budgeting, saving, borrowing, investment, and the use of banking or digital financial services. The study focused on the general adult population because financial management behavior is relevant to everyday household decision-making rather than being limited to financially trained individuals.

4.3.2. Sample Size Justification

The final sample consisted of 535 usable responses. An initial sample benchmark of approximately 385 respondents was estimated using a conventional 95% confidence level and 5% margin of error. However, because non-probability sampling was employed, this calculation was used as a planning benchmark rather than as evidence of population representativeness.

Sample adequacy was also considered from a statistical power perspective. Based on Cohen's (1992) guidance, approximately 77 observations would be required to detect a medium effect size ($f^2 = 0.15$) with 80% power at a 5% significance level. The final sample of 535 therefore provided sufficient statistical power for the proposed PLS-SEM analysis and moderation testing (Hair et al., 2019).

4.3.3. Sampling Strategy

A non-probability convenience sampling approach, supplemented by snowball sampling, was used because a comprehensive and accessible sampling frame of Jordanian adults was not available for the study and the target population was geographically dispersed. Online distribution provided a practical means of reaching respondents across different governorates. This approach is consistent with previous financial behavior research conducted in emerging-market and Middle Eastern contexts (Sawaya et al., 2026; Aoun et al., 2026; Al-Habashneh, 2026).

To broaden participation, the questionnaire was distributed through multiple digital channels, including Facebook, LinkedIn, WhatsApp, university networks, professional associations, and community organizations. Participants were also encouraged to share the survey with other eligible respondents. Demographic participation was monitored during data collection, with additional efforts made to reach underrepresented groups and obtain coverage across different governorates.

Despite these efforts, the non-probability design may introduce selection bias, particularly toward younger, highly educated, and digitally connected respondents. The findings are therefore interpreted as reflecting the surveyed sample rather than being statistically representative of the Jordanian adult population.

Recruitment through social media, university networks, professional associations, and community organisations may have favoured individuals with stronger digital access and connections to educational or professional networks. Snowball recruitment may also have increased similarity among respondents within these networks. Although multiple channels were used, their respective contributions to the achieved sample are not quantified in the present reporting. The diversity of distribution channels should therefore not be interpreted as evidence of balanced recruitment or population representativeness.

4.3.4. Data Collection Procedure

Data were collected in July 2026 using a Qualtrics online survey available in Arabic and English to facilitate participation across the target population (Qualtrics, 2025). Participants were recruited through social media, university networks, professional organizations,

and community organizations. Ethical approval was obtained from the Research Ethics Committee, and informed consent was obtained electronically before participation. Quality controls included attention checks and reverse-coded items, and the average completion time was approximately 10–12 min.

A total of 682 individuals initiated the questionnaire. After incomplete responses and those failing the specified quality checks were excluded, 535 usable responses remained, representing a usable completion rate of 78.5% among those who initiated the survey.

4.3.5. Sample Characteristics and Limitations

Table 1 presents the demographic characteristics of the sample. The achieved sample was predominantly young and highly educated: 79.5% of respondents were aged 35 or younger, and 95.9% held tertiary qualifications. These characteristics limit the applicability of the findings to older adults and those with lower educational attainment. Amman accounted for 43.9% of respondents, raising the possibility that the findings disproportionately reflect capital-city financial experiences, institutional access, and information environments. Governorate residence alone, however, does not establish whether respondents lived in urban or rural areas. The sample should therefore be understood as a non-probability sample of online respondents rather than a representative cross-section of Jordanian adults.

Table 1. Sample Demographic Characteristics.

Category	Subcategory	Frequency	Percentage
Gender	Female	224	41.9%
	Male	311	58.1%
Age	18–25 years	208	38.9%
	25–35 years	217	40.6%
	35–45 years	68	12.7%
	>45 years	42	7.8%
Marital Status	Single	389	72.7%
	Married	146	27.3%
Educational Level	High School	22	4.1%
	Bachelor's Degree	176	32.9%
	Master's Degree	318	59.4%
	Doctorate	19	3.6%
Governorate	Amman	235	43.9%
	Zarqa	99	18.5%
	Irbid	78	14.6%
	Aqaba	36	6.7%
	Other Governorates	87	16.3%

The age categories describe respondents' age at the time of the survey and are not treated as generational cohorts. Their boundaries do not correspond directly to Generation Z or Generation X, and the open-ended category above 45 years encompasses multiple birth cohorts. The demographic distribution also limits the interpretation of the pooled findings. In particular, the high proportion of tertiary-educated respondents means that the results primarily reflect this educational profile and provide limited evidence concerning adults with lower educational attainment.

4.4. Instrument Development

A structured questionnaire was used to collect demographic information and measure the five study constructs. Construct items were rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Appendix A presents the item wording.

Financial literacy (FL) was measured using four self-report items addressing understanding of interest rates and inflation, investment knowledge, budgeting capability, and confidence in managing savings and investments. The measure therefore captures perceived financial knowledge and capability rather than performance on an objective financial knowledge test.

Financial education (FE) was measured using four items addressing the perceived adequacy of school-based financial education and its perceived contribution to decision-making, financial confidence, and budgeting skills. The measure captures respondents' evaluations of financial education and its benefits rather than an independently verified record of educational participation.

Access to financial information (AFI) was measured using four items covering ease of obtaining information, its perceived contribution to saving and decision-making confidence, and the use of online financial comparison tools. The measure consequently encompasses perceived information access, use, and usefulness.

Financial management behaviour (FMB) was measured using four items covering regular saving, responsible debt and credit management, pursuit of long-term financial goals, and informed borrowing decisions. These items capture self-reported financial practices rather than independently observed behaviour.

Trust in financial institutions (TFI) was measured using six items developed for this study, drawing on the competence, integrity, and benevolence dimensions discussed by Mayer et al. (1995) and the trust measurement approach of Gefen et al. (2003). These sources provided conceptual and measurement foundations; the resulting six-item instrument should not be treated as a previously validated Jordanian financial-sector scale.

The items address perceived technical expertise and understanding of economic conditions (TFI1–TFI2), transparency and information accuracy (TFI3–TFI4), and concern for customers and depositors (TFI5–TFI6). This mapping explains the intended content coverage rather than establishing three empirically validated subdimensions. In the reported model, TFI was assessed as a single construct.

A pilot involving 20 professionals was conducted before the main survey. However, the present reporting does not specify the participants' expertise, the review criteria, item-level feedback, resulting revisions, or separate pilot reliability estimates. The pilot therefore cannot, on the information reported, establish comprehensive content validity or contextual validation.

Table 2 summarises the conceptual foundations, contextualisation, intended content coverage, pilot assessment, and main-sample measurement assessment of the TFI measure, distinguishing the documented evidence from the limitations of the validation process.

Table 2. Development and Assessment of the Trust in Financial Institutions Measure.

Stage	Documented Basis or Procedure	Evidence and Qualification
Conceptual foundation	Mayer et al. (1995) and Gefen et al. (2003) informed the trust construct and item development.	Conceptual grounding does not establish validation of the resulting Jordanian instrument.
Contextualisation	Six items refer to banks and financial institutions in Jordan.	The wording predominantly concerns banks; coverage of other institution types is limited.

Table 2. *Cont.*

Stage	Documented Basis or Procedure	Evidence and Qualification
Intended content coverage	TFI1–TFI2 address competence; TFI3–TFI4 address integrity; TFI5–TFI6 address benevolence.	This is a conceptual mapping; separate dimensions were not validated in the reported model.
Pilot assessment	A pilot involving 20 professionals is reported.	Participant expertise, assessment criteria, feedback, revisions, and pilot reliability estimates are not specified.
Main-sample assessment	Internal consistency, convergent validity, discriminant validity, and loadings are reported	These assessments provide sample-specific measurement evidence and do not independently establish content validity.

4.5. Data Analysis

Data were analysed using partial least squares structural equation modelling (PLS-SEM) in SmartPLS (Hair et al., 2019). The analysis comprised measurement-model assessment followed by structural-model evaluation. The original results report 5000 bootstrap resamples. Additional sensitivity checks based on published *p*-values are explicitly distinguished below from estimations requiring respondent-level data.

Measurement-model assessment considered internal consistency, convergent validity and discriminant validity, including Cronbach's alpha, composite reliability, average variance extracted and the heterotrait–monotrait ratio (Henseler et al., 2015). Structural inference used 5000 bootstrap resamples and collinearity assessment used variance inflation factors.

Measurement model assessment included internal consistency (Cronbach's alpha, composite reliability), convergent validity (average variance extracted), and discriminant validity (Heterotrait–Monotrait ratio) (Henseler et al., 2015). Structural model evaluation used bootstrapping with 5000 resamples to test path coefficient and moderation effect significance. Collinearity was assessed using Variance Inflation Factor.

Measurement model assessment distinguished internal consistency reliability, convergent validity, and discriminant validity. Internal consistency was evaluated using Cronbach's alpha, rho_A, and composite reliability (rho_C). Convergent validity was assessed through standardised indicator loadings and average variance extracted (AVE), while discriminant validity was evaluated using the heterotrait–monotrait ratio (HTMT). These assessments address different aspects of measurement quality and were considered jointly rather than relying on a single statistic (Hair et al., 2019; Henseler et al., 2015).

PLS-SEM does not require multivariate normally distributed data, and statistical inference was conducted using non-parametric bootstrapping with 5000 resamples. Nevertheless, this does not remove the value of reporting distributional characteristics: descriptive statistics and normality diagnostics provide information about response patterns and potential departures from normality. Normality assessment and measurement reliability therefore address separate methodological questions.

Moderation concerns whether the relationship between a predictor and financial management behaviour varies according to trust in financial institutions. A complete moderation specification includes the predictor main effects, the moderator main effect, and the corresponding predictor–moderator interaction terms. The interaction coefficients represent changes in the predictor–outcome slopes as institutional trust increases. In this specification, predictor main effects are conditional on the reference value of trust; where trust is centred, this reference corresponds to its mean. Consequently, a reduction in a predictor's main-effect coefficient is not a prerequisite for moderation.

5. Results

5.1. Sample Profile

Table 1 presents the demographic characteristics of the 535 respondents. Women represented 41.9% of the sample and men 58.1%. Most respondents were aged 18–25 (38.9%) or 25–35 (40.6%), while 12.7% were aged 35–45 and 7.8% were over 45. Regarding education, 4.1% had completed high school, 32.9% held a bachelor's degree, 59.4% held a master's degree, and 3.6% held a doctorate. Geographically, 43.9% were from Amman, 18.5% from Zarqa, 14.6% from Irbid, 6.7% from Aqaba, and 16.3% from other governorates.

5.2. Measurement Model Assessment

Table 3 presents reliability and convergent validity results. All constructs demonstrated satisfactory internal consistency, with Cronbach's alpha, rho_A, and composite reliability (rho_C) exceeding the recommended threshold of 0.70. AVE values were above 0.50 for all constructs, supporting convergent validity (Hair et al., 2019).

Table 3. Construct Reliability and Convergent Validity.

Construct	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	AVE
Financial Education (FE)	0.851	0.862	0.893	0.677
Access to Financial Information (AFI)	0.873	0.879	0.913	0.739
Financial Literacy (FL)	0.795	0.812	0.864	0.614
Financial Management Behavior (FMB)	0.846	0.851	0.893	0.676
Trust in Financial Institutions (TFI)	0.879	0.882	0.914	0.724

Discriminant validity was assessed using the Heterotrait–Monotrait ratio (HTMT). As shown in Table 4, all HTMT values were below the conservative threshold of 0.85, supporting discriminant validity among the constructs (Henseler et al., 2015). VIF values were below 5, indicating no serious multicollinearity concerns.

Table 4. Heterotrait–Monotrait Ratio (HTMT).

Construct Pair	HTMT Value	Threshold (<0.85)	Status
FE ↔ AFI	0.229	0.85	Passed
FL ↔ FE	0.368	0.85	Passed
FL ↔ AFI	0.271	0.85	Passed
FMB ↔ FE	0.451	0.85	Passed
FMB ↔ AFI	0.529	0.85	Passed
FMB ↔ FL	0.498	0.85	Passed
TFI ↔ FE	0.277	0.85	Passed
TFI ↔ AFI	0.319	0.85	Passed
TFI ↔ FL	0.265	0.85	Passed
TFI ↔ FMB	0.423	0.85	Passed

Note: All HTMT values are below the 0.85 threshold, supporting discriminant validity.

5.3. Structural Model Assessment

Bootstrapping with 5000 resamples was used to assess the structural model. The model explained 38.9% of the variance in financial management behaviour ($R^2 = 0.389$), leaving 61.1% unexplained by the specified model.

Table 5 presents the direct relationships. Financial literacy was positively associated with financial management behaviour ($\beta = 0.218$, $t = 5.589$, $p = 0.001$, $f^2 = 0.078$), supporting H1. Financial education was also positively associated with financial management behaviour ($\beta = 0.231$, $t = 5.775$, $p = 0.001$, $f^2 = 0.085$), supporting H2. Access to financial information had the largest reported direct coefficient ($\beta = 0.298$, $t = 8.514$, $p = 0.001$, $f^2 = 0.167$), supporting H3.

Table 5. Structural Model Results: Direct Effects.

Hypothesis	Path	Original Sample (O)	Sample Mean (M)	Standard Deviation	T Statistics	*p* Values	f-Square	Supported?
H1	FL → FMB	0.218	0.220	0.039	5.589	0.001	0.078	Yes
H2	FE → FMB	0.231	0.233	0.040	5.775	0.001	0.085	Yes
H3	AFI → FMB	0.298	0.299	0.035	8.514	0.001	0.167	Yes

Table 6 presents the interaction results. The interaction between access to financial information and trust in financial institutions was positive ($\beta = 0.157$, $t = 4.121$, $p = 0.001$, $f^2 = 0.118$), supporting H4. The financial literacy–trust interaction was also positive ($\beta = 0.134$, $t = 3.168$, $p = 0.002$, $f^2 = 0.087$), supporting H5.

Table 6. Structural Model Results: Moderation Effects.

Hypothesis	Path	Original Sample (O)	Sample Mean (M)	Standard Deviation	T Statistics	*p* Values	f-Square	Supported?
H4	AFI × TFI → FMB	0.157	0.157	0.0381	4.121	0.001	0.118	Yes
H5	FL × TFI → FMB	0.134	0.134	0.0419	3.168	0.002	0.087	Yes
H6	FE × TFI → FMB	0.109	0.109	0.0545	1.980	0.048	0.058	Borderline support

Note: The value originally displayed as $p = 0.000$ is reported as $p < 0.001$. H6 meets the conventional 5% significance threshold but provides borderline evidence. Statistical significance does not establish robustness across alternative specifications.

The financial education–trust interaction was positive ($\beta = 0.109$, $t = 1.980$, $p = 0.048$, $f^2 = 0.058$). Although it meets the conventional 5% significance threshold, its *p*-value is close to that threshold and provides borderline evidence for H6. This finding warrants greater caution than the interactions involving financial literacy and access to financial information.

The positive interaction coefficients are consistent with stronger estimated capability–behaviour slopes at higher levels of institutional trust in the reported model as shown in Figure 2. Interaction f^2 values are 0.118 for access to information, 0.087 for financial literacy and 0.058 for financial education. Their numerical ordering does not establish statistically significant differences between the interaction effects. Importantly, the available report does not show direct-path coefficients before and after interaction inclusion; such coefficient changes cannot be reconstructed from the published summary tables.

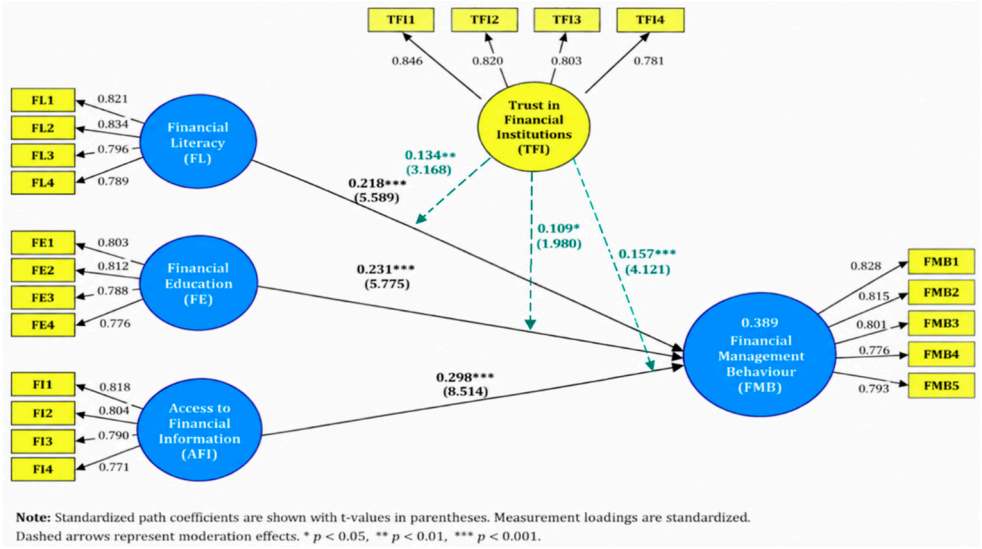


Figure 2. Reported structural results.

5.4. Robustness and Statistical Sensitivity

A multiple-testing sensitivity check was conducted using the three published moderation *p*-values. Table 7 present Bonferroni-adjusted *p*-values were calculated as min(3p, 1), and Holm step-down adjusted *p*-values were obtained by ordering the three *p*-values. These calculations do not require respondent-level data. They test sensitivity to multiplicity adjustment only, not to omitted variables, alternative estimators, controls or subsamples. The reported $p < 0.001$ for H4 implies an adjusted Bonferroni $p < 0.003$ and Holm $p < 0.003$; the exact values cannot be recovered from a rounded inequality.

Table 7. Bonferroni and Holm Adjustments for the Moderation Effects.

Moderation	Original *p*	Bonferroni *p*	Holm *p*	Bonferroni 5%	Holm 5%
H4 AFI × TFI	<0.001	<0.003	<0.003	Significant	Significant
H5 FL × TFI	0.002	0.006	0.004	Significant	Significant
H6 FE × TFI	0.048	0.144	0.048	Not significant	Significant

The financial education interaction is therefore fragile: it meets the conventional 5% criterion and Holm correction but not the conservative Bonferroni correction. The other two interactions remain statistically significant under both corrections. No model with demographic controls, alternative estimator, or subgroup comparison has been re-estimated from the manuscript alone.

6. Discussion

6.1. Discussion of Findings

This study examined the relationships between financial literacy, financial education, access to financial information, and financial management behaviour, while considering trust in financial institutions as a moderating factor. Within this predominantly young, tertiary-educated online sample, all three capability dimensions were positively associated with financial management behaviour. This pattern is consistent with the positive associations reported by Jabbour Al Maalouf and Sfeir (2026) and Sawaya et al. (2026), although their populations and contexts differ. The cross-sectional results should also be read alongside Białowolski et al. (2026), whose longitudinal analyses showed that associations between knowledge and behaviour narrowed under longer-difference and cross-lagged

specifications. Tan et al. (2025) reported an indirect association between financial education and budgeting behaviour through budgeting attitudes and intentions, while Gerrans et al. (2025) found that participation in a financial education unit and confidence in searching for financial information were associated with transitions between financial-literacy profiles. These findings suggest mechanisms that may merit further study, but they do not explain the moderation results reported here: the present model does not test attitudes, norms, intentions, or information-search confidence as mediators, and confidence in searching for information is distinct from access to financial information. The different student samples and outcomes also limit direct comparison with the present study. Recent employee-focused evidence from Indonesia likewise found a significant direct association between financial behaviour and presenteeism but an indirect literacy association through financial well-being (Risfandy et al., 2026); the different outcome and institutional setting caution against treating it as a direct replication.

Access to financial information showed the strongest direct association with financial management behavior. This highlights the importance of timely and accessible financial information in supporting everyday financial decisions. In an increasingly digital financial environment, individuals may have greater opportunities to compare financial products, evaluate alternatives, and obtain information relevant to saving, borrowing, and financial planning.

More importantly, the reported interactions suggest that the relationships were stronger at higher levels of institutional trust, although evidence for financial education was borderline. The strongest moderation effect occurred for access to financial information. A plausible explanation is that information supplied through financial institutions and related channels becomes more actionable when individuals consider its source credible and reliable. Recent studies provide context for this interpretation: Haran Rosen et al. (2026) associated institutional trust with retirement-related financial behaviours, while Wang et al. (2026) found that financial literacy and financial education had different associations with fairness-based trust in banks. Neither study tests the predictor-by-trust interactions examined here; they therefore offer contextual comparison rather than direct confirmation of the moderation results.

Trust also strengthened the relationship between financial literacy and financial management behavior. Financial knowledge may provide individuals with the capacity to evaluate financial alternatives, but its application can still depend on confidence in the institutions through which financial products and services are accessed. The moderation effect for financial education was borderline significant ($p = 0.048$), warranting cautious interpretation. One possible explanation is that financial education develops knowledge and skills that may be partly transferable across institutional settings and therefore less dependent on current levels of institutional trust.

The structural relationships should be interpreted in light of the absence of demographic and socioeconomic controls. Financial capabilities, institutional trust, and financial management behaviour may share antecedents, including age, education, income, and financial circumstances. Consequently, the reported coefficients may partly reflect differences in these characteristics rather than relationships attributable solely to the focal constructs. The findings describe relationships within the specified model and surveyed sample; they do not establish effects independent of potential confounding factors.

The model explained 38.9% of the variance in financial management behaviour ($R^2 = 0.389$), leaving 61.1% unexplained by the specified constructs. Financial capabilities and institutional trust therefore provide a partial explanation of behaviour within the surveyed sample. Additional factors may be relevant: income can constrain opportunities to save and manage debt; financial stress may shape short-term financial priorities; digital

financial literacy may influence the evaluation and use of online financial services; and risk tolerance may affect borrowing and investment decisions. These are plausible explanations rather than relationships tested in this study. The unexplained variance may also reflect measurement error and other unobserved influences, so it cannot be attributed entirely to omitted variables. Future research should examine whether incorporating these factors improves explanatory and predictive performance.

The central theoretical contribution concerns the conditions under which financial capabilities are associated with financial management behaviour. The reported interactions are consistent with the proposition that institutional trust may strengthen the relationships involving financial literacy and access to financial information. Evidence for the financial education interaction is weaker and warrants caution. These findings suggest that financial capability and institutional trust should be considered jointly when explaining financial behaviour. Building on the institutional trust reasoning of Abdelsalam et al. (2024), the study offers individual-level evidence from Jordan without directly testing a multilevel model of trust or the mechanisms underlying the relationships.

6.2. Theoretical Implications

The study draws on the institutional trust reasoning of Abdelsalam et al. (2024) to examine conditional relationships at the individual level. Whereas their research concerns trust and bank market risk across countries, the present study examines whether individuals' trust in financial institutions moderates the relationships between financial capabilities and financial management behaviour. This provides a complementary application of trust reasoning rather than a direct test or validation of a multilevel framework.

The reported interactions suggest that institutional trust may be relevant to understanding when financial capabilities are more strongly associated with behaviour. The evidence is clearer for financial literacy and access to financial information, while the financial education interaction is borderline and warrants caution. The findings therefore support considering institutional confidence alongside individual capabilities, without assuming that knowledge, educational experiences, or information access necessarily translate into effective financial management.

Institutional trust could influence whether individuals regard financial information as credible or feel willing to engage with financial institutions. These are plausible explanations, but neither mechanism was directly measured. The theoretical implications consequently concern the observed conditional relationships within the surveyed sample, subject to potential confounding and common method bias, rather than established causal processes.

6.3. Practical Implications

The findings have implications for policymakers, financial institutions, and financial education providers. For policymakers, financial literacy and inclusion initiatives may be more effective when accompanied by measures that strengthen institutional credibility, transparency, accountability, and consumer protection. Existing initiatives by the Central Bank of Jordan aimed at financial literacy and consumer protection provide an important foundation for this approach (Central Bank of Jordan, 2023).

For financial institutions, the particularly strong moderation of the information access relationship highlights the importance of providing financial information that is accurate, understandable, transparent, and credible. Institutional competence, consistent communication, customer protection, and responsiveness can help strengthen trust and may encourage individuals to use available financial information more effectively.

Financial education providers should also consider institutional trust when designing programs. Education should not focus exclusively on financial concepts but should also

help individuals evaluate financial information, understand financial products, and identify reliable sources. Programs implemented by organizations such as UN Women and German Sparkassenstiftung demonstrate the growing emphasis on financial capability and resilience in Jordan (UN Women, 2025; German Sparkassenstiftung, 2025).

Digital financial service providers also have an important role. As platforms such as MyMal and Orange Money expand access to financial services and information, clear communication, transparency, privacy protection, and accessible customer support can contribute to user confidence (MyMal, 2025; Orange Jordan, 2025). This is particularly relevant given the strong interaction observed between information access and institutional trust.

6.4. Implications for Jordan and Other Contexts

Jordan combines relative monetary and financial stability with continuing exposure to regional and economic uncertainty. Within this context, institutional trust may be particularly relevant to how individuals respond to financial information and apply their financial capabilities. Evidence that distrust remains a reason for financial exclusion further reinforces the importance of considering trust alongside access and financial education (World Bank, 2025).

Although the findings are specific to the surveyed Jordanian sample, they raise the possibility that similar relationships may operate in other countries experiencing economic or institutional uncertainty. The strength of these relationships may nevertheless vary according to financial system development, institutional quality, economic conditions, and levels of public trust. Comparative research across different institutional settings would therefore provide an important extension of the present study.

7. Conclusions

This study examined whether trust in financial institutions moderates the relationships between financial literacy, financial education, access to financial information, and financial management behavior in Jordan. The findings show that all three financial capability dimensions are positively associated with financial management behavior, with access to financial information demonstrating the strongest association. Trust in financial institutions also positively moderates each relationship, although the strength of the moderation varies across the three capability dimensions.

The study contributes to the financial behavior literature by demonstrating that institutional trust represents an important boundary condition in the relationship between financial capability and financial management behavior. In particular, the findings extend the relevance of Abdelsalam et al.'s (2024) multi-level trust perspective to individual financial behavior. Rather than assuming that financial knowledge, education, and information automatically translate into effective financial behavior, the results suggest that their relationships with financial management behavior are stronger when institutional trust is higher.

These findings have practical implications for policymakers, financial institutions, and financial education providers. Initiatives designed to strengthen financial capability should therefore be accompanied by efforts to enhance institutional credibility, transparency, consumer protection, and access to reliable financial information. Within the limitations of the cross-sectional and non-probability research design, the study highlights institutional trust as an important contextual factor in understanding financial management behavior during economic uncertainty.

These findings concern the surveyed respondents and should not be generalised to all Jordanian adults. Their relevance to older, less educated, rural, or less digitally connected populations remains to be established. The practical implications should therefore be treated

as considerations for developing and evaluating financial capability initiatives, rather than population-wide policy conclusions.

Limitations and Future Research

This study has several limitations that provide opportunities for future research. First, the cross-sectional design does not permit causal inference or establish the direction of the relationships examined. Longitudinal or experimental studies could investigate how changes in institutional trust influence financial management behavior over time and address potential reverse relationships.

Second, the use of convenience and snowball sampling resulted in a sample that was relatively young, highly educated, and digitally connected. Although the sample size provided adequate statistical power, it is not statistically representative of the Jordanian adult population. Future studies should use probability-based or more diverse sampling approaches, particularly to include older, less educated, rural, and less digitally connected populations. Third, all five constructs were measured through self-reports obtained from the same respondents in a single survey wave. This creates a risk of social desirability and common method bias, as shared response tendencies, consistency motives, or similarities in item wording may contribute to the observed relationships. Internal consistency and discriminant validity assessments do not rule out this source of bias. Without a formal common-method-bias diagnostic, the extent to which method effects influence the direct and interaction coefficients remains uncertain. In addition, financial literacy reflects respondents' perceived knowledge and capabilities rather than objective financial knowledge. Future research should combine self-reported measures with objective financial literacy assessments, independently observed financial behaviours, or temporally separated measurements.

Fourth, trust in financial institutions was examined as an overall construct. However, individuals may distinguish between trust in the Central Bank, commercial banks, fintech providers, and other financial institutions. Future studies could examine these dimensions separately and investigate how institutional trust interacts with broader societal trust, extending the multi-level perspective of Abdelsalam et al. (2024).

Finally, the study did not capture all factors that may influence financial management behavior, including income, employment, household size, financial stress, risk tolerance, and digital literacy. Future studies could incorporate these variables and directly measure potential mechanisms linking institutional trust and financial capabilities with behaviour, such as perceived information credibility and willingness to engage with financial institutions. Comparative research across countries with different levels of economic uncertainty and institutional development would also help determine whether the moderating role of trust varies across contexts.

Author Contributions: Conceptualization, K.H., K.A.-H., A.E. and A.M.A.T.; methodology, K.H., K.A.-H., A.E. and A.M.A.T.; software, K.H., K.A.-H., A.E. and A.M.A.T.; validation, K.H., K.A.-H., A.E. and A.M.A.T.; formal analysis, K.H., K.A.-H., A.E. and A.M.A.T.; investigation, K.H., K.A.-H., A.E. and A.M.A.T.; resources, K.H., K.A.-H., A.E. and A.M.A.T.; data curation, K.H., K.A.-H., A.E. and A.M.A.T.; writing—original draft preparation, K.H., K.A.-H., A.E. and A.M.A.T.; writing—review and editing, K.H., K.A.-H., A.E. and A.M.A.T.; visualization, K.H., K.A.-H., A.E. and A.M.A.T.; supervision, K.H., K.A.-H., A.E. and A.M.A.T.; project administration, K.H., K.A.-H., A.E. and A.M.A.T.; funding acquisition, A.E. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the deanship of the scientific research ethical committee, Mut'ah University (Ethical approval code: MU2026-13; 21 March 2026).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data available upon request from authors.

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

Appendix A. Survey Items

Table A1. Financial Literacy (FL).

Item Code	Survey Item
FL1	I understand the concepts of interest rates and inflation.
FL2	I am knowledgeable about investment options and their associated risks.
FL3	I can create and follow a personal budget effectively.
FL4	I am confident in my ability to manage my savings and investments.

Table A2. Financial Education (FE).

Item Code	Survey Item
FE1	I received adequate financial education in school.
FE2	Financial education has helped me make better financial decisions.
FE3	I feel more confident in managing my personal finances due to financial education.
FE4	Financial education has improved my budgeting skills.

Table A3. Access to Financial Information (FI).

Item Code	Survey Item
AFI1	I have easy access to financial information when I need it.
AFI2	Access to financial information has improved my savings habits.
AFI3	I use online tools to compare financial products and services.
AFI4	I feel confident in making financial decisions due to the information I access.

Table A4. Financial Management Behavior (FMB).

Item Code	Survey Item
FMB1	I save a portion of my income on a regular basis.
FMB2	I avoid high-interest debt and manage my credit responsibly.
FMB3	I have set long-term financial goals and actively work towards them.
FMB4	I make informed decisions when borrowing money or taking out loans.
FMB5	I regularly monitor my income and expenses to ensure that my spending remains within my budget.

Table A5. Trust in Financial Institutions (TFI).

Item Code	Survey Item
TFI1	Jordanian banks have the technical expertise to manage my money effectively.
TFI2	Financial institutions in Jordan understand the economic challenges facing the country.
TFI3	Banks in Jordan are transparent about their financial operations.
TFI4	I believe the financial information provided by Jordanian banks is accurate.

References

Abdelsalam, O., Chantziaras, A., Joseph, N. L., & Tsileponis, N. (2024). Trust matters: A global perspective on the influence of trust on bank market risk. *Journal of International Financial Markets, Institutions & Money*, *92*, 101959. [CrossRef]

Al-Habashneh, A. G. (2026). Exploring the link between fintech adoption and sustainable performance in the banking sector. *International Journal of Productivity and Quality Management*, *47*(4), 465–484. [CrossRef]

Al-Majali, M. M., & Al-Habashneh, A. G. (2025). Digital transformation in Jordanian commercial banks: The role of trust, digital readiness, and interactivity. *Journal of Financial Services Marketing*, *30*(2), 112–128.

Antoniuk, D. S., Vakaliuk, T. A., Didkivskyi, V. V., Vizghalov, O. Y., Olinyk, O. V., & Yanchuk, V. M. (2024, May 14). *Enhancing personal financial management skills through a machine learning-powered business simulator*. AREdu 2024: 7th International Workshop on Augmented Reality in Education (pp. 198–205), Kryvyi Rih, Ukraine.

Aoun, D., Rahal, R., Sfeir, L., & Jabbour Al Maalouf, N. (2026). Understanding millennials' financial behavior: The role of fintech adoption, financial literacy, and the mediating effect of financial attitudes in a crisis-affected emerging economy. *International Journal of Financial Studies*, *14*(2), 35. [CrossRef]

Association of Banks in Jordan. (2025). *Banking Impact Index: Annual report 2025*. Association of Banks in Jordan.

Atkinson, A., & Messy, F.-A. (2012). *Measuring financial literacy: Results of the OECD/International network on financial education (INFE) pilot study* (OECD Working Papers on Finance, Insurance and Private Pensions, No. 15). OECD.

Bellocchi, A., & Travaglini, G. (2025). Financial literacy and financial education: The role of irreversible costs. *Economics Letters*, *247*, 112173. [CrossRef]

Białowolski, P., Cwynar, A., & Węziak-Białowolska, D. (2026). Revisiting the financial knowledge–behavior link: Longitudinal, bidirectional, and item-level evidence on financial deliberation. *Journal of Consumer Affairs*, *60*(3), e70075. [CrossRef]

Central Bank of Jordan. (2023). *National financial inclusion strategy 2023–2028*. Available online: https://www.cbj.gov.jo/EBV4.0/Root_Storage/EN/National_Financial_Inclusion_Action_Plans/National_Financial_Inclusion_Strategy_(2023-2028).pdf (accessed on 12 October 2026).

Central Bank of Jordan. (2026). *Recent monetary & economic developments in Jordan (January 2026)*. Available online: https://www.cbj.gov.jo/ebv4.0/root_storage/en/eb_list_page/january_2026-0.pdf (accessed on 12 October 2026).

Chhillar, N., Sharma, K., & Arora, S. (2025). Exploring the role of digital financial literacy and personal financial behavior in shaping financial stress and well-being in the digital age. *Acta Psychologica*, *259*, 105308. [CrossRef] [PubMed]

Cohen, J. (1992). A power primer. *Psychological Bulletin*, *112*(1), 155–159. [CrossRef] [PubMed]

Das, T. K., & Teng, B.-S. (2004). The risk-based view of trust: A conceptual framework. *Journal of Business Psychology*, *19*, 85–116. [CrossRef]

FaXing, L., & Loang, O. K. (2024). Green investing and financial education: The case of China's A-share market. In R. El Khoury (Ed.), *Technology-driven business innovation* (pp. 29–41). Springer. [CrossRef]

Fernandes, D., Lynch, J. G., Jr., & Netemeyer, R. G. (2014). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, *60*(8), 1861–1883. [CrossRef]

Gambetta, D. (1988). Can we trust trust? In D. Gambetta (Ed.), *Trust: Making and breaking cooperative relations* (pp. 213–237). Basil Blackwell.

Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, *27*(1), 51–90. [CrossRef]

German Sparkassenstiftung. (2025). *Financial resilience project: Jordan annual report*. German Sparkassenstiftung.

Gerrans, P., Hoffmann, A. O. I., McNair, S. J., & Pallant, J. I. (2025). More than objective knowledge: Exploring heterogeneity in individuals' response to a financial education initiative across multiple financial literacy domains. *Pacific-Basin Finance Journal*, *90*, 102669. [CrossRef]

Guiso, L., Sapienza, P., & Zingales, L. (2008). Trusting the stock market. *Journal of Finance*, *63*, 2557–2600. [CrossRef]

Haag, L., & Brahm, T. (2025). The gender gap in economic and financial literacy: A review and research agenda. *International Journal of Consumer Studies*, *49*(2), e70031. [CrossRef]

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. [CrossRef]

Haran Rosen, M., Lusardi, A., & Mitchell, O. S. (2026). *Trust, financial literacy, and financial behaviors: Shaping retirement security* (NBER Working Paper No. 35220). NBER. [CrossRef]

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135. [CrossRef]

Hishamudin, M. Z., Kamarudin, N. S., Abdul Hadi, N., & Ahmad, A. (2025). Intention to use digital platforms for Islamic financial education in Malaysia. *Journal of Advanced Research in Applied Sciences and Engineering Technology*, *49*(1), 298–311. [CrossRef]

Ho, C. S. M., Gümüş, S., Choi, S., & Barajeeh, B. (2026). Financial literacy education, confidence, and digital financial behavior among adolescents: Evidence from 19 countries. *International Journal of Consumer Studies*, *50*(1), e70188. [CrossRef]

Imjai, N., Meesook, K., Somwethee, P., Usman, B., & Aujirapongpan, S. (2025). Exploring the impact of digital financial literacy to effective financial planning and control: Perspectives on competitiveness of Thai micropreneurs. *Social Sciences & Humanities Open*, *11*, 101307. [CrossRef]

Jabbour Al Maalouf, N., & Sfeir, L. (2026). Financial literacy and FinTech adoption as drivers of financial behavior: Evidence from fragile and digitally mature economies. *Journal of Risk and Financial Management*, *19*(8), 548. [CrossRef]

Kanagaretnam, K., Lobo, G. J., Wang, C., & Whalen, D. J. (2019). Cross-country evidence on the relationship between societal trust and risk-taking by banks. *Journal of Financial and Quantitative Analysis*, *54*, 275–301. [CrossRef]

Klapper, L., Lusardi, A., & Panos, G. A. (2013). Financial literacy and its consequences: Evidence from Russia during the financial crisis. *Journal of Banking & Finance*, *37*(10), 3904–3923. [CrossRef]

Klapper, L., Lusardi, A., & Van Oudheusden, P. (2015). *Financial literacy around the world: Insights from the Standard & Poor's Ratings Services Global Financial Literacy Survey*. World Bank Development Research Group.

Kosová, R., & Michaelides, A. (2026). Trust and investment loss: Evidence from UK financial corporate failures. *Journal of Financial Literacy and Wellbeing*, *4*, e6. [CrossRef]

La Porta, R., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. (1998). Law and finance. *Journal of Political Economy*, *106*, 1113–1155. [CrossRef] [PubMed]

Lichtenberg, P. A., Rorai, V., & Flores, E. V. (2024). A person-centered approach to financial capacity: Early memory loss, financial management and decision-making. *Aging & Mental Health*, *28*(10), 1383–1389. [CrossRef] [PubMed]

Lu, Z., Li, H., & Wu, J. (2024). Exploring the impact of financial literacy on predicting credit default among farmers. *Borsa Istanbul Review*, *24*(2), 352–362. [CrossRef]

Luhmann, N. (1979). *Trust and power*. John Wiley & Sons.

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, *52*(1), 5–44. [CrossRef] [PubMed]

Lusardi, A., Mitchell, O. S., & Oggero, N. (2020). Debt and financial vulnerability on the verge of retirement. *Journal of Money, Credit, and Banking*, *52*(5), 1005–1034. [CrossRef]

Mahendru, M., Sharma, G. D., & Hawkins, M. (2022). Toward a new conceptualization of financial well-being. *Journal of Public Affairs*, *22*(2), e2505.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, *20*(3), 709–734. [CrossRef]

Miller, M., Reichelstein, J., Salas, C., & Zia, B. (2015). Can you help someone become financially capable? A meta-analysis of the literature. *The World Bank Research Observer*, *30*(2), 220–246. [CrossRef]

MyMal. (2025). *MyMal personal finance management application: User guide*. MyMal.

Nooteboom, B. (1996). Trust, opportunism and governance: A process and control model. *Organization Studies*, *17*, 985–1010. [CrossRef]

Orange Jordan. (2025). *Orange Money: Tahweesheh savings account*. Orange Jordan.

Öztürk, M., Yıldırım, D., & Eren, M. (2026). Financial cognition, behavior, and well-being in a generational context: A Bayesian-SEM perspective from Türkiye. *Borsa Istanbul Review*, *26*(Suppl. S1), 100841. [CrossRef]

Pevzner, M., Xie, F., & Xin, X. (2015). When firms talk, do investors listen? The role of trust in stock market reactions to corporate earnings announcements. *Journal of Financial Economics*, *117*, 190–223. [CrossRef]

Qualtrics. (2025). *Sample size calculator*. Qualtrics.

Risfandy, T., Jannah, E. M., Yahya, M. H., & Pamungkas, P. (2026). How do financial literacy, financial behavior, and financial well-being affect presenteeism? *SAGE Open*, *16*(3), 1–15. [CrossRef]

Sabri, M. F., Wijekoon, R., Abd Rahim, H., Burhan, N. A. S., Madon, Z., & Hamsan, H. H. (2022). Financial literacy, financial behavior, self-efficacy, and financial health among Malaysian households: The mediating role of money attitudes. *International Journal of Academic Research in Business and Social Sciences*, *12*(13), 114–125. [CrossRef] [PubMed]

Sawaya, C., Aoun, D., Jabbour Al Maalouf, N., El Khoury, G., Balouza, M., & Elia, J. (2026). Navigating financial turbulence: The role of financial literacy, financial education, and access to financial information in personal finance management. *International Review of Economics & Finance*, *111*, 105708. [CrossRef]

Sharma, V., Kumar, R., Kaur, M., & Jain, J. (2026). Shaping financial well-being through digital financial literacy: Do financial self-efficacy and personal financial management behavior mediate the relationship? *Journal of Financial Services Marketing*, *31*, 32. [CrossRef]

Shi, W., Ali, M., & Leong, C.-M. (2025). Dynamics of personal financial management: A bibliometric and systematic review. *International Journal of Bank Marketing*, *43*(1), 125–165. [CrossRef]

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *Journal of Finance*, *52*, 737–783. [CrossRef]

Soomro, Y. A., Ali, M., Yaqub, M. Z., Ali, I., & Badghish, S. (2023). Financial education is more precious than money. *International Journal of Business Performance Management*, *25*(1), 1–24. [CrossRef]

Tahir, M. S. (2026). Financial literacy, financial behavior and financial resilience: The mediating role of digital financial services. *China Finance Review International*, 1–22. [CrossRef]

Tan, X., Xiao, J. J., Meng, K., & Xu, J. (2025). Financial education and budgeting behavior among college students: Extending the theory of planned behavior. *International Journal of Bank Marketing*, *43*(3), 506–521. [CrossRef]

UN Women. (2025). *Financial literacy training program: Oasis Centres annual report*. UN Women.

Wang, S., Royalty, K., & Mattar, P. (2026). Financial literacy and fairness-based trust in banks: Evidence from US households. *International Journal of Bank Marketing*. Advance online publication. [CrossRef]

World Bank. (2025). *The Global Findex Database 2025: Connectivity and financial inclusion in the digital economy*. Development Research Group.

Yasman, N. (2024). Financial literacy programs: A tool for improved personal financial planning. *ResearchGate*. [CrossRef]

Zucker, L. G. (1986). Production of trust: Institutional sources of economic structure, 1840–1920. *Research in Organizational Behavior*, *8*, 53–111.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.