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Social Comparison Orientation, Financial Education, and Financial Management Behavior among Private Higher Education Lecturers: The Mediating Role of Financial Self-Efficacy and the Moderating Role of Financial Socialization

Astriwati, Buyung Sarita, Andi Basru Wawo, Salma Saleh

Halu Oleo University, Kendari, Indonesia

ABSTRACT: Social comparison and financial education expose individuals to information they may use to manage personal finances. This study examined their associations with financial management behavior, the mediating role of financial self-efficacy, and the moderating role of financial socialization. Cross-sectional questionnaire data from 280 permanent lecturers in private higher education were analyzed with partial least squares structural equation modeling and supplemented by necessary condition analysis. Social comparison orientation and financial education were positively associated with financial management behavior and financial self-efficacy. The specific indirect effects through financial self-efficacy were positive for social comparison orientation ($\beta = 0.130$) and financial education ($\beta = 0.142$), and both direct coefficients remained positive and significant. Financial socialization did not significantly moderate either direct association. Financial self-efficacy had the largest reported necessity effect size ($d = 0.261$) among the three antecedents with tabulated estimates. The findings distinguish two sources of financial learning and identify perceived capability as a common correlate of their translation into reported financial practice

1. INTRODUCTION

Financial management behavior comprises the routines people use to allocate income, control expenditure, manage debt, and prepare for future expenses. These routines require decisions that recur over time. A budget must be revised when income or obligations change, and a decision to build an emergency fund must be followed by repeated contributions. Dew and Xiao (2011) treat financial management as a multidimensional pattern of practice. That distinction is important for lecturers, whose academic qualifications establish expertise in their disciplines but do not directly indicate the extent of their financial education or the consistency of their household financial routines.

Financial knowledge is an important resource for household decisions, yet it captures only one part of financial capability. Lusardi and Mitchell (2014) explain the economic significance of acquiring financial knowledge, and Atkinson and Messy (2012) distinguish knowledge, attitudes, and behavior in measuring financial literacy. A lecturer might understand the concept of an emergency reserve while feeling uncertain about how to establish one alongside competing obligations. Serido et al. (2013) provide a developmental account in which learning, perceived competence, and behavior are related components of financial capability. In this study, financial education represents reported opportunities for financial learning and perceived learning outcomes, financial self-efficacy represents confidence in carrying out financial tasks, and financial management behavior represents the practices respondents say they use.

Social comparison offers a separate source of information. Individuals compare themselves with others when evaluating their abilities or judgments, particularly when objective standards are difficult to establish (Festinger, 1954). People vary in their tendency to make these comparisons (Gibbons and Buunk, 1999). Colleagues may provide a reference point for judging whether a savings target is realistic or an example of how to schedule debt repayments. The direction of the response depends in part on what is compared and how the reference is interpreted. An attainable example may encourage adaptation, whereas an apparently unattainable example can lead to unfavorable self-evaluation (Collins, 1996). Evidence on peer consumption and exposure to visible spending also illustrates why comparative information can encourage spending rather than improve financial management (Kuhn et al., 2011; Bertrand and Morse, 2016).

Prior work directly motivates the present model. Ahamed and Limbu (2025) examined financial self-efficacy and financial socialization in the association between social comparison orientation and financial management behavior. Their study reported a positive association for comparison orientation, an indirect association through financial self-efficacy, and evidence that financial socialization conditioned the comparison–behavior association in their sample. The present study extends that framework by estimating financial education alongside social comparison orientation, examining a separate indirect path for each predictor, and testing financial socialization on both direct paths. It uses a sample of permanent lecturers in private higher education. This design asks whether instructional learning and comparative information each retain an association with behavior when considered together. It also examines whether both pathways are conditional on financial socialization within this occupational setting.

1.1 Social comparison orientation and financial behavior

A tendency to compare can expose individuals to practical information that is otherwise difficult to obtain. A colleague who explains how they separate recurring expenses from irregular expenditures provides a process that another person can evaluate and adapt. People can also use differences between their own practices and those of a reference group to identify gaps in planning. The literature distinguishes comparison motives and outcomes, including self-evaluation, improvement, and protection of self-esteem (Wills, 1981; Buunk and Gibbons, 2007). These motives do not imply a uniform behavioral response. The positive prediction in this study rests on the informational value of comparison in the measurement domains, which include seeking financial information from others.

Comparison may also be associated with perceived capability. Social cognitive theory identifies vicarious experience as one source of efficacy beliefs (Bandura, 1977, 1986). Observing how a person with comparable resources carries out a financial task can help an observer judge whether a similar action is feasible. The effect of a comparison on efficacy may depend on the perceived similarity of the reference person and the attainability of the task. The survey measures general comparison orientation in a financial context and therefore estimates an overall association across such experiences.

H1. Social comparison orientation is positively associated with financial management behavior.

H3. Social comparison orientation is positively associated with financial self-efficacy.

1.2 Financial education and financial behavior

Financial education can make the steps involved in a decision more explicit. Instruction in cash-flow planning may teach a person to separate fixed and variable expenses and compare their totals with expected income. That procedure can be applied directly when allocating funds. Financial education programs differ substantially in content, delivery, timing, and proximity to the decisions they seek to influence (OECD, 2015; Kaiser and Menkhoff, 2017). Research syntheses have also differed in the magnitude they assign to downstream behavioral effects (Fernandes et al., 2014; Kaiser et al., 2022). The effects observed in evaluations of designed interventions and associations observed in surveys of prior exposure answer different questions.

Education may also contribute to confidence when participants can rehearse a decision, receive feedback, and complete a task successfully. Such experiences can strengthen expectations that a similar task can be carried out independently. Chen and Volpe (1998) document differences in financial knowledge across student groups, and Xiao and O'Neill (2016) situate education within a wider set of financial capability measures. The present survey captures formal and informal learning alongside perceived knowledge and application. Its financial education coefficient thus represents the association of a broad learning construct and cannot isolate the effect of a particular course or intervention.

H2. Financial education is positively associated with financial management behavior.

H4. Financial education is positively associated with financial self-efficacy.

1.3 Financial self-efficacy as a mediator

Financial self-efficacy concerns a person's perceived ability to organize and perform financial tasks. It can influence whether people initiate action and persist when a decision becomes difficult. Lown (2011) operationalizes this belief at the level of personal finance, while Farrell et al. (2016) link it to personal finance behavior. Perceived capability is also conceptually related to perceived behavioral control in the theory of planned behavior (Ajzen, 1991), although the constructs are defined within different theoretical frameworks.

Comparison and education offer distinguishable routes to confidence. Comparative information may show which practices are feasible for similar people. Financial education can give individuals a structured way to try those practices and evaluate the consequences of a decision. In turn, confidence may support routine execution, such as continuing to monitor expenses after an unexpected bill. The indirect paths estimate how much of each predictor's association is transmitted statistically through the confidence construct. A positive direct path can remain if the predictor also supplies information, procedures, or cues that support behavior through mechanisms outside the model.

H5. Financial self-efficacy is positively associated with financial management behavior.

H6. Social comparison orientation has a positive indirect association with financial management behavior through financial self-efficacy.

H7. Financial education has a positive indirect association with financial management behavior through financial self-efficacy.

1.4 Financial socialization as a moderator

Consumer socialization describes how people acquire marketplace skills and knowledge through interaction with social agents (Ward, 1974; Moschis and Churchill, 1978). Financial socialization applies this account to money-related knowledge, values, and practices acquired through observation, discussion, and experience. Family communication and parental modeling can establish early expectations about money (Danes, 1994; Gudmunson and Danes, 2011). Evidence from young adults shows that parental, work, and educational experiences can contribute to this process (Shim et al., 2010). The lecturer survey extends measurement beyond family experiences to include broader channels such as media.

Socialization may alter the usefulness of financial information. For instance, people who have learned to discuss the trade-offs behind a purchase may be better equipped to interpret peer spending in light of their own commitments. Experience discussing and practicing financial decisions may likewise give people a setting in which to apply financial education. An alternative possibility is substitution. Respondents with established routines may have less reason to change behavior after receiving additional input. Because the direction depends on whether these resources reinforce or substitute for one another, the hypotheses specify moderation without assuming that both interactions must be positive.

H8. Financial socialization moderates the direct association between social comparison orientation and financial management behavior.

H9. Financial socialization moderates the direct association between financial education and financial management behavior.

2. MATERIALS AND METHODS

2.1 Study design and participants

The study used a cross-sectional online questionnaire administered to permanent lecturers at private higher education institutions in Kendari, Indonesia. The sampling frame comprised 932 lecturers, and the study used simple random sampling with an analytical sample of 280 respondents. The calculation used to set the sample target took the population size and a nominal error tolerance of 0.05 as inputs. The frame defines the group to which the sampling design applies. Differences in institutional conditions, employment arrangements, or household obligations can limit generalization to other groups of lecturers.

2.2 Measures

The questionnaire used five response categories from 1 (strongly disagree) to 5 (strongly agree). Table 1 describes the operational domains. Social comparison orientation assessed how respondents used others as reference points for evaluating ability and financial attainment or gathering financial information. Financial education included both formal and informal learning, together with respondents' assessments of what they understood and could apply. Because the survey did not administer a standardized financial knowledge test, the learning measure is interpreted as perceived financial education and its reported outcomes.

Financial socialization covered communication, role modeling, experience, money values, and media. The construct therefore combines channels through which learning takes place and socialized content that respondents report acquiring. Financial self-efficacy concerned confidence in managing decisions, goals, and financial pressures. Financial management behavior captured reported actions in budgeting, managing spending and credit, saving, and planning over a longer horizon. The questionnaire operationalized each construct for the study context, so its coefficients should be interpreted with reference to these domains.

Table 1. Operational domains of the survey measures

Construct	Domains assessed
Social comparison orientation (SCO)	Comparison of abilities and financial attainment, seeking financial information from others, and intensity of self-comparison
Financial education (FE)	Formal and informal financial education, financial knowledge, and application of financial learning
Financial socialization (FS)	Family communication, role modeling, practical experience, values and attitudes toward money, and socialization through media
Financial self-efficacy (FSE)	Confidence in controlling finances, solving financial problems, making decisions, achieving goals, and handling financial stress
Financial management behavior (FMB)	Budgeting and planning, expenditure management, credit and debt management, saving and emergency funds, and long-term planning

Source: Primary survey questionnaire. Conceptual sources include Buunk and Gibbons (2007), Chen and Volpe (1998), OECD (2015), Gudmunson and Danes (2011), Farrell et al. (2016), and Dew and Xiao (2011).

2.3 Statistical analysis

Partial least squares structural equation modeling was implemented in SmartPLS 4. The measurement model was evaluated through internal consistency, average variance extracted, and discriminant validity. Cronbach's alpha and composite reliability describe score consistency, and average variance extracted assesses the variance shared by a construct and its indicators (Fornell and Larcker, 1981; Hair et al., 2022). The heterotrait–monotrait ratio (HTMT) was evaluated across construct pairs, with 0.85 used as a conservative reference for distinguishing the constructs (Henseler et al., 2015).

Structural results were assessed using path coefficients and bootstrap inference. Two specific indirect effects represented paths through financial self-efficacy. The direct and indirect effects were interpreted together to distinguish complementary mediation from an indirect-only pattern (Zhao et al., 2010). Financial socialization was included as a main term for the behavioral outcome alongside its two interaction terms. Each interaction assessed the change in the corresponding direct association with financial management behavior across levels of socialization. The model did not test moderation of the indirect effects. Explanatory performance was summarized with R^2 and local f^2 values, and the reported Q^2predict statistics were examined relative to the naïve prediction benchmark (Shmueli et al., 2019).

2.4 Necessary condition analysis

A supplementary necessary condition analysis (NCA) in RStudio examined whether upper levels of financial management behavior were empirically limited when antecedent scores were low. The analysis used ceiling envelopment and ceiling regression approaches based on free disposal hulls (CE-FDH and CR-FDH). NCA and PLS-SEM address different questions. A structural coefficient summarizes an association with the outcome under the fitted model, while NCA examines whether part

of the predictor–outcome space above the estimated ceiling is empty (Dul, 2016; Richter et al., 2020). Reported effect sizes and p-values are paired with the bottleneck estimates to show how candidate minima change with the target. The thresholds are conditional on the observed score range and the estimated ceiling.

3. RESULTS AND DISCUSSION

3.1 Respondent characteristics

Table 2 describes the sample. Men accounted for 164 of the 280 respondents, and 175 lecturers reported a master's degree as their highest qualification. The largest age group was over 30 through 40 years, comprising 122 respondents. The largest tenure category comprised 160 lecturers with fewer than five years of service. These distributions locate the findings in an occupational sample with substantial representation of lecturers in the earlier years of service. The analysis did not estimate separate paths by gender, degree, age, or tenure.

Table 2. Respondent characteristics (n = 280)

Characteristic	Category	Count	Percent
Gender	Men	164	58.57
	Women	116	41.43
Age	Under 30 years	22	7.86
	Over 30 through 40 years	122	43.57
	Over 40 through 50 years	85	30.36
	Over 50 years	51	18.21
Highest degree	Master's	175	62.50
	Doctorate	105	37.50
Teaching tenure	Under 5 years	160	57.14
	Over 5 through 10 years	84	30.00
	Over 10 through 15 years	18	6.43
	Over 15 years	18	6.43

Source: Primary survey data (2026)

3.2 Measurement model

Table 3 summarizes reliability and convergent validity. Cronbach's alpha ranged from 0.918 to 0.947, and composite reliability ranged from 0.938 to 0.960. Approximate average variance extracted values reconstructed from the reported diagonal of the Fornell–Larcker matrix ranged from 0.752 to 0.841. These estimates indicate substantial shared variance. The two highest composite reliability estimates also warrant item-level review for overlapping wording. A high reliability coefficient cannot establish that a measure captures the full conceptual breadth of its construct.

Table 3. Construct reliability and average variance extracted

Construct	Cronbach's alpha	Composite reliability	Approximate AVE
SCO	0.937	0.955	0.841
FE	0.947	0.960	0.826
FS	0.918	0.938	0.752

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Construct	Cronbach's alpha	Composite reliability	Approximate AVE
FSE	0.922	0.941	0.762
FMB	0.929	0.946	0.778

Source: Primary survey data (2026)

The HTMT ratios ranged from 0.048 to 0.739 (Table 4). The largest ratio was for financial socialization and financial self-efficacy, two constructs that can be related because social learning may inform confidence. Their point estimate remained below the prespecified reference. Financial education and social comparison orientation had the smallest ratio. Their low overlap is consistent with treating instructional learning and comparative information as separate antecedents in the estimated model. Point estimates provide evidence about construct separation, and bootstrap intervals would allow a more complete inferential assessment.

Table 4. Heterotrait–monotrait ratios

Construct	SCO	FE	FS	FSE	FMB
SCO	—				
FE	0.048	—			
FS	0.558	0.500	—		
FSE	0.537	0.590	0.739	—	
FMB	0.498	0.571	0.545	0.695	—

Source: Primary survey data (2026)

3.3 Structural model and hypothesis tests

The structural model explained 55.1 percent of the variance in financial management behavior and 57.9 percent of the variance in financial self-efficacy. The largest reported inner variance inflation factor was 2.626, for the path from financial self-efficacy to behavior. The saturated-model standardized root mean square residual was 0.034. The positive construct-level Q^2predict values indicate an improvement over the naïve benchmark under the reported procedure. Comparison with indicator-level prediction errors from an alternative model would be needed to characterize predictive performance in greater detail.

Table 5. Explanatory and predictive statistics

Endogenous construct	R^2	Adjusted R^2	Q^2predict
FSE	0.579	0.576	0.572
FMB	0.551	0.541	0.508

Source: Primary survey data (2026)

Table 6 reports the hypothesis tests. Social comparison orientation and financial education both had positive direct coefficients for financial management behavior (0.405 and 0.458, respectively). Both were also positively associated with financial self-efficacy (0.523 and 0.574, respectively), and the coefficient from financial self-efficacy to behavior was 0.248. Each of these five paths was statistically significant at the 0.05 level. The local f^2 estimates for the direct behavioral associations were 0.185 for social comparison orientation, 0.235 for financial education, and 0.052 for financial self-efficacy. These values distinguish their incremental contributions within this model from the magnitude of their standardized path coefficients.

The specific indirect effects through financial self-efficacy were positive for social comparison orientation (0.130) and financial education (0.142). The indirect estimates are consistent with the products of their component coefficients to three decimal places. Because each predictor also retained a positive significant direct coefficient, both patterns are consistent with

complementary mediation. The cross-sectional design identifies a pattern of covariation consistent with the proposed mediation model and does not establish the temporal sequence of the underlying processes.

The interaction coefficients for financial socialization with social comparison orientation and financial education were 0.014 and 0.035, respectively. Neither reached the 0.05 significance threshold, and their local f^2 values were 0.001 and 0.003. The estimates provide little evidence that financial socialization changed either direct association in this sample. The hypothesis tests address interaction effects on the behavioral outcome. They do not establish whether particular forms of socialization predict efficacy, influence the outcome at other stages of life, or condition the indirect associations.

Table 6. Direct, indirect, and interaction estimates

Hypothesis and path	β	SE	t	p	Decision
H1. SCO → FMB	0.405	0.058	6.952	0.020	Supported
H2. FE → FMB	0.458	0.052	8.736	<0.001	Supported
H3. SCO → FSE	0.523	0.038	13.699	0.010	Supported
H4. FE → FSE	0.574	0.036	16.144	<0.001	Supported
H5. FSE → FMB	0.248	0.060	4.124	0.002	Supported
H6. SCO → FSE → FMB	0.130	0.032	4.060	0.010	Supported
H7. FE → FSE → FMB	0.142	0.036	3.989	0.002	Supported
H8. FS × SCO → FMB	0.014	0.034	0.405	0.685	Unsupported
H9. FS × FE → FMB	0.035	0.032	1.101	0.271	Unsupported

Source: Primary survey data (2026)

3.4 Necessary condition analysis

The supplementary analysis reported statistically significant ceiling effects for the three antecedents with tabulated estimates (Table 7). Financial self-efficacy had the largest reported necessity effect size (d = 0.261), followed by social comparison orientation (d = 0.182) and financial education (d = 0.179). These results complement the structural model. Financial education had the largest direct coefficient for behavior, whereas financial self-efficacy had the largest observed ceiling effect. The difference is meaningful because the two estimates summarize different features of the observed data.

Table 7. Estimated necessity effects for financial management behavior

Condition	Necessity effect (d)	p
Financial education	0.179	0.004
Social comparison orientation	0.182	0.011
Financial self-efficacy	0.261	0.004

Source: Primary survey data (2026)

The bottleneck results in Table 8 show that the estimated minimum score for each condition increased as the target outcome rose. At the 80-percent outcome level, the estimated minima were 41.4 for financial education, 44.6 for social comparison orientation, and 54.9 for financial self-efficacy, expressed as percentages of their respective ranges. Financial self-efficacy was the first condition to show a positive estimated threshold, at the 30-percent outcome level. A threshold indicates the estimated lower boundary compatible with a target in these data. Attainment can also depend on resources, constraints, or practices outside the model. Estimates at the top of the observed range are especially sensitive to sparse observations, so the 100-percent row should be interpreted as a sample-specific boundary.

Table 8. Estimated bottleneck levels for financial management behavior

Target (percent)	FE	SCO	FSE
0–20	NN	NN	NN
30	NN	NN	3.7
40	NN	1.6	14.0
50	NN	12.3	24.2
60	12.4	23.1	34.4
70	26.9	33.9	44.7
80	41.4	44.6	54.9
90	55.9	55.4	65.1
100	70.4	66.1	75.4

Source: Primary survey data (2026)

3.5 Discussion

3.5.1 Comparative information and financial education

The positive coefficients for comparison orientation are consistent with the possibility that colleagues provide useful financial reference points. For a lecturer deciding whether to set aside income for irregular expenses, a colleague's experience can clarify what a feasible savings schedule looks like and how it can be maintained. An example that explains the decision process provides more actionable information than a visible marker of consumption. The measure combines comparison tendency and information seeking, so the observed positive association is compatible with both self-evaluation and learning. It cannot distinguish comparison to more successful peers from comparison to peers in more difficult circumstances.

The findings extend Ahamed and Limbu (2025) by examining the comparison pathway alongside financial education in an occupational sample. The association of comparison with financial management behavior persisted after financial education was included. In the same model, financial education was positively associated with both behavior and perceived capability. The joint pattern suggests that survey respondents who report access to one source of financial learning can still differ in their reported behavior according to their exposure to the other. Because participation in educational activities may also reflect motivation, access, or pre-existing financial interest, the direct path should be read as a conditional survey association.

The education result is compatible with evidence that financial instruction can affect downstream behavior (Kaiser et al., 2022). The study's learning measure also includes perceived knowledge and application, which may explain part of its close association with self-reported behavior. A useful next comparison would separate educational exposure from demonstrated knowledge and from later application. For example, attendance records could identify the training received, scenario questions could assess whether a decision rule was understood, and repeated measurements could show whether that rule entered routine use. Such a design would help identify which aspect of learning is associated with enduring change.

3.5.2 Financial self-efficacy and the translation of learning into practice

The two positive indirect coefficients are consistent with a common confidence pathway from distinct sources of information. A financial course can provide a practice opportunity that strengthens perceived competence. A comparison with someone in a similar financial position can make an unfamiliar practice seem achievable. When lecturers believe they can carry out a task, they may be more willing to begin it and to persist after setbacks. This interpretation follows social cognitive theory's distinction between experiences that build confidence and behavior that confidence can help support (Bandura, 1977, 1986).

Complementary mediation also suggests that the two antecedents have behavioral associations beyond the measured confidence pathway. Instruction can supply a budgeting template or a decision rule that can be applied with little change in self-belief.

Comparative information can draw attention to a financial obligation that had previously been overlooked. Conversely, behavior itself may strengthen financial self-efficacy by providing successful experience. Repeated measurement of learning exposure, confidence, and subsequent behavior would help distinguish that feedback process from the order proposed in the present model (Maxwell and Cole, 2007).

The NCA results place the confidence finding in a second analytical context. Financial self-efficacy had a modest direct f^2 value for behavior but the largest reported ceiling effect. A factor can be more informative about whether top outcomes are possible within the sample than about how scores differ on average across respondents. This distinction is relevant when deciding how to evaluate a financial education program. Mean improvement and the proportion of participants who can sustain several practices over time are different outcomes. A measure of task-specific confidence could help distinguish participants who understand a procedure from those who feel ready to carry it out independently.

3.5.3 Financial socialization and the limits of interaction

Neither financial socialization interaction was supported. The comparison interaction therefore differs from the pattern reported by Ahamed and Limbu (2025). Occupational context is one possible explanation. Permanent lecturers may encounter financial information at work or through professional networks even when family discussions and earlier modeling differ. The measure also aggregates socialization sources that can vary in their content, timing, and relevance. Family discussion of debt, informal advice from colleagues, and exposure to financial information in media may have different implications for evaluating educational material or peer behavior.

The small observed interactions are compatible with socialization having a role at a different point in the process. Family experiences can contribute to financial beliefs long before adult educational opportunities arise (Gudmunson and Danes, 2011). A single interaction term can miss differences among socialization agents and stages of life. Testing separate socialization dimensions would require a prespecified model and sufficient measurement precision and sample size for each interaction. The current findings support retaining the null interaction results as an empirical boundary of this model.

3.5.4 Practical implications and limitations

For private higher education institutions, the positive education and confidence associations identify content that could be evaluated in a workplace financial education program. Exercises could ask participants to build a budget for a month with irregular costs, compare the total cost of credit products, or specify a feasible emergency saving contribution. Guided peer examples could describe how a lecturer made a financial decision, including the constraints and trade-offs involved. The data support treating these as intervention ideas to evaluate. The survey did not estimate the effectiveness of any such program.

Three limitations qualify the findings. First, simultaneous measurement prevents temporal ordering of the mediator and the outcome. Second, responses came from the same questionnaire. Shared response tendencies and overlap between reported learning application and behavior could contribute to the structural associations (Podsakoff et al., 2003). The low inner VIF values address collinearity among predictor terms and cannot rule out shared method variance. Third, the sampling frame is geographically and occupationally bounded, and the observed NCA thresholds depend on that frame and the score distributions. Replication across institutions with different employment arrangements and income structures would help assess transferability.

4. CONCLUSION

In a survey of 280 permanent lecturers in private higher education, social comparison orientation and financial education were positively associated with financial management behavior and financial self-efficacy. Financial self-efficacy was positively associated with behavior and showed complementary mediation for both antecedents. Financial socialization did not significantly moderate either direct association. In the supplementary necessary condition analysis, financial self-efficacy had the largest reported ceiling effect among the tabulated antecedents. Together, these findings distinguish access to financial learning, confidence in using it, and the routines through which lecturers manage their finances.

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Author Contributions

Astriwati contributed to conceptualization, investigation, data curation, formal analysis, and writing the original draft. Buyung Sarita contributed to supervision, conceptualization, and review and editing. Andi Basru Wawo contributed to methodology, validation of the analytical approach, and review and editing. Salma Saleh contributed to interpretation of results and review and editing.

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