

Stakeholder Disparities in Islamic Financial Literacy and Financial Behavior: Evidence from a Pesantren Community

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Abstract

Islamic financial literacy (IFL) is crucial for fostering responsible financial behavior in Muslim communities, yet empirical evidence from pesantren ecosystems remains limited. This study investigates the relationship between IFL and saving and investment behaviors among stakeholders at Pondok Pesantren Karangdurin. Using a quantitative approach, the study surveyed 120 respondents, comprising administrators, alumni, parents, and students, selected through stratified purposive sampling, and analyzed the data using descriptive statistics, correlation analysis, regression models, ANOVA, and post hoc Tukey HSD tests. Results reveal strong positive correlations between IFL and both saving ($r = 0.47$) and investment behaviors ($r = 0.77$). Regression analysis shows that IFL explains 22.15% of saving behavior and 59.23% of investment behavior variance. Significant differences are observed across stakeholder groups, with administrators demonstrating the highest literacy and behavioral scores. This study extends Islamic financial literacy behavior theory to a pesantren based, multi stakeholder context, providing novel empirical evidence on intra institutional disparities and supporting the design of differentiated, stakeholder-specific financial education interventions.

Keywords: *Islamic financial literacy, saving behavior, investment behavior, pesantren ecosystem, financial education, stakeholder analysis.*

Introduction

The urgency of advancing Islamic financial literacy (IFL) in Indonesia is closely linked to the nation's ambition to integrate sharia finance into mainstream economic development. Despite extensive national education programs and institutional initiatives, Islamic financial awareness remains uneven and insufficient, particularly among communities traditionally marginalized from formal financial systems.¹ Pesantren (Islamic boarding schools), with their distinct educational culture and vast national networks, represent a strategic frontier for embedding IFL at the grassroots level.² However, the absence of systematic and

¹ Dihyatur Masqon Ahmad, *The Dynamics of the Pondok Pesantren: An Islamic Educational Institution in Indonesia* (Brill, 2012), https://doi.org/10.1163/9789401207584_006; Hudaifah Ahmad et al., "Constructing Ethnographic Protocols for Zakat Studies in the Muslim Community," *International Journal of Islamic Finance and Sustainable Development* 17, no. 1 (2025): 75–91, <https://doi.org/10.55188/ijifsd.v17i1.935>.

² Hanun Asrohah, "THE DYNAMICS OF PESANTREN: Responses toward Modernity and Mechanism in Organizing Transformation," *JOURNAL OF INDONESIAN ISLAM* 5, no. 1 (2011): 1,

institutionalized financial education within pesantren constrains this potential. National-level efforts have emphasized early financial education and community-based initiatives, including structured literacy programs in pesantren such as Tebuireng,³ and the broader shift toward digital financial ecosystems,⁴ but comprehensive and centralized assessment frameworks and policy coordination for IFL remain underdeveloped.⁵

Within pesantren, these challenges are amplified by heterogeneous institutional structures and diverse stakeholder populations. Programs such as participatory training at Pesantren Banyuanyar, fintech education at Dayah Darul Hikmah, and cooperative-based financial training at Nurul Wafa have shown promising short-term results,⁶ and similar improvements have been documented in Bekasi's pesantren community.⁷ Islamic fintech initiatives have also strengthened investment awareness and reduced exposure to illegal online lending,⁸ while cooperative-based empowerment programs in Situbondo have enhanced economic capability among santri.⁹ Nevertheless, evidence regarding long-term behavioral sustainability and program scalability remains limited. Notably, most initiatives prioritize individual capacity building rather than institutional transformation, highlighting the need for localized and context-sensitive IFL approaches tailored to pesantren ecosystems.

At the core of the present study is Pondok Pesantren Karangdurin (PPK), a traditional pesantren characterized by a highly heterogeneous internal community, comprising adult

<https://doi.org/10.15642/JIIS.2011.5.1.66-90>; Bashori Bashori et al., "From Vision to Reality: A Holistic Examination of Transformational Leadership as a Catalyst for Cultivating Organizational Culture in Pesantren," *Development: Studies in Educational Management and Leadership* 1, no. 2 (2022): 133–52, <https://doi.org/10.47766/development.v1i1.486>.

³ H Humaidi et al., "Cerdas Finansial Sejak Dini: Program Edukasi Literasi Keuangan Bagi Santri Pondok Pesantren Tebuireng," *Welfare: Jurnal Pengabdian Masyarakat* 3, no. 4 (2025): 683–88, <https://doi.org/10.30762/welfare.v3i4.2854>.

⁴ M Abdillah et al., "Cashless Revolution: The Impact on Regional Economic Growth," *Jurnal Akuntansi Universitas Jember* 23, no. 1 (2025): 92–113, <https://doi.org/10.19184/jauj.v23i1.53700>.

⁵ N S Mahdzan et al., "The Impact of Financial Literacy on Individual Saving: An Exploratory Study in Malaysia," *Transformations in Business & Economics* 16, no. 3 (2017): 60–77; E Dinc et al., "The Effect of Financial Literacy on Financial Behavior: A Structural Equation Modeling Approach," *Journal of Islamic Accounting and Business Research* 13, no. 4 (2022): 567–84, <https://doi.org/10.1108/JIABR-03-2021-0090>.

⁶ S Abidin and S Faizah, "Kesejahteraan Ustadz Dari Perspektif Maqashid Syariah," *Jurnal Ekonomi Syariah Teori Dan Terapan* 8, no. 2 (2021): 141–55, <https://doi.org/10.20473/vol8iss2021pp141-155>; N Hidayah et al., "Sharia Financial Literacy and Inclusion in Islamic Boarding Schools of Rabithah of Islamic Ma'ahid of Nahdlatul Ulama DKI Jakarta," *Al-Mashrafiyah*, ahead of print, 2023, <https://doi.org/10.24252/al-mashrafiyah.v7i1.36027>; H Wibowo, "Analisis Perilaku Keuangan Komunitas Pesantren: Perspektif Literasi Keuangan Syariah," *Jurnal Keuangan Dan Perbankan Syariah* 5, no. 2 (2021): 89–104.

⁷ S Sufyati et al., "From Madrasah to Muamalah: Enhancing Islamic Financial Literacy in Bekasi's Pesantren Community," *Indonesian Journal of Business, Accounting and Management* 6, no. 2 (2023): 121–30, <https://doi.org/10.36406/ijbam.v6i02.1335.163>.

⁸ Shelfi Malinda et al., "Integrating Rationality and Religiosity In Financial Literacy Education: Strengthening Investment Awareness And Preventing Illegal Online Lending At Tahfiz Al-Qur'an Izzudin Islamic Boarding School," *International Journal Of Community Service* 5, no. 4 (2025): 486–92, <https://doi.org/10.51601/ijcs.v5i4.937>.

⁹ N Muhammad, "Enhancing Pesantren Economy: Sharia-Based Cooperative Training at Nurul Wafa Islamic Boarding School, Situbondo," *Community Empowerment*, ahead of print, 2025, <https://doi.org/10.31603/ce.12609>.

santri, alumni, parents, and administrators. Despite its central role in the local religious and social ecosystem, PPK has not yet institutionalized a formal IFL curriculum. This condition provides a compelling opportunity to examine variations in financial literacy and behavior across internal stakeholder groups and to assess the influence of literacy on saving and investment practices that shape long-term household financial security.

Prior research has underscored the significant relationship between financial literacy and economic behavior in Muslim societies. Studies conducted in various pesantren settings in Java, Aceh, and Sumatra reveal that targeted IFL programs can yield substantial improvements in knowledge and behavioral outcomes. For instance, one study reported a rise in financial knowledge from 45% to 80% following structured interventions in pesantren communities.¹⁰ Similarly, programs focusing on Islamic fintech, savings discipline, and cooperative training have documented improved decision-making capabilities and reduced reliance on non-compliant financial products,¹¹ including evidence that structured savings programs can significantly enhance students' financial discipline.¹² Collectively, these findings support a general behavioral model linking enhanced literacy to improved economic behavior.

However, several limitations remain evident in the existing literature. Most studies focus on single population groups and rarely conduct comparative analyses across multiple stakeholder groups within pesantren. Moreover, many studies lack rigorous empirical designs, including robust sampling strategies and validated instruments tailored to pesantren contexts. While Mahdzan et al. (2020) developed a six-domain objective IFL measure,¹³ and Dinc et al. (2022) validated a four-dimensional cross-country IFL scale, these tools have rarely been adapted for pesantren populations.¹⁴ these instruments have rarely been adapted for pesantren populations, and intra-group variations remain underexplored.

Additionally, program-level evaluations in pesantren have not systematically incorporated longitudinal designs or post-intervention assessments. As reported in Bekasi and Situbondo case studies, although short-term literacy gains are evident, sustained behavior change remains unmeasured.¹⁵ evidence of sustained behavioral change remains limited. The lack of integration between fiqh muamalah education and practical financial skills further

¹⁰ Dinc et al., "The Effect of Financial Literacy on Financial Behavior: A Structural Equation Modeling Approach."

¹¹ D Rahmawati, "Strategi Peningkatan Literasi Keuangan Syariah Di Pesantren: Studi Implementatif," *Jurnal Ekonomi Dan Pendidikan Islam* 7, no. 1 (2024): 1–15; Wibowo, "Analisis Perilaku Keuangan Komunitas Pesantren: Perspektif Literasi Keuangan Syariah."

¹² Mahmud Khalil Shofa Siagian and Uswah Hasanah, "The Effectiveness of Savings Programs in Shaping Students' Financial Discipline in Islamic Boarding Schools," *International Conference on Islamic Economic (ICIE)* 4, no. 1 (2025): 118–33, <https://doi.org/10.58223/icie.v4i1.420>.

¹³ N S Mahdzan and S Tabiani, "The Impact of Financial Literacy on Individual Saving: An Empirical Study among Malaysian Employees," *International Journal of Business and Society* 21, no. 2 (2020): 749–66.

¹⁴ Dinc et al., "The Effect of Financial Literacy on Financial Behavior: A Structural Equation Modeling Approach."

¹⁵ Rahmawati, "Strategi Peningkatan Literasi Keuangan Syariah Di Pesantren: Studi Implementatif"; Wibowo, "Analisis Perilaku Keuangan Komunitas Pesantren: Perspektif Literasi Keuangan Syariah"; Sufyati et al., "From Madrasah to Muamalah: Enhancing Islamic Financial Literacy in Bekasi's Pesantren Community"; Muhammad, "Enhancing Pesantren Economy: Sharia-Based Cooperative Training at Nurul Wafa Islamic Boarding School, Situbondo."

reflects a persistent curricular gap. Calls for revitalizing muamalah instruction as a vehicle for financial literacy have gained traction,¹⁶ yet empirical validation of such pedagogical approaches remains scarce.

In sum, while the literature broadly agrees that financial literacy influences financial behavior and that pesantren communities can benefit from IFL interventions, these conclusions are largely derived from small-scale, isolated, and methodologically constrained studies. The absence of comparative stakeholder-based evidence and limited use of validated instruments underscore critical gaps in the current body of knowledge. This study aims to fill these gaps by examining stakeholder-based variations in Islamic financial literacy and their effects on saving and investment behavior within Pondok Pesantren Karangduri. By addressing four research questions, the study provides a comprehensive empirical basis for understanding how IFL shapes financial behavior in pesantren communities.

The novelty of this study lies in its empirical comparison of multiple internal stakeholder groups within a single pesantren, the adaptation of validated IFL measurement instruments to the pesantren context, and the simultaneous analysis of saving and investment behaviors. This integrative approach advances a more nuanced understanding of financial behavior in religious educational institutions. Ultimately, the findings are expected to inform the development of tailored Islamic financial education modules and institutional strategies aligned with the socio-religious context of pesantren. By identifying literacy-related behavioral gaps and stakeholder-level variations, this study contributes not only to academic discourse but also to practical frameworks for enhancing financial inclusion and welfare in Islamic educational institutions.

Methods

This study employed an explanatory quantitative research design to examine the predictive relationship between Islamic financial literacy (IFL) and two core behavioral outcomes: saving and investment behaviors. An explanatory design was selected because the primary objective was not only to describe the level of IFL within the pesantren community but also to test theoretically grounded hypotheses regarding how literacy influences financial behaviors across heterogeneous subgroups within Pondok Pesantren Karangduri (PPK). This approach aligns with the established theoretical premise that financial knowledge functions as a key determinant of financial behavior, as widely affirmed in prior studies.¹⁷

The research was conducted over a two-month period, from July to August 2025, and focused on capturing a cross-sectional snapshot of the pesantren ecosystem. Pondok Pesantren Karangduri (PPK) was selected as the research site due to its traditionalist orientation and high demographic heterogeneity, comprising adult students (santri dewasa), parents, alumni, and administrative staff. The study population included all individuals

¹⁶ Abdillah et al., “Cashless Revolution: The Impact on Regional Economic Growth.”

¹⁷ N S.; Tabiani Mahdzan S., “The Impact of Financial Literacy on Individual Saving: An Empirical Study among Malaysian Employees,” *International Journal of Business and Society* 21, no. 2 (2020): 749–66; Dinc et al., “The Effect of Financial Literacy on Financial Behavior: A Structural Equation Modeling Approach.”

affiliated with PPK who were potentially involved in personal or household financial decision-making, ensuring broad representation of financial literacy profiles.

A total of 120 respondents were selected using stratified purposive sampling. The strata were based on four distinct categories: santri dewasa, parents, alumni, and administrators. Stratified purposive sampling was employed to ensure proportional representation of these internal stakeholder groups, acknowledging that each group brings unique experiences and levels of exposure to financial education. This sampling method is considered particularly useful in behavioral studies conducted in community-based institutions where subgroup variation is analytically significant.¹⁸

Data were collected through a structured questionnaire comprising 44 items rated on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The instrument measured three key variables: Islamic financial literacy (20 items), saving behavior (12 items), and investment behavior (12 items). The items for IFL were adapted from validated instruments developed in previous empirical research, and were tailored to the pesantren context with attention to local financial practices and cultural norms. The questionnaire underwent content validation by two subject-matter experts in Islamic economics and pesantren-based pedagogy to ensure relevance, clarity, and construct validity.

The administration of the questionnaire was conducted in collaboration with pesantren administrators to ensure efficient distribution and return. Surveys were handed out and completed in designated spaces within the pesantren, such as the administrative office, study halls, and community centers, to maximize respondent comfort and focus. Respondents were briefed on the purpose of the research, and informed consent was obtained prior to data collection. Participation was voluntary and anonymity was strictly maintained.

The data analysis was performed using R (version 4.5.1, released 13 June 2025) under the Windows ucrt environment. Descriptive statistics were calculated to summarize the levels of IFL, saving, and investment behaviors across the sample and within each subgroup. Measures of central tendency and variability were computed to establish the general literacy profile of PPK's community. The next step involved Pearson product-moment correlation analysis to explore bivariate relationships between IFL and the two behavioral variables. Pearson correlation is widely used in behavioral finance research to measure linear associations between continuous variables.¹⁹

To examine the predictive power of Islamic financial literacy on saving and investment behaviors, multiple linear regression analyses were conducted. These models tested the significance of IFL as an independent variable influencing the behavioral outcomes, controlling for subgroup membership. The regression coefficients, confidence intervals, and p-values were reported to determine the strength and significance of the relationships. The

¹⁸ Rahmawati, "Strategi Peningkatan Literasi Keuangan Syariah Di Pesantren: Studi Implementatif"; Wibowo, "Analisis Perilaku Keuangan Komunitas Pesantren: Perspektif Literasi Keuangan Syariah."

¹⁹ Dinc et al., "The Effect of Financial Literacy on Financial Behavior: A Structural Equation Modeling Approach."

use of regression aligns with existing methodologies in financial literacy research and allows for robust inference of causal patterns.²⁰

To assess whether financial literacy and behavior differed significantly across stakeholder groups, a one-way Analysis of Variance (ANOVA) was performed for each variable, followed by Tukey's Honestly Significant Difference (HSD) post-hoc test. ANOVA is a standard tool for comparing means across multiple groups, while the Tukey HSD test is ideal for identifying specific group differences. The decision to include post-hoc testing was informed by prior pesantren studies that reported substantial subgroup heterogeneity.²¹

Boxplot visualizations were also generated to graphically depict the distribution of IFL, saving, and investment scores across the four groups. These plots provided intuitive visual confirmation of the differences observed in the statistical analyses and were used to identify outliers and spread within each category. Visualizations were produced using the *ggplot2* package in R to ensure clarity and publication-ready quality.

The methodology in this study was constructed to fill significant gaps in existing research, especially the lack of comparative and group-based analyses within pesantren. By incorporating validated measurement instruments, a rigorous sampling technique, and multiple layers of statistical testing, the study ensures a high level of internal validity and analytical depth. Furthermore, the integration of context-sensitive measures and collaboration with pesantren stakeholders enhances ecological validity and increases the practical relevance of the findings for policy and education design in Islamic educational institutions.

In sum, the methodological design reflects both theoretical rigor and contextual appropriateness. The use of explanatory quantitative analysis, stratified purposive sampling, validated instruments, and advanced statistical techniques situates this study as a robust empirical contribution to the field of Islamic financial education. It also establishes a replicable model for future research on financial behavior within pesantren and other community-based religious institutions in Indonesia and beyond.

Results and Discussion

Results

This section presents the empirical findings from the study on Islamic financial literacy (IFL), saving behavior, and investment behavior within the ecosystem of Pondok Pesantren Karangdurin (PPK). The results are structured into six sub-sections, corresponding to the methodological procedures: descriptive statistics, correlation analysis, regression analysis, analysis of variance (ANOVA), Tukey HSD post hoc comparisons, and visualizations. The presentation of results is explicitly anchored in the theoretical assumption that financial

²⁰ Mahdzan and Tabiani, "The Impact of Financial Literacy on Individual Saving: An Empirical Study among Malaysian Employees."

²¹ Rahmawati, "Strategi Peningkatan Literasi Keuangan Syariah Di Pesantren: Studi Implementatif."

literacy constitutes a core determinant of financial behavior,²² while also highlighting structural heterogeneity across internal stakeholder groups within the pesantren context.

Descriptive Statistics

To understand the central tendencies and distribution characteristics of the main variables studied—Islamic Financial Literacy (IFL), Saving Behavior, and Investment Behavior—a descriptive statistical analysis was performed. This analysis provides insights into the general tendencies of the respondents' responses and highlights variations across financial behavior dimensions.

Table 1. Descriptive Statistics of Main Variables

Variable	Mean	SD	Skewness
Islamic Financial Literacy	3.65	0.39	0.04
Saving Behavior	3.66	0.29	0.20
Investment Behavior	3.39	0.39	-0.10

Table 1 shows relatively high mean scores across all three variables. Islamic financial literacy (IFL) reflects a moderately strong internalization of Sharia-compliant financial principles among respondents. Saving behavior demonstrates the highest central tendency, indicating that routine financial prudence is relatively well embedded within the pesantren environment. By contrast, investment behavior records the lowest mean, suggesting a behavioral transition gap between financial knowledge and engagement in more complex financial activities.

Correlation Analysis

To explore the relationships among the variables, Pearson correlation analysis was conducted. This step aimed to determine whether Islamic financial literacy is significantly associated with saving and investment behaviors among different stakeholder groups in the pesantren ecosystem.

Table 2. Pearson Correlation Matrix

Variables	IFL	Saving Behavior	Investment Behavior
Islamic Financial Literacy	1.000	0.4706	0.7696
Saving Behavior		1.000	0.4838
Investment Behavior			1.000

Table 2 demonstrates positive and statistically significant correlations ($p < 0.001$) among all variables. Notably, the strongest association occurs between IFL and investment behavior, indicating that higher levels of Islamic financial knowledge are particularly critical for participation in cognitively demanding financial decisions. This finding reinforces the conceptualization of IFL as a driver of rational economic action, especially in domains characterized by higher perceived risk and informational complexity.

Regression Analysis

To assess the explanatory capacity of Islamic financial literacy, regression analyses were conducted to evaluate the extent to which IFL predicts saving and investment behaviors

²² Mahdzan and Tabiani, "The Impact of Financial Literacy on Individual Saving: An Empirical Study among Malaysian Employees"; Dinc et al., "The Effect of Financial Literacy on Financial Behavior: A Structural Equation Modeling Approach."

across the stakeholder spectrum. This step moves beyond association by quantifying the magnitude of literacy's predictive influence on financial behavior.

Table 3. Regression Model Predicting Saving Behavior

Predictor	B	R ²	p-value
Islamic Financial Literacy	0.3545	0.2215	< 0.001

Table 4. Regression Model Predicting Investment Behavior

Predictor	B	R ²	p-value
Islamic Financial Literacy	0.7676	0.5923	< 0.001

The results presented in Tables 3 and 4 indicate that IFL is a moderate predictor of saving behavior, explaining 22.15% of its variance, and a strong predictor of investment behavior, accounting for 59.23% of the variance. This asymmetry suggests that while saving behavior may be partially shaped by cultural norms and habitual practices, investment behavior is substantially more dependent on financial literacy, consistent with prior evidence on the cognitive demands of investing.(Dinc et al., 2022).

Analysis of Variance (ANOVA)

To examine whether financial literacy and financial behaviors differ systematically across stakeholder groups (administrators, alumni, parents, and students), a one-way ANOVA was performed. This analysis assesses whether observed behavioral disparities are statistically attributable to group membership within the pesantren structure.

Table 5. ANOVA for Group Differences in IFL, Saving, and Investment

Variable	F-Value	p-value
Islamic Financial Literacy	188.6	0.001
Saving Behavior	43.15	0.001
Investment Behavior	118.0	0.001

The ANOVA results indicate statistically significant mean differences across stakeholder groups for IFL, saving behavior, and investment behavior. The particularly high F-values for IFL and investment behavior suggest pronounced structural disparities in access to financial knowledge and practice, underscoring the differentiated financial roles embedded within the pesantren hierarchy.

Post Hoc Tukey HSD Test Results

To identify which groups significantly differ from each other, Tukey's HSD tests were conducted following the ANOVA. This analysis helps pinpoint where educational interventions or behavioral gaps exist.

Table 6. Tukey HSD - Islamic Financial Literacy

Comparison	Mean Difference	p-value
Admin vs Parents	Significant	0.001
Admin vs Students	Significant	0.001
Admin vs Alumni	Significant	0.001

Table 7. Tukey HSD - Saving Behavior

Comparison	Mean Difference	p-value
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Admin vs Others	Significant	0.001
Alumni vs Parents	Not Significant	0.157

Table 8. Tukey HSD - Investment Behavior

Comparison	Mean Difference	p-value
Admin vs Others	Significant	0.001

The Tukey HSD results confirm that administrators consistently outperform other groups in Islamic financial literacy and financial behavior. Alumni exhibit intermediate performance, while parents and students tend to lag behind. This pattern indicates that institutional responsibility and exposure to financial management functions are strongly associated with higher literacy and behavioral outcomes, providing empirical justification for stakeholder-differentiated intervention strategies.

Boxplot Visualizations of Group Differences

To visually substantiate the statistical findings, boxplot visualizations were generated for each key variable across stakeholder groups. These figures provide a distributional perspective that complements the inferential results, allowing clearer identification of median differences and variability patterns.

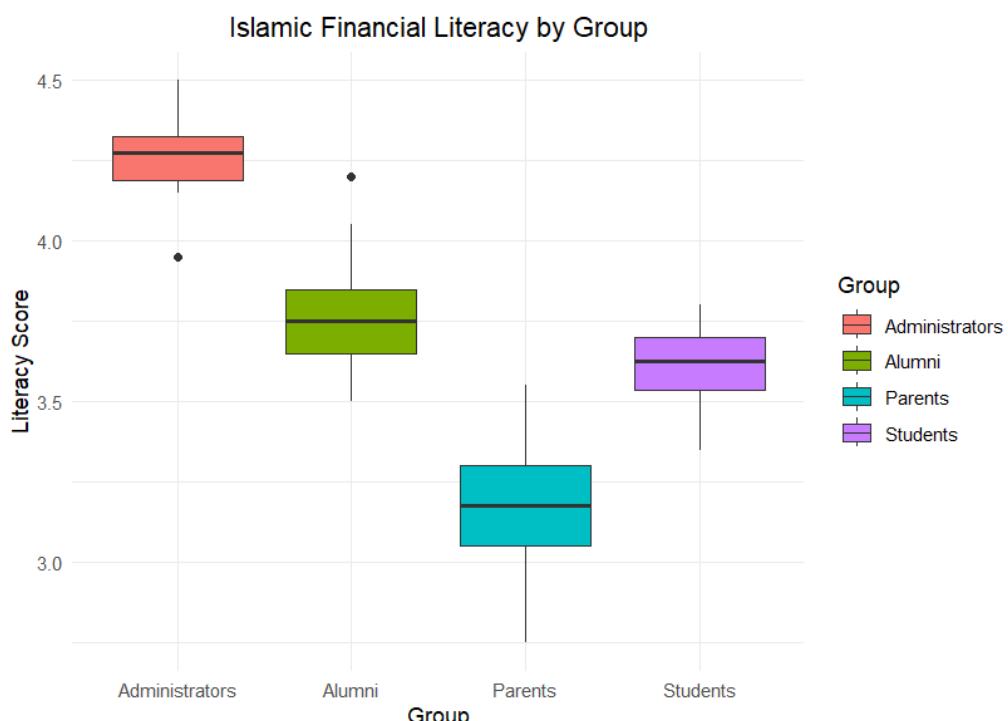


Figure 1. Boxplot of Islamic Financial Literacy by Group

Figure 1 shows administrators with the highest median IFL scores and the least variability, indicating strong and consistent knowledge. Parents show the lowest median and wider dispersion.

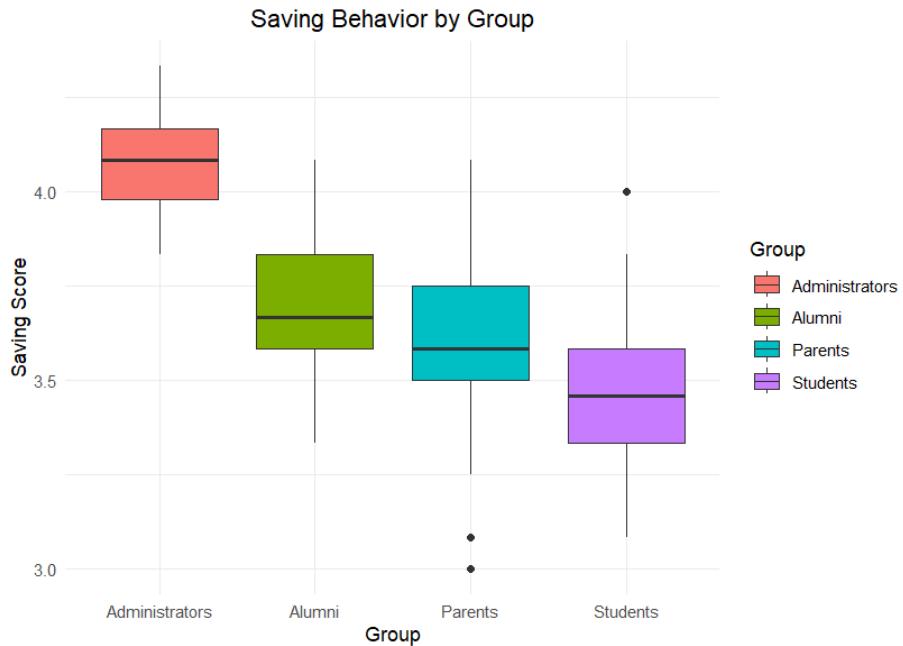


Figure 2. Boxplot of Saving Behavior by Group

Figure 2 shows a similar pattern where administrators again lead, followed by alumni and students, while parents are lowest. The compression of the box among administrators implies behavioral consistency.



Figure 3. Boxplot of Investment Behavior by Group

Figure 3 reveals the widest inter-group disparity in investment behavior. The lower medians and wider dispersion among parents and students reinforce the interpretation that investment engagement is highly knowledge-sensitive and unevenly distributed across stakeholder groups, reflecting differential exposure to Islamic financial instruments and decision-making contexts.

Discussion

Descriptive Overview of Financial Behavior

The descriptive results indicate that Islamic financial literacy among the community of Pondok Pesantren Karangduri (PPK) is positioned at a moderately high level, with a mean score of 3.65 on a five-point Likert scale. This finding suggests that respondents possess a reasonable understanding of basic Shariah-compliant financial principles, including concepts related to saving, investment, and risk avoidance.²³ However, the literacy level appears to remain predominantly functional rather than strategic. In contrast, saving behavior demonstrates the highest mean score (3.66) and relatively low dispersion, indicating that saving practices are already embedded as a stable habit within the pesantren community. This pattern reflects the institutionalization of prudential values such as moderation, discipline, and future-oriented responsibility that characterize pesantren life.²⁴ Saving behavior in this context thus appears to be culturally reinforced rather than purely knowledge-driven.

Investment behavior, however, records the lowest mean score (3.39), indicating that Shariah-compliant investment has not yet become a mainstream financial practice among stakeholders at PPK. This outcome can be interpreted through the lens of cognitive complexity and structural constraints, as investment decisions require deeper understanding of risk, expected returns, contractual structures, and Shariah compliance mechanisms.²⁵ Without systematic education and experiential learning, financial literacy alone may be insufficient to translate knowledge into investment behavior, particularly in pesantren settings where financial engagement remains largely informal.²⁶ In pesantren contexts, where financial education is often informal and consumption patterns remain relatively traditional, such advanced financial competencies are less likely to develop organically. This gap reinforces the argument that financial literacy alone, when not supported by structured education and practical exposure, may be insufficient to induce behavioral change in complex financial domains.

Correlation and Cognitive Linkages

The correlation analysis further elucidates the role of Islamic financial literacy as a behavioral determinant. The moderate correlation between literacy and saving behavior ($r = 0.47$) suggests that higher literacy is associated with improved saving practices, but the relationship is partially mediated by social norms and institutional culture. This finding aligns with the Theory of Planned Behavior, which emphasizes the influence of subjective norms and perceived behavioral control alongside knowledge.²⁷ In the pesantren context, saving

²³ Abdillah et al., "Cashless Revolution: The Impact on Regional Economic Growth."

²⁴ Mahdzan et al., "The Impact of Financial Literacy on Individual Saving: An Exploratory Study in Malaysia."

²⁵ Y Dinc et al., "The Mediating Role of Islamic Financial Literacy in Behavioral Intentions," *International Journal of Islamic and Middle Eastern Finance and Management* 16, no. 1 (2023): 104–22, <https://doi.org/10.1108/IMEFM-03-2021-0112>.

²⁶ Ahyak and Sulhan, "The Dynamics of Sharia Mutual Fund Market Share in Indonesia: The Role of the Sharia Stock Market and the Influence of Conventional Competition," *JEIZA: Jurnal Ekonomi Islam Az-Zain* 1, no. 2 (2025): 49–60.

²⁷ I Ajzen, "The Theory of Planned Behavior," *Organizational Behavior and Human Decision Processes* 50, no. 2 (1991): 179–211.

behavior may be heavily shaped by familial habits, communal expectations, and cultural norms that emphasize simplicity and precaution.

By contrast, the strong correlation between literacy and investment behavior ($r = 0.77$) underscores the centrality of knowledge as an enabling factor for investment engagement. Islamic investment decisions demand higher cognitive involvement, including understanding Shariah contracts, profit-and-loss sharing, asset backing, and ethical screening.²⁸ This finding supports Human Capital Theory, positioning Islamic financial literacy as a productive asset that enhances individuals' capacity to participate in complex financial activities.

Predictive Validity via Regression Analysis

The regression analysis provides robust empirical confirmation of the correlational findings. Islamic financial literacy emerges as a statistically significant predictor of both saving and investment behaviors, with distinct explanatory power across behavioral domains. Literacy explains approximately 22% of the variance in saving behavior, suggesting that saving is influenced by a combination of knowledge, income stability, and religious teachings.²⁹

In contrast, literacy explains nearly 60% of the variance in investment behavior, indicating a substantially stronger causal pathway. This finding corroborates prior studies emphasizing the decisive role of literacy in Islamic investment decisions.³⁰ Even marginal improvements in literacy may therefore yield disproportionate gains in investment participation, particularly within pesantren communities.

Sociodemographic Differentiation and ANOVA Insights

The ANOVA results reveal pronounced heterogeneity across stakeholder groups within PPK. Significant differences are observed for literacy, saving, and investment behaviors, with a consistent hierarchical pattern: administrators outperform alumni, alumni outperform students, and parents occupy the lowest position across all variables. These differences reflect variations in exposure, responsibility, and financial engagement.³¹ These findings highlight the stratified nature of financial capability within pesantren ecosystems.

Administrators exhibit the highest levels, likely due to their involvement in managing pesantren finances and interacting with financial institutions. Alumni demonstrate higher levels than students, likely due to post-graduation exposure to real-world economic environments. Parents show the lowest levels, reflecting limited access to formal financial education and exposure to Islamic financial products beyond basic banking.

Post Hoc Analysis with Tukey HSD

²⁸ E Durak et al., "Do Financial Literacy and Halal Literacy Drive Islamic Financial Inclusion?," *Borsa Istanbul Review* 22, no. 4 (2022): 763–75, <https://doi.org/10.1016/j.bir.2022.03.003>.

²⁹ Abidin and Faizah, "Kesejahteraan Ustadz Dari Perspektif Maqashid Syariah."

³⁰ Mahdzan et al., "The Impact of Financial Literacy on Individual Saving: An Exploratory Study in Malaysia"; Dinc et al., "The Mediating Role of Islamic Financial Literacy in Behavioral Intentions"; Durak et al., "Do Financial Literacy and Halal Literacy Drive Islamic Financial Inclusion?"

³¹ S Ismail et al., "Financial Literacy and Behavior among Malaysian Muslim Consumers," *Journal of Islamic Accounting and Business Research* 14, no. 4 (2023): 673–93, <https://doi.org/10.1108/JIABR-01-2022-0022>.

The post hoc analysis using Tukey HSD strengthens the interpretation of group differences. The largest gaps occur between parents and administrators, as well as between parents and alumni, indicating a structural divide within the pesantren ecosystem. These gaps have implications for the effectiveness of financial education initiatives. Uniform programs may fail to address the specific needs of less literate stakeholders, particularly parents who influence household financial decisions.³² The presence of non-significant differences between parents and alumni in saving behavior suggests convergence due to cultural norms, reinforcing that saving is influenced more by culture than knowledge. In contrast, investment behavior remains highly dependent on literacy and exposure.

Visualizing Behavioral Gaps

The boxplot visualizations visually confirm the statistical findings. Higher medians and tighter distributions among administrators indicate both competence and behavioral consistency, while lower medians among parents reflect systematically limited engagement rather than isolated outliers.

Contributions to Literature and Theory

The findings are aligned with the broader literature on Islamic financial literacy and financial behavior, which consistently emphasizes the role of literacy in shaping economic decision-making, particularly in investment contexts. However, this study extends existing knowledge by offering a multi-stakeholder analysis within a pesantren ecosystem, capturing the internal heterogeneity that has been largely overlooked in prior research focusing on single populations such as students or teachers.

More importantly, this study advances a conceptual interpretation of Islamic financial literacy not merely as individual cognitive capital, but as a normative and institutional mechanism embedded within religious educational environments. In pesantren contexts, financial behavior is shaped not only by rational economic calculation but also by shared religious values, institutional roles, and social expectations. This finding strengthens behavioral and human-capital theories by situating them within faith-based institutional settings, where literacy functions simultaneously as knowledge, moral guidance, and socially reinforced practice.

By empirically demonstrating differentiated literacy–behavior linkages across administrators, alumni, parents, and students, this study contributes a refined understanding of how institutional positioning mediates the translation of literacy into financial action. The results suggest that Islamic financial literacy operates through layered pathways—cognitive, normative, and institutional—thereby offering a more comprehensive explanatory framework for financial behavior in religious communities. This conceptual contribution enhances the generalizability of Islamic financial literacy research beyond pesantren, positioning it as a relevant analytical lens for other faith-based and community-centered financial education contexts.

³² R Rosman et al., “Financial Education and Literacy among Muslim Women Entrepreneurs,” *Asian Journal of Economics and Banking* 6, no. 2 (2022): 204–22, <https://doi.org/10.1108/AJEB-01-2022-0002>.

Conclusion

This study empirically examined the impact of Islamic financial literacy (IFL) on saving and investment behaviors within the sociocultural ecosystem of Pondok Pesantren Karangdurin. The results indicate that IFL is strongly associated with both saving and investment behaviors, with substantially stronger explanatory power observed in the context of investment. Regression analysis shows that IFL explains 22.15% of the variance in saving behavior and 59.23% of the variance in investment behavior, indicating differentiated behavioral sensitivity to financial knowledge. Administrators consistently exhibited higher IFL and financial behavior scores than students, alumni, and parents, reflecting institutional role-based disparities in financial exposure and responsibility. Post hoc analyses further confirmed statistically significant inter-group differences, particularly favoring those in leadership or managerial roles. Overall, these findings reinforce the theoretical proposition that Islamic financial literacy functions as a critical enabling factor for forward-looking financial behavior, especially in cognitively demanding domains such as investment.

The implications of this study are both academic and practical. Academically, the findings contribute to the Islamic finance and financial literacy literature by demonstrating how religiously grounded financial knowledge translates into distinct behavioral outcomes across heterogeneous stakeholder groups within a pesantren context. Practically, the results highlight the importance of differentiated and role-sensitive financial education strategies, rather than uniform interventions, to address structural literacy gaps among parents, students, alumni, and administrators. Future research is encouraged to adopt longitudinal designs to assess behavioral persistence over time and to investigate how digital Islamic financial tools may strengthen the literacy–behavior nexus among pesantren communities.

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