GOLDEN RATIO OF SOCIAL SCIENCE AND EDUCATION
VOLUME 6, ISSUE. 2 (2026)
Website: https://goldenratio.id/index.php/grsse/index

GOLDEN RATIO
ISSN [Online]: 2797-5827

SOCIAL SCIENCE AND EDUCATION | RESEARCH ARTICLE

Pappaseng Values and Islamic Financial Literacy in Relation to Financial Inclusion among the Bugis Community

Andi Darmawangsa[1], A. Ardi[2], Muhammad Hasibuddin[3]

[1, 2, 3] Faculty of Islamic Studies, Universitas Muslim Indonesia, Makassar, Indonesia.
Email: andi.darmawangsa@umi.ac.id[1], ardi.fai@umi.ac.id[2], mhasibuddin@umi.ac.id[3]

ARTICLE HISTORY

Received: March 11, 2026
Revised: October 26, 2026
Accepted: November 08, 2026

DOI
https://doi.org/10.52970/grsse.v6i2.2800

ABSTRACT
Existing studies have not established whether an understanding of a specific indigenous ethical tradition contributes to Islamic financial inclusion beyond the role of financial literacy. This study addresses this gap by examining the relationship between Pappaseng values, Islamic financial literacy, and Islamic financial inclusion among members of the Bugis community and by developing an educational proposal based on the findings. This study employed a quantitatively oriented mixed-methods approach, combining an online survey of 157 respondents from Makassar, Gowa, and Maros with interviews and observations. The qualitative findings were integrated with the quantitative results to provide a more comprehensive interpretation. The mean scores for Islamic financial literacy, understanding of Pappaseng values, and Islamic financial inclusion were 3.72, 3.35, and 3.28, respectively, on a five-point scale. The corresponding Cronbach's alpha values were 0.88, 0.81, and 0.79, indicating acceptable internal consistency. The reported regression coefficients showed positive associations between Islamic financial literacy and Islamic financial inclusion (0.46; $p < 0.001$), as well as between understanding of Pappaseng values and Islamic financial inclusion (0.29; $p = 0.004$), with an R^2 value of 0.42. However, the coefficient types and precision estimates were not fully documented. Qualitative findings indicated that values of honesty, responsibility, prudence, and solidarity were associated with financial decision-making, while also revealing limited knowledge of Islamic financial contracts and the continued use of informal financial services. This study distinguishes technical financial capabilities from the moral and relational dimensions of financial participation. Trust may facilitate participation in both formal and informal financial arrangements, making the direction of this relationship important for interpretation. However, trust and social capital were not measured as separate mediating constructs. The proposed educational model was developed based on the research findings and formative consultations rather than an evaluated intervention.

Keywords: Pappaseng Values, Islamic Financial Literacy, Islamic Financial Inclusion, Bugis Community, Community Education.

I. Introduction

Islamic financial literacy encompasses the knowledge, attitudes, and practical skills required to evaluate financial decisions in accordance with Islamic principles. Research on financial literacy distinguishes between the ability to recognize financial information and the ability to apply that information in decision-

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

ISSN [Online]: 2797-5827

making (Huston, 2010; Remund, 2010). In the context of Islamic finance, these competencies also involve an understanding of financial contracts and Sharia principles (Dinc et al., 2021). However, an important question remains regarding how technical financial knowledge relates to financial participation when individuals also evaluate their financial choices based on culturally inherited moral values. Although knowledge of financial contracts and trust in individuals who recommend financial products may coexist, they represent distinct foundations for financial decision-making. Among the Bugis community, financial decisions are shaped by interpersonal relationships influenced by family guidance, religious teachings, social reputation, and mutual assistance. Pappaseng, which refers to the inherited advice and moral teachings of Bugis society, provides an ethical framework for evaluating these relationships. It encompasses values associated with honesty, responsibility, dignity, self-restraint, and respect for others. Rukka et al. (2019) describe Pappaseng as a philosophy that guides community life, while Rizki et al. (2024) examine the moral education embedded in Pappaseng to Riolo. The relevance of Pappaseng to Islamic financial literacy lies in its potential to connect established moral principles with the practical requirements of contemporary financial decision-making. Several Pappaseng values illustrate this relationship. Lempu refers to honesty, siri' represents personal and collective dignity, and sipakatau emphasizes mutual respect and the recognition of human worth. These values are complemented by amanah, which denotes trustworthiness, as well as principles of prudence, moderation, and mutual assistance. Collectively, these principles may influence how individuals select business partners, communicate financial obligations, evaluate debt, and establish relationships with financial institutions. Nevertheless, familiarity with moral principles does not necessarily indicate an adequate understanding of financial contracts. For example, individuals may strongly uphold honesty while continuing to rely on an institution's reputation rather than examining the contractual terms of its financial products.

South Sulawesi provides a relevant context for investigating this distinction. Abdullah et al. (2020) document variations in the understanding of Islamic financial products among rural communities, while Said and Amiruddin (2017) identify differences in familiarity with financial services among university students in Makassar. These studies highlight gaps in local financial knowledge but do not specifically examine the role of Bugis cultural understanding. Similarly, Kartini et al. (2020) investigate financial knowledge, attitudes, and behavior among homemakers in Maros. Although their research shares a geographical context with the present study, their behavioral framework does not separately assess understanding of Pappaseng values. Accordingly, the focus on Bugis participants serves an analytical purpose: Pappaseng represents a distinct indigenous ethical tradition whose perceived understanding can be examined alongside financial literacy, rather than assuming that geographical residence or religious affiliation adequately reflects cultural orientation. The research gap concerns whether understanding an indigenous ethical tradition remains associated with Islamic financial inclusion after accounting for technical financial literacy and how this association is reflected in everyday financial practices. Previous studies examining financial product adoption, religiosity, social capital, and financial behavior provide relevant explanatory perspectives. However, these constructs should not be considered interchangeable with the understanding of Pappaseng values. This study therefore treats Pappaseng understanding as a distinct questionnaire-based construct and uses qualitative accounts to interpret its relevance to financial practices. Islamic financial inclusion is assessed using a ten-item engagement scale, while a separate question captures respondents' previous experience with Islamic financial products. Neither measure, independently, establishes the quality of financial services or improvements in household welfare.

To address this research gap, the study formulates three research questions. First, what are the observed levels of Islamic financial literacy, understanding of Pappaseng values, and Islamic financial inclusion among the surveyed Bugis respondents? Second, how are Islamic financial literacy and Pappaseng understanding associated with Islamic financial inclusion when both variables are included in the same multiple regression model? Third, how can participants' accounts of financial practices inform the development of financial education that integrates Islamic financial principles with local cultural values? These questions combine quantitative measurement with qualitative interpretation while distinguishing the proposed educational model from claims regarding the effectiveness of an implemented intervention. This

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

study offers a bounded contribution to existing explanations of financial participation based on financial literacy and social capital. The first research question provides a descriptive assessment of the measured constructs and the characteristics of the surveyed respondents. The second examines their conditional associations to determine whether understanding of Pappaseng values provides additional explanatory information alongside financial literacy within the specified two-predictor model. The third explores the practical circumstances underlying these associations and uses the findings to inform the development of educational content. The originality of this study lies in examining a separately measured Bugis ethical construct alongside Islamic financial literacy and financial inclusion, while exploring the tensions between formal and informal financial practices. Rather than claiming that cultural dimensions have never been examined in financial research, this study offers a context-specific perspective on how indigenous ethical values may relate to financial participation. Furthermore, the proposed educational model is presented as a research-informed framework, not as a validated intervention.

II. Literature Review and Hypothesis Development

2.1. Islamic Financial Literacy and Financial Participation

The human capital perspective explains how financial knowledge can reduce the informational effort required to compare financial services and understand financial obligations (Lusardi & Mitchell, 2014). Evidence linking financial literacy to stock market participation provides support for this argument in the context of another financial market (van Rooij et al., 2011). However, applying this perspective to Islamic financial inclusion requires consideration of additional factors. Ali et al. (2020) identify both demand-side and supply-side considerations in the Indonesian context, while Widityani et al. (2020) examine educational and socioeconomic differences in financial product selection. Financial literacy may facilitate participation, but it does not necessarily ensure the availability of affordable, accessible, and appropriate financial products. Accordingly, the present study examines financial knowledge and capabilities within a specific institutional context rather than treating financial literacy as the sole determinant of financial inclusion. Research on Islamic banking also positions financial literacy alongside institutional and behavioral factors. Albaity and Rahman (2019), Pala et al. (2024), and Yusfiarto et al. (2023) investigate different financial services, population groups, and adoption-related outcomes. These studies provide a basis for considering financial literacy as an explanatory factor. However, their findings do not necessarily establish that coefficients derived from studies of banking intentions or capital market adoption can be generalized to a community-based financial inclusion scale. This distinction is important because attitudes toward Islamic finance, knowledge of specific financial contracts, and actual engagement with financial services represent different analytical dimensions. Therefore, this study maintains a clear distinction between Islamic financial literacy, understanding of Pappaseng values, and Islamic financial inclusion. This perspective also highlights the challenges associated with measurement. Respondents may demonstrate positive attitudes toward prudent financial behavior and report confidence in making financial decisions without necessarily possessing the ability to interpret specific financial contracts. Huston (2010) and Remund (2010) distinguish financial knowledge from its practical application, emphasizing the importance of clearly defining constructs and the decision-making tasks they represent.

In this study, the financial literacy score encompasses knowledge, attitudes, and self-reported capabilities. Consequently, it represents a broad financial literacy construct rather than a specific assessment of financial contract comprehension. Future educational assessments should distinguish these dimensions more explicitly before interpreting changes in composite financial literacy scores. Evidence from other Indonesian contexts further supports this perspective. Kartini et al. (2020) examine the relationship between financial knowledge, attitudes, and financial behavior among homemakers in Maros. Similarly, Hesniati et al. (2025), based on 407 survey respondents in Indonesia, identify associations between financial knowledge, self-efficacy, and digital financial inclusion, as well as an indirect relationship between financial knowledge and financial well-being through financial inclusion. These studies support the examination of financial

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

capabilities alongside other individual orientations, although neither specifically investigates Bugis ethical understanding or employs the financial inclusion measure used in the present study. Based on the human capital perspective, H1 proposes a positive association between Islamic financial literacy and Islamic financial inclusion. This expectation is based on the premise that financial knowledge may improve individuals' ability to understand financial agreements, compare contractual obligations, and communicate with financial service providers. These capabilities may facilitate financial participation when appropriate services are available. Nevertheless, access, affordability, previous financial product usage, and institutional experience remain potential alternative explanations that are not controlled for in the two-predictor regression model.

H1 : Islamic financial literacy is positively associated with Islamic financial inclusion when understanding of Pappaseng values is included in the regression model.

2.2. Pappaseng Values and Social Relationships

Social capital and trust perspectives explain how financial decisions are embedded in interpersonal relationships and social networks (Guiso et al., 2004; Guiso et al., 2008). Within this framework, Pappaseng provides an ethical vocabulary through which individuals may interpret and evaluate expected conduct. However, it should not be regarded as a direct measure of social capital or institutional trust. The value of lempu may emphasize the importance of transparent explanations, siri' may reinforce the social significance of fulfilling financial obligations, and sipakatau may encourage respectful communication. These values offer possible explanations of how cultural understanding may influence financial decision-making. Nevertheless, the regression model measures understanding of Pappaseng values rather than these underlying mechanisms separately. Therefore, such relationships remain theoretical interpretations rather than independently tested mechanisms. Fikri et al. (2023) provide a cultural perspective on the relationship between Bugis values of responsibility and Islamic principles, although their study does not establish a causal relationship with financial outcomes. The human capital and relational perspectives complement each other because they address different dimensions of financial participation. Financial literacy concerns individuals' ability to understand and apply financial information, whereas cultural understanding relates to the values and expectations through which individuals evaluate appropriate conduct and credible advice. Individuals may recognize the moral importance of fulfilling financial obligations while lacking an adequate understanding of the contractual terms involved. Conversely, they may understand a financial product but perceive the institution offering it as untrustworthy or the associated commitment as unsuitable. Previous studies on Pappaseng emphasize the role of moral guidance in community life and education (Rukka et al., 2019; Rizki et al., 2024). Incorporating this perspective extends the conceptual framework by distinguishing financial decision-making competence from culturally embedded motivations for financial participation, without assuming that either construct can substitute for the other.

Based on this relational perspective, H2 proposes a positive association between understanding of Pappaseng values and Islamic financial inclusion. This expectation is grounded in the potential alignment between culturally valued principles, including honesty, responsibility, and mutual assistance, and the behavioral expectations individuals may hold toward Islamic financial institutions. Such alignment may strengthen the perceived credibility and acceptability of financial institutions when their practices are consistent with these values. However, the direction of this relationship may depend on the financial context. The same ethical expectations may encourage individuals to rely on family-based lending arrangements or trusted community funds rather than formal financial institutions. Evidence concerning financial knowledge, attitudes, and behavior among homemakers in Maros (Kartini et al., 2020) provides a relevant local comparison, although it does not directly examine Pappaseng values. Accordingly, H2 represents an exploratory and context-specific proposition derived from the integration of cultural and financial perspectives rather than a relationship already established through comparable research among the Bugis community.

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

H2 : Understanding of Pappaseng values is positively associated with Islamic financial inclusion when Islamic financial literacy is included in the regression model.

2.3. Conceptual Framework and Educational Contribution

Figure 1 illustrates the distinction between the statistical relationships examined through regression analysis and the integration of findings used to develop the proposed educational framework. The statistical model includes two explanatory variables entered simultaneously, without interaction terms or mediating variables. Decision-making capabilities and relational expectations serve as theoretical perspectives for interpreting the observed associations rather than as additional variables in the statistical model. Hypotheses H1 and H2 provide the theoretical basis for interpreting the reported regression results, although no preregistration or prospective hypothesis documentation was available. The lower section of the figure illustrates the interpretive integration process, through which qualitative accounts are considered alongside quantitative survey findings to identify educational priorities and examine potentially conflicting interpretations of financial practices.

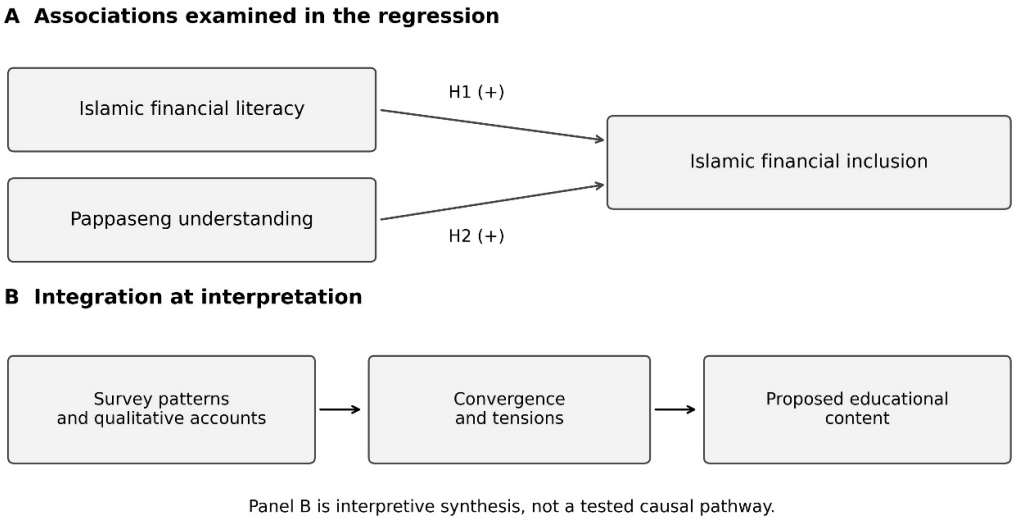


Figure 1. Conceptual Framework of the Associations Examined in the Study
Source: Authors' synthesis.

The solid arrows in the upper panel represent the hypothesized positive associations examined through the additive regression model. The lower panel illustrates the integration of quantitative and qualitative findings for interpretive purposes; it does not represent a tested mediation model or an evaluated educational intervention. This distinction also establishes the scope of the study's theoretical contribution. The proposed framework does not treat cultural identity as a substitute for financial knowledge. Instead, it identifies two analytically distinct resources that may help explain financial participation and highlights the circumstances under which their potential contributions may differ. Interpersonal trust and social networks may sustain informal financial arrangements, while limited understanding of financial contracts may coexist with strong ethical commitments. Considering these possibilities within a common analytical framework makes cultural understanding an empirical construct to be examined rather than an assumed positive attribute of Islamic financial products. The proposed educational model is developed based on this interpretation and requires a separate implementation and evaluation study to establish its effectiveness.

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

ISSN [Online]: 2797-5827

III. Research Method

3.1. Research Design and Setting

This study employed a quantitatively oriented mixed-methods approach, comprising separate quantitative and qualitative analytical components that were integrated during the interpretation stage. The quantitative component focused on describing the observed levels of the research variables and examining their associations, while the qualitative component explored cultural meanings and financial practices through interviews and observations. Although the two components were analyzed separately, their findings were brought together to provide a more comprehensive understanding of the research questions. However, the available documentation does not sufficiently establish the timing or interdependence of data collection to classify the study as an explanatory sequential design or confirm that both components were conducted concurrently. Therefore, the integration is described based on the documented analytical activities rather than an assumed chronological sequence. Following Fetters et al. (2013), the interpretive process involved comparing the contributions of each component to the research questions while retaining differences and inconsistencies rather than treating qualitative findings as automatic confirmation of the quantitative results. The fieldwork was conducted among Bugis communities in Makassar City, Gowa Regency, and Maros Regency, South Sulawesi, Indonesia. These locations provided relevant settings for examining the interaction between local cultural practices and Islamic financial institutions, including Islamic banks, Islamic cooperatives, and community-based Islamic microfinance institutions. The target population consisted of economically active members of the Bugis community, particularly microenterprise participants and households that had previously used or had the potential to use Islamic financial services. The geographical scope was limited to Bugis participants in these locations and does not imply that the broader populations of the three areas are culturally homogeneous.

3.2. Participants and Data Collection

The quantitative sample consisted of 157 Bugis respondents recruited through non-probability sampling in Makassar, Gowa, and Maros. The target respondents were economically active community members, particularly microenterprise participants and households that had previously used or had the potential to access Islamic financial services. The recruitment process aimed to obtain variation in respondents' age, educational background, occupation, and place of residence. However, this objective describes the intended sample composition rather than a formally documented eligibility-screening procedure. Since no probability sampling frame or response denominator was available, the diversity of the sample should not be interpreted as evidence of population representativeness. The geographical distribution and characteristics of the respondents are presented in Table 1. Further information regarding recruitment channels, exclusion criteria, and fieldwork dates requires confirmation from the original research records. Data were collected using an online, closed-ended questionnaire consisting of 48 items, comprising 20 items measuring Islamic financial literacy, 18 items assessing understanding of Pappaseng values, and 10 items measuring Islamic financial inclusion. All items were reported to use a five-point response scale. The Islamic financial literacy construct covered financial knowledge, attitudes, and capabilities, while the cultural understanding construct focused on respondents' understanding and internalization of values relevant to individual and social conduct. Islamic financial inclusion was measured through respondents' engagement with Islamic financial products and services.

Demographic characteristics and previous financial product usage were recorded separately. Because the financial literacy instrument incorporated self-reported attitudes and capabilities, its composite score was interpreted as a broad measure of financial literacy rather than an objective assessment of financial contract knowledge alone. The available documentation did not provide the exact item wording, response anchors, reverse-coded items, score aggregation procedures, or rules for handling missing responses.

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

ISSN [Online]: 2797-5827

Consequently, the reported scale means were retained without reconstructing the scoring procedures based on undocumented assumptions. The qualitative component involved interviews and observations to obtain contextual insights from customary and religious leaders, microentrepreneurs, personnel of Islamic financial institutions, and community organizers. Informants were selected purposively based on their relevance to cultural guidance and financial practices within the Bugis community. Observations were conducted in market settings and religious study groups. However, the available documentation does not specify the total number of informants, their distribution across research locations, recruitment procedures, interview duration and language, recording and transcription arrangements, or the interview guide used. Therefore, the qualitative findings presented in this study are based on role-based and location-based paraphrases documented in the research records. Their primary contribution is to provide contextual interpretations of financial practices rather than to establish prevalence estimates, demonstrate thematic saturation, or identify direct relationships between individual interview accounts and survey scores.

3.3. Data Analysis and Integration

The quantitative data were analyzed using descriptive statistics and multiple linear regression. Descriptive analysis was conducted to summarize respondents' characteristics and the reported scores of the research variables. Internal consistency was assessed using Cronbach's alpha, following the reliability coefficient introduced by Cronbach (1951). However, this coefficient was not interpreted as evidence that the constructs were necessarily unidimensional or sufficiently distinct from one another. Previous reporting indicated that item assessment involved corrected item-total correlations and that all items were retained. Nevertheless, the corresponding coefficients and retention criteria were not provided. Accordingly, this information is acknowledged as a methodological reporting limitation rather than presented as a fully verified validity assessment. A reproducible evaluation would require access to the original questionnaire, item-level statistical outputs, scoring procedures, and documented decision criteria. The interpretation of internal consistency also considers Sijtsma's (2009) caution against treating reliability coefficients as substitutes for construct validation. Multiple linear regression was employed to examine the associations between Islamic financial inclusion as the dependent variable and Islamic financial literacy and understanding of Pappaseng values as the two explanatory variables. Both explanatory variables were entered simultaneously into an additive regression model. Demographic characteristics were described but were not included as regression covariates. Accordingly, H1 and H2 concern the positive associations of each explanatory variable with Islamic financial inclusion, conditional on the other variable included in the model. The reported p-values are presented without assuming that a one-sided hypothesis-testing procedure was employed. Table 4 distinguishes the reported regression coefficients and p-values from statistical information that was not available, including coefficient types, standard errors, and confidence intervals. A comprehensive assessment of the regression model would require the intercept, analytical sample size, complete estimation output, and diagnostic results concerning linearity, residual variance, multicollinearity, influential observations, and residual behavior relevant to statistical inference. Since these outputs were not provided, the adequacy of the regression assumptions cannot be independently verified. Furthermore, the cross-sectional design does not establish causal relationships and leaves open the possibility of reverse associations and unobserved confounding factors.

The qualitative data were analyzed through a thematic approach involving coding, grouping related information, and interpreting recurring patterns of meaning, following Braun and Clarke (2006). The reported themes included honesty and trustworthiness, prudence and moderation, responsibility and dignity, and solidarity. Although the available documentation supports this general description of the analytical process, it does not establish the number of coders, whether the coding process was primarily inductive or deductive, the procedures used to develop the coding framework, or the involvement of qualitative analysis software, reflexive notes, and participant validation. These procedures were therefore not retrospectively assumed or claimed. The interpretation considered both convergent and divergent findings, particularly by examining the

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

positive associations identified in the survey alongside qualitative accounts of limited financial contract knowledge and continued preferences for informal financial arrangements. This approach provided a structured basis for interpreting the findings while acknowledging the limitations of the available qualitative documentation. The integration of quantitative and qualitative findings was conducted at the interpretation stage. The survey results identified the direction of the observed associations, while qualitative accounts from different participant groups provided contextual explanations of how financial knowledge, institutional credibility, financial obligations, and solidarity influenced financial practices. The comparison of these findings subsequently informed the development of the proposed educational content, as summarized in Table 5. This description represents a reconstruction of the documented integration process rather than a claim that a formal joint display procedure was implemented during fieldwork. Table 6 provides an additional synthesis to make the integration process more explicit for readers. Furthermore, discussions involving customary leaders, academics, and Islamic finance practitioners were conducted to consider the conceptual, cultural, and practical relevance of the proposed educational model. However, in the absence of a documented panel composition, selection criteria, discussion protocol, evaluation records, or details of resulting revisions, this process is characterized as formative consultation rather than formal expert validation or evidence of intervention effectiveness.

3.4. Ethical Considerations and Methodological Transparency

The interview findings are presented without personal identifiers and are reported as paraphrased accounts rather than translated verbatim quotations. However, the documentation available for this study does not establish whether an institutional ethics approval or exemption was obtained, nor does it provide an approval reference, consent procedures, or permissions concerning the recording and use of qualitative accounts. These details must be verified against the original research records, as anonymizing participant information does not replace the requirements for informed consent and appropriate ethical oversight. Therefore, no ethics approval, exemption, or participant consent is assumed in the absence of supporting documentation. Access to the underlying survey and interview data must also comply with the actual consent conditions and applicable institutional requirements. These unresolved matters represent important limitations in the methodological and ethical reporting of the study.

IV. Result and Discussion

4.1. Quantitative and Qualitative Findings

a. Respondent Characteristics and Financial Participation

The sample consisted of 75 male respondents (47.8%) and 82 female respondents (52.2%). Respondents aged 31–45 years represented the largest age group, followed by those aged 18–30 years. In terms of educational background, respondents ranged from primary to tertiary education, with senior secondary and vocational school graduates constituting the largest group. Traders and microentrepreneurs represented the most common occupational categories. Table 1 presents the distribution of respondents according to their demographic and socioeconomic characteristics.

Table 1. Respondent Characteristics (n = 157)

Characteristic	Category	n	%
Gender	Male	75	47.8
	Female	82	52.2
Age	18–30 years	55	35.0
	31–45 years	64	40.8
	Over 45 years	38	24.2
Education	Primary school or equivalent	20	12.7

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

	Junior secondary school	32	20.4
	Senior secondary/vocational school	67	42.7
	Tertiary education	38	24.2
Occupation	Trader/microentrepreneur	60	38.2
	Farmer/fisher	18	11.5
	Civil servant/employee	34	21.7
	Homemaker	25	15.9
	Other occupations	20	12.7
Place of residence	Makassar City	70	44.6
	Gowa Regency	47	29.9
	Maros Regency	40	25.5
Previous use of Islamic financial services	Previously used an Islamic financial product	103	65.6
	Never used an Islamic financial product	54	34.4

In terms of geographical distribution, Makassar City contributed 70 respondents, followed by Gowa Regency with 47 respondents and Maros Regency with 40 respondents. These figures describe the composition of the recruited sample rather than the proportional distribution of Bugis residents across the three locations in South Sulawesi. The variation in occupational and educational backgrounds is relevant to the study's educational objectives, as respondents may encounter different financial products, payment arrangements, and sources of financial advice. However, the available data do not establish differences in financial literacy or financial inclusion across occupational, educational, gender, or geographical groups. Regarding previous financial product usage, 103 respondents (65.6%) reported having used at least one Islamic financial product, whereas 54 respondents (34.4%) indicated that they had never used such products. This measure captures respondents' previous experience with Islamic financial services and should be distinguished from the Islamic financial inclusion scale analyzed in the subsequent sections, which represents a composite measure. Therefore, the findings do not indicate that 65.6% of respondents were active users at the time of data collection or that all previous users demonstrated comparable levels of financial engagement. The presence of both previous users and nonusers provides a relevant context for examining the relationship between financial knowledge and participation in Islamic financial services. Qualitative accounts further revealed that community members continued to rely on family-based lending, rotating savings groups, and community funds. Participation in these informal arrangements may coexist with the use of formal Islamic financial services. Consequently, formal and informal financial participation should not necessarily be interpreted as mutually exclusive categories, as the same household may rely on different financial arrangements to meet different needs.

b. Islamic Financial Literacy, Understanding of Pappaseng Values, and Instrument Reliability

The mean score for Islamic financial literacy was 3.72 (SD = 0.54). Understanding of Pappaseng values had a mean score of 3.35 (SD = 0.57), while Islamic financial inclusion recorded a mean score of 3.28 (SD = 0.61). Table 2 presents the descriptive statistics for the three main research variables. Although all three scales used the same theoretical response range of 1–5, they represented different constructs and consisted of different numbers of measurement items.

Table 2. Descriptive Statistics of the Main Research Variables (n = 157)

Variable	Theoretical range	Mean	SD
Islamic financial literacy	1–5	3.72	0.54
Understanding of Pappaseng values	1–5	3.35	0.57
Islamic financial inclusion	1–5	3.28	0.61

Source: Study survey. SD = standard deviation. Category classifications are not presented because the corresponding numerical thresholds were not specified.

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

ISSN [Online]: 2797-5827

The mean scores indicate that respondents generally provided responses above the midpoint of each respective scale. However, these findings do not establish a nationally comparable level of Islamic financial literacy or inclusion. The interpretation relies on continuous scores because numerical thresholds for classifying respondents into specific proficiency categories were not established. Likewise, the differences between the mean scores are presented descriptively and should not be interpreted as statistically significant differences between the constructs. The qualitative findings provide additional context for interpreting these descriptive results. Participants demonstrated familiarity with principles such as honesty, the avoidance of excessive debt, and the importance of Islamic values in financial decision-making. Nevertheless, some accounts indicated limited understanding of the specific terms and conditions of Islamic financial contracts. These findings suggest a distinction between general awareness of Islamic financial principles and the practical ability to evaluate specific financial products. Previous studies conducted in South Sulawesi also identified variations in public understanding of Islamic financial products (Abdullah et al., 2020; Said & Amiruddin, 2017). However, differences in sampling procedures and measurement instruments prevent direct comparisons between the present respondents, previous research samples, and national financial literacy indices. The reliability analysis produced Cronbach's alpha values of 0.88 for Islamic financial literacy, 0.81 for understanding of Pappaseng values, and 0.79 for Islamic financial inclusion, as presented in Table 3. These results provide evidence of internal consistency for the three instruments within the present sample. Nevertheless, Cronbach's alpha values alone do not establish the unidimensionality of the constructs or confirm that the three instruments measure sufficiently distinct concepts. This interpretation is consistent with Sijtsma's (2009) caution regarding the use of Cronbach's alpha as a comprehensive measure of measurement quality. Such considerations are particularly relevant when financial knowledge, attitudes, and behavior are assessed through related questionnaire items.

Table 3. Internal Consistency of the Research Instruments

Instrument	Number of items	Cronbach's α
Islamic financial literacy	20	0.88
Understanding of Pappaseng values	18	0.81
Islamic financial inclusion	10	0.79

Source: Reported instrument analyses. Cronbach's alpha values indicate internal consistency within the study sample but do not independently establish construct validity.

The reported internal consistency results provide a preliminary assessment of the reliability of the instruments within the study sample. However, they do not establish whether ethically framed items measuring financial inclusion are empirically distinguishable from similarly worded items measuring ethical values. Potential overlap in item content may contribute to the observed associations, highlighting the importance of examining the original questionnaire wording. Dinc et al. (2021) developed a multidimensional Islamic financial literacy measurement instrument, while Dinc et al. (2023) examined its applicability across different countries. These studies provide relevant methodological comparisons but do not establish the original sources or adaptation procedures of the instruments used in the present study. Accordingly, the measurement contribution of this research remains exploratory: understanding of Pappaseng values is treated as a separate analytical construct, while its discriminant validity and cross-cultural comparability remain unestablished.

c. Associations with Islamic Financial Inclusion

The multiple regression results indicate positive associations between both explanatory variables and Islamic financial inclusion. Islamic financial literacy had a reported regression coefficient of 0.46 ($p < 0.001$), while understanding of Pappaseng values had a reported coefficient of 0.29 ($p = 0.004$). The model's coefficient of determination (R^2) was 0.42. Table 4 summarizes the available regression results.

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

ISSN [Online]: 2797-5827

Table 4. Reported Regression Results for Islamic Financial Inclusion

Explanatory variable	Coefficient	Coefficient type	SE	95% CI	p-value
Islamic financial literacy	0.46	NR	NR	NR	< 0.001
Understanding of Pappaseng values	0.29	NR	NR	NR	0.004

Source: Reported regression analysis. Dependent variable: Islamic financial inclusion score. $R^2 = 0.42$; total survey sample size = 157. NR = not reported in the available analysis. The coefficient type, standard errors, 95% confidence intervals, intercept, actual analytical sample size, adjusted R^2, overall F-test, and regression diagnostic results require verification against the original regression records. Missing statistical values cannot be reliably reconstructed from rounded coefficients and p-values alone.

Within the estimated regression model, higher Islamic financial literacy scores were positively associated with Islamic financial inclusion scores after accounting for understanding of Pappaseng values. Similarly, understanding of Pappaseng values demonstrated a positive association with Islamic financial inclusion after accounting for Islamic financial literacy. These findings suggest that both variables provide relevant explanatory information regarding financial participation within the study sample. The R^2 value of 0.42 indicates that the two-predictor model accounted for 42% of the observed variation in Islamic financial inclusion scores. However, this result does not imply that the two variables caused 42% of respondents' financial behavior. The positive association between Islamic financial literacy and financial inclusion is consistent with research examining financial knowledge in relation to financial inclusion and enterprise-related outcomes (Masrizal et al., 2025), although the outcomes examined in these studies are not directly equivalent. Research on microenterprise performance investigates the relationship between financial capabilities and business outcomes, whereas the present study focuses on reported financial engagement among respondents from different community backgrounds. Wijaya et al. (2024) examine financial management behavior and well-being, while Osman et al. (2024) investigate financial management within a Muslim millennial population. These studies provide relevant perspectives for distinguishing technical financial knowledge, normative orientations, and financial participation. Nevertheless, they do not establish which factors precede others causally in the present research context. The contribution of this study lies in examining a distinct cultural understanding construct alongside financial literacy rather than assuming that financial literacy alone provides a comprehensive explanation of financial inclusion. Recent studies in the field further clarify the boundaries of these findings. Hesniati et al. (2025) examine the relationships between financial knowledge, self-efficacy, and digital financial inclusion, reporting an indirect relationship between financial knowledge and financial well-being through financial inclusion. Their findings highlight the relevance of confidence and financial access as additional explanatory considerations.

However, digital financial inclusion represents a different outcome from Islamic financial inclusion. Similarly, Karomah and Melati (2025) examine the relationships between financial literacy, financial behavior, and financial inclusion in fishing households in the context of economic resilience. Their focus on livelihood conditions differs from the cultural perspective adopted in the present study. Taken together, these comparisons demonstrate why the positive coefficients identified in this study should be interpreted in relation to their specific constructs, populations, and analytical specifications rather than directly compared or ranked against coefficients reported in other models. The additive regression model does not examine whether understanding of Pappaseng values moderates the relationship between financial literacy and financial inclusion or mediates that relationship through trust. Furthermore, the standardization status of the reported coefficients is undocumented. Therefore, the coefficients of 0.46 and 0.29 should not be used to rank the relative importance of the explanatory variables or to estimate the expected change in the outcome for a one-unit increase in either predictor without further methodological verification. Previous experience with Islamic financial institutions may also influence financial literacy, while education, income, service accessibility, and financial experience may be associated with both explanatory variables and financial inclusion. These considerations are relevant to the interpretation of the subsequent discussion and the

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

ISSN [Online]: 2797-5827

development of educational recommendations. The reported coefficient directions and p-values are consistent with the expectations formulated in H1 and H2 within the available regression specification. However, because the coefficient types, precision estimates, and diagnostic results remain unavailable, the findings provide provisional support for the hypothesized associations rather than comprehensive evidence of model validity. The R^2 value describes the proportion of sample variation accounted for by the fitted regression model. An additional claim regarding the overall statistical significance of the model is not made because the corresponding test results were not available.

4.2. Pappaseng in Everyday Financial Practice

a. Honesty and Trustworthiness in Transactions

The first theme concerns lempu (honesty) and amanah (trustworthiness). A customary leader in Gowa described honesty and the preservation of dignity as central elements of the advice given to younger generations regarding trade, debt, and business cooperation. A trader in Makassar emphasized the importance of a prospective business partner's reputation, expressing a preference for someone considered trustworthy over an individual offering higher returns whose honesty remained uncertain. These accounts indicate that financial decisions are embedded in social relationships, in which individual conduct can affect both personal standing and broader family reputation. A religious leader in Maros connected the value of lempu with the importance of explaining the terms and consequences of financial transactions. This account gives honesty a practical financial dimension: parties should understand the agreements they enter into rather than relying solely on assurances that a transaction is appropriate. Similarly, a customer in Makassar associated Islamic finance with transparent agreements and parental advice concerning honest business practices. Nevertheless, the customer acknowledged having limited knowledge of contractual details and relying considerably on the perceived trustworthiness of financial institution personnel. These accounts highlight both the potential and the limitations of using cultural values in financial education. Trust can make a financial institution more approachable; however, trusting an individual is not equivalent to understanding a financial contract. Education based on Pappaseng values can draw on familiar expectations of honesty to encourage transparent explanations of product terms, obligations, and risks. This interpretation is consistent with research examining the relationship between cultural values and ethical financial conduct, although findings from other organizational settings cannot establish the effectiveness of the proposed approach within the communities examined in this study (Setiawan & Cholili, 2023).

b. Prudence and Moderation in Managing Money

The second theme concerns prudent borrowing and restrained consumption. A microentrepreneur in Gowa described discussing financing decisions with family members and assessing repayment capacity before accepting financial obligations. The participant associated these practices with the importance of avoiding financial burdens that could affect future generations. Similarly, a younger respondent in Makassar described declining consumer borrowing offers when the source of repayment was unclear, relating this decision to parental advice concerning moderation and responsibility. Other accounts highlighted the prioritization of essential household expenditures and the avoidance of financial products whose mechanisms were not fully understood. These practices suggest that participants did not perceive financial capability merely as a willingness to acquire more financial products or services. Instead, financial prudence could involve postponing or rejecting an offer. This distinction is important when interpreting financial inclusion because greater participation is not necessarily beneficial if it results in financial commitments beyond a household's repayment capacity or involves products whose terms are insufficiently understood. The educational implication is to connect culturally familiar advice with practical financial skills, particularly budgeting, assessing repayment capacity, and comparing financial commitments. Pappaseng provides a familiar cultural framework through which these practices can be discussed, while technical instruction supplies the information necessary to make specific financial decisions. The accounts support the relevance

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

ISSN [Online]: 2797-5827

of combining these two elements. However, they do not quantify household financial resilience or demonstrate that culturally framed instruction produces better outcomes than other educational approaches.

c. Responsibility, Dignity, and Repayment Obligations

The third theme concerns siri' and the fulfillment of financial commitments. A farmer in Maros explained that unjustified delays in repayment could damage personal and family reputations. Similarly, an Islamic financing officer in Makassar described customers who took repayment commitments seriously because they did not want to be perceived as untrustworthy. These accounts suggest that participants understood repayment obligations as social and moral responsibilities in addition to contractual requirements. The financing officer also described customers' limited understanding of formal procedures when they encountered repayment difficulties. Some customers preferred to request additional time through personal conversations rather than follow institutional procedures, such as restructuring. This account indicates a gap between the willingness to fulfill financial commitments and knowledge of the formal channels available for communicating financial difficulties. However, it does not establish how frequently this behavior occurs or whether such requests result in particular institutional responses. From an educational perspective, responsibility should be connected with an understanding of both financial obligations and the procedures available when repayment becomes difficult. Discussing siri' can make this subject more meaningful to participants, but it should not replace explanations of the options available to customers experiencing repayment difficulties. Cultural concepts are most useful when they clarify formal procedures and encourage constructive communication between customers and financial institutions. The broader relationship between Bugis dignity, social responsibility, and Islamic values provides additional context for this interpretation (Fikri et al., 2023).

d. Solidarity and the Relationship between Informal and Formal Finance

The fourth theme concerns solidarity and mutual assistance among community members. Participants described rotating savings arrangements, collective funds, and financial support from relatives. A religious study group organizer in Gowa explained that a collective fund helped members cover healthcare expenses and obtain small amounts of business capital for their microenterprises. The organizer also noted that the group was considering closer cooperation with an Islamic financial institution to improve the management of its activities. This account illustrates how existing community-based financial practices can provide a starting point for financial education. An Islamic microfinance manager in Makassar reported that explanations of profit-sharing, zakat, and charitable giving were easier for members to understand when connected with mutual assistance and social justice.

The manager also emphasized the continuing need to explain the contractual details of financial products. These accounts suggest that culturally familiar examples can facilitate communication while leaving a distinct role for technical financial instruction. Nevertheless, they do not establish that all informal financial arrangements comply with Sharia principles or that formalizing such arrangements automatically improves their operation. Some participants continued to prefer informal financial arrangements because they were perceived as flexible, accessible, and grounded in direct personal trust. Consequently, the same cultural values that may make Islamic financial services attractive can also reinforce continued reliance on informal arrangements. Local values do not necessarily lead to a single institutional preference. Ahmed and Salleh (2016) connect financial planning, literacy, inclusion, zakat, and awqaf within a framework oriented toward the needs of lower-income households. Similarly, Sevriana et al. (2024) identify connections between financial literacy, planning, and inclusion through their bibliometric analysis. These perspectives support the importance of assessing whether financial arrangements meet household needs rather than treating product uptake as the sole objective. Yudiana's (2018) work on locally adapted Islamic banking services is also relevant to this issue. The present findings further emphasize the importance of understanding the functions already performed by community-based financial practices.

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

ISSN [Online]: 2797-5827

4.3. Integration of Quantitative and Qualitative Findings

The integration of quantitative and qualitative findings identifies areas of convergence and qualification rather than establishing a direct correspondence between individual participants and measured variables. The positive coefficients for Islamic financial literacy and understanding of Pappaseng values are consistent with accounts that associate financial decisions with knowledge, honesty, responsibility, and solidarity. However, the qualitative findings also reveal continued reliance on personal assurances and informal financial arrangements. Table 6, presented after the proposed educational model, organizes these relationships by distinguishing survey evidence, qualitative interpretation, and educational implications. This synthesis is intended to support the interpretation of the findings; it does not imply that the datasets were merged at the respondent level or that the qualitative themes were included as mechanisms in the regression model. The qualitative findings also qualify a straightforward interpretation of the quantitative results. The mean score for understanding Pappaseng values summarizes questionnaire responses across the sample, whereas customary and religious leaders described the continuing importance of these values as a source of advice. Younger participants could relate to general moral principles without necessarily recalling their traditional formulations. Thus, cultural understanding may be expressed in different ways. Remembering traditional expressions, recognizing the values they represent, and applying those values in financial decisions are related but distinct activities. A second qualification concerns the direction in which trust is placed. Interview accounts suggest that trusted relationships can encourage engagement with Islamic financial institutions. However, they can also sustain preferences for family lending or community-based savings arrangements. This finding helps explain why cultural affinity should not be equated with automatic participation in formal financial institutions.

In practical terms, financial education should address the perceived usefulness, accessibility, and transparency of financial services rather than assume that shared cultural values will resolve every barrier to participation. In the Bugis context, family advice and social reputation provide plausible reasons for cultural expectations to remain relevant even when general financial literacy is taken into account. The interview accounts illustrate how participants assess the trustworthiness of others and interpret financial obligations. They also help explain why positive associations between cultural understanding and financial inclusion can coexist with preferences for informal finance: moral credibility may be attributed to relatives or community groups rather than financial institutions. This interpretation refines the assumption that trust necessarily promotes institutional adoption by emphasizing the importance of identifying the recipient of that trust. Nevertheless, this explanation is derived from qualitative accounts, and institutional trust and interpersonal trust require separate measurement in future research. Taken together, the findings support an educational approach that combines two objectives: strengthening practical knowledge of Islamic finance and making that knowledge meaningful through familiar cultural values. This approach builds on the moral and educational role of Pappaseng discussed by Rizki et al. (2024). Its proposed applications focus on financial decisions in households, microenterprises, and community groups. The central task is to translate moral understanding into informed financial practices while maintaining the importance of specific contractual knowledge.

4.4. A Proposed Pappaseng-Based Financial Literacy Model

The proposed model combines knowledge and practical skills related to Islamic finance with the cultural values identified in this study. It begins with familiar financial situations, such as selecting a business partner, considering financing, meeting installment obligations, or managing a community fund. The relevant Pappaseng value provides a basis for discussion, while the associated financial content clarifies the decision-making process and its potential consequences. Table 5 presents the educational components developed from the integrated findings. It describes a proposed educational framework rather than an intervention that has already been implemented or evaluated.

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

ISSN [Online]: 2797-5827

Table 5. Components of the Proposed Pappaseng-Based Educational Model

Cultural emphasis	Financial learning focus	Context identified in the study
Lempu and *amanah*	Understanding agreements, obligations, and transparent communication	Selecting trustworthy business partners and evaluating explanations provided by financial personnel
Prudence and moderation	Budgeting, assessing repayment capacity, and avoiding excessive financial commitments	Family consultation before obtaining financing and restraint in consumer borrowing
Siri' and responsibility	Fulfilling financial commitments and understanding procedures for addressing repayment difficulties	Repayment discipline and customers' reliance on personal requests for additional repayment time
Sipakatau and solidarity	Understanding collective funds, mutual assistance, and relevant Islamic financial services	Rotating savings groups, community funds, and cooperation with Islamic microfinance institutions

Source: Synthesis of the study's survey, interview, and observation findings. The components represent a proposed educational framework; learning gains and implementation outcomes have not been measured.

Table 6. Interpretive Comparison of Quantitative and Qualitative Findings

Reported survey evidence	Qualitative interpretation	Educational inference and boundary
Islamic financial literacy coefficient = 0.46; $p < 0.001$	Participants valued honest explanations, although some relied on financial personnel without fully understanding contractual details.	Connect familiar advice with contract comprehension. Trust should not be treated as a substitute for understanding contractual terms.
Pappaseng-understanding coefficient = 0.29; $p = 0.004$	Responsibility and solidarity informed participants' views of financial obligations and mutual assistance, while informal financial arrangements remained attractive.	Explain institutional procedures using familiar cultural concepts while recognizing that trust may be directed toward either formal institutions or interpersonal networks.
Previous use of Islamic financial products = 65.6%; Islamic financial inclusion mean = 3.28	The use of formal financial products coexisted with family lending, rotating savings arrangements, and collective funds.	Distinguish previous product use from informed and appropriate financial participation. Do not infer a common participant-level pathway from these aggregate findings.

Source: Synthesis of the reported findings. The quantitative and qualitative datasets were not linked at the respondent level. No additional frequencies, interviews, or mediation estimates were generated for this comparison.

A future pilot program could begin with community consultations to identify appropriate examples and terminology, followed by educational sessions connecting familiar financial situations with specific contractual or budgeting tasks. Facilitators could invite participants to explain their financial obligations in their own words and identify the information required before selecting a financial product. Customary or religious leaders could contribute insights into cultural meanings, while Islamic financial practitioners could ensure the accuracy of product explanations. These roles are proposed arrangements for future implementation and should not be interpreted as activities already conducted in this study. Dewi and Ferdian (2021) discuss community-based education in relation to readiness for change, highlighting the importance

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

ISSN [Online]: 2797-5827

of considering differences in participants' prior knowledge and familiarity. Nevertheless, the feasibility of the proposed approach would require further assessment, particularly regarding facilitator preparation, participants' availability, delivery costs, language preferences, and accessibility. These aspects have not yet been evaluated in the present study. The reported panel consultation provides preliminary input regarding the model's suitability but does not offer reproducible evidence of its acceptability. The study does not document the panel size, membership criteria, assessment instrument, procedures for addressing disagreements, or revisions made following the discussion. Future pilot studies should record these elements and distinguish cultural acceptability from actual learning effectiveness. An explanation may be culturally acceptable without improving participants' understanding of contractual terms. Similarly, better contractual comprehension may not lead to changes in financial service use when access or affordability remains limited. Therefore, the proposed model requires evaluation at each stage rather than a general claim that experts have established its feasibility. An important implication is that cultural relevance and technical accuracy must be addressed together. Associating a financial product with honesty or mutual assistance may make its explanation more familiar, but such an association cannot replace information about the actual contractual agreement.

Likewise, encouraging responsible financial participation should preserve individuals' ability to decline financial commitments that are unsuitable for their circumstances. This emphasis is consistent with the study's findings concerning prudence and moderation and prevents the proposed model from reducing financial literacy education to the promotion of financial products. For Islamic financial institutions, the findings suggest that communication strategies could connect explanations of contractual terms and financial obligations with values already reflected in community financial practices. For community-based education, the findings highlight the importance of budgeting, responsible borrowing, understanding agreements, and managing collective funds. These recommendations represent implications derived from the reported evidence rather than demonstrated outcomes of a policy or training intervention. Their practical value will depend on how the proposed model is implemented and evaluated within the intended communities. As'ad et al. (2025) examine Islamic financial literacy as a mediating variable in the relationship between communication, branding, and financial inclusion in a different Indonesian banking sample. Their findings make literacy-sensitive communication relevant to the design of the proposed model, but they do not establish a mediation effect in the present study. Evaluation of the proposed model should distinguish immediate comprehension, decision quality, and subsequent financial behavior. The differing conclusions reported by Fernandes et al. (2014) and the randomized evaluation synthesis by Kaiser et al. (2022) reinforce the importance of direct evaluation rather than assuming that culturally relevant instruction will necessarily produce lasting behavioral changes. A future study could compare the same technical financial content delivered with and without cultural framing, assess participants' baseline familiarity, and conduct follow-up assessments after the educational sessions. Contract comprehension and the ability to identify unsuitable financial commitments would provide more informative measures of learning than account-opening intentions alone. Subsequent appropriate product use, non-use, complaints, and repayment difficulties should also be examined as distinct outcomes. These evaluations are proposed directions for future research; the present study did not include a comparison group, measure learning gains, or collect follow-up behavioral outcomes.

4.5. Limitations and Directions for Further Research

The findings are subject to several limitations. The use of a nonprobability sample and an online questionnaire restricts the generalizability of the results, particularly to community members with limited digital access. Furthermore, the study covers only three locations and does not establish that the observed patterns are representative of all Bugis communities. Its cross-sectional survey design also prevents the identification of temporal relationships or causal effects. Because the constructs were measured through questionnaire responses, the reported associations should be interpreted with consideration of possible

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

ISSN [Online]: 2797-5827

overlap in item content and response tendencies. Common method bias may arise when related variables are collected from the same respondents using similar measurement procedures (Podsakoff et al., 2003). However, no diagnostic results are available to determine the extent to which this issue affected the present findings. The statistical reporting also has limitations. The available results do not include standard errors, confidence intervals, a consistently identified coefficient type, or regression diagnostic results. Consequently, the precision of the estimates and the extent to which the regression assumptions were satisfied cannot be fully assessed. In addition, Cronbach's alpha provides evidence of internal consistency but is insufficient to establish construct validity. More comprehensive documentation of the measurement instruments, scoring procedures, and regression outputs would improve the transparency, interpretation, and reproducibility of the findings.

The qualitative and panel components provide contextual insights, but their methodological reporting requires further detail. The available information does not specify the number and distribution of informants, fieldwork dates, interview procedures, or the analytical steps used to establish the credibility of the qualitative findings. Similarly, the panel consultation was not designed or reported as an evaluation of educational outcomes. Future research should document these procedures more comprehensively, assess the proposed model through practical implementation, and investigate whether improvements in financial understanding translate into informed and appropriate use of financial services. Further research could also distinguish the role of trust in formal financial institutions from trust within interpersonal networks. The findings indicate that both forms of trust are relevant, although they may support different financial choices. Examining their relationships with financial literacy, understanding of Pappaseng values, and access to financial services would help clarify the conditions under which a Pappaseng-based educational approach may be useful. Such research should maintain the distinction between cultural values as an educational resource and the understanding of those values as a measured explanatory variable.

V. Conclusion

This study examined Islamic financial literacy, understanding of Pappaseng values, and Islamic financial inclusion among 157 Bugis respondents in Makassar, Gowa, and Maros. The descriptive results showed mean scores of 3.72 for Islamic financial literacy, 3.35 for understanding of Pappaseng values, and 3.28 for Islamic financial inclusion, based on a theoretical scale ranging from 1 to 5. The regression analysis indicated positive associations between Islamic financial inclusion and both Islamic financial literacy (coefficient = 0.46; $p < 0.001$) and understanding of Pappaseng values (coefficient = 0.29; $p = 0.004$), with an R^2 of 0.42. These findings represent sample-based associations and should not be interpreted as evidence of causal relationships or the effectiveness of educational interventions. The qualitative findings provided further context through accounts of honesty, trustworthiness, prudence, dignity, responsibility, and social solidarity. Participants related these values to selecting business partners, making borrowing decisions, fulfilling financial obligations, and organizing mutual assistance among family and community members. However, some accounts also revealed limited understanding of contractual details and a continued preference for informal financing arrangements. These findings suggest that cultural affinity can provide a meaningful foundation for financial education, but it cannot replace practical financial knowledge or determine a single institutional preference.

Theoretically, this study contributes to the understanding of financial inclusion by distinguishing financial capability from the moral and relational considerations that shape financial participation. The reported regression model indicates that understanding of Pappaseng values remains positively associated with Islamic financial inclusion when Islamic financial literacy is considered simultaneously. The qualitative findings provide context for interpreting this relationship and demonstrate why cultural understanding should not be equated with automatic participation in formal financial institutions. From a human capital perspective, financial literacy concerns individuals' knowledge and practical capabilities in making financial decisions, whereas a social capital perspective emphasizes interpersonal trust, credibility, and socially

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

ISSN [Online]: 2797-5827

recognized obligations. Integrating these perspectives highlights the possibility that culturally meaningful trust may support both formal financial services and informal arrangements based on family or community relationships. This distinction offers a contextual refinement of existing explanations of financial inclusion and provides propositions for further empirical investigation, although it does not establish a new causal theory or demonstrate a mediation pathway.

From a practical perspective, the proposed Pappaseng-based educational model provides a context-sensitive foundation for connecting Islamic financial knowledge and practical skills with locally meaningful ethical values. The model can serve as an initial framework for community consultations and pilot programs involving Islamic financial institutions and community-based educators. Financial institutions should communicate product terms, costs, obligations, and relevant procedures through accessible explanations and practical examples, while facilitators should encourage participants to ask questions and make informed decisions, including declining financial commitments that are unsuitable for their circumstances. Before wider implementation, pilot programs should systematically document participant characteristics, levels of comprehension, delivery requirements, and participant feedback to assess their feasibility and educational value. The panel discussion conducted in this study represents a formative review rather than formal validation or an evaluation of educational effectiveness. Therefore, more complete methodological documentation and empirical evaluation are necessary before stronger conclusions about the model's feasibility and effectiveness can be drawn. These recommendations are intended to guide educational design and future evaluation rather than predict increased financial account ownership or claim proven intervention effectiveness. Cultural messaging should also complement, rather than replace, existing requirements for transparent product information and consumer protection.

AI Disclosure

ChatGPT (OpenAI) was used solely to assist with English-language editing, including grammar correction, sentence refinement, and improvements in readability. The authors retain full responsibility for the accuracy, originality, interpretation, and final content of the manuscript.

Authorship Contribution

Andi Darmawangsa: Conceptualization, Research Design, Methodology, and Supervision. A. Ardi: Data Collection, Investigation, Formal Analysis, and Writing – Original Draft Preparation. Muhammad Hasibuddin: Literature Review, Data Validation, Qualitative Data Analysis, and Writing – Review and Editing. All authors contributed to the interpretation of the findings, critically reviewed the manuscript, and approved the final version for publication.

Conflict of Interest Statement

The authors declare that they have no competing interests related to the research, authorship, or publication of this article.

References

Abdullah, M. W., Kadir, S., & Alaaraj, H. (2020). Sharia financial literation in developing Sharia-based business for rural communities in South Sulawesi. IKONOMIKA, 5(1), 117–140. https://doi.org/10.24042/febi.v5i2.7050

Ahmed, H., & Salleh, A. M. H. A. P. M. (2016). Inclusive Islamic financial planning: A conceptual framework. International Journal of Islamic and Middle Eastern Finance and Management, 9(2), 170–189. https://doi.org/10.1108/IMEFM-01-2015-0006

Albaity, M., & Rahman, M. (2019). The intention to use Islamic banking: An exploratory study to measure Islamic financial literacy. International Journal of Emerging Markets, 14(5), 988–1012. https://doi.org/10.1108/IJOEM-05-2018-0218

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

Ali, M. M., Devi, A., Furqani, H., & Hamzah, H. (2020). Islamic financial inclusion determinants in Indonesia: An ANP approach. International Journal of Islamic and Middle Eastern Finance and Management, 13(4), 727–747. https://doi.org/10.1108/IMEFM-01-2019-0007

As'ad, S., Mawardi, I., & Anshori, M. (2025). Linking Islamic branding and marketing communication with Islamic financial inclusion: The mediating role of Islamic financial literacy. Journal of Islamic Accounting and Business Research. Advance online publication. https://doi.org/10.1108/JIABR-09-2023-0296

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16(3), 297–334. https://doi.org/10.1007/BF02310555

Dewi, M. K., & Ferdian, I. R. (2021). Enhancing Islamic financial literacy through community-based workshops: A transtheoretical model. Journal of Islamic Accounting and Business Research, 12(5), 729–747. https://doi.org/10.1108/JIABR-08-2020-0261

Dinc, Y., Çetin, M., Bulut, M., & Jahangir, R. (2021). Islamic financial literacy scale: An amendment in the sphere of contemporary financial literacy. ISRA International Journal of Islamic Finance, 13(2), 251–263. https://doi.org/10.1108/IJIF-07-2020-0156

Dinc, Y., Çetin, M., & Jahangir, R. (2023). Revisiting the concept of Islamic financial literacy in a boundaryless context: Cross-country comparison of Islamic financial literacy. Journal of Islamic Accounting and Business Research, 14(8), 1364–1382. https://doi.org/10.1108/JIABR-02-2022-0043

Fernandes, D., Lynch, J. G., Jr., & Netemeyer, R. G. (2014). Financial literacy, financial education, and downstream financial behaviors. Management Science, 60(8), 1861–1883. https://doi.org/10.1287/mnsc.2013.1849

Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs—Principles and practices. Health Services Research, 48(6pt2), 2134–2156. https://doi.org/10.1111/1475-6773.12117

Fikri, Rahmawati, Aris, & Hannani. (2023). Transformation of religious moderation and Islamic law: Reflections on siri' na pesse culture in Bugis community. Al-Ulum, 23(2), 265–289. https://doi.org/10.30603/au.v23i2.4119

Guiso, L., Sapienza, P., & Zingales, L. (2004). The role of social capital in financial development. American Economic Review, 94(3), 526–556. https://doi.org/10.1257/0002828041464498

Guiso, L., Sapienza, P., & Zingales, L. (2008). Trusting the stock market. The Journal of Finance, 63(6), 2557–2600. https://doi.org/10.1111/j.1540-6261.2008.01408.x

Hesniati, H., Anggriani, A., Suprapto, Y., & Arviano, H. (2025). Financial knowledge, self-efficacy, and financial well-being: The role of digital inclusion in Indonesia. Golden Ratio of Finance Management, 6(1), 1–14. https://doi.org/10.52970/grfm.v6i1.1779

Huston, S. J. (2010). Measuring financial literacy. Journal of Consumer Affairs, 44(2), 296–316. https://doi.org/10.1111/j.1745-6606.2010.01170.x

Kaiser, T., Lusardi, A., Menkhoff, L., & Urban, C. (2022). Financial education affects financial knowledge and downstream behaviors. Journal of Financial Economics, 145(2), 255–272. https://doi.org/10.1016/j.jfineco.2021.09.022

Karomah, K. N., & Melati, I. S. (2025). Financial literacy, financial behavior, and financial inclusion as critical determinants of economic resilience among fishing families in Tambak Lorok, Semarang, Indonesia. Golden Ratio of Auditing Research, 6(1), 145–159. https://doi.org/10.52970/grar.v6i1.1429

Kartini, K., Fitri, F., Rabiyah, U., & Anggraeni, D. (2020). Analysis of the financial literacy behavior model. Golden Ratio of Finance Management, 1(2), 114–122. https://doi.org/10.52970/grfm.v1i2.69

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. Journal of Economic Literature, 52(1), 5–44. https://doi.org/10.1257/jel.52.1.5

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.

ISSN [Online]: 2797-5827

Masrizal, Sukmana, R., & Trianto, B. (2025). The effect of Islamic financial literacy on business performance with emphasis on the role of Islamic financial inclusion: Case study in Indonesia. Journal of Islamic Marketing, 16(1), 166–192. https://doi.org/10.1108/JIMA-07-2022-0197

Osman, I., Syed Alwi, S. F., Rehman, M. A., Muda, R., Hassan, F., Hassan, R., & Abdullah, H. (2024). The dilemma of millennial Muslims towards financial management: An Islamic financial literacy perspective. Journal of Islamic Marketing, 15(1), 59–78. https://doi.org/10.1108/JIMA-09-2021-0283

Pala, F., Erdoğdu, A., Ali, M., Alnori, F., & Barut, A. (2024). Analyzing the linkage between Islamic financial literacy and Islamic banking services adoption: Evidence from Turkey. Journal of Islamic Accounting and Business Research, 15(5), 784–817. https://doi.org/10.1108/JIABR-12-2021-0324

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Remund, D. L. (2010). Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. Journal of Consumer Affairs, 44(2), 276–295. https://doi.org/10.1111/j.1745-6606.2010.01169.x

Rizki, A. A., Khasani, F., Firman, Ramadhan, N. J. H., & Nurhidayah. (2024). The value of moral education based on local wisdom in Pappaseng to Riolo. Al-Ishlah: Jurnal Pendidikan Islam, 22(2), 70–80. https://ejurnal.iainpare.ac.id/index.php/alislah/article/view/11508

Rukka, S., Salle, A., Wahid, A. M. Y., & Pide, A. S. M. (2019). Pappaseng as a philosophy of community life in South Sulawesi. Journal of Law, Policy and Globalization, 87, 132–138. https://doi.org/10.7176/JLPG/87-15

Said, S., & Amiruddin, A. M. A. (2017). Literasi keuangan syariah di perguruan tinggi keagamaan Islam (Studi kasus UIN Alauddin Makasar). Al-Ulum, 17(1), 44–64. https://doi.org/10.30603/au.v17i1.29

Setiawan, N., & Cholili, A. (2023). Cultural values as anti-fraud strategy: Lessons from Islamic schools. Share: Jurnal Ekonomi dan Keuangan Islam, 12(2), 500–525. https://doi.org/10.22373/share.v12i2.20120

Sevriana, L., Febrian, E., Anwar, M., & Faisal, Y. A. (2024). A proposition to implement inclusive Islamic financial planning in Indonesia through bibliometric analysis. Journal of Islamic Accounting and Business Research, 15(2), 225–243. https://doi.org/10.1108/JIABR-01-2022-0022

Sijtsma, K. (2009). On the use, the misuse, and the very limited usefulness of Cronbach's alpha. Psychometrika, 74(1), 107–120. https://doi.org/10.1007/s11336-008-9101-0

van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. Journal of Financial Economics, 101(2), 449–472. https://doi.org/10.1016/j.jfineco.2011.03.006

Widityani, S. F., Faturohman, T., Rahadi, R. A., & Yulianti, Y. (2020). Do socio-demographic characteristics and financial literacy matter for selecting Islamic financial products? Journal of Islamic Monetary Economics and Finance, 6(1), 51–76. https://doi.org/10.21098/jimf.v6i1.1057

Wijaya, H. R., Hati, S. R. H., Ekaputra, I. A., & Kassim, S. (2024). The impact of religiosity and financial literacy on financial management behavior and well-being among Indonesian Muslims. Humanities and Social Sciences Communications, 11, Article 830. https://doi.org/10.1057/s41599-024-03309-6

Yudiana, F. E. (2018). Modifikasi branchless banking pada perbankan syariah di Indonesia berdasarkan kearifan lokal. Muqtasid: Jurnal Ekonomi dan Perbankan Syariah, 9(1), 14–28. https://doi.org/10.18326/muqtasid.v9i1.14-28

Yusfiarto, R., Nugraha, S. S., Mutmainah, L., Berakon, I., Sunarsih, S., & Nurdany, A. (2023). Examining Islamic capital market adoption from a socio-psychological perspective and Islamic financial literacy. Journal of Islamic Accounting and Business Research, 14(4), 574–594. https://doi.org/10.1108/JIABR-02-2022-0037

2026. The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY-SA) 4.0 license.