

Predicting parent satisfaction in rural primary schools: The roles of teacher competence and learning facilities

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Abstract

Parent satisfaction is a crucial stakeholder indicator of school service quality. However, prior research has largely examined school-family collaboration, teacher competence, and learning environments in isolated analytical streams. This study investigates the simultaneous and relative contributions of teachers' pedagogical competence, professional competence, and learning facilities to parent satisfaction within an underserved rural primary school context in Indonesia. A cross-sectional correlational survey was conducted in March 2026 using a census of 142 parents or guardians at a public primary school in Central Kalimantan. Data were collected using four-point Likert questionnaires and analyzed via multiple linear regression. The model was significant, $F(3, 138) = 75.540$, $p < .001$, and explained 62.2% of the variance in parent satisfaction ($R^2 = .622$; adjusted $R^2 = .613$). Pedagogical competence was the strongest predictor ($\beta = .556$, $p < .001$), followed by learning facilities ($\beta = .208$, $p = .001$) and professional competence ($\beta = .207$, $p = .001$). These findings highlight that even in resource-limited settings, parents prioritize the observable instructional practices of teachers alongside the physical adequacy of the school. The study contributes an integrated, parent-centered model to the literature, offering practical implications for school leaders to prioritize pedagogical coaching and targeted infrastructure improvements to enhance stakeholder satisfaction.

Keywords: Pedagogical competence; Professional competence; Learning facilities; Parent satisfaction; Primary education

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INTRODUCTION

Parents and guardians are not merely recipients of school information; they are stakeholders who observe the consistency of teaching, interact with school personnel, finance and support learning at home, and make judgments about whether the educational services experienced by their children meet reasonable expectations. In this sense, parent satisfaction provides a stakeholder-centered indicator of perceived school quality. International evidence shows that parents' satisfaction is associated with the quality of family-school collaboration, trust, information exchange, learning environments, and perceived teacher qualifications (Hu et al., 2021; Paccaud et al., 2021). Research conducted during emergency remote schooling further

demonstrated that parents can provide differentiated evaluations of teachers' competence, feedback, flexibility, and instructional practices because they encounter visible consequences of classroom decisions in children's learning experiences (Letzel et al., 2022).

For primary schools, parent satisfaction is particularly consequential because school and family responsibilities are highly interdependent. Children at this level require sustained guidance, and many aspects of instructional quality become visible to parents through assignments, communication, assessment results, classroom routines, and the child's response to learning. Hardianto et al. (2023) emphasized that meaningful school-parent partnerships should move beyond one-way school programs and enable parents to participate in educational processes. Such partnership-oriented work is consistent with broader findings that satisfaction is stronger when parents perceive constructive collaboration and confidence in schools and teachers (Paccaud et al., 2021). Parent satisfaction therefore needs to be understood as a multidimensional response to both interpersonal and institutional features of schooling rather than as a simple reaction to academic scores alone.

The local setting of this study makes the research practically important. SDN 1 Damparan is a public primary school located in Dusun Hilir, Barito Selatan, Central Kalimantan, where educational service quality is shaped by both teacher performance and material learning resources. In this underserved rural context, examining these factors simultaneously provides a more comprehensive understanding of how classroom practices and school infrastructure jointly influence parent satisfaction.

State of the Art and Research Gap

Recent scholarship relevant to this study can be organized into three analytical streams. The first stream examines parent satisfaction through family-school relations. Paccaud et al. (2021), using data from parents in Switzerland, showed that satisfaction with school collaboration was closely related to children's emotional inclusion, collaboration quality, trust, and information. Hu et al. (2021) similarly found that home-school partnership predicted Chinese parents' satisfaction with administration, learning environments, teacher qualifications, and child-appropriate learning. Lau et al. (2021) extended parent-satisfaction research to online learning and showed that parent judgments are also sensitive to children's capacity to learn independently. These studies establish that parent satisfaction is substantively connected to the quality of school processes, but they concentrate primarily on collaboration, preschool services, or remote-learning conditions.

The second stream differentiates facets of teacher competence. Contemporary teacher-quality research treats effective teaching as more than subject-matter knowledge. König et al. (2021) found that pedagogical competence predicted dimensions of instructional quality and was associated with students' mathematical progress. Blömeke et al. (2022) further demonstrated that teacher competence can operate through situation-specific skills and instructional quality, illustrating why distal knowledge measures alone may not fully explain educational outcomes. Copur-Gencturk & Tolar (2022) showed that content knowledge, pedagogical content knowledge, and content-specific noticing are empirically distinguishable components of teaching expertise. More recent cross-context evidence also indicates that the relation between professional competence and educational outcomes can vary by instructional and sociocultural context (Yang et al., 2025). In the Indonesian primary-school literature, Handriani et al. (2025) reported that both pedagogical and professional competence predicted mathematics achievement, with pedagogical competence showing the stronger relative association. Lasaiba et al. (2024) likewise positioned pedagogical competence as an important component in a broader learning model. Together, these studies support treating pedagogical and professional competence as related but analytically distinct dimensions.

The third stream concerns learning facilities and physical or technological resources. Educational resources shape the conditions under which teaching can be enacted. Espinosa Andrade et al. (2024) found significant associations between several forms of school

infrastructure and elementary-school achievement in Ecuador, while [Agyei et al. \(2024\)](#) showed that infrastructure inequality was related to district-level academic performance in Ghana. At the teacher level, [Kundu et al. \(2020\)](#) identified a relationship between ICT infrastructure and teacher efficacy, illustrating that material resources can influence the environment in which professional capability is exercised. Such findings do not imply that infrastructure automatically produces satisfaction or achievement, but they make clear that learning resources constitute an independent dimension of educational quality that should not be collapsed into teacher competence.

A gap remains at the intersection of these three streams. Parent-satisfaction studies have commonly emphasized collaboration and trust; teacher-competence studies have usually examined instructional quality or student outcomes; and infrastructure studies have concentrated on resource inequality or achievement. Few studies have estimated the relative contribution of pedagogical competence, professional competence, and learning facilities within one parent-centered model, especially in a rural Indonesian public primary school. This study addresses that gap by integrating two teacher-competence dimensions and a school-resource dimension as simultaneous statistical predictors of parent satisfaction. The novelty is therefore not a claim that each variable is new, but that their relative contributions are tested together from the parent stakeholder perspective in an underserved local context. This integration also responds to the contextual argument in recent teacher-competence research that relationships among educational quality indicators may vary across systems and locations ([Yang et al., 2025](#)).

Conceptual Rationale and Study Purpose

Pedagogical competence refers here to parents' perceptions of teachers' capacity to understand learners, plan and manage instruction, use appropriate learning media, conduct learning activities, and evaluate learning. Professional competence concerns mastery and responsible application of subject knowledge, adaptation of instruction, professional practice, and continuing use of relevant knowledge and technology. These constructs are conceptually separable because a teacher may know disciplinary content well yet differ in the ability to transform that content into responsive learning experiences. The distinction is consistent with empirical models that separate content-oriented and pedagogical facets of professional expertise ([Copur-Gencturk & Tolar, 2022](#); [König et al., 2021](#)).

Learning facilities represent the material conditions that support instruction, including books and learning materials, teaching aids, and technology such as computers and internet connectivity. Such resources can affect the range, efficiency, and accessibility of learning activities. They may also become directly visible to parents and therefore influence judgments about whether a school provides an adequate educational service. In the Indonesian public-service context, satisfaction measurement under Regulation No. 14 of 2017 emphasizes whether services, personnel, procedures, and facilities meet users' expectations ([Ministry of Administrative and Bureaucratic Reform Regulation, 2017](#)). Although a school is not reducible to a commercial service organization, this framework provides a practical basis for capturing stakeholders' evaluations of service experience.

Accordingly, the study asked whether pedagogical competence, professional competence, and learning facilities significantly predict parent satisfaction individually and jointly. Four hypotheses were evaluated: pedagogical competence positively predicts parent satisfaction (H1); professional competence positively predicts parent satisfaction (H2); learning facilities positively predict parent satisfaction (H3); and the three predictors jointly explain a significant proportion of variance in parent satisfaction (H4). Because the study uses a cross-sectional correlational design, the term predict is used in its statistical sense and does not establish causal effects.

METHODS

Research Design and Context

This study employed a quantitative correlational survey design. The design was selected to estimate the statistical relationships between three predictors, pedagogical competence, professional competence, and learning facilities, and parent satisfaction without manipulating the school environment or assigning participants to experimental conditions. Data collection took place in March 2026 at SDN 1 Damparan, Dusun Hilir District, Barito Selatan Regency, Central Kalimantan, Indonesia. The study design is correlational and uses multiple linear regression as the primary inferential procedure. Accordingly, the article reports associations and predictive coefficients rather than causal effects.

Participants and Sampling

The target population consisted of all 142 parents or guardians of students enrolled in Grades I-VI at SDN 1 Damparan in 2026. A census or total-sampling strategy was used, so every member of the identified parent/guardian population was included in the survey frame (Sugiyono, 2020). The grade distribution represented 21 students in Grade I, 17 in Grade II, 32 in Grade III, 24 in Grade IV, 22 in Grade V, and 26 in Grade VI. All reported statistical analyses used $N = 142$.

Participants were heterogeneous in age, educational background, and occupation. Most respondents were women (66.2%), and the largest age group was 31-40 years (36.6%). The most common educational backgrounds were primary school (33.8%) and junior secondary school (25.4%). Homemakers constituted the largest occupational group (40.8%), followed by farmers (19.7%) and traders (12.7%). These characteristics are relevant because parent evaluations can be shaped by prior educational experience and the intensity of everyday engagement with children's schooling; however, demographic covariates were not included in the regression model used in the study.

Instruments and Materials

Data were collected using four-point Likert questionnaires covering pedagogical competence (X1), professional competence (X2), learning facilities (X3), and parent satisfaction (Y). Response options ranged from 1 (strongly inappropriate) to 4 (strongly appropriate). The pedagogical-competence items represented parents' evaluations of teachers' understanding of learners, instructional planning and management, implementation, media use, and assessment. Professional-competence items captured mastery and application of subject matter, adaptation of teaching, professional responsibility, technology use, and related professional practices. Learning-facility items addressed the availability of learning materials, teaching aids, and relevant technology.

Parent satisfaction was adapted from the nine-element public-service satisfaction framework in Ministry of Administrative and Bureaucratic Reform Regulation No. 14 of 2017 and contextualized to the educational setting. The adaptation was theoretically justified because schools are public institutions that provide educational services to students and families. The regulation emphasizes service quality dimensions related to procedures, service personnel, facilities, and user expectations. These dimensions were adjusted to capture parents' perceptions of school services, teacher interactions, and learning support conditions.

Pearson item-total correlations were used for item screening, retaining items with correlations of at least .300. After elimination of nonvalid items, the reported scales contained 17 items for pedagogical competence, 16 for professional competence, 8 for learning facilities, and 13 for parent satisfaction. Internal consistency was $\alpha = .753$, $.741$, $.614$, and $.712$, respectively. The first, second, and fourth coefficients are acceptable for exploratory survey interpretation; the learning-facilities coefficient ($\alpha = .614$) is comparatively weak and should be treated as a psychometric limitation rather than described as strong reliability. Future studies

should refine this scale and evaluate its latent structure through factor analysis before making broader claims.

Procedure and Data Collection

The survey was administered to the full identified parent/guardian population during the March 2026 fieldwork period. The questionnaire measured the four study variables and also collected basic respondent characteristics. Complete analyses were obtained for all 142 respondents. Before estimating the regression model, item validity and internal consistency were evaluated and items failing the stated validity criterion were excluded from the final scales.

The analysis sequence followed four stages: descriptive profiling of respondents and scale scores; evaluation of instrument validity and reliability; assessment of regression assumptions; and multiple linear regression with parent satisfaction as the dependent variable. This sequence preserves the study data while presenting it in a journal-oriented order that separates measurement evidence from substantive hypothesis testing.

Data Analysis

IBM SPSS was used for the statistical analyses reported in the study. Descriptive statistics included frequencies, percentages, means, and standard deviations. Multiple linear regression was specified as $Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$, where Y denotes parent satisfaction, X_1 pedagogical competence, X_2 professional competence, and X_3 learning facilities. Statistical significance was assessed at $\alpha = .05$. The regression results are reported using unstandardized coefficients (B), standard errors, standardized coefficients (β), t statistics, p values, R , R^2 , adjusted R^2 , and the omnibus F test. Standardized β values are interpreted as relative standardized associations, not as percentages of causal contribution.

Assumption checks reported in the study included a residual probability plot, multicollinearity statistics, and a residual scatterplot. Tolerance values ranged from .632 to .801 and VIF values from 1.248 to 1.581, indicating no problematic multicollinearity. The residual scatterplot did not show a clear systematic funnel or wave pattern. The thesis also reported Kolmogorov-Smirnov tests for the raw variables; because regression normality concerns the residual distribution rather than each predictor separately, the present article gives greater interpretive weight to the residual probability plot. Durbin-Watson was 1.120. These diagnostics were judged sufficient for the exploratory cross-sectional model, although future work should report residual-based tests, clustering adjustments, and influence diagnostics more comprehensively (Tabachnick & Fidell, 2019).

Ethical Considerations

This research followed ethical principles for educational research involving human participants. Before questionnaire distribution, participants received information regarding the research objectives, procedures, voluntary participation, and their right to withdraw. Participants provided informed consent before participating in the study. All collected information was treated confidentially and was used only for academic research purposes. Research permission was obtained from the school institution before data collection.

RESULTS AND DISCUSSION

Results

Participant Characteristics

Table 1 summarizes respondent characteristics. The sample was dominated by women and adults aged 31-50 years. Educational attainment was concentrated at primary and junior-secondary levels, while occupational backgrounds were diverse. Because the study used a census of the school's parent/guardian population, these percentages describe the stakeholder

group available at this particular school rather than a probabilistic sample of parents in Barito Selatan or Central Kalimantan.

Table 1. Participant Characteristics (N = 142)

Characteristic / Category	N	%
Age: 21-30 years	28	19.7
Age: 31-40 years	52	36.6
Age: 41-50 years	40	28.2
Age: >50 years	22	15.5
Sex: Female	94	66.2
Sex: Male	48	33.8
Education: No schooling	12	8.5
Education: Primary school	48	33.8
Education: Junior secondary	36	25.4
Education: Senior secondary	30	21.1
Education: Diploma	8	5.6
Education: Bachelor's degree	8	5.6
Occupation: Homemaker	58	40.8
Occupation: Employee	12	8.5
Occupation: Trader	18	12.7
Occupation: Farmer	28	19.7
Occupation: Fisher	6	4.2
Occupation: Laborer	12	8.5
Occupation: Unemployed	8	5.6

Descriptive Statistics and Scale Consistency

As shown in Table 2, the mean scale score was 47.97 (SD = 9.89) for pedagogical competence, 43.12 (SD = 9.05) for professional competence, 21.86 (SD = 3.95) for learning facilities, and 35.75 (SD = 8.24) for parent satisfaction. The reliability pattern indicates that measurement quality was adequate for exploratory analysis overall, but the learning-facilities scale was the weakest and should be interpreted cautiously.

Table 2. Scale Descriptives and Internal Consistency

Variable	Items	M	SD	Cronbach's α
Pedagogical competence (X1)	17	47.97	9.89	.753
Professional competence (X2)	16	43.12	9.05	.741
Learning facilities (X3)	8	21.86	3.95	.614
Parent satisfaction (Y)	13	35.75	8.24	.712

Regression Assumptions and Model Estimates

The collinearity diagnostics were within conventional limits: tolerance was .632 for pedagogical competence, .765 for professional competence, and .801 for learning facilities; corresponding VIF values were 1.581, 1.307, and 1.248. The residual scatterplot showed no strong systematic pattern, and the residual probability plot was approximately linear. On this basis, the multiple-regression model was retained for interpretation.

Table 3 shows that all three predictors had positive and statistically significant standardized coefficients. Pedagogical competence was the strongest standardized predictor ($\beta = .556$, $p < .001$). Professional competence ($\beta = .207$, $p = .001$) and learning facilities ($\beta = .208$, $p = .001$) had nearly equal but smaller standardized coefficients. The unstandardized equation was $\hat{Y} = -4.085 + 0.463X1 + 0.188X2 + 0.434X3$. These coefficients indicate expected changes in the satisfaction score conditional on the other predictors; they should not be read as percentages or as proof of causal effects.

Table 3. Multiple Regression Predicting Parent Satisfaction

Predictor	B	SE	β	t	p	Tol.	VIF
Constant	-4.085	2.989	-	-1.367	.174	-	-
Pedagogical (X1)	.463	.055	.556	8.442	<.001	.632	1.581
Prof. (X2)	.188	.055	.207	3.453	.001	.765	1.307
Facilities (X3)	.434	.122	.208	3.553	.001	.801	1.248

The omnibus model was statistically significant, $F(3, 138) = 75.540$, $p < .001$. R was .788 and R^2 was .622, with an adjusted R^2 of .613 and a standard error of the estimate of 5.127. Thus, the three predictors jointly accounted for 62.2% of observed variance in parent satisfaction within this school sample. The remaining 37.8% is not attributable to one specific omitted factor; it represents variance not explained by the three predictors and may include other school, family, relational, measurement, and random components.

Table 4. Model Fit and Omnibus Test

R	R^2	Adjusted R^2	SEE	F	df	p
.788	.622	.613	5.127	75.540	3, 138	<.001

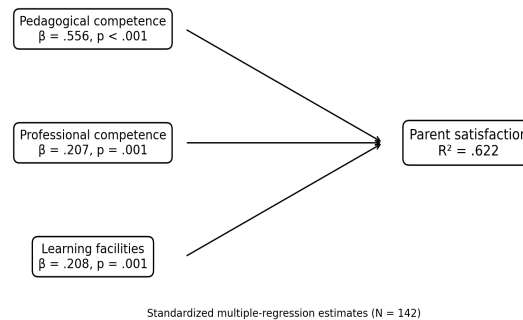


Figure 1. Standardized Regression Model for Parent Satisfaction

Discussion

Integrated Model and Contribution to Parent-Satisfaction Research

The principal finding is that teacher competence and learning facilities together provide substantial statistical information about parent satisfaction in this local primary-school context. As presented in Table 4, the model explained 62.2% of the variance, which indicates that parents' evaluations of the school were strongly patterned by the three measured domains. This result advances the study beyond separate significance tests by emphasizing the integrated model: parents appear to evaluate educational service through a combination of what teachers do pedagogically, what they demonstrate professionally, and what resources the school makes available for learning.

This integrated result is consistent with the broader parent-satisfaction literature while extending it in a different direction. [Paccaud et al. \(2021\)](#) showed that collaboration, trust, information, and children's inclusion are central to parents' satisfaction with schools. [Hu et al. \(2021\)](#) found that home-school partnership predicted satisfaction with administration, learning environments, teacher qualifications, and child-appropriate learning. The present model does not measure collaboration directly; instead, it shows that parent satisfaction is also systematically associated with parents' perceptions of core instructional and resource conditions. The findings therefore complement rather than replace relationship-based models of satisfaction.

The unexplained 37.8% of variance is theoretically meaningful. Descriptive results in the study show that parents rated trust in school service personnel relatively positively, but friendliness and politeness comparatively low. Such variation implies that satisfaction is also shaped by relational service experiences that are not captured by teacher competence or facilities alone. This interpretation corresponds with [Hardianto et al. \(2023\)](#) and [Utari \(2023\)](#), who emphasized participatory school-parent partnerships and positive contextual teacher behaviors in Indonesian schools, as well as with [Paccaud et al. \(2021\)](#), who identified trust and collaboration as key correlates. A stronger future model should therefore combine instructional

competence, resources, school-family communication, service responsiveness, leadership, and perceived student well-being.

Pedagogical Competence as the Strongest Predictor

As presented in Table 3, pedagogical competence had the largest standardized coefficient ($\beta = .556$). This means that, holding professional competence and learning facilities constant, a one-standard-deviation difference in perceived pedagogical competence was associated with an expected .556-standard-deviation difference in parent satisfaction. The coefficient should not be converted into a 55.6% “contribution”; standardized beta is a regression slope, whereas explained variance is summarized by R^2 and related incremental statistics.

The strength of the pedagogical association is plausible because pedagogical competence is the dimension of teacher quality most directly visible in everyday learning. Parents encounter its consequences through lesson organization, clarity of assignments, instructional media, classroom management, responsiveness to learner differences, assessment, and feedback. Descriptive results indicate particular weakness in preparing learning media or teaching aids, with that item receiving a low mean. Such practices are observable to children and often communicated to parents, making them salient inputs to judgments of whether the school is providing effective learning experiences.

These findings converge with empirical literature highlighting the central role of pedagogical competence in educational quality. König et al. (2021) established that pedagogical competence predicts key dimensions of instructional quality and student progress, while Blömeke et al., (2022) demonstrated that the path from teacher knowledge to student progress is better understood when situation-specific skills and instructional quality are included, reinforcing the idea that competent performance is not reducible to possession of knowledge. In a similar vein, Burić & Kim (2020) highlighted that instructional quality serves as a key mechanism linking teacher factors to positive student educational beliefs and classroom outcomes.

Locally, Hardianto et al. (2023) examining primary schools in the same regency (Barito Selatan) similarly found that pedagogical competence exerted a stronger relative effect than professional competence on student achievement. Although the dependent variables differ, student achievement versus parent satisfaction, this convergent pattern underscores that active pedagogical enactment, rather than static content knowledge alone, serves as the primary driver of both student learning and stakeholder evaluations in primary education.

The practical implication is not to neglect professional knowledge but to prioritize professional development that translates knowledge into observable instructional quality. Training should therefore target diagnosis of learner needs, lesson planning, differentiated instruction, classroom management, formative assessment, feedback, and purposeful use of learning media. Hikmah & Sutapa (2025) showed in an elementary-school context that structured teacher empowerment training is associated with teacher self-efficacy, which is a critical determinant of overall teacher performance and classroom leadership (Akman, 2021), while Prasetyono et al. (2021) emphasized strengthening learning methods as part of professional competency development. Furthermore, teacher self-efficacy and teaching experience directly support creative instructional practices in primary classrooms (Gale et al., 2021; Hayati et al., 2023). Programs at SDN 1 Damparan should be evaluated not only by attendance but also by changes in classroom practice and stakeholder perceptions.

Professional Competence and the Translation of Knowledge into Practice

Professional competence was also a significant predictor ($\beta = .207$, $p = .001$), although its standardized coefficient was smaller than that of pedagogical competence. Item-level descriptions suggest that parents viewed subject-matter mastery more positively than teachers' adaptation of teaching methods to learner characteristics. This difference is informative: parents may recognize that teachers possess knowledge, yet satisfaction depends on whether professional knowledge is converted into teaching decisions that learners can access.

Contemporary research supports this distinction. [Copur-Gencturk & Tolar \(2022\)](#) content knowledge, and noticing. [Blömeke et al. \(2022\)](#) similarly showed that teacher knowledge can influence learning through more proximal competence and instructional-quality processes. [Yang & Kaiser \(2022\)](#) summarized evidence showing that links among professional competence, instructional quality, and student outcomes are complex rather than mechanically direct. More recent evidence from China also found weak or context-dependent direct relationships between professional competence and affective outcomes, with some pathways operating through instructional quality [Yang et al. \(2025\)](#). These studies help explain why professional competence can matter while showing a weaker direct association with a stakeholder outcome such as parent satisfaction.

For school improvement, professional competence should therefore be developed as applied expertise. Subject mastery remains necessary, but it should be linked to curriculum interpretation, diagnostic use of assessment, adaptation of examples, technology-supported resources, and continuing reflection. [Lindström et al. \(2025\)](#) found that formal teacher competence is relevant to student achievement, while [Prasetyono et al. \(2021\)](#) highlighted the value of strengthening teaching methods and use of learning resources. The present results suggest a similar direction: parents may respond most positively when professional capability is translated into clear, responsive, and reliable instruction.

Learning Facilities as a Distinct School-Quality Signal

Learning facilities made a significant unique contribution ($\beta = .208$, $p = .001$), almost identical in standardized magnitude to professional competence. This finding is important because it indicates that parent satisfaction is not explained solely by perceptions of teachers. Even after teacher competence was statistically controlled, the adequacy of learning resources remained associated with satisfaction. The local descriptive evidence points to shortages or weaknesses in teaching aids, computers, internet connectivity, and learning materials, making the facilities coefficient substantively plausible.

International infrastructure studies provide convergent evidence that material conditions matter for educational quality, although their outcomes differ from parent satisfaction. [Espinosa Andrade et al. \(2024\)](#), using elementary-school data from Ecuador, found positive associations between several infrastructure components and learning outcomes and emphasized that not all investments have equal educational value. [Agyei et al. \(2024\)](#) documented a relationship between infrastructure inequality and academic performance across districts in Ghana. [Kundu et al. \(2020\)](#) found that ICT infrastructure was associated with teacher efficacy, highlighting an indirect mechanism through which resources may shape the ability to enact effective instruction. The present study adds a stakeholder-perception mechanism: parents may interpret adequate facilities as evidence that a school can support credible and contemporary learning.

The implication is that facility improvement should be prioritized by instructional function rather than visibility alone. Given the study findings, immediate attention should focus on access to adequate textbooks and learning materials, usable teaching aids, computers or shared digital devices, and dependable internet access where pedagogically justified. Infrastructure procurement should be accompanied by teacher capability to integrate resources into lessons. A computer that is unavailable during instruction or a teaching aid that teachers do not use contributes little to experienced quality. This interaction between resources and professional practice is a promising target for future research.

Theoretical and Practical Implications

Theoretically, the findings support a multi-input view of parent satisfaction. Satisfaction is not simply a response to one visible school feature. It reflects perceptions of instructional processes, professional capability, material learning conditions, and likely relational experiences outside the present model. The strong coefficient for pedagogical competence suggests that proximal instructional practice may be more salient to parents than professional

competence considered in isolation. This resonates with the teacher-competence literature, in which the practical enactment of knowledge through instructional quality is increasingly treated as a central mechanism (Blömeke et al., 2022; König et al., 2021).

For school leadership, the results justify a sequenced improvement strategy. First, strengthen pedagogical practice through classroom-focused coaching and professional learning. Second, sustain professional competence through subject-focused communities of practice, curriculum study, and technology-related development. Third, close high-priority resource gaps that constrain instruction. Fourth, monitor parent satisfaction with an instrument that clearly separates instructional quality, school-family communication, service behavior, and facilities. Such monitoring would transform satisfaction from an end-of-year opinion measure into a diagnostic source for school improvement.

For district authorities, the local nature of the study argues against applying the exact coefficients mechanically to other schools. However, the model can guide a broader evaluation framework. Replication across schools in Dusun Hilir and Barito Selatan would make it possible to distinguish parent-level perceptions from school-level differences and to examine whether the same predictor hierarchy appears in schools with different staffing, accreditation, infrastructure, and community characteristics. A multilevel design would be more appropriate once multiple schools are included.

Study Limitations and Future Research

Several limitations constrain interpretation. First, the cross-sectional correlational design does not establish temporal order or causality. Higher perceived teacher competence may be associated with satisfaction, but satisfied parents may also evaluate teachers more favorably because the same respondent rated predictors and outcome. Common-method variance is therefore a serious possibility. Future research should combine parent surveys with classroom observation, teacher assessments, administrative records, and longitudinal measurement.

Second, all participants came from one school. Total sampling eliminates sampling error within the defined school population, but it does not create external representativeness for Barito Selatan, Central Kalimantan, or Indonesian primary schools. Replication across urban, rural, remote, public, and private schools is necessary before generalizing the coefficient pattern.

Third, the measurement model requires strengthening. Several original questionnaire items were removed after item-total validity screening, and the learning-facilities scale had $\alpha = .614$. Item-total correlations and Cronbach's alpha provide limited evidence of construct validity. Future studies should undertake expert content validation, exploratory and confirmatory factor analysis or an appropriate SEM measurement model, convergent/discriminant validity assessment, and reliability estimates beyond a single alpha coefficient. Parent satisfaction should also be measured with a scale specifically validated for educational services rather than relying primarily on an adapted generic public-service framework.

Fourth, the model omitted plausible determinants such as school-family communication, trust, school leadership, teacher social and personality competence, student well-being, prior academic experience, socioeconomic position, and parent expectations. The unexplained 37.8% should motivate theory-driven expansion rather than be attributed speculatively to one factor. Paccaud et al. (2021) and Hu et al. (2021) indicate that collaboration, trust, and school-family partnership are especially strong candidates for an expanded model.

Finally, the model did not test moderation or mediation. It is plausible that facilities strengthen the relationship between teacher competence and satisfaction by enabling teachers to enact better instruction, or that school-family communication mediates the translation of instructional experiences into parent judgments. These mechanisms should be tested with larger multi-school samples and pre-specified models rather than inferred from the present coefficients.

CONCLUSION

This study examined pedagogical competence, professional competence, and learning facilities as simultaneous predictors of parent satisfaction at SDN 1 Damparan, a rural public primary school in Central Kalimantan. The regression model was statistically significant and explained 62.2% of the observed variance in parent satisfaction. Pedagogical competence showed the strongest standardized association ($\beta = .556$), while professional competence ($\beta = .207$) and learning facilities ($\beta = .208$) also provided significant unique prediction. The findings therefore support an integrated interpretation of parent satisfaction: parents' evaluations are linked both to the quality of teachers' instructional practice and professional capability and to the material resources available for learning. For school improvement, the most immediate priority is strengthening pedagogical enactment, planning, learner responsiveness, classroom management, assessment, feedback, and purposeful media use, while continuing to develop professional competence and remedy resource gaps in teaching aids, learning materials, computers, and internet access. Because the design is cross-sectional and based on one school, the results should not be interpreted causally or generalized beyond the study context. Multi-school longitudinal research with stronger construct validation and measures of school-family communication, trust, leadership, and student well-being is needed to test whether this predictor structure is stable across educational settings.

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