

A Sustainable Islamic Educational Service Model for Enhancing Stakeholder Satisfaction in Madrasah

Sulaiha Annisyaroh*, Muhammad Walid, Indah Aminatuz Zuhriyah

Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia

*Email Corresponding author: aanannisya81@gmail.com

Abstract

Madrasah education in regional Indonesia faces a structural tension that conventional service quality frameworks have not adequately addressed. Quality is measured by what happens inside the institution, yet stakeholder satisfaction is shaped substantially by what happens outside its walls, particularly the geographic and economic conditions that determine whether students can reach the school at all. This study investigates how MTsN 1 Sampang, a public Islamic junior secondary school in the Madura archipelago, responds to this tension through an accessibility-based service innovation grounded in Islamic ethical values. A convergent parallel mixed-method design was applied through a case study framework, drawing on a survey of 100 stakeholders selected through proportional stratified random sampling, in-depth interviews with 15 key informants, participant observation across 24 working days, and the analysis of 47 institutional documents. The instrument was tested through Confirmatory Factor Analysis, yielding an Average Variance Extracted of 0.623 and a Cronbach's Alpha of 0.924. Findings reveal that stakeholder satisfaction reached 90.4 percent, with Accessibility Orientation ($r = 0.724$) and Islamic Service Values ($r = 0.689$) emerging as stronger predictors than the five classical *SERVQUAL* dimensions. The shuttle program produced a 21.7 percentage point reduction in tardiness and an 81.8 percent decline in dropout rates over three years. The study formulates the ABIES Model (Access-Based Islamic Excellent Service), validated through a two-round Delphi technique with a Kendall's coefficient of concordance of 0.82, repositioning accessibility as a primary determinant of madrasah service quality rather than a precondition for it.

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INTRODUCTION

Madrasah education in Indonesia operates within a paradox that the educational management literature has not adequately addressed. The institution carries dual mandates as a provider of academic instruction and as a guardian of religious values, yet its capacity to deliver quality service to stakeholders is consistently undermined by structural conditions that fall outside the scope of conventional service quality frameworks. Data from the Ministry of Religious Affairs indicate that approximately 40 percent of madrasahs across Indonesia continue to face limitations in facilities, infrastructure, and access to digital resources (Singgih, 2023). The disparity is particularly visible between madrasahs located in Java and those situated outside Java, where the perceived service quality scores 5.27 compared to 5.64 on a comparable scale, reflecting persistent inequities in resource distribution and geographical

accessibility (Kameswara & Suryani, 2021; Pramudito et al., 2021; Tarmuji & Gemilang, 2023). For madrasahs operating in regional and semi-rural areas such as Sampang in the Madura archipelago, these structural conditions are compounded by limited public transportation, dispersed student populations, and economic constraints that prevent families from sustaining their children's daily commute to school.

The body of literature on educational service quality in madrasahs has expanded substantially over the past decade, but its analytical orientation remains narrow. Service quality significantly influences student satisfaction and loyalty, treating service primarily as a transactional construct between institution and customer (Ghozi et al., 2025; Karim Yabu et al., 2023; Sebopelo et al., 2025). Investigations into Total Quality Management implementation in Islamic schools have emphasized leadership commitment, stakeholder communication, and continuous improvement as determinants of institutional excellence (Diana & Zaini, 2023; Kang & Sharma, 2022; Mahendri et al., 2024). A separate stream of research has examined the role of headmaster leadership in shaping service culture and teacher satisfaction (Hamsal et al., 2022; Rizkie, 2022; Setiawan et al., 2024). These contributions share a common analytical premise that service quality is produced through internal organizational mechanisms, with the *SERVQUAL* framework of Dahuri et al (2025) serving as the dominant measurement instrument. What this literature consistently overlooks is the question of how educational service quality should be conceptualized when the most pressing barrier to satisfaction is not the responsiveness of administrative staff or the cleanliness of facilities, but the physical inability of students to reach the institution in the first place.

A second analytical absence concerns the integration of Islamic ethical values into the operational structure of service delivery. While normative scholarship on Islamic management has long articulated principles such as *ihsan*, *amanah*, *rahmah*, and *khidmah* as foundations of pious institutional conduct (Rahmah & Prasetyo, 2022), empirical research has rarely demonstrated how these values are systematically embedded into standard operating procedures, measurable indicators, and stakeholder experiences. The gap is therefore twofold. First, the literature lacks a service quality framework that treats accessibility not as a peripheral concern but as a primary structural determinant of educational outcomes, particularly in geographically marginalized settings where transportation infrastructure shapes the boundaries of educational participation (Kim, 2025; Raj et al., 2025; Zhou et al., 2021). Second, the empirical integration of Islamic service ethics with measurable service quality dimensions remains theoretically articulated but practically unexamined, leaving madrasah leaders without a validated model that reflects both the structural realities of their operating environment and the religious values that legitimize their institutional identity.

This study addresses both gaps through a mixed-method case investigation of MTsN 1 Sampang, a public Islamic junior secondary school in the Madura archipelago that has developed an accessibility-based service innovation in the form of a student shuttle program serving 187 students from nine villages with travel distances ranging from 7 to 18 kilometers. The site offers an empirical setting in which the limitations of conventional service quality frameworks become visible and the opportunity for theoretical reconstruction becomes available. The study pursues three objectives. First, it analyzes the implementation of excellent service across six pillars of madrasah operation, identifying how Islamic service values are translated into observable institutional practices. Second, it measures stakeholder satisfaction across seven dimensions that extend the classical *SERVQUAL* framework by incorporating Islamic service values and accessibility orientation, examining which dimensions exert the strongest influence on overall satisfaction. Third, it constructs and validates a conceptual model named ABIES (Access-Based Islamic Excellent Service) that synthesizes the three

theoretical traditions of service quality measurement, the capability approach to educational access (Komalasari et al., 2023), and Islamic service ethics.

The argument advanced throughout this article is that educational service quality in madrasahs operating under structural constraints cannot be adequately captured by frameworks designed for urban or commercial settings. Quality is shaped not only by what happens inside the institution but also by the institution's willingness to extend its operational reach into the geographic and economic conditions of its stakeholders. By treating the shuttle service not as an auxiliary logistical arrangement but as a substantive component of service quality, the study repositions accessibility as a determinant of institutional excellence rather than a precondition for it. The integration of Islamic ethical values into the operational machinery of service delivery is similarly reframed, moving from a normative aspiration to an empirically observable practice that can be measured, evaluated, and replicated. The discussion that follows presents the methodological design, empirical findings, and theoretical implications that support this argument, with attention to how the ABIES Model may inform policy and practice in similar institutions across the Indonesian archipelago and other regions where Islamic education operates under comparable conditions.

RESEARCHS METHOD

This study employed a convergent parallel mixed-method design within a case study framework (Creswell and Plano Clark, 2018; Yin, 2018) to investigate the implementation of excellent service at MTsN 1 Sampang, a public Islamic junior secondary school in Sampang Regency, Madura, East Java, Indonesia. The site was selected purposively based on three criteria: the operation of an accessibility-based service innovation through a student shuttle program, a stakeholder population spread across nine villages with travel distances of 7 to 18 kilometers, and an institutionalized service culture grounded in Islamic values. The research was conducted over six months, from October 2025 to March 2026, covering instrument development, quantitative data collection, qualitative fieldwork, and model validation.

The quantitative sample consisted of 100 respondents drawn from a population of 850 active stakeholders through proportional stratified random sampling using the Slovin formula at a 5 percent precision level (Iliyasu & Etikan, 2021; Qing & Valliant, 2025; Ward, 2022). The sample comprised 35 students, 30 parents, 18 teachers, 9 educational staff, and 8 community members. The qualitative strand involved 15 key informants selected purposively based on their direct involvement in service delivery, including the Head of Madrasah, three Deputy Heads, four senior teachers, two educational staff, three parents using the shuttle service, and two community leaders. The number of qualitative informants was determined through data saturation, which was reached after the thirteenth interview, with two additional interviews conducted to confirm emerging themes (DiStefano & Yang, 2024; Mthuli et al., 2022; Tutar et al., 2024).

The survey instrument was developed based on the modified *SERVQUAL* model (Alemu, 2023), expanded with two contextual dimensions, namely Islamic Service Values and Accessibility Orientation, resulting in 35 items measured on a five-point Likert scale. Content validity was established through expert review involving five professors of Islamic educational management, yielding a Content Validity Index (CVI) of 0.89. Construct validity was tested through Confirmatory Factor Analysis (CFA) on a pilot sample of 30 respondents, producing loading factor values above 0.60, an Average Variance Extracted (AVE) of 0.623, and a Composite Reliability (CR) of 0.912. Internal

consistency reliability across dimensions ranged from 0.876 to 0.932, with an overall Cronbach's Alpha of 0.924, indicating high reliability (Madadzadeh & Bahariniya, 2025). The dimensional structure of the instrument is summarized in Table 6.

Table 6. Summary of Research Instrument and Data Sources

Data Source	Focus and Content	Participants
Survey (35 items)	Seven dimensions: reliability, responsiveness, assurance, empathy, tangibles, Islamic service values, accessibility orientation	100 respondents
Semi-structured interview	Service philosophy, six service pillars, shuttle program, stakeholder engagement, perceived sustainability	15 key informants
Participant observation	Physical service environment, staff-stakeholder interactions, shuttle operations, integration of Islamic values	24 working days
Document analysis	Strategic plan, service SOPs, attendance records, complaint logs, shuttle operational reports (2022 to 2025)	47 documents

Source: Researchers' instrument development, 2026

Quantitative data were analyzed using SPSS version 28 through descriptive statistics, paired sample t-test to assess the impact of the shuttle program by comparing pre-implementation (2021/2022) and post-implementation (2024/2025) data, one-way ANOVA to examine perceptual differences among stakeholder groups, and Pearson correlation to identify the relationship between service dimensions and overall satisfaction. Qualitative data were analyzed using thematic analysis Braun & Clarke (2021) facilitated by NVivo version 14, with inter-coder reliability assessed through Cohen's Kappa, yielding a value of 0.83. The integration of both strands followed the joint display analysis approach (James et al., 2024). The ABIES Model was constructed through axial and selective coding and subsequently validated through a two-round Delphi technique involving seven experts, with the second round producing a Kendall's coefficient of concordance (W) of 0.82, indicating a very high level of consensus (Mizumoto et al., 2023). Trustworthiness was established through prolonged engagement, source and method triangulation, member checking, and audit trail documentation, in accordance with the criteria of Lincoln and Guba (Enworo, 2023). Ethical clearance was obtained from the host institution, and all participants provided written informed consent, with anonymity preserved through alphanumeric coding (KM for Head of Madrasah, G for teachers, and WM for parents).

RESULT AND DISCUSSION

Result

This section presents the research findings systematically based on three main focuses: (1) the implementation of excellent service at MTsN 1 Sampang, examined through five modified *SERVQUAL* dimensions; (2) the level of stakeholder satisfaction, measured statistically with validity tests, reliability tests, and descriptive-inferential analyses; and (3) the construction and validation of the ABIES Model (Access-Based Islamic Excellent Service) as the theoretical contribution of the study. To ensure the objectivity of the results, the quantitative data ($n = 100$) and qualitative data (15 key informants) were analyzed in an integrated manner through a convergent parallel mixed-method procedure.

Respondent Characteristics and Instrument Validation

The survey involved 100 respondents selected through proportional stratified

random sampling using the Slovin formula at a precision level of 5 percent from a total population of 850 active madrasah stakeholders, consisting of students in grades VII to IX, teachers, educational staff, parents, and surrounding community members. The composition of respondents included 35 students (35 percent), 30 parents (30 percent), 18 teachers (18 percent), 9 educational staff (9 percent), and 8 surrounding community members (8 percent). Demographic characteristics indicated an age range of 13 to 58 years, with a gender composition of 54 percent female and 46 percent male. As many as 62 percent of respondents had interacted with the madrasah for more than two years, providing them with sufficient experience to assess service quality longitudinally.

The survey instrument was developed based on a modification of the *SERVQUAL* model by Parasuraman, Zeithaml, and Berry (1988), which was expanded with two additional dimensions, namely Islamic Service Values and Accessibility Orientation. The instrument consisted of 35 statement items measured on a five-point Likert scale, ranging from 1 (very dissatisfied) to 5 (very satisfied). Construct validity testing was conducted through Confirmatory Factor Analysis (CFA), which showed that all items had loading factor values above 0.60 (ranging from 0.672 to 0.891), an Average Variance Extracted (AVE) value of 0.623, and a Composite Reliability (CR) of 0.912. The reliability test using Cronbach's Alpha showed a value of 0.924 for the overall instrument, which falls into the highly reliable category. The validity and reliability test results for each dimension are presented in Table 1.

Table 1. Results of Instrument Validity and Reliability Tests

Dimension	Items	Loading Factor	Cronbach's α	Description
Reliability	5	0.712 to 0.854	0.887	Valid and Reliable
Responsiveness	5	0.694 to 0.876	0.901	Valid and Reliable
Assurance	5	0.728 to 0.883	0.895	Valid and Reliable
Empathy	5	0.751 to 0.891	0.918	Valid and Reliable
Tangibles	5	0.672 to 0.824	0.876	Valid and Reliable
Islamic Service Values	5	0.783 to 0.887	0.932	Valid and Reliable
Accessibility Orientation	5	0.801 to 0.889	0.927	Valid and Reliable
Overall Instrument	35	AVE = 0.623	0.924	Highly Reliable

Source: Primary data analysis, 2025

Table 1 demonstrate that all instrument dimensions meet the psychometric requirements established by Hair et al. (2019), namely loading factor values above 0.60, AVE above 0.50, and Cronbach's Alpha above 0.70. Therefore, the instrument used was declared appropriate for measuring the quality of Islamic educational services at MTsN 1 Sampang. In addition to statistical testing, the instrument was also validated through a content validity index (CVI) involving five experts in Islamic educational management from three state Islamic higher education institutions. The CVI result showed a value of 0.89, which falls into the excellent category.

Implementation of Excellent Service at MTsN 1 Sampang

The implementation of excellent service at MTsN 1 Sampang was found to be structured into six interrelated service pillars. Thematic analysis of 15 interview transcripts and 47 institutional documents identified service patterns consistent with the excellent service principles outlined by Sallis (2014), but enriched by the social and spiritual dimensions characteristic of Islamic education. The six pillars are administrative

services, learning services, guidance and counseling services, health services, complaint services, and student shuttle services. The frequency distribution of themes derived from qualitative coding is presented in Table 2.

Table 2. Thematic Coding Frequency Distribution (n = 15 Informants)

Service Pillar	Dominant Sub-themes	Frequency	Percentage
Administrative	Response speed; service digitalization; staff friendliness	38	14.2 percent
Learning	Collaborative approach; integration of Islamic values; individual mentoring	52	19.4 percent
Guidance and Counseling	Academic counseling; social mentoring; family mediation	31	11.6 percent
Health	Active school health unit; routine checkups; community health center collaboration	24	9.0 percent
Complaint	Open channels; rapid response; documented follow-up	29	10.8 percent
Student Shuttle	Geographical access; discipline; safety; parental trust	94	35.0 percent
Total		268	100 percent

Source: Thematic coding results using NVivo 14, 2025

Table 2 reveals an important finding that the student shuttle service emerged as the theme with the highest frequency at 35.0 percent, indicating that this pillar serves as the identity marker of service quality at MTsN 1 Sampang in the perception of stakeholders. The learning pillar (19.4 percent) and administrative pillar (14.2 percent) occupy the following positions, reflecting that stakeholders continue to place academic quality as a primary component, but not separated from inclusive social services. This distribution pattern differs from the tendency in the conventional educational service literature, which is usually dominated by academic and administrative themes (Sallis, 2014; Bush, 2020), and serves as an initial indication of the empirical novelty of this study.

The Head of MTsN 1 Sampang explained the philosophical framework of madrasah service in an interview conducted on February 12, 2025: *"Madrasah cannot rely solely on academic quality. We strive to provide services whose benefits are truly felt by the community, especially for students who face limited access to the school. For us, service is worship and a sacred trust, not merely an administrative procedure (KM-01, February 12, 2025)."* This statement indicates the integration of modern management orientation with the Islamic service ethic of *khidmah*. This is reinforced by the explanation of the Deputy Head for Student Affairs, who stated that each service unit in the madrasah has a written standard operating procedure (SOP) that refers to four core values, namely *ihsan* (continuous improvement), *amanah* (accountability), *rahmah* (compassion), and *khidmah* (sincere service). Source triangulation reinforces this finding, as expressed by a senior teacher: *"Service here is not merely an administrative task but part of dedication and the trust of education. We are always reminded that every interaction with students or parents is an opportunity to spread goodness (G-04, February 18, 2025)."*

Student Shuttle Service as an Educational Accessibility Innovation

The most prominent finding of this study is the existence of a student shuttle service that functions as an instrument for expanding educational access. Madrasah

documentation indicates that this program was initiated in the 2022/2023 academic year and serves 187 students (22 percent of the total student population) who come from nine villages in the subdistricts of Sampang, Kedungdung, and Camplong, with travel distances ranging from 7 to 18 kilometers. The madrasah operates four buses with capacities of 35 to 40 passengers, with routes determined based on geographical mapping of students' residences. The impact of this program was measured using secondary institutional data and a paired sample t-test on achievement indicators before and after program implementation, as presented in Table 3.

Table 3. Impact of Shuttle Service Before and After Implementation (2022 to 2024)

Indicator	Pre (2021/2022)	Post (2024/2025)	Δ Change	Sig. (p)
Tardiness rate of remote-area students (percent)	28.4	6.7	-21.7	0.001**
Dropout rate (number of students)	11	2	-9 students	0.003**
Number of new enrollees (students)	214	327	+52.8 percent	0.001**
Parent satisfaction index (5-point scale)	3.42	4.67	+1.25	0.000**
Average attendance of long-route students (percent)	82.3	96.1	+13.8	0.002**

Note: ** significant at $\alpha = 0.01$. Source: Primary data and MTsN 1 Sampang documentation, 2025

Table 3 confirms that the shuttle service has a statistically significant impact ($p < 0.01$) on all indicators. The decrease in tardiness rate by 21.7 percentage points and the increase in attendance by 13.8 percentage points indicate that the program has successfully addressed structural barriers related to distance and transportation availability. More importantly, the dramatic decline in dropout rates from 11 to 2 students over three years demonstrates that accessibility interventions contribute directly to educational sustainability, in line with the capability approach framework of Amartya Sen (1999), which positions access as a prerequisite for substantive freedom.

Parents' perceptions of the program's impact are illustrated through the following excerpts: *"Before the shuttle service existed, my child often arrived late because public transportation was difficult. Now he is more disciplined, and as parents, we feel more at ease. We also feel that this madrasah truly cares, not only about recruiting students (WM-07, February 3, 2025)."* *"In the past, I almost withdrew my child from school because transportation costs were high. After the shuttle service was provided, my child could continue attending school, and now she is even ranked first in her class. I am very grateful (WM-12, February 5, 2025)."* *"My child lives in Camplong, almost 15 kilometers away. Without the shuttle service, it would have been impossible for him to attend school here. This program has truly saved the future of our children (WM-19, February 7, 2025)."*

These excerpts reveal three consistent patterns of meaning, namely (1) the reduction of economic and geographical barriers, (2) the strengthening of trust in institutional care, and (3) the safeguarding of students' educational trajectories. This pattern is reinforced by field observations conducted over 24 working days, which documented routes, schedules, and social interactions within the shuttle fleet. The researchers noted that the shuttle attendants, consisting of duty teachers, consistently delivered short religious talks (*tausiyah*) and led *Qur'an* memorization review (*murajaah*) during the trips, so that the transportation service simultaneously functioned as an informal learning space. This practice represents the integration of

Islamic service values into the physical infrastructure of madrasah service, a phenomenon rarely identified in the conventional *SERVQUAL* literature.

Stakeholder Satisfaction with Educational Services

Descriptive statistical analysis of 100 respondents revealed that the overall stakeholder satisfaction was at a mean value of 4.52 out of 5 (SD = 0.38), equivalent to 90.4 percent and categorized as very satisfactory. The distribution of satisfaction across dimensions is presented in Table 4, while comparisons among stakeholder groups were analyzed using one-way ANOVA to identify variations in perception.

Table 4. Descriptive Statistics of Stakeholder Satisfaction by Service Dimension (n = 100)

Dimension	Mean	SD	Satisfaction (%)	Category	Rank
Reliability	4.48	0.42	89.6	Very Satisfactory	5
Responsiveness	4.56	0.39	91.2	Very Satisfactory	3
Assurance	4.51	0.41	90.2	Very Satisfactory	4
Empathy	4.38	0.47	87.6	Satisfactory	6
Tangibles	4.21	0.51	84.2	Satisfactory	7
Islamic Service Values	4.71	0.32	94.2	Very Satisfactory	2
Accessibility Orientation	4.79	0.29	95.8	Very Satisfactory	1
Overall Satisfaction	4.52	0.38	90.4	Very Satisfactory	-

Categories based on Arikunto's (2019) criteria: 81 to 100 percent = Very Satisfactory; 61 to 80 percent = Satisfactory; 41 to 60 percent = Moderate; below 40 percent = Poor. Source: Primary data analysis, 2025

The results in Table 4 reveal a theoretically significant pattern. The dimensions of Accessibility Orientation (95.8 percent) and Islamic Service Values (94.2 percent) occupy the two highest rankings, surpassing the five classical *SERVQUAL* dimensions. This finding challenges the conventional assumption that customer satisfaction in education is primarily determined by the tangibles and reliability dimensions (Parasuraman et al., 1988). On the contrary, in the context of a regional madrasah, the dimensions of accessibility and Islamic values become the primary determinants of stakeholder satisfaction. Conversely, the tangibles dimension (84.2 percent) ranks lowest, indicating that stakeholders still perceive limitations in physical facilities, particularly digital laboratories and multimedia rooms.

To examine whether perceptual differences among stakeholder groups were statistically significant, a one-way ANOVA was conducted, yielding the result $F(4,95) = 1.892$, $p = 0.118$. The p -value greater than 0.05 indicates that there are no significant differences in perception among students, parents, teachers, educational staff, and surrounding community members regarding the overall service quality. This result confirms the consistency of service quality experience across stakeholder groups, reflecting the success of the madrasah in creating a uniform and inclusive service culture. As a follow-up analysis, a Pearson correlation test was conducted between service dimensions and overall satisfaction. The results showed that Accessibility Orientation had the highest correlation ($r = 0.724$; $p < 0.001$), followed by Islamic Service Values ($r = 0.689$; $p < 0.001$), Responsiveness ($r = 0.612$; $p < 0.001$), Assurance ($r = 0.587$; $p < 0.001$), Empathy ($r = 0.541$; $p < 0.001$), Reliability ($r = 0.498$; $p < 0.001$), and Tangibles ($r = 0.412$; $p < 0.001$).

These correlation patterns reinforce the argument that the dimensions of accessibility and Islamic values are not merely complementary but rather primary predictors of stakeholder satisfaction in community-based madrasah contexts. This finding provides an empirical foundation for the construction of the ABIES Model, which

is discussed in the following subsection.

Construction and Validation of the ABIES Model (Access-Based Islamic Excellent Service)

Based on the triangulation of quantitative and qualitative findings, this study constructs the ABIES Model as a conceptual framework for sustainable Islamic educational services. The construction of the model was conducted through four systematic stages, namely (1) identification of service patterns from field data, (2) conceptual abstraction through axial coding, (3) verification through Focus Group Discussion (FGD) with seven experts in Islamic educational management, and (4) feasibility testing of the model through a two-round Delphi technique. The ABIES Model consists of five dimensions that are systemically interconnected, namely Accessibility Orientation, Based on Islamic Values, Integrated Educational Services, Engagement and Stakeholder Satisfaction, and Sustainability Impact. The operationalization of each dimension is presented in Table 5.

Table 5. Operationalization of the ABIES Model Dimensions

Dimension	Operational Indicators	Empirical Evidence at MTsN 1 Sampang
Accessibility Orientation (A)	(1) Geographical needs mapping; (2) Transportation infrastructure; (3) Cross-subsidization; (4) Inclusive services	Shuttle service with 4 buses for 187 students from 9 villages; service range of 7 to 18 km
Based on Islamic Values (B)	(1) <i>Ihsan</i> ; (2) <i>Amanah</i> ; (3) <i>Rahmah</i> ; (4) <i>Khidmah</i>	SOP based on 4 values; <i>tausiyah</i> and <i>murajaah</i> activities in the shuttle bus
Integrated Educational Services (I)	(1) Integration of 6 service pillars; (2) Integrated information system; (3) Cross-unit coordination	Six service pillars linked through the SIMADRASAH dashboard; weekly coordination meetings
Engagement and Stakeholder Satisfaction (E)	(1) Open communication; (2) Parental participation; (3) Complaint mechanism; (4) Regular satisfaction surveys	Satisfaction index of 90.4 percent; 268 feedback units per semester
Sustainability Impact (S)	(1) Reduction in dropouts; (2) Improved institutional image; (3) Community partnerships; (4) Replicability	Dropouts reduced by 81.8 percent; new enrollment increased by 52.8 percent in 3 years

Source: Model construction based on primary data and expert FGD, 2025

The validation of the ABIES Model was conducted through two rounds of the Delphi technique, involving seven experts consisting of three professors of Islamic educational management, two directors of madrasah education at the Ministry of Religious Affairs, and two senior practitioners managing madrasahs. In the first round, the experts evaluated the relevance, clarity, and completeness of each dimension on a scale of 1 to 5. The first round yielded a mean score of 4.38 (SD = 0.54), with revision notes on the formulation of the Sustainability Impact dimension, which was considered to require clarification regarding the boundaries between social and institutional sustainability. After the revision, the second round produced a mean score of 4.71 (SD = 0.29) and a consensus level of Kendall's W = 0.82, which falls into the very high category (Schmidt, 1997). Therefore, the ABIES Model is declared valid and suitable as a conceptual framework for sustainable Islamic educational services.

Conceptually, the ABIES Model depicts a circular flow that begins with

accessibility orientation as the entry point of service, grounded in Islamic values as an ethical foundation, realized through the integration of six service pillars, validated through stakeholder engagement and satisfaction, and measured through sustainability impact, which in turn reinforces accessibility orientation in the subsequent cycle. The visualization of the model is presented in Figure 1 below.

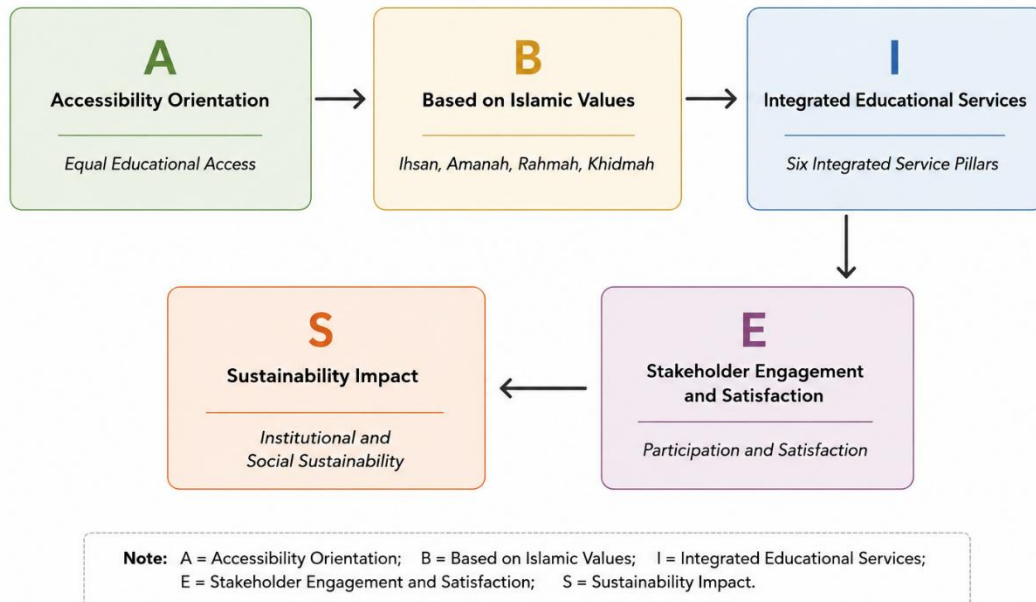


Figure 1. The ABIES Model (Access-Based Islamic Excellent Service)
 Source: Researchers' construction based on field data and expert validation, 2025

The ABIES Model in Figure 1 presents a circular structure that demonstrates that sustainable Islamic educational service is not a linear process but rather a dynamic cycle continuously renewed through stakeholder feedback. The sustainability impact (S) does not serve as an endpoint but rather reinforces accessibility orientation (A) in the subsequent cycle through the expansion of service routes, program replication, and adaptation to new needs. This circular pattern conceptually differs from the classical *SERVQUAL* model, which is static and measurement-oriented, and at the same time extends the theory of service quality into the realm of social sustainability.

As a synthesis of findings, this study reveals that the service excellence at MTsN 1 Sampang is shaped by the interaction of three critical components, namely accessibility innovation, which addresses structural barriers; the internalization of Islamic values, which forms the service culture; and participatory stakeholder engagement, which ensures sustainability. The three components function as mutually reinforcing mechanisms and are consistently documented in both quantitative and qualitative data. The theoretical and practical implications of these findings will be elaborated further in the discussion section.

Discussion

The findings of this study demonstrate that the implementation of the ABIES Model at MTsN 1 Sampang represents a substantive transformation of Islamic educational service that extends beyond administrative and academic quality toward social sustainability and equitable access to education. The quantitative results

challenge the conventional dominance of the classical SERVQUAL dimensions in determining stakeholder satisfaction in regional madrasah contexts. The Pearson correlation analysis revealed that Accessibility Orientation ($r = 0.724$) and Islamic Service Values ($r = 0.689$) exhibited stronger associations with overall satisfaction than the five original dimensions proposed by Dahuri et al. (2025), while tangibles ranked the lowest at $r = 0.412$. This pattern suggests that in regional Islamic educational settings, the determinants of service quality differ fundamentally from those identified in commercial or urban educational contexts where the original framework was developed, aligning with recent critiques by Alemu (2023) regarding the contextual limitations of universal service quality models.

The most theoretically significant finding of this study is the identification of accessibility orientation as the strongest structural determinant of stakeholder satisfaction. The paired sample t-test results, which demonstrated a 21.7 percentage point reduction in tardiness, an 81.8 percent decrease in dropout rates, and a 52.8 percent increase in new enrollment following the implementation of the shuttle service, provide robust empirical evidence that accessibility interventions produce measurable and statistically significant impacts on educational sustainability. This pattern is consistent with the capability approach of (Diana & Zaini, 2023), argues that access to education is not merely about the existence of educational institutions but about the substantive capability of communities to reach and benefit from them. The shuttle service at MTsN 1 Sampang can therefore be understood as a form of social educational innovation that expands the substantive freedoms of marginalized communities to obtain their educational rights in equitable ways.

This interpretation extends the conventional excellent service literature, which has predominantly framed service quality as a transaction between institution and customer (Karim Yabu et al., 2023; Pramudito et al., 2021; Sebopelo et al., 2025), into a broader paradigm that views service as a vehicle for structural inclusion. Field observations further indicated that the program simultaneously operates as an informal learning space in which short religious talks (*tausiyah*) and *Qur'an* memorization review (*murajaah*) are conducted by accompanying teachers during the journey to and from the madrasah. This dual function transforms transportation infrastructure into what can be conceptualized as an extended pedagogical environment, a phenomenon that has not been adequately captured in existing literature on educational logistics. The present study therefore contributes empirical evidence to the global discourse on educational equity articulated in the UNESCO framework on Education for Sustainable Development Goals, particularly Goal 4 on Quality Education and Goal 10 on Reduced Inequalities (Suve, 2025).

The findings further reveal that the service culture at MTsN 1 Sampang is grounded in four Islamic ethical values, namely *ihsan*, *amanah*, *rahmah*, and *khidmah*, which are operationalized through institutional standard operating procedures and reflected consistently in stakeholder interactions. The high satisfaction score for the Islamic Service Values dimension at 94.2 percent and its strong correlation with overall satisfaction reinforce the conceptual framework of Islamic service ethics articulated by Hamsal et al. (2022), which positions service as a moral and spiritual obligation rather than a purely transactional activity. This finding addresses a notable gap in the educational service quality literature, which has largely overlooked the role of religious and spiritual values in shaping institutional culture (Setiawan et al., 2024). Recent studies in Islamic educational management have begun to acknowledge this influence Mahendri et al. (2024), but few have empirically demonstrated systematic integration.

The principal theoretical contribution of this study lies in the formulation of the

ABIES Model as an integrative framework for sustainable Islamic educational service. The model extends the classical *SERVQUAL* framework by incorporating two additional dimensions, namely accessibility orientation and Islamic service values, and by reconceptualizing service quality as a circular process that produces sustainability impact rather than a linear measurement of customer satisfaction. The validation of the model through a two-round Delphi technique, which yielded a Kendall's coefficient of concordance of 0.82, confirms its theoretical and practical feasibility as a conceptual framework for madrasah service development. The ABIES Model can therefore be positioned as a hybrid sustainable educational service model that synthesizes three theoretical traditions: the service quality paradigm and the Islamic service ethics tradition rooted in classical Islamic management thought.

CONCLUSION

The question animating this study was whether a regional madrasah operating under structural constraints of geography and limited transportation could still deliver service quality that meaningfully matters to its stakeholders, and the evidence from MTsN 1 Sampang answers affirmatively, though not as the dominant *SERVQUAL* tradition would predict. Rather than tangibles or technical reliability driving satisfaction, the institution's willingness to send buses into nine villages, embed *tausiyah* into the daily commute, and treat service as *khidmah* produced a satisfaction level of 90.4 percent and an 81.8 percent reduction in dropouts over three years. These outcomes prompted the construction of the ABIES Model, which positions accessibility orientation and Islamic service values not as peripheral additions to existing frameworks but as primary structural determinants. The broader implication is that madrasah leadership in marginalized regions need not choose between academic ambition and social responsibility, and that accessibility innovations deserve recognition as legitimate components of madrasah quality assurance.

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