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Innovative Leadership of Madrasah Aliyah Principals in Enhancing Educational Quality in Pidie, Aceh Province

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Abstract:

This study explores the innovative leadership practices of Islamic senior high school (known as Madrasah Aliyah) principals in Pidie Regency, Aceh, aimed at enhancing educational quality. It addresses the research gap regarding innovative leadership in madrasahs, particularly in Aceh—a post-conflict region with strong cultural and religious values. The study draws on Transformational Leadership and Adaptive Leadership theories to frame its analysis. Using a qualitative case study approach, data were collected from 32 informants, including principals, teachers, students, and school committee members, from eight purposively selected State Madrasah Aliyahs. Data collection methods included direct observation, in-depth interviews, and document analysis. The findings identify five key components of innovative leadership: strategic vision, stakeholder orientation, collaboration, trust-building, and open communication. Practical strategies, such as technology-based learning and community engagement, were implemented to address challenges in student performance while preserving cultural and religious identity. These results underscore the pivotal role of innovative leadership in balancing tradition and modernity, offering actionable recommendations for principals and policymakers to develop adaptive leadership strategies in similar educational contexts.

Abstrak:

Penelitian ini bertujuan untuk mengeksplorasi perilaku kepemimpinan inovatif kepala Madrasah Aliyah di Kabupaten Pidie, Aceh, dalam meningkatkan kualitas pendidikan. Studi ini mengisi kesenjangan penelitian terkait terbatasnya kajian tentang kepemimpinan inovatif di madrasah, khususnya dalam konteks Aceh sebagai wilayah pasca-konflik dengan nilai budaya dan agama yang kuat. Dengan menggunakan teori Transformational Leadership dan Adaptive Leadership, penelitian kualitatif dengan metode studi kasus, penelitian ini melibatkan 32 informan dari delapan Madrasah Aliyah Negeri yang dipilih secara purposive. Informan terdiri atas kepala madrasah, guru, siswa, dan anggota komite sekolah. Data dikumpulkan melalui observasi langsung, wawancara mendalam, dan analisis dokumen. Hasil penelitian mengidentifikasi lima aspek utama kepemimpinan inovatif: visi strategis, orientasi pada pemangku kepentingan, kolaborasi, pembangunan kepercayaan, dan komunikasi terbuka. Strategi praktis seperti pembelajaran berbasis teknologi serta keterlibatan komunitas diterapkan untuk mengatasi tantangan rendahnya hasil belajar sambil mempertahankan identitas budaya dan religius. Hasil ini menegaskan pentingnya kepemimpinan inovatif dalam menyeimbangkan tradisi dan modernitas, sekaligus menawarkan rekomendasi strategis bagi kepala madrasah dan pembuat kebijakan untuk mengembangkan kepemimpinan adaptif dalam konteks pendidikan serupa.

Keywords:

Innovative Leadership, Madrasah Aliyah, Educational Quality, Pidie Regency, Aceh

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Introduction

In the context of rapid globalization and technological advancement, educational innovation has become indispensable for ensuring relevance and competitiveness. Failure to adopt necessary changes may result in stagnation, preventing educational systems from meeting the evolving demands of the global landscape. For educational institutions in post-conflict areas such as Aceh, the challenges are even more complex. These institutions not only face the need for innovation but also the task of rebuilding trust, social cohesion, and educational quality in the aftermath of prolonged conflict (Shah & Cardozo, 2014; Nasir, Rizal, Basri, & Pabbajah, 2024). Such complexities demand leadership approaches that are adaptive, transformative, and capable of addressing both systemic issues and local needs simultaneously.

In Indonesia, the need for educational innovation is particularly urgent, as the country continues to face significant challenges in improving educational quality, especially when compared to regional neighbors like Singapore and Malaysia. According to the World Population Review (2021), Indonesia ranked 54th out of 78 countries—an improvement from the previous year but still trailing behind countries such as Singapore, Malaysia, and Thailand (Arifa, 2022). Persistent low performance in literacy and mathematics highlights the need for comprehensive educational reforms at all levels, including madrasahs, which are a vital component of Indonesia's Islamic educational system. Despite these challenges, regions like Aceh, which are deeply rooted in cultural and religious traditions, face additional difficulties in aligning modern educational demands with the preservation of Islamic values (Erawadi & Setiadi, 2024).

The Minister of Education has acknowledged that Indonesia's education system faces substantial challenges in keeping pace with global standards (Kemendikbud, 2019). In areas such as reading, science, and mathematics, Indonesia ranks 74th out of 79 countries, with average scores that have continued to decline since 2015 (OECD, 2016). These rankings signal an urgent need for substantial educational reforms to improve learning outcomes. While these challenges point to systemic issues in the education

sector, they also highlight the unique difficulties faced by madrasahs, especially in reconciling religious and cultural values with global educational standards. For Aceh, these challenges are compounded by resource constraints and the lingering effects of conflict, requiring innovative leadership approaches capable of bridging these gaps while fostering trust and social cohesion (Zikriati & Arani, 2024).

One key initiative to address these challenges is the promotion of innovative schools aligned with contemporary educational developments. The Ministry of Education and Culture launched the Driving Schools Program, which focuses on the holistic development of student learning outcomes, including literacy, numeracy, and character competencies, supported by highly qualified human resources (Kemendikbudristek, 2021). Simultaneously, the Ministry of Religious Affairs introduced the Madrasah Reform and Madrasah Innovation programs, aimed at enhancing governance and educational standards in madrasahs (Kementerian Agama RI, 2020, 2021). However, these efforts remain underexplored in terms of addressing the distinctive needs of madrasahs, particularly in Aceh, where cultural and religious contexts play a crucial role in shaping educational practices.

In the context of innovation in educational sectors like madrasahs, leadership plays a critical role in implementing effective and sustainable changes. This study draws on Transformational Leadership Theory (Burns, 1978; Bass, 1985) and Adaptive Leadership Theory (Heifetz, 1994; Yukl, 2014) as frameworks for analyzing innovative leadership. Transformational leadership provides a lens to understand how principals articulate strategic visions, foster intellectual stimulation, and address individual needs to improve institutional outcomes (Ismail, Mohamad, Mohamed, Rafiuddin, Zhen, 2010; Zenger & Folkman, 2014; Zenger, 2015). Meanwhile, Adaptive Leadership emphasizes the leaders' capacity to respond effectively to evolving challenges, particularly in dynamic and resource-constrained environments such as post-conflict Aceh. Together, these frameworks offer valuable insights into the dual demands faced by madrasah principals: integrating Islamic values with global educational standards while addressing systemic challenges such as low student performance.

A substantial body of literature has examined innovative leadership in various educational contexts; however, few studies have specifically explored this concept within the realm of madrasahs, particularly in the context of Aceh. Moreover, existing research often overlooks the distinctive challenges faced by madrasahs in Aceh, such as the integration of traditional Islamic values with global educational standards, addressing persistently low student achievement, and rebuilding trust in the post-conflict era. Based on a review of the literature, prior studies on innovative leadership in education tend to focus on three primary areas: First, the role of innovative leadership in responding to the challenges posed by global change and business dynamics, as discussed by Mamula, Perić, & Vujić (2019) and Alharbi (2021); second, the examination of leadership within formal educational settings, with studies by Toprak (2020) and Arham, Norizan, Arham, Hasbullah, Malan, & Alwi (2022) exploring how effective leadership influences educational organizational behavior, enhances student outcomes, and adapts leadership

styles in the digital era; and third, the theme of educational leadership transformation, with a particular emphasis on high student achievement, as highlighted by Anderson (2017).

While these studies provide valuable contributions, they largely neglect the unique characteristics of Islamic education, particularly in regions like Aceh, where innovative leadership must navigate the dual demands of preserving religious and cultural identity while incorporating modern educational practices. This gap underscores the originality and relevance of the current study. Consequently, this research seeks to explore how innovative leadership practices among madrasah principals in Aceh address the complex challenge of reconciling the preservation of cultural and religious values with the embrace of global and technological advancements. By focusing on this distinctive context, the study aims to contribute to a more nuanced understanding of educational leadership in post-conflict and culturally specific settings, offering practical insights for policymakers and educational leaders in developing adaptive strategies to address similar challenges.

Research Method

This study employed a qualitative research approach, utilizing a case study methodology to gain a comprehensive understanding of the innovative leadership behaviors of Madrasah Aliyah principals in Pidie Regency, Aceh. The case study design was selected to examine the intricate relationships between leadership practices and the unique cultural and religious dynamics inherent in the madrasah context, facilitating a detailed exploration of specific phenomena within a real-world setting. The qualitative approach was chosen for its capacity to explore complex psychological, social, and cultural phenomena, offering the flexibility to investigate how leadership practices varied in response to local contextual factors (Creswell, 2013; Sugiyono, 2019).

Eight State Madrasah Aliyahs in Pidie Regency were purposively selected based on specific criteria, including the principal's demonstrated track record in implementing innovative programs, active collaboration with stakeholders, and the geographic and demographic diversity within the region. These criteria ensured that the selected madrasahs represented a wide range of contexts within the study area. A total of 32 informants participated in the study, including eight principals, ten teachers, eight students, and six members of school committees. The informants were selected through purposive sampling to ensure that they had direct involvement in or experience with the madrasahs' innovative initiatives.

Data were collected through direct observation, in-depth interviews, and document analysis. The primary data for this study were gathered through semi-structured interviews, guided by a thematic framework centered on the five key aspects of innovative leadership identified in the study: strategic vision, stakeholder orientation, collaboration, trust-building, and open communication. Principals were asked specific questions about their leadership strategies, including how they articulated their vision, engaged stakeholders in decision-making, and integrated Islamic values with

contemporary educational demands. Teachers and students were interviewed about their experiences and perceptions of the principals' leadership, while members of school committees were questioned regarding their involvement in program development and school governance.

Observations focused on daily school activities, such as meetings, classroom interactions, and teacher training sessions, which provided valuable insights into the practical application of leadership practices. Document analysis included reviewing school plans, meeting minutes, and reports related to madrasah governance and innovative programs. To enhance the validity and reliability of the findings, data were triangulated by comparing information from multiple sources. For example, responses from principals during interviews were cross-referenced with feedback from teachers and students, as well as supporting documents such as strategic plans and performance reports. This triangulation ensured that the data were comprehensive and consistent across different informants and methods.

Data analysis was conducted using Miles and Huberman's interactive model, which included data reduction, data display, and conclusion drawing. Thematic analysis was employed to identify patterns and relationships among the five aspects of innovative leadership. Emergent themes were subsequently contextualized within the framework of transformational and adaptive leadership theories, ensuring alignment with the study's theoretical foundation.

Results and Discussion

Result

Aspects of Innovative Leadership of Madrasah Principals in Pidie Regency

This study observed eight madrasahs in Pidie Regency and conducted interviews with principals, teachers, students, school committees, and other stakeholders. Five primary aspects of innovative leadership were identified: strategic vision, stakeholder orientation, collaboration, trust-building, and open communication. These aspects were derived from data collected through semi-structured interviews, direct observations of school activities, and analysis of relevant documents, including Madrasah Budget Plans (RKAM) and program reports. The findings indicate that the innovative leadership behaviors of madrasah principals align closely with both transformational leadership theory and adaptive leadership frameworks. Each aspect illustrates how principals integrate Islamic values with modern educational innovations to address local and global challenges.

Moreover, principals addressed specific challenges such as low student achievement in literacy and numeracy by implementing targeted strategies, such as gamified learning tools and personalized mentoring programs. For example, at ISHS4, the introduction of game-based learning platforms enhanced student engagement in mathematics and science. Similarly, personalized mentoring sessions at ISHS5 contributed to improved literacy outcomes among struggling students (Interview,

January 2023). These strategies not only reflect innovative practices but also demonstrate the principals' capacity to adapt leadership approaches to meet the specific educational needs of their students. Further elaboration on each aspect is provided below:

Strategic Vision

Principals consistently demonstrated a forward-looking vision aimed at improving educational outcomes while preserving religious and cultural values. In response to the challenge of low student achievement, principals integrated targeted innovations into their strategic plans. For example, at ISHS1, the principal implemented a management application that not only streamlined administrative processes but also delivered personalized learning modules through e-learning platforms. These modules, designed to enhance literacy and numeracy, allowed teachers to monitor and address individual student performance gaps. Similarly, at ISHS8, the principal adopted a long-term vision of transforming the school into a religiously and academically competitive institution by 2030, incorporating entrepreneurial skills into the religious curriculum. According to the principal, the entrepreneurial curriculum nurtures critical thinking and problem-solving skills, which are essential for global competitiveness (Interview, January 2023). However, perspectives among teachers and students varied. At ISHS1, teachers expressed enthusiasm for the technology but emphasized the need for further training to maximize its potential. Meanwhile, students at ISHS8 appreciated the motivational impact of the principal's vision but noted the difficulty in balancing religious and entrepreneurial demands.

Stakeholder Orientation

Active stakeholder involvement was a hallmark of leadership practices across all the madrasahs. At ISHS2, the principal explained, "We engage stakeholders in decision-making processes, particularly in designing and implementing innovative programs such as tahfiz and tahsin" (Interview, January 2023). These programs, which were supported by the school committee, also incorporated components aimed at enhancing literacy and numeracy, particularly through parental involvement. For example, parents participated in literacy campaigns designed to encourage reading habits at home, while teachers integrated basic numeracy activities into religious lessons, such as zakat calculation exercises. A teacher remarked, "This collaboration ensures that learning is continuous, both at school and at home" (Interview, January 2023). These programs reflect a collaborative approach that aligns educational practices with community values. Teachers at ISHS2 emphasized that their involvement in program development strengthened their sense of ownership. However, students expressed that their roles were more passive, primarily confined to peripheral activities, suggesting areas for improvement in stakeholder engagement at various levels.

Collaboration

Collaboration emerged as a critical driver of innovation within the madrasahs. At ISHS3, the principal actively involved teachers and the school committee in preparing the Madrasah Budget Plan (RKAM). This collaborative approach ensured that resources were strategically allocated to address key challenges, such as low student achievement. Special funding was directed toward developing literacy and numeracy programs, including teacher training and supplementary learning materials. A teacher noted, "Allocating special funds for student talent development greatly supports innovation implementation in the classroom... the funds help us create interactive teaching modules that make reading and math lessons more engaging for students" (Interview, January 2023). At ISHS7, collaboration extended beyond the school to include the surrounding community. Local leaders and artists were invited to contribute to the curriculum, incorporating traditional Acehnese art into lessons. For example, students practiced calculating patterns and proportions in traditional embroidery, which integrated cultural preservation with numeracy education. These collaborative efforts not only enriched the educational experiences of students but also strengthened their connection to local traditions.

Trust-Building

Transparency and inclusivity were fundamental in building trust among stakeholders. At ISHS4, the principal fostered trust by involving the school committee in decision-making processes, particularly in the allocation of resources for academic support programs. For example, the committee collaborated with teachers to design literacy improvement initiatives, such as family reading programs, which engaged parents in supporting their children's learning at home. A committee member remarked, "We are always involved in decision-making related to student development, especially programs that directly benefit students" (Interview, January 2023). At ISHS5, trustbuilding was also evident in the principal's approach to disciplinary practices. The principal consistently communicated policies to parents, ensuring transparency and accountability. Furthermore, the principal implemented regular progress updates for parents, including reports on students' literacy and numeracy achievements. This transparency not only reinforced trust but also encouraged parental involvement in academic interventions. A teacher noted, "When parents see clear evidence of progress, they are more willing to support our programs" (Interview, January 2023). These practices enhanced the confidence of teachers and parents in the leadership, contributing to a positive work environment conducive to collaboration.

Open Communication

Effective communication played a pivotal role in aligning stakeholders with the principal's strategic vision. At ISHS5, the principal emphasized, "Frequent and structured communication is essential to ensure alignment in implementing our vision" (Interview, January 2023). This structured communication included weekly teacher meetings to review students' academic progress, particularly in literacy and numeracy. A teacher shared, "These meetings allow us to identify challenges early and collaborate on

solutions for struggling students" (Interview, January 2023). Similarly, ISHS2 utilized open forums to address concerns and gather feedback, fostering a culture of transparency and inclusion. For example, the principal organized student-led discussions, where students could propose improvements to learning activities, such as incorporating digital tools into classroom instruction. A student remarked, "Our suggestions are taken seriously, and we've seen many of them implemented in our classes" (Interview, January 2023). These practices highlight the importance of tailoring communication strategies to meet the diverse needs of stakeholders, creating an inclusive and participatory environment.

These five aspects—Strategic Vision, Stakeholder Orientation, Collaboration, Trust-Building, and Open Communication—demonstrate how madrasah principals in Pidie Regency successfully address educational challenges through innovative leadership. Each madrasah tailored these leadership practices to its unique context, balancing local cultural and religious values with global educational demands. The table below provides a summary of how these practices were implemented across the eight madrasahs, highlighting key strategies derived from interviews, observations, and document analysis.

Table 1. Aspects of Innovative Leadership of Madrasah Principals in Pidie Regency

Name of Madrasah	Strategic Vision	Stakeholder Orientation	Collaboration	Trust- Building	Open Communication
ISHS1	Enhancing students with noble character and creativity	Involving committee, teachers, students, community	Collaboration with all stakeholders	Transparency in budget management	Communicated through meetings
ISHS2	Creating logical, critical, and morally upright generations	Involving committee in tahfiz and tahsin programs	Collaboration with committee to improve education quality	Trust through consistency in tahfiz and tahsin programs	Communication through meetings and socialization
ISHS3	Improving education quality and innovation	Involving stakeholders in decision- making	Teachers involved in preparing the Madrasah Budget Plan	Openness in budget management	Discussions through regular meetings
ISHS4	Innovative, integrated, and green learning	Active role of committee and community in management	Collaboration with committee in student development	Active involvement fosters trust	Socialization through direct communication

Students	Involving	Cooperation	Trust built	Communication
	•	*	O	through regular
knowledge,		committee	transparency	meetings
faith, and	discipline		in student	
good deeds			discipline	
IT-based and	Committee	Collaboration	Openness in	Communication
innovative	involved in	through IT	management	through
madrasah	program	development in	and	periodic
management	evaluation	teaching	administration	meetings
Enhancing	Collaboration	Collaboration	Trust built	Communication
students'	with	with the	through	with
morals and	committee in	surrounding	personal	stakeholders
basic	student	community	approach	through forums
education	moral			and meetings
quality	development			· ·
Religious,	Involving	Collaboration with	Trust built	Open meetings
superior, and	stakeholders	teachers and	through	and discussions
competitive	in developing	committee in	everyone's	
madrasah by	local	entrepreneurship	involvement	
2030	potentials	programs		
	with knowledge, faith, and good deeds IT-based and innovative madrasah management Enhancing students' morals and basic education quality Religious, superior, and competitive madrasah by	with parents in student discipline good deeds IT-based and innovative involved in program evaluation Enhancing Collaboration with morals and basic student education quality Religious, superior, and competitive madrasah by local	with parents in with parents and committee faith, and discipline good deeds IT-based and committee innovative involved in through IT development in teaching Enhancing Collaboration with the morals and committee in surrounding students' with with the morals and committee in surrounding development basic student community education moral development Religious, Involving Collaboration with stakeholders teachers and competitive in developing committee in entrepreneurship	with parents in student committee transparency in student discipline IT-based and innovative involved in through IT management madrasah program development in and management evaluation teaching administration Enhancing Collaboration Collaboration Trust built students' with with the through morals and committee in surrounding personal sasic student community approach education moral quality Religious, Involving superior, and competitive madrasah by local entrepreneurship involvement

Source: Data derived from interviews with principals and stakeholders, supported by document analysis and direct observation during field visits

The table illustrates the diversity and adaptability of leadership practices across the eight madrasahs. While all institutions consistently emphasized trust-building and open communication as foundational practices, their approaches varied in response to specific challenges and priorities. For example, ISHS1 and ISHS6 placed a strong emphasis on integrating technology to enhance both administrative efficiency and teaching effectiveness, reflecting their commitment to modern educational innovation. Conversely, ISHS2 and ISHS7 prioritized religious and cultural programs, such as tahfiz (Quran memorization) and the integration of local art, aimed at strengthening students' character while fostering a sense of cultural identity. These variations underscore the importance of context-sensitive leadership strategies, enabling madrasah principals to effectively address both local needs and global challenges. The following sections will examine how these innovative behaviors translate into broader educational outcomes, particularly in addressing low literacy and numeracy rates while promoting cultural preservation and social cohesion.

Innovative Behavior of Madrasah Principals

The innovative leadership exhibited by madrasah principals in Pidie Regency plays a pivotal role in guiding these institutions toward improved academic and moral achievements. The principals' strategic visions emphasize not only the enhancement of educational quality but also the cultivation of students with strong moral character and global competencies. Each madrasah has implemented a variety of strategies, ranging from the integration of technology into religious education to the preservation of local culture, reflecting the principals' ability to adapt to modern educational demands while

upholding religious and cultural values. These strategies are aligned with the principles of Transformational Leadership Theory, which highlights the role of visionary leadership in fostering innovation, and Adaptive Leadership Theory, which emphasizes the importance of responsiveness to dynamic challenges.

For instance, the principals have adapted their leadership behaviors to address specific challenges, such as low literacy and numeracy achievement, by incorporating personalized approaches like gamified learning, family engagement programs, and mentorship initiatives. These strategies demonstrate a clear alignment with transformational leadership, as the principals articulate compelling visions for their madrasahs while motivating teachers and students to engage with innovative solutions. At the same time, adaptive leadership is evident in the principals' responsiveness to the evolving needs of their students and communities, as they adjust their leadership practices to address the specific context of each madrasah.

The data summarized in Table 2 were primarily collected through semi-structured interviews with principals, teachers, and school committees, complemented by observations of madrasah activities and analysis of relevant documents, such as program reports and budget plans. This data provides a comprehensive overview of the innovative behaviors demonstrated by the principals, categorized according to their strategic focus and key actions.

Table 2. Innovative Behavior of Madrasah Principals

		- F	
Name of Madrasah	Innovative Behavior of Madrasah Principal	Main Focus	
ISHS1	Integrating technology into religious education	Creativity and innovative	
	to enhance students' creativity and innovative thinking.	thinking skills through technology.	
ISHS2	Developing educational programs that combine religious values with global academic competencies, including student exchange programs and international partnerships.	Global academic competencies and religious values.	
ISHS3	Integrating traditional values and local culture into religious education, collaborating with community leaders and local artists for training and workshops.	Inclusive education and appreciation of local cultural diversity.	
ISHS4	Utilizing technology for character development through online mentoring programs, self-evaluation applications, and game-based learning platforms.	Student character development through technology.	
ISHS5	Combining academic and moral competencies through e-learning platforms, ethics and morality modules, and training sessions for teachers.	Academic and moral competencies through e-learning and ethics modules.	
ISHS6	Emphasizing character building through strong religious values with routine religious activities and spiritual mentoring programs.	Student character building through strong religious values.	

ISHS7	Enhancing students' morals and basic	•				
	education quality through integration of	and basic education				
	religious values and local customs, as well as quality. intensive academic guidance.					
ISHS8	Building a religious, superior, and competitive madrasah with inclusive education programs	excellence through				
	based on local potentials and participation in	inclusive education and				
	international academic and religious	local potentials.				
	competitions.					

Source: Data derived from interviews, observations, and document analysis, 2024

The findings of this study highlight the diverse strategies employed by madrasah principals in Pidie Regency to address their specific educational goals while balancing both traditional and modern educational demands. Each madrasah demonstrates a unique approach to leadership that integrates innovative practices with a commitment to upholding cultural and religious values.

At ISHS1, the principal employs technology to enhance religious education, aiming to foster creativity and critical thinking among students. As the principal explained, "We apply e-learning and software for learning so that students can think more critically and innovatively" (Interview, January 2023). This approach illustrates how technology can be leveraged not only to deliver religious content but also to cultivate essential skills like creativity and problem-solving, demonstrating that educational innovation can coexist with religious teachings.

In contrast, ISHS2 focuses on blending global academic competencies with religious values. The principal shared, "We encourage students to participate in national and international academic and religious competitions so they have a global perspective" (Interview, January 2023). This strategy aims to provide students with a global outlook while maintaining the foundational importance of religious values. Through initiatives such as international student exchange programs, the madrasah seeks to broaden students' horizons, giving them exposure to different cultures and perspectives without compromising their religious identity.

At ISHS3, the principal integrates local cultural values into the educational framework, emphasizing the preservation of traditions alongside religious teachings. The principal stated, "We involve local artists and community leaders in training so that students understand the importance of preserving traditions" (Interview, January 2023). This strategy not only reinforces students' understanding of their cultural heritage but also encourages a holistic approach to education that values both religious and cultural identity, underscoring the significance of community engagement in educational leadership.

Similarly, ISHS4 utilizes technology for character development, integrating online mentoring programs and self-evaluation applications. The principal explained, "We developed game-based applications to teach moral values in a way that is enjoyable for students" (Interview, January 2023). This innovative approach combines modern technology with character education, making it more engaging and relevant to today's

tech-savvy students. By using digital tools to teach moral values, the madrasah bridges the gap between the digital age and traditional values, ensuring that character development is both effective and enjoyable.

At ISHS5, the principal adopts a similar strategy, emphasizing the combination of academic and moral competencies through an e-learning platform. The principal noted, "We strive for students not only to be academically smart but also to have noble character in accordance with Islamic teachings" (Interview, January 2023). This holistic approach reflects the madrasah's dual commitment to academic excellence and character development, aligning with the Islamic educational philosophy of nurturing both intellectual and moral virtues.

At ISHS6, character building through strong religious values is central to the educational approach. The principal stated, "We focus on shaping students' character by instilling strong religious values through consistent mentoring programs and daily routines" (Interview, January 2023). The emphasis on routine religious activities and spiritual mentoring creates a structured environment where students' moral and ethical development is prioritized alongside academic achievement, ensuring that religious values are deeply ingrained in their character formation.

ISHS7 integrates religious values with local customs to enhance students' morals and education. The principal explained, "We involve community leaders and parents to ensure that students grow up with strong moral foundations and an appreciation for local traditions" (Interview, January 2023). This approach highlights the importance of community and family engagement in the educational process. Teachers also noted that this collaboration fosters a sense of identity and belonging among students, further reinforcing the madrasah's role as a cultural and religious hub in the community.

Finally, ISHS8 focuses on fostering a religious, superior, and competitive madrasah by promoting inclusive education programs based on local potentials. The principal emphasized, "We aim to develop students who are both religiously devout and academically competitive by integrating entrepreneurship and local potential into our curriculum" (Interview, January 2023). The madrasah's integration of entrepreneurship into the curriculum, alongside participation in national and international academic and religious competitions, reflects its commitment to preparing students for global challenges while maintaining a strong religious foundation.

Across all eight madrasahs, trust-building and open communication emerge as foundational practices for creating environments conducive to innovation. At ISHS4, trust was fostered through collaborative decision-making with the school committee, while at ISHS7, community leaders played a vital role in moral development programs. Similarly, ISHS2 and ISHS8 utilized open forums and inclusive discussions to ensure that all stakeholders, including students, had opportunities to contribute to school initiatives. These practices collectively promote a sense of ownership and shared responsibility among teachers, students, parents, and community members, thereby facilitating a culture of collaboration and continuous improvement.

The innovative behaviors demonstrated by madrasah principals in Pidie Regency reflect a dynamic interplay between traditional values and modern educational demands. By aligning their leadership practices with both global competencies and local needs, the principals have demonstrated how innovative leadership can drive educational transformation in a culturally and religiously sensitive context. The following section will explore the theoretical and practical implications of these findings, offering insights for policymakers and educators working in similar contexts, particularly those navigating the challenges of balancing tradition and innovation in education.

Discussion

Leadership is recognized as a dynamic concept involving the interaction between leaders and followers, with its success largely dependent on the specific circumstances and conditions at any given time (Peretomode, 2012; Amegayibor, 2021). This perspective underscores the evolving nature of leadership, which adapts to situational developments. In the educational context, leadership dynamics are particularly shaped by the challenges posed by globalization and modernization, which demand swift and appropriate responses. Educational leaders are increasingly tasked with maintaining relevance amidst rapid technological and social changes, making traditional approaches potentially inadequate. As emphasized by Widiastuti, MR, Widodo, Ahmed, & Shahzeb (2024), effective leadership in Indonesia's educational landscape requires the integration of Islamic and multicultural values, striking a balance between tradition and modernity, particularly in regions like Aceh.

The findings of this study align with both transformational leadership theory (Bass, 1985) and adaptive leadership frameworks (Heifetz, 1994; Yukl, 2014), which emphasize the importance of a clear vision, collaboration, and adaptability in addressing educational challenges. This research contributes novel insights by applying these leadership theories specifically to the context of madrasahs in Aceh—a post-conflict region where Islamic and cultural values are deeply embedded in educational practices. Previous studies, such as those by Zulpikar, Pratama, & Saeful (2024), underscore the critical role of innovative leadership in improving school culture across Indonesia. Brown (2023) asserts that visionary leaders must articulate a compelling vision capable of inspiring and guiding organizations through external changes, including technological advancements and social developments. Successful leadership, according to Brown, involves not only creating a vision but also translating it into actionable steps, ensuring the organization remains adaptive in the face of change.

In a similar vein, research by Howard, O'Brien, Kay, & O'Rourke (2019) emphasizes that innovation in education hinges on a leader's capacity to effectively integrate technology, fostering a more adaptive and collaborative learning environment. However, this study offers unique insights into how innovative leadership in Aceh incorporates religious principles alongside modern educational practices to address both local and global demands. At ISHS1, the principal's strategic vision integrates e-learning platforms designed to enhance creativity and critical thinking among students. This approach resonates with the findings of Wong & Ng (2021), who argue that digital innovation

fosters adaptive, future-ready educational environments. In contrast to studies focusing on general educational contexts, this research highlights the unique application of digital tools in Islamic education, where technology serves not only to enhance academic performance but also to preserve religious values. This approach aligns with the work of UNESCO (2023) and Ruiz-Rojas, Salvador-Ullauri, & Acosta-Vargas (2024), who emphasize the dual benefits of integrating technology for both academic efficiency and the development of critical thinking. Moreover, Juhairiah, Yuwono, & Kinasih (2024) found that combining Islamic teachings with e-learning platforms supports both intellectual and moral development, which is consistent with the dual focus observed at ISHS1.

Collaboration emerged as a key component of innovative leadership in the study. At ISHS6, the principal built a curriculum development team that included various stakeholders, such as teachers, the school committee, and the community. This approach aligns with Drucker (1996) and Boone (2015), who argue that leaders who foster collaboration can stimulate creativity and innovation within institutions. By involving a diverse set of stakeholders in strategic decision-making, these collaborations introduce different perspectives that enhance the overall effectiveness of educational programs. Howard, O'Brien, Kay, & O'Rourke (2019) further support this notion, emphasizing the importance of including local communities and external organizations in educational reforms. The active participation of the school committee and community in program evaluation at ISHS6 exemplifies how collaboration can strengthen innovative initiatives, fostering a sense of shared ownership and accountability among all stakeholders.

Responsiveness to change is another key characteristic of innovative leadership, as demonstrated at ISHS8. The principal's ability to adapt and foster positive relationships between teachers and students, while addressing internal challenges and creating a conducive learning environment, showcases this quality. Yukl (2014) and Boeske (2023) emphasize that effective leaders are those who can adjust to environmental changes without compromising their strategic goals. At ISHS8, the principal's adaptability in implementing responsive policies not only builds interpersonal trust but also motivates both teachers and students to work collaboratively. This flexibility aligns with the findings of Jun & Lee (2023), Karimi, Malek, Farani, & Liobikienė (2023), and Njaramba (2024), who highlight that transformational leaders create environments conducive to both intellectual and emotional growth within the organization.

Transformational leadership, as defined by Bass & Riggio (2006) and Adams, Sofian, & Zainol (2018), is marked by a leader's ability to inspire followers to achieve results beyond their expectations through motivation and positive influence. This principle is clearly reflected at ISHS5, where the principal employs motivational strategies, such as integrating ethics and morality modules into e-learning platforms, to enhance both the intellectual and moral competencies of students. These strategies are consistent with the work of Richardson, Bathon, & McLeod (2021), and UNESCO (2023), all of whom emphasize the dual role of leadership in promoting both academic excellence and the development of moral character.

The practice of culturally responsive leadership, as observed at ISHS3, further emphasizes the importance of integrating local traditions into educational practices. The principal's collaboration with local artists and community leaders to incorporate cultural elements into the curriculum fosters a strong sense of identity and belonging among students. This approach resonates with Yang, Mamun, & Salameh (2023) who advocates for culturally responsive leadership in the Indonesian educational context. Additionally, Zenger & Folkman (2014) highlight that leaders with a clear strategic vision can inspire innovation and commitment, as demonstrated at ISHS4, where technology-based mentoring programs support character development while promoting independent learning.

Finally, this study offers actionable recommendations for enhancing leadership practices in madrasahs, particularly in regions like Aceh. As suggested by Ulfia (2024), structured training programs focused on digital innovation, stakeholder collaboration, and cultural integration could significantly improve the leadership effectiveness of madrasah principals. Such training would equip principals with the skills needed to manage the dual demands of modern education and cultural preservation. Furthermore, expanding mentorship networks among madrasah principals would facilitate the exchange of best practices and help address the unique challenges faced in post-conflict educational settings. For instance, scaling successful initiatives such as the game-based learning programs at ISHS4 or the family engagement strategies at ISHS6 could contribute to improved literacy and numeracy outcomes across similar madrasahs.

The findings of this study underscore the critical role of innovative and transformational leadership in navigating educational challenges while preserving the cultural and religious values central to madrasahs in Aceh. Kim & Maloney (2020) emphasize that leadership in religious schools must strike a delicate balance between modern educational demands and traditional values, a balance that the madrasah principals in this study have successfully achieved. By integrating Islamic principles with global competencies, these principals have demonstrated a leadership model that not only meets the challenges of contemporary education but also strengthens the cultural and spiritual fabric of their communities. This leadership approach offers valuable insights for policymakers and educators seeking to implement similar practices in other culturally and religiously distinct educational contexts. The success of these principals highlights the potential of leadership that is both innovative and context-sensitive, ensuring that education remains relevant, inclusive, and culturally grounded in an increasingly globalized world.

Conclusion

This study explores the innovative leadership behaviors of Madrasah Aliyah principals in Pidie Regency, Aceh, demonstrating how they successfully integrate Islamic values with modern educational practices to improve educational quality. Five key aspects of innovative leadership—strategic vision, stakeholder orientation, collaboration, trust-building, and open communication—were identified as essential in addressing

challenges such as low literacy and numeracy rates. The principals employed adaptive strategies, including the use of e-learning platforms, gamified learning tools, and family engagement programs, to enhance academic outcomes while preserving cultural and religious identity. These leadership practices underscore the applicability of Transformational Leadership Theory and Adaptive Leadership Theory, which emphasize visionary, collaborative, and context-sensitive approaches, in guiding leadership in culturally distinct educational settings.

In practical terms, this study provides actionable recommendations for policymakers to implement structured training programs focused on digital innovation, stakeholder collaboration, and cultural integration. By aligning Islamic principles with global competencies, madrasah principals in this study exemplify a leadership model that effectively balances tradition with modernity. Their approach offers valuable insights and lessons for leaders and educators in similar educational contexts, contributing to the broader discourse on leadership in religious and culturally rich settings.

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Ethical Statement

This study was conducted in compliance with established ethical standards to safeguard the rights and confidentiality of participants. Informed consent was obtained from all participants, including school staff and students, who were provided with clear information regarding the voluntary nature of their participation and their right to withdraw at any stage without consequence. To ensure anonymity, pseudonyms were employed, and all data were securely stored in accordance with data protection regulations. The study received approval from the institutional ethics committee and was carried out with cultural sensitivity and respect for the participants' values and context. Data collection methods included observation, semi-structured interviews, and document analysis, and participants were informed that the findings would be utilized solely for academic purposes.

CRediT Authorship Contribution Statement

- **Author 1:** Conceptualization, Methodology, Investigation, Data collection, Writing-original draft.
- **Author 2:** Supervision, Review & editing, Validation.
- **Author 3:** Supervision, Review & editing, Validation.

Conflict of Interest

Authors may declare no conflict of interest.

Data Availability

The data are available upon request.

REFERENCES

- Adams, D., Sofian, S., & Zainol, A. (2018). Transactional and transformational leadership: complementary or opposites? *Mastering Theories of Educational Leadership and Management* (pp. 107–113). University of Malaya Press.
- Alharbi, I. B. A. (2021). Innovative leadership: a literature review paper. *Open Journal of Leadership*, 10(03), 214–229. https://doi.org/10.4236/ojl.2021.103014.
- Arham, A. F., Norizan, N. S., Arham, A. F., Hasbullah, N. N., Malan, I. N. B., & Alwi, S. (2022). Initializing the need for digital leadership: A meta-analysis review on leadership styles in educational sector. *Journal of Positive School Psychology*, 6(8), 2755–2773. https://journalppw.com/index.php/jpsp/article/view/10280.
- Amegayibor, G. K. (2021). Leadership styles and employees' performance: a case of family-owned manufacturing company, Cape Coast. *International Journal of Financial, Accounting, and Management, 3*(2), 149–164. https://doi.org/10.35912/ijfam.v3i2.624.
- Anderson, M. (2017). Transformational leadership in education. *International Social Science Review*, *93*(1), 1–13. https://www.jstor.org/stable/90012919.
- Arifa, S. N. (2022). *Hari pendidikan internasional, bagaimana tingkat pendidikan di indonesia saat ini?* https://www.goodnewsfromindonesia.id/2022/01/24/haripendidikan-internasional-bagaimana-tingkat-pendidikan-di-indonesia-saat-ini.
- Bass, B. M. (1985). Leadership and performance beyond expectations. Free Press.
- Bass, B. M & Riggio, R.E. (2006). *Transformational leadership* (2nd edition). Psychology Press.
- Boeske, J. (2023). Leadership towards sustainability: A review of sustainable, sustainability, and environmental leadership. *Sustainability*, *15*(16), 12626. https://doi.org/10.3390/su151612626.
- Boone, J. (2015). Leading learning organizations through transformational change. *International Journal of Educational Management*, 29(3), 275–283. https://doi.org/10.1108/IJEM-06-2013-0096.
- Brown, M. (2023). Leading in changing times. *Handbook of open, distance and digital education* (pp. 509–525). Springer Nature Singapore. https://doi.org/10.1007/978-981-19-2080-6_28.
- Burns, J. M. G. (1978). Leadership. Harper & Row.
- Creswell, J. W. (2013). *Penelitian kualitatif & desain riset memilih di antara lima pendekatan* (S. Z. Qudsy (ed.)). Pustaka Pelajar.
- Drucker, P. F. (1996). Your leadership is unique. *Christianity Today International/Leadership Journal*, 17(4), 54. https://www.edomi.org/wp-content/uploads/2021/01/your-leadership-is-unique-drucker.pdf.
- Erawadi, E., & Setiadi, F. M. (2024). Transformation of traditional islamic education: Dayah as a modern educational institution in post-conflict Aceh. *FITRAH: Jurnal Kajian Ilmu-Ilmu Keislaman*, 9(2), 225–246.

- https://doi.org/10.24952/fitrah.v9i2.10110.
- Heifetz, R. A. (1994). *Leadership without easy answers* (Issue v. 465). Harvard University Press.
- Howard, P., O'Brien, C., Kay, B., & O'Rourke, K. (2019). Leading educational change in the 21st century: creating living schools through shared vision and transformative governance. *Sustainability*, *11*(15), 4109. https://doi.org/10.3390/su11154109.
- Ismail, A., Mohamad, M. H., Mohamed, H. A.-B., Rafiuddin, N. M., & Zhen, K. W. P. (2010). Transformational and transactional leadership styles as a predictor of individual outcomes. *ECTAP Theoretical and Applied Economics, Romania, XVII*(6 (547)), 89–104. http://store.ectap.ro/articole/477_ro.pdf.
- Juhairiah, S., Yuwono, D., & Kinasih, Q. Y. (2024). Digital transformation in islamic education: opportunities, challenges, and its impact on islamic values. *Journal of Vocational Education and Educational Technology Innovations*, 1(1), 1–6. https://doi.org/10.70074/JVETI.V1I1.20.
- Jun, K., & Lee, J. (2023). Transformational leadership and followers' innovative behavior: roles of commitment to change and organizational support for creativity. *Behavioral Sciences*, *13*(4), 320. https://doi.org/10.3390/bs13040320.
- Karimi, S., Malek, F. A., Farani, A. Y., & Liobikienė, G. (2023). The role of transformational leadership in developing innovative work behaviors: the mediating role of employees' psychological capital. *Sustainability*, 15(2), 1267. https://doi.org/10.3390/su15021267.
- Kemendikbud. (2019). *Hasil PISA Indonesia 2018: Akses makin meluas, saatnya tingkatkan kualitas*. https://www.kemdikbud.go.id/main/blog/2019/12/hasil-pisa-indonesia-2018-akses-makin-meluas-saatnya-tingkatkan-kualitas.
- Kemendikbudristek. (2021). *Programsekolahpenggerak | Program sekolah penggerak*. https://sekolah.penggerak.kemdikbud.go.id/programsekolahpenggerak/.
- Kementerian Agama RI. (2020). *MEQR Madrasah education quality reform*. M.adrasah Reform. https://madrasahreform.kemenag.go.id/.
- Kementerian Agama RI. (2021). *Pelatihan inovasi madrasah: menuju madrasah unggul.* https://balitbangdiklat.kemenag.go.id/berita/pelatihan-inovasi-madrasah-menuju-madrasah-unggul.
- Kim, J., & Maloney, E. J. (2020). *Learning innovation and the future of higher education*. Johns Hopkins University Press. https://doi.org/10.1353/book.71965.
- Mamula, T., Perić, N., & Vujić, N. (2019). The contribution of innovative leadership style as an answer to global and business changes. *Quality Access to Success*, *20*(170), 9–14. https://www.proquest.com/openview/fe909b3609917afb9aaf2c93a75954e5/1?pq-origsite=gscholar&cbl=1046413.
- Nadur, E. S. (2017). Implementasi kepemimpinan transformasional kepala sekolah dalam membentuk budaya sekolah pada konteks pendidikan di Indonesia. *Jurnal Penelitian*, 21(1), 48–61. https://e-journal.usd.ac.id/index.php/JP/article/view/885.
- Nasir, M., Rizal, S., Basri, & Pabbajah, M. (2024). Revolutionizing Teungku Dayah learning model: exploring the transformative impact of technological advancements on Islamic education in Aceh. *Cogent Education*, 11(1). https://doi.org/10.1080/2331186X.2024.2335720.

- Njaramba, F. (2024). Transformational leadership in a crisis: Dimensional analysis with psychological capital. *Heliyon*, *10*(16), e35900. https://doi.org/10.1016/j.heliyon.2024.e35900.
- OECD (2016), PISA 2015 Results (Volume I): Excellence and equity in education. OECD Publishing. https://doi.org/10.1787/9789264266490-en.
- Peretomode, V. F. (2012). *Theories of management: implications for educational administration*. Justice Jeco Publishing Global.
- Richardson, J. W., Bathon, J., & McLeod, S. (2021). Leadership for deeper learning: Facilitating school innovation and transformation. In *Leadership for Deeper Learning: Facilitating School Innovation and Transformation*. Routledge, Taylor & Francis Group. https://doi.org/10.4324/9780429324796.
- Ridwansah, D. (2021). *Nadiem makarim akui sistem pendidikan indonesia sudah ketinggalan sebelum pandemi*. https://www.jawapos.com/nasional/pendidikan/28/09/2021/nadiem-makarim-akui-sistem-pendidikan-indonesia-sudah-ketinggalan/.
- Ruiz-Rojas, L. I., Salvador-Ullauri, L., & Acosta-Vargas, P. (2024). Collaborative working and critical thinking: Adoption of generative artificial intelligence tools in higher education. *Sustainability*, *16*(13), 5367. https://doi.org/10.3390/su16135367.
- Shah, R., & Lopes Cardozo, M. (2014). Education and social change in post-conflict and post-disaster Aceh, Indonesia. *International Journal of Educational Development*, 38, 2–12. https://doi.org/10.1016/j.ijedudev.2014.06.005.
- Sugiyono. (2019). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Alfabeta.
- Toprak, M. (2020). Leadership in educational: a systematic review. *International Journal of Educational Administration, Management, and Leadership, 1*(2), 85–96. https://doi.org/10.51629/ijeamal.v1i2.10.
- Ulfia, N. (2024). *Kepemimpinan transformasional kepala madrasah dalam peningkatan motivasi kerja guru di MIN 10 Aceh Besar*. Universitas Islam Negeri Ar-Raniry.
- UNESCO. (2023). *Technology in education: a case study on Indonesia*. GEM Report UNESCO. https://doi.org/10.54676/WJMY7427.
- Widiastuti, A., MR, M. I. F., Widodo, S. F. A., Ahmed, T., & Shahzeb, S. (2024). Integration of Pancasila and Islamic values in Indonesia's futuristic education transformation: Multicultural analysis. *Journal of Social Studies (JSS)*, 20(2), 133–144. https://doi.org/10.21831/jss.v20i2.76379.
- Wong, C. P., & Ng, D. (2021). The roles of school leaders in developing future-ready learners: the case of Singapore. *International Journal of Educational Management*, 35(1), 249–269. https://doi.org/10.1108/IJEM-06-2020-0283.
- Yang, M., Mamun, A. Al, & Salameh, A. A. (2023). Leadership, capability and performance: A study among private higher education institutions in Indonesia. *Heliyon*, 9(1). https://doi.org/10.1016/j.heliyon.2023.e13026.
- Yukl, G. (2014). Leadership in Organizations, 8th edition. Pearson Education, Inc.
- Zenger, J. (2015). *Nine behaviors that drive innovation*. Forbes. https://zengerfolkman.com/articles/nine-behaviors-that-drive-innovation/.
- Zenger, J., & Folkman, J. (2014). Research: 10 traits of innovative leaders. *Harvard Business Review*, 1–5. https://hbr.org/2014/12/research-10-traits-of-innovative-leaders.

- Zikriati, Z., & Arani, S. (2024). Optimizing Merdeka Curriculum in West Aceh: Challenges and opportunities in education. *Tarbawi: Jurnal Ilmu Pendidikan, 20*(1), 42–54. https://doi.org/10.32939/tarbawi.v20i1.3765.
- Zulpikar, A. S., Pratama, D. W., & Saeful, A. (2024). Kepemimpinan transformasional dalam lembaga pendidikan sekolah. *Jurnal Pendidikan Tambusai*, 8(1), 12444–12452. https://doi.org/10.31004/JPTAM.V8I1.14285.