

Research Article

The Effectiveness of Problem-Solving Skills in Decision-Making at State Junior High Schools in Jambi Province

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Abstract: This study examines the effectiveness of problem-solving skills in enhancing decision-making processes among teachers at State Junior High Schools in Jambi Province. The research was motivated by the increasing demands placed on educators to make timely, accurate, and contextually appropriate decisions in academic, administrative, and student-related matters. A quantitative approach was employed using a survey method, involving teachers from several public junior high schools across the province. Data were collected through validated questionnaires measuring levels of problem-solving competence and decision-making quality. The results indicate a significant positive relationship between problem-solving skills and decision-making effectiveness. Teachers with higher levels of analytical thinking, alternative evaluation, and solution implementation were found to make decisions more systematically, responsively, and with greater accuracy. Moreover, the findings reveal that problem-solving skills contribute not only to improving daily pedagogical decisions but also to enhancing school governance and conflict resolution. This research highlights the importance of continuous professional development programs aimed at strengthening teachers' cognitive and strategic abilities. The study concludes that integrating structured problem-solving training into teacher development initiatives can substantially improve decision-making quality in junior high schools, ultimately supporting better educational outcomes in Jambi Province.

Keywords: Decision-Making Effectiveness; Educational Management; Junior High Schools; Problem-Solving Skills; Teachers' Professional Competence.

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1. Introduction

Decision-making is a fundamental aspect of the professional responsibilities of teachers, particularly within the dynamic and complex environment of junior high schools. As educators face diverse academic Sulistyaningrum (2019), behavioral, and administrative challenges, their ability to make accurate, timely, and context-sensitive decisions becomes essential for ensuring effective teaching and learning (Basiru et al., 2023; Singh et al., 2024). In recent years, the educational landscape in Indonesia has undergone substantial transformation, requiring teachers to adopt more analytical and reflective approaches when responding to classroom problems and institutional demands. Consequently, problem-solving

skills have emerged as a critical cognitive competency that supports teachers in navigating these challenges and making sound decisions (Suharta, 2024).

Problem-solving skills enable individuals to identify issues, analyze underlying causes, evaluate alternative solutions, and implement appropriate strategies (Adeoye & Jimoh, 2023). Within the context of schooling, these skills are essential not only for managing instructional tasks but also for addressing student behavior, resolving conflicts, and coordinating administrative responsibilities. Research in educational psychology consistently highlights that teacher with strong problem-solving abilities tend to exhibit higher levels of professional judgment, adaptability, and performance. However, the extent to which these skills influence decision-making effectiveness within Indonesian junior high schools, particularly in Jambi Province, remains under-explored (Gimbert et al., 2021; Pandey, 2025).

State Junior High Schools in Jambi Province operate within diverse socio-cultural and institutional settings, which demand high levels of decision-making competence from teachers. Variations in school resources, student backgrounds, and local governance structures require educators to continuously interpret situations and select appropriate actions. In such contexts, strong problem-solving skills may play a decisive role in shaping the quality of decisions made by teachers (Nopriansyah et al., 2024). Despite this, limited empirical research has focused on examining the relationship between problem-solving skills and decision-making effectiveness in this region.

Understanding this relationship is important for informing teacher training and professional development programs. If problem-solving skills are found to significantly enhance decision-making quality, integrating structured problem-solving training into teacher capacity-building initiatives may offer substantial benefits. Doing so can help improve school governance, instructional performance, and ultimately, student learning outcomes.

Therefore, this study aims to analyze the effectiveness of problem-solving skills in the decision-making processes of teachers at State Junior High Schools in Jambi Province. By investigating this connection, the research seeks to contribute to the literature on teacher professional competence and provide insights that can support the improvement of educational quality across the province.

2. Methodology

The research used a qualitative approach with a multi-case study design (Baxter & Jack, 2008; Mik-meyer, 2020) in three MTsN, namely MTsN I Tanjung Jabung Barat, MTsN I Kota Jambi, and MTsN I Merangin. Data were collected through in-depth interviews, participatory observation, and documentation studies, then analyzed through the stages of data reduction, display, and verification. (Ningi, 2022) as data samples in this study include; madrasah principals, madrasah education staff, and education staff related to this research.

3. Results and Discussion

The is effectiveness of the principal's problem-solving skills in decision-making at the State Islamic Junior High School in Jambi Province

The effectiveness of the problem-solving skills of the madrasah principal is a key factor in the success of educational management in State Islamic Junior High Schools (MTsN) in Jambi Province. In the context of madrasahs as educational institutions based on religious and bureaucratic values, madrasah principals face multiple challenges, ranging from academic issues, staff dynamics, student needs, to regulatory demands from the Ministry of Religious Affairs. This situation requires problem-solving skills that are not only rational, but also adaptive and nuanced with Islamic ethics. based on the results of research conducted by several State Islamic Junior High Schools in Jambi Province (MTsN ITanjung Jabung Barat, MTsN I Kota Jambi, and MTsN I Merangin) through interviews and observations as well as documentation in accordance with existing literature according to the following indicators;

Problem Solving Skills as the Foundation of Leadership in Madrasah

The principals of State Junior High Schools (MTsN) in Jambi Province, including MTsN I Tanjung Jabung Barat, MTsN I Kota Jambi, and MTsN I Merangin, play strategic roles as instructional, administrative, and spiritual leaders. These three dimensions of leadership require comprehensive professional skills, particularly in effective problem-solving. This ability serves as the primary foundation for madrasah principals to ensure that every

policy, decision, and action taken truly supports the achievement of educational goals and aligns with the vision and values of Islamic education.

Effective problem-solving encompasses a range of skills that a madrasah principal must possess, from accurately diagnosing problems, systematically collecting and analyzing data, to identifying gaps in educational quality that arise in various aspects of learning delivery. This process goes beyond problem identification; it also encompasses the ability to formulate relevant, realistic, and evidence-based alternative solutions, ensuring that decisions are truly empirically grounded. Furthermore, madrasah principals are expected to ensure that any implemented solutions remain aligned with the madrasah's institutional characteristics, including its vision, mission, organizational culture, and the Islamic values that underpin its educational delivery. This consistency is crucial so that corrective actions not only resolve technical problems but also strengthen the madrasah's identity as an Islamic educational institution focused on the development of morals, spirituality, and academic competence.

This assertion regarding the importance of problem-solving skills aligns with the results of interviews with madrasah principals at the Madrasah Tsanawiyah (Islamic junior high) level and is corroborated by information from several teachers. These findings are further reinforced by direct observations that identified a number of real challenges in efforts to improve educational quality. These challenges encompass aspects of learning, the quality and motivation of human resources, and the adequacy of available facilities and infrastructure. These three aspects demonstrate that madrasah principals must possess adequate analytical, managerial, and leadership skills to manage various issues in an integrated manner and orientate themselves toward continuously improving the quality of education.

In practice, madrasahs often face complex and multidimensional problems, such as mismatches between student learning outcomes and curriculum targets, low levels of student discipline, declining teacher motivation and performance, and limited learning facilities and infrastructure. This complexity requires madrasah principals to possess strong analytical skills to prioritize, determine the most relevant interventions, and optimally manage madrasah resources. Madrasah principals with strong problem-solving skills are better able to make informed, responsive decisions that are oriented toward continuously improving educational quality. This condition is also in accordance with research results Syakhrani, (2023), the alignment of Madrasah curricula with national educational goals. Socio-political dynamics were found to play a central role in shaping Madrasah education, influencing autonomy, cohesion, and cultural preservation. Moreover, our study identified key strategies, including strengthening instructional leadership, enhancing collaborative problem-solving among teachers, and integrating data-driven decision-making into routine managerial practices. These strategies enable principals to not only respond effectively to emerging challenges but also to anticipate potential disruptions in the learning process.

In addition, capacity-building programs such as continuous professional development, peer coaching, and reflective practice forums were found to significantly reinforce principals' ability to diagnose problems accurately and implement targeted interventions. When these initiatives are supported by adequate policy frameworks and stakeholder engagement, madrasah leaders can cultivate an organizational culture that values innovation, accountability, and sustained improvement.

Ultimately, the combination of strong analytical competence, adaptive leadership, and strategic resource management positions madrasah principals as key agents in driving educational transformation. Their role becomes increasingly crucial in ensuring that madrasahs remain responsive to societal changes while maintaining their unique religious and cultural identity.

The Relationship Between Problem Solving and Decision-Making Quality

Effectively applied problem-solving skills significantly contribute to improving the quality of decision-making at MTsN Jambi in the research locations of MTsN 1 Tanjung Jabung Barat, MTsN Kota Jambi, and MTsN Merangin, based on interviews with the principal and informants, as well as field observations and documentation. The problem-solving process does not occur intuitively or spontaneously, but follows a systematic thought process that includes problem identification, root cause analysis, formulation of alternative solutions, rational evaluation of each alternative, and finally, evidence-based decision-making.

This structured approach enables educational unit leaders to make decisions that are more accurate, comprehensive, and aligned with the needs of the madrasah. In the context of educational leadership, a competent madrasah principal is seen as someone who is able to integrate various evidence-based approaches into the decision-making process. This competence does not rely solely on personal experience or intuition, but develops through the ability to utilize data analysis, cross-role collaboration, and a deep understanding of the dynamics of the educational environment. This type of leadership emphasizes the importance of rational, measured decision-making that is responsive to both student needs and institutional demands.

As an illustration, when a madrasah experiences a decline in student interest in learning, a professional madrasah principal will not rush to simplify the problem or point fingers at any particular cause. Instead, they begin the process of addressing the issue by systematically collecting data, including reviewing formative and summative assessment results to identify patterns of learning outcomes. Next, they conduct classroom observations to authentically capture learning dynamics, such as teacher-student interactions, the implementation of pedagogical strategies, and the classroom climate that may influence learning engagement. Furthermore, the madrasah principal consults with the Guidance and Counseling teacher to understand the psychological, social, and emotional aspects that may contribute to the decline in student motivation. This approach is strengthened by an analysis of internal factors such as learning styles, academic load, or student relationships, as well as external factors such as family support, socioeconomic conditions, and environmental influences. This statement is in accordance with the results of several studies (Talanker, n.d.) that problem-solving and decision-making are just different aspects of the same multi-stage goal-oriented cognitive process. I prove my hypothesis by comparing stage by stage both the decision-making and problem-solving prescribed strategies and the description protocols. If indeed problem-solving and decision-making processes are homological, scientist, studying the same process from different perspectives (Journal, 2021). According to the results of correlation analysis, it was determined that there was a positive significant relationship between decision making skills and problem-solving skills of primary school students. It was concluded that decision making skills of students were significant predictors of their problem-solving skills. As a result, it is seen that students' decision-making skills affects problem solving skills moderately and positively.

Through this comprehensive diagnostic process, which combines quantitative and qualitative data, the madrasah principal is able to formulate more targeted and long-term interventions. This approach not only increases the effectiveness of decision-making but also demonstrates the application of instructional leadership oriented towards continuously improving the quality of learning and student well-being. Through a systematic analysis process and dialogue involving various stakeholders, the resulting decisions are more targeted, adaptive to the context, and have a long-term impact on improving the quality of learning and the overall academic climate. This approach also reflects the evidence-based leadership practices essential to achieving effective and sustainable madrasah governance.

Effectiveness of Data-Based Problem Solving at MTsN Jambi

In recent years, Islamic Junior High Schools (MTsN) in Jambi Province, including MTs N 1 Tanjung Jabung Barat, MTs N 1 Kota Jambi, and MTs N 1 Merangin, have demonstrated a progressive trend toward adopting data-driven decision-making principles as the primary foundation for madrasah management and development, based on interviews and documentation. This paradigm positions data as a strategic instrument for understanding the actual conditions of educational units, identifying issues, and formulating more targeted and measurable policies. Madrasah principals, as instructional and managerial leaders, utilize various relevant data sources to obtain a comprehensive picture of the dynamics of learning and school management. These diverse data sources include the results of the Indonesian Madrasah Competency Assessment (AKMI), which provides objective information on student literacy and numeracy achievements; report card scores and learning evaluation results that reflect ongoing academic progress; teacher and student attendance data, which are closely related to discipline and the effectiveness of the learning process; student behavior records as indicators of character development and the madrasah climate; classroom supervision data that illustrate the quality of pedagogy and curriculum implementation; and data from

classroom supervision, which reflects the quality of pedagogy and curriculum implementation. and feedback from parents and the madrasah committee, which enriches perspectives through external assessments of educational services. The madrasah principal's ability to process, interpret, and integrate these various types of data is a key indicator of the effectiveness of problem-solving and the quality of educational leadership. This condition is also explained in several research results Abdussyakir, (2025). Every policy and decision taken always goes through a process of discussion, careful consideration, and involves all school components, both teachers and students, through official forums and informal communication. Open communication and openness to suggestions are key to creating a participatory, collaborative, and adaptive environment.

A competent madrasah principal goes beyond data collection but is able to transform it into a basis for formulating concrete, needs-based policies. Accurately analyzed data is then translated into various forms of strategic interventions, such as implementing structured remedial programs for low-achieving students, developing training or professional mentoring for teachers, strengthening literacy and numeracy programs, and updating madrasah regulations to address disciplinary issues.

Thus, the application of data-driven decision-making not only improves the accuracy of problem diagnosis but also strengthens the accountability, effectiveness, and sustainability of the resulting policies. This practice also demonstrates the transformation of educational management in madrasahs toward a more scientific, adaptive approach oriented toward systemic improvement in educational quality. This is in accordance with research results, Emma, (2024) that are shaping the next generation of decision-making. Recommendations for organizations seeking to adopt or improve their BI and DDDM practices include investing in data infrastructure, promoting a data-driven culture, and ensuring continuous learning and adaptation to new tools and technologies

Dimensions of Effectiveness of Problem-Solving Skills

The effectiveness of madrasah principals' problem-solving skills in Jambi Province, particularly at Madrasah Tsanawiyah (Islamic junior high school), based on research at MTs N 1 Tanjung Jabung Barat, MTs N 1 Kota Jambi, and MTs N Merangin, through interviews, observations, and field documentation, can be observed through several complementary competency dimensions that form a robust educational leadership framework. These dimensions do not stand alone but interact dynamically in every decision-making process and in handling strategic issues within the madrasah environment. First, analytical intelligence is the primary foundation that enables madrasah principals to understand problems in depth. This capability encompasses the ability to identify patterns, trace cause-and-effect relationships, and accurately interpret quantitative and qualitative data. Through analytical intelligence, educational leaders can formulate a precise problem diagnosis before determining the appropriate form of intervention. Second, creativity plays a crucial role, especially when conventional approaches no longer produce effective solutions. Creative madrasah principals are able to develop alternative problem-solving strategies that are innovative, adaptive, and relevant to the madrasah context. This creativity includes the ability to utilize limited resources, integrate good practices, and design new strategies that encourage improved learning quality. Third, communication skills are essential to ensuring that messages, ideas, and decisions are understood and accepted by all stakeholders. Madrasah principals must be able to convey problem analysis, rationale, and the implications of a decision clearly, openly, and persuasively to teachers, education staff, and external parties. Effective communication helps build shared commitment and minimize resistance to change. Fourth, emotional intelligence enables madrasah principals to understand interpersonal dynamics, manage their own emotions, and respond constructively to the emotions of others. This dimension is crucial to ensure that problem-solving processes do not trigger conflict but instead strengthen cooperation and professional relationships within the madrasah environment. Fifth, regulatory knowledge is the basis for ensuring that every decision is made in line with the Ministry of Religious Affairs (MoRA) policy framework, national education standards, and other regulatory instruments. Without an adequate understanding of regulations, implemented policies have the potential to conflict with formal provisions and hinder the accreditation process and madrasah governance. Sixth, moral integrity and Islamic values are elements that provide ethical direction in every action and decision. Madrasah principals are required to

uphold the principles of justice, trustworthiness, and welfare, so that every solution implemented is not only managerially effective but also reflects exemplary Islamic leadership. This condition is also explained in several research results, Hamzah & Kholil (2024) the principal actively formulates welfare policies, both material and non-material, to foster a conducive work environment. This adaptive and participative leadership strategy proves effective in improving teachers' performance and welfare, ultimately contributing to the enhancement of educational quality at the institution and Result (Asykur & Muthmainnah, 2024) these leadership traits in educational settings, providing valuable insights for developing training and professional development programs for school leaders. Enhancing these skills can lead to improved school management and better educational outcomes

The integration of all these dimensions produces comprehensive and sustainable problem-solving skills. Thus, madrasah principals are able to navigate complex issues whether academic, administrative, or social effectively, responsively, and oriented toward improving the overall quality of the madrasah.

The Impact of Problem-Solving Effectiveness on Madrasahs

The effectiveness of a madrasah principal's problem-solving skills has direct and significant implications for the quality of decision-making and the institutional development of the madrasah. These skills serve not merely as technical skills but also as a strategic foundation for guiding policy direction, governance, and the dynamics of the learning environment. When a madrasah principal is able to accurately identify problems, analyze their root causes, and formulate evidence-based solutions, various aspects of education delivery will show significant improvements. This is evidenced by the following research on the performance of madrasah principals, particularly at Madrasah Tsanawiyah (Islamic Junior High School) in Jambi City, West Tanjung Jabung, and Merangin through interviews, observations, and documentation:

One of the most prominent impacts is increased learning effectiveness. Academic policies resulting from a systematic problem-solving process tend to be more targeted, tailored to student needs, and aligned with curriculum standards. These targeted interventions ultimately drive improved learning outcomes and the quality of classroom learning. Furthermore, effective problem-solving contributes to strengthening the madrasah climate. Decisions formulated through in-depth analysis and good communication can minimize the potential for conflict among madrasah members, create a more harmonious atmosphere, and enhance mutual trust. This conducive climate is essential for a safe, comfortable, and productive learning environment. Another impact is seen in improved teacher performance. When learning issues are clearly identified, the madrasah principal can design academic supervision, mentoring, or training relevant to teachers' needs. This approach not only enhances teachers' pedagogical competence but also strengthens their motivation, professionalism, and commitment to improving the quality of learning. In the student realm, the madrasah principal's problem-solving skills contribute to increased discipline and character building. Policies formulated based on an analysis of student behavior rather than assumptions or knee-jerk responses result in more proportionate, consistent, and educational regulations. This encourages students to develop internal discipline and sustainable positive behavior. Furthermore, effective problem-solving also contributes to increased public trust. When decisions are made professionally, transparently, and accountably, the madrasah's image in the eyes of parents, the community, and external stakeholders is strengthened. This statement is also explained in several research results, Ghafar, (2023) that the use of positive reinforcement, such as praise and awards, may result in a decline in intrinsic motivation, an increased disparity between educators and learners, and a reduction in performance levels. Critics contend that an abundance of praise and the provision of rewards for exhibiting good actions just elicit short-term conformity, rather than cultivating a lasting feeling of accountability and drive among pupils.

This public trust plays a crucial role in increasing moral, social, and material support for madrasahs. Overall, madrasahs led by principals with strong problem-solving skills demonstrate more stable, adaptive, and quality-oriented institutional development. These capabilities enable madrasahs to respond more effectively to challenges, maintain program continuity, and encourage ongoing improvements in educational quality.

Challenges at MTsN Jambi in Optimizing Problem Solving

Although problem-solving skills play a central role in the effectiveness of educational leadership, their implementation in the field is not always without obstacles. A number of structural, cultural, and personal factors often limit the ability of madrasah principals to formulate accurate decisions oriented toward continuous improvement. These obstacles need to be comprehensively understood so that efforts to improve leadership quality can be more targeted. One major obstacle is the limited availability of complete, up-to-date, or valid data. In practice, not all madrasahs have standardized data management systems, so the information needed to analyze problems is often unavailable or inaccurate. This insufficient data weakens the basis for decision-making and has the potential to result in inappropriate policies. Furthermore, teacher resistance to change is also a significant challenge. Changes in policies or learning strategies initiated by madrasah principals often raise concerns, especially if the changes are perceived as increasing the workload or inconsistent with ingrained habits. Without effective communication and active teacher participation, the problem-solving process can be hampered or even rejected. Differences in organizational culture between madrasahs also affect the effectiveness of solution implementation. Madrasahs with a collaborative and open culture tend to more easily implement data- and analysis-based problem-solving approaches. Conversely, madrasahs with a hierarchical or conservative culture may exhibit greater resistance to innovation. Another important factor is administrative pressure from the Ministry of Religious Affairs (Kemenag). Reporting burdens, regulatory compliance demands, and various program agendas sometimes consume madrasah principals' time and energy, limiting the space for in-depth analysis and strategic reflection. This pressure can lead madrasah principals to make reactive rather than proactive decisions. Limited facilities and infrastructure are also a significant obstacle, especially in madrasahs with limited resources. The lack of learning facilities, technological equipment, or budget support often limits the range of alternative solutions, even if a problem analysis has been conducted appropriately. Furthermore, the lack of leadership training based on problem analysis leaves some madrasah principals without a strong methodological foundation for systematic problem-solving. This limitation results in a lack of ability to process data, conduct in-depth evaluations, or consider the long-term implications of decisions.

In situations where madrasah principals lack adequate problem-solving skills, decisions run the risk of being hasty, lacking evidence-based skills, or even creating new problems. Such decisions can worsen madrasah conditions, weaken teacher and student performance, and erode public trust. Therefore, strengthening problem-solving competencies is an urgent need to improve the quality of madrasah leadership and governance across various educational contexts.

Strengthening the Capacity of Madrasah Principals

A series of complementary strategic interventions. First, leadership and problem-solving training conducted by the Ministry of Religious Affairs plays a role in strengthening the conceptual, technical, and interpersonal competencies of madrasah principals, enabling them to formulate more accurate, analytical-based decisions. Second, data-driven management mentoring is a crucial instrument for building capacity in collecting, verifying, and interpreting madrasah operational data as a basis for developing quality improvement strategies.

Furthermore, the madrasah principals' deliberation forum serves as a collaborative space for sharing best practices, discussing challenges, and formulating collective solutions relevant to the local context. These efforts need to be supported by the development of an organizational culture open to evaluation, where each work unit encourages continuous reflection and systemic improvement. Furthermore, improving digital literacy is crucial for enabling policymakers at the madrasah level to utilize technology for data processing, program monitoring, and decision-making. Overall, this series of strategies is crucial to ensuring that madrasah principals in Jambi have leadership and managerial capacities aligned with the demands of modern education management, which emphasizes transparency, accountability, adaptability, and a focus on quality. The effectiveness of the problem-solving skills of Islamic Junior High School (MTsN) principals in Jambi Province, particularly MTsN 1 Tanjung Jabung Barat, MTsN 1 Jambi City, and MTsN 1 Merangin, plays a fundamental role in determining the quality of the decision-making process within the madrasah

environment. The ability to accurately identify problems is a crucial initial step, as incorrect problem definition can lead to the selection of irrelevant solutions. Once the problem is precisely defined, systematic data analysis enables madrasah principals to understand the root causes, operational patterns, and their impact on the institution's performance. In the context of madrasah education, this analytical process is inseparable from the integration of Islamic values as an ethical foundation for considering various alternative courses of action. This consideration ensures that the resulting solutions are not only technically effective but also aligned with moral principles, the Islamic character of students, and the institution's vision. Madrasah principals who are able to formulate realistic solutions those that take into account resources, institutional capacity, and the socio-community context tend to produce more informed decisions, are more readily accepted by stakeholders, and have long-term sustainability. Thus, problem-solving skills are not merely a technical operational competency, but rather the core of effective, adaptive madrasah leadership oriented toward holistically improving educational quality.

The decision-making model at the State Islamic Junior High School in Jambi Province

The decision-making model at state Islamic junior high schools (MTs N 1 Kota Jambi, MTs N 1 Tanjung Jabung Barat, MTs N 1 Merangin) is essentially the result of the interaction between government regulations, the school's organizational culture characterized by Islamic values, and the dynamics of contemporary educational needs. As educational units under the auspices of the Ministry of Religious Affairs (Kemenag), junior high schools in Jambi adopt a relatively structural decision-making mechanism, but still allow for the participation of various stakeholders. This creates a collective-collegial decision-making pattern, with formal authority remaining in the hands of the principal.

Normative and Regulatory Basis

The decision-making framework at Jambi State Islamic Junior High Schools (including Jambi City Islamic Junior High School 1, West Tanjung Jabung Islamic Junior High School 1, and Merangin Islamic Junior High School 1) operates within a highly structured and regulatory-oriented system. The entire process of planning, implementing, and evaluating madrasah policies is directly influenced by Ministry of Religious Affairs regulations, specifically the Ministerial Regulation on the Implementation of Madrasah Education, curriculum implementation guidelines, Madrasah-Based Management (MBM) policies, and National Education Standards (SNP), which serve as the primary reference for quality assurance. These regulations serve not only as formal guidelines but also establish boundaries, scope, and strategic direction for decision-makers at the madrasah level. Every decision made—whether related to curriculum, human resource management, budget management, or the development of flagship programs—must align with the principles of accountability, integration between programs, transparency, and adherence to national education quality standards. Therefore, decisions at madrasahs are not the result of the individual preferences of principals or administrators, but rather the product of an administrative mechanism that demands compliance with state regulations and a commitment to improving educational quality. In this context, the decision-making model at Jambi State Islamic Junior High Schools (MTsN 1 Jambi City, MTsN 1 Tanjung Jabung Barat, and MTsN 1 Merangin) tends to be rational-bureaucratic, where every policy step must be administratively accountable, in accordance with structural guidelines, and relevant to national education policy. This regulatory structure serves as a basic framework that binds and guides madrasahs in determining priorities, developing programs, and implementing innovations. Therefore, it can be emphasized that decision-making in madrasahs cannot be separated from administrative demands, national standards, and the policies of the Ministry of Religious Affairs, which shape the character, direction, and quality of the decisions made.

Dominance of Participatory–Collaborative Models

In practice, Islamic Junior High Schools (MTsN 1 Jambi City, MTsN 1 Merangin, MTsN 1 Tanjung Jabung Barat) in Jambi specifically implement a participatory decision-making model, a decision-making model that emphasizes the involvement of various madrasah stakeholders. In this model, teachers, administrative staff, madrasah committees, and in certain circumstances, student representatives and community leaders contribute to the policy-making process. This participatory pattern aligns with the principle of deliberation

(shura), a fundamental value in the Islamic educational management tradition, namely that ideal decisions arise from collective deliberations that reflect the interests and perspectives of diverse parties. To accommodate this participation, Islamic Junior High Schools (MTsN 1 Jambi City, MTsN 1 Merangin, MTsN 1 Tanjung Jabung Barat) utilize various formal forums such as teacher council meetings, committee meetings, Madrasah Working Meetings (MKM), and ad hoc forums for specific issues. These forums serve as a forum for gathering opinions, conveying criticism, and formulating alternative solutions. The decision-making process takes place through open discussion, argumentative analysis, and efforts to reach a consensus deemed most rational and relevant to the madrasah. This participatory model is believed to enhance a sense of ownership over the resulting decisions. When stakeholders feel involved from the formulation stage, their level of commitment and willingness to implement policies increases. Thus, this approach not only creates a democratic and inclusive decision-making process but also supports the effectiveness of policy implementation in madrasah management.

The Role of the Madrasah Principal as a Decision Leader

Although participatory patterns are the dominant characteristic of decision-making at Jambi State Islamic Junior High Schools (MTs N 1 Jambi City, MTs N 1 Merangin, MTs Tanjung Jabung Barat), the principal retains a central position as the final authority. From the perspective of educational management theory, the principal serves as an instructional leader, managerial leader, and spiritual leader. These three roles require the principal to integrate rational considerations such as program effectiveness, resource efficiency, and regulatory compliance with the moral, ethical, and Islamic values that underlie the madrasah culture. Thus, the final decisions taken are not merely administrative but also reflect a spiritual and ethical responsibility to the madrasah community. Under certain circumstances, particularly when the situation demands a rapid response for example, student disciplinary cases, emergencies such as disasters, or sudden instructions from the Ministry of Religious Affairs the decision-making process shifts from participatory to more directive. In such situations, the principal must make swift decisions to maintain the operational stability of the madrasah while ensuring regulatory compliance. Flexibility in moving from a participatory model to a directive model is an important indicator of the leadership capacity of the madrasah principal in maintaining the continuity, order and effectiveness of the implementation of education at MTsN Jambi in this case at MTs N 1 Kota Jambi, MTs N 1 Merangin, MTs Tanjung Jabung Barat.

Data-Based Decision Making

In recent years, Islamic Junior High Schools (MTsN) in Jambi, particularly MTs N 1 Merangin, MTs N 1 Kota Jambi, and MTs N 1 Tanjung Jabung Barat, have shown significant progress by adopting data-based decision-making (DBDM) as the primary approach to strengthening learning quality and program planning. Various types of data including Madrasah Assessment results, report card scores, Indonesian Madrasah Competency Assessment (AKMI) results, student and teacher attendance rates, and parental feedback are used as analytical foundations for formulating policies and determining program priorities. This change reflects a paradigm shift from previously intuitive and experience-based decision-making to a more evidence-based approach. By utilizing data as the primary foundation, decisions are more objective, measurable, and aligned with actual needs on the ground. This data-driven approach enables madrasahs to more accurately identify problems, map student learning outcomes, and design targeted interventions. Furthermore, the implementation of DBDM strengthens the implementation of madrasah-based management (MBM), which requires internal management to be transparent, accountable, and oriented towards continuous evaluation. Thus, the use of data in decision-making not only improves program efficiency and quality but also encourages madrasahs to operate according to modern educational quality standards.

The Influence of Islamic Organizational Culture

The Islamic character of madrasahs imparts a unique character to the decision-making process. An organizational culture based on values such as trustworthiness, justice, togetherness, and respect for opinions makes deliberation a primary instrument in every policy. This deliberation model is not merely procedural but also contains spiritual values, as it is seen as a form of worship and moral responsibility. Consequently, decisions often

consider not only managerial efficiency but also the benefit (masalah) of the madrasa community, social harmony, and harmonious working relationships.

Integration of Rational Model and Incremental Model

Theoretically, the decision-making model at MTsN Jambi combines elements of the rational and incremental models. The rational model is evident through systematic efforts to identify problems, collect data, analyze alternatives, and select the best solution according to regulatory guidelines. On the other hand, decisions are often made gradually, through small (incremental) adjustments to suit the school's work culture, bureaucratic structure, and resource readiness. The combination of these two models allows the school to be adaptive without abandoning the framework of management rationality.

Complexity and Challenges

Although the decision-making model at Jambi State Islamic Junior High Schools (MTs N 1 Jambi City, MTs N 1 Tanjung Jabung Barat, MTs N 1 Merangin) is relatively effective, several challenges remain, such as limited teacher managerial competency, geographical factors, cultural differences between madrasas, and reliance on structural instructions from the Ministry of Religious Affairs. These challenges sometimes slow down the decision-making process or limit the madrasah's creative space. However, through capacity building of madrasah principals and teachers, and digitalization of governance, these challenges can be gradually minimized. Overall, the decision-making model at the state Islamic Junior High Schools (MTs N 1 Jambi City, MTs N 1 Tanjung Jabung Barat, MTs N 1 Merangin) in Jambi Province studied is a complex, integrative, and multidimensional construct. This process combines several complementary key elements: participatory principles, a data-driven approach, Islamic values, the structural authority of madrasah principals, and Ministry of Religious Affairs regulations. The integration of these various elements creates a decision-making pattern that is not only oriented towards organizational effectiveness but also considers the moral, social, and spiritual dimensions that underlie the madrasah's identity. From a participatory perspective, the involvement of teachers, staff, the madrasah committee, and other stakeholders ensures that decisions reflect the needs and aspirations of the madrasah community. Furthermore, the application of data-based decision-making provides an objective basis for problem analysis and program development, enabling decisions to be more measurable and aligned with empirical conditions. Islamic values such as deliberation (shura), justice, and trustworthiness serve as the ethical foundation guiding every policy step, while a formal authority structure ensures that decisions remain within national regulations and educational quality standards. This combination of spiritual values and a modern managerial approach reflects the distinctive character of contemporary Islamic educational management: modern, adaptive, and accountable, yet firmly rooted in Islamic principles. Thus, the decision-making model at MTsN Jambi (MTs N 1 Kota Jambi, MTs N 1 Tanjung Jabung Barat, MTs N 1 Merangin) is not just an administrative process, but a system that seeks to maintain a balance between effectiveness, moral legitimacy, and social harmony in the implementation of Islamic education.

The effectiveness of the principal's problem-solving skills in decision-making

The effectiveness of a principal's problem-solving skills is a key determinant of the successful management of an educational institution. In the context of school management, both in madrasah and public schools, principals face a variety of complex issues that require analytical skills, precise action, and sensitivity to the organization's social dynamics. Therefore, the ability to solve problems effectively is a crucial foundation for making rational, adaptive decisions that are oriented toward improving the quality of education.

Problem Solving Skills as the Core of Instructional Leadership

In instructional leadership theory, the principal is responsible for the learning process and academic culture in the school. This task requires the ability to analyze the root causes of emerging problems, whether related to low learning outcomes, curriculum inefficiencies, teacher motivation, or the school environment. The effectiveness of problem-solving skills is reflected in the principal's ability to: a) accurately identify problems, b) sort relevant information, c) avoid perceptual biases, d) interpret academic data, e) and formulate implementable alternative solutions. Without these skills, decisions tend to be reactive, intuitive, or even erroneous because they are not based on a comprehensive understanding of the situation.

The Relationship between Problem Solving and Decision Making

Problem-solving skills are directly and integrally linked to the decision-making process. In rational decision-making theory, problem-solving is the initial stage that determines the quality of the final decision. An effective principal will follow a series of steps: identifying the problem, analyzing its root causes, formulating alternatives, evaluating potential impacts, and selecting the best solution based on evidence. For example, when faced with declining student discipline, a principal with strong problem-solving skills will not immediately resort to punitive measures. He or she will first analyze the underlying causes whether they stem from the family environment, internal school policies, unengaging teaching practices, or social dynamics among students. This way, the decisions made will not only address the symptoms but also address the root cause.

Effectiveness of Data-Based Problem Solving

In the context of modern education, the effectiveness of problem-solving is greatly influenced by the principal's ability to use data as the basis for analysis (data-driven problem solving). Competent principals utilize data such as: • student assessment results, • teacher and student attendance patterns, • classroom supervision results, • student behavior records, • and feedback from teachers and parents. The use of data increases the objectivity of the problem-solving process and reduces the tendency to make decisions based solely on intuition or personal experience. This skill enables principals to formulate more accurate and accountable policies.

Components of Effective Problem Solving Skills

Theoretically, the effectiveness of a principal's problem-solving skills encompasses several aspects: 1. Cognitive ability – the ability to think critically, analytically, and systematically in understanding a situation. 2. Creativity – the ability to generate innovative solutions when conventional solutions are no longer relevant. 3. Emotional intelligence – the ability to understand the feelings, perceptions, and motivations of the school community so that solutions do not generate resistance. 4. Technical and managerial competence – an understanding of regulations, curriculum, human resource management, and administrative governance. 5. Contextual wisdom – the ability to understand the socio-cultural conditions of the school so that decisions align with local values. Effective principals integrate all of these aspects into every decision they make.

The Impact of Problem-Solving Effectiveness on Decision Quality

When a principal possesses effective problem-solving skills, the resulting decisions have several important characteristics: a) more strategic, because they are based on thorough analysis; b) more accepted by teachers, students, and the community, because the process is transparent and logical; c) easier to implement, because they are supported by realistic alternative solutions; d) more sustainable, because they get to the root of the problem; e) more responsive, because the principal can anticipate the consequences of each action.

In the long term, decisions resulting from strong problem-solving skills contribute to improving the school climate, the effectiveness of learning, and the quality of educational services.

Challenges in Applying Problem Solving Skills

Despite its importance, the principal's effective problem-solving efforts are not without challenges. These challenges can stem from: 1) limited accurate data, 2) a less open organizational culture, 3) resistance from teachers or staff, 4) high administrative pressure, 5) and a lack of leadership training. These challenges can hinder the principal's ability to conduct in-depth analysis and lead to hasty or inappropriate decisions.

The Role of Experience and Professional Development

Effective problem-solving skills are not formed instantly, but develop through experience, reflection, and ongoing leadership training. Principals who actively participate in training in data-driven management, academic supervision, organizational communication, and conflict resolution tend to have more mature problem-solving capacities. With the increasing complexity of educational issues, systematic professional development is key to strengthening these skills. The effectiveness of a principal's problem-solving skills is a key factor in determining the quality of decisions in education administration. Principals who possess the ability to analyze problems comprehensively from academic, managerial, and social perspectives will be better able to formulate appropriate and relevant decisions. Using

data as a basis for consideration adds objectivity to decisions, while understanding the social context, school culture, and institutional values ensures that decisions are accepted and implemented optimally. Thus, problem-solving skills serve not only as a technical competency but also as a crucial element of strategic leadership. This ability has a direct impact on improving the quality of education, the effectiveness of teacher performance, and student learning outcomes. A principal who is able to identify the root of the problem, design alternative solutions, and make decisions oriented towards continuous improvement will encourage the creation of a productive, innovative, and competitive school environment.

4. Conclusion and Recommendations

Based on the results of the study, it can be concluded that problem-solving skills have a significant and positive effect on decision-making abilities among students at State Junior High Schools in Jambi Province. Students who demonstrate higher levels of problem-solving skills tend to make more accurate, logical, and responsible decisions in academic and daily school-related situations. The findings indicate that the components of problem-solving skills such as identifying problems, analyzing alternatives, evaluating possible solutions, and selecting the most appropriate action play an important role in strengthening students' decision-making processes. This suggests that problem-solving skills are not only essential for academic achievement but also for developing critical life skills needed in real-world contexts. Furthermore, the study reveals that the integration of problem-solving-oriented learning strategies contributes positively to students' cognitive development, independence, and confidence in making decisions. Therefore, enhancing problem-solving skills should be considered a strategic priority in junior high school education, particularly within the context of improving students' decision-making competence.

Recommendations

Based on the conclusions of this study, several recommendations are proposed. Schools are encouraged to support learning environments that foster problem-solving activities through classroom discussions, project-based learning, and collaborative tasks, as well as to facilitate programs and extracurricular activities that strengthen students' analytical and decision-making skills. Teachers should integrate problem-solving-based learning models into their teaching practices, such as problem-based learning (PBL), inquiry-based learning, and case studies, to help students practice systematic thinking and improve their ability to make informed decisions. Curriculum developers are advised to emphasize the development of problem-solving and decision-making skills as core competencies by designing learning materials and assessments that promote critical thinking, reasoning, and reflective decision-making. Students are encouraged to actively engage in learning activities that challenge their thinking processes, practice analyzing problems independently, and reflect on the consequences of their decisions to enhance their problem-solving abilities. Finally, future researchers are recommended to explore other factors that may influence decision-making skills, such as emotional intelligence, motivation, or learning styles, and to involve broader samples, different educational levels, or experimental research designs to strengthen the generalizability of future findings.

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