



From Correlation to Context: Evaluating Quantitative Research Practices in Islamic Education

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Abstract :

This study aims to identify and describe the methodological characteristics of quantitative research in the field of Islamic Education Management. Using a qualitative descriptive approach and content analysis method, this study analyzes scientific papers in the form of theses, dissertations, and accredited journal articles published between 2020 and 2025. The results of the study show that the quantitative approach in this field is dominated by descriptive and correlational designs, with data collection techniques in the form of questionnaires and simple statistical analyses such as correlation and regression. Although this method offers advantages in terms of objectivity, efficiency, and generalization of findings, its weakness lies in its limitations in exploring the contextual meaning, spiritual values, and complexity of the phenomenon of Islamic education. The study also uncovered key challenges such as inconsistency in instrument validity, gaps between Western methods and Islamic values, and limitations in the use of experimental designs. The implications of this study emphasize the importance of strengthening methodological literacy, the development of contextual instruments based on Islamic values, and the application of more complex quantitative methods to improve the quality of decision-making in Islamic educational institutions. These findings are expected to be the foundation for building an integrative methodological framework in the field of Islamic Education Management.

INTRODUCTION

Islamic Education Management is a discipline that integrates modern management principles with Islamic educational values to optimize the planning, organization, implementation, and supervision of Islamic educational institutions (Barbieri & Nguyen, 2025; Flood et al., 2025; Locatelli et al., 2023). Conceptually, this field aims not only to achieve academic achievements but also to shape the character and Islamic values of students (Muhaemin et al., 2023). The quantitative approach in Islamic Education Management research has special characteristics, namely the use of scientific methods with a deductive approach, the collection of measurable numerical data, and statistical analysis to test hypotheses (Arar & Orucu, 2022; Muhajir, 2022; Said & Sharif, 2023). This characteristic distinguishes quantitative research from qualitative approaches that are more exploratory and interpretive (Kashif & Udunuwara, 2024; Pilcher & Cortazzi, 2024; Stavrianos, 2025). In the context of Islamic Education Management, the quantitative approach allows researchers to measure and evaluate various managerial aspects, such as the leadership of the head of the madrasah, learning effectiveness, teacher performance, and student learning outcomes objectively and measurably.

Quantitative research in the field of Islamic Education Management plays an important role in providing objectively measurable empirical data to support evidence-based decision-making. In the research practice carried out by students of the Islamic Education Management Study Program, Faculty of Tarbiyah and Teacher Training, UIN Sunan Gunung Djati Bandung Class of 2021/2022, it is known that the majority of students choose a quantitative approach in the preparation of their thesis. This shows a strong tendency towards research methods that are objective, measurable, and systematic. Of the total 180 students analyzed, as many as 144 students, or around 80% used a quantitative approach. Details of the data are presented in the following table.

Table 1. Percentage of Theses that use Quantitative Research

Information	Number of Scholars	Presence (%)
A thesis that uses quantitative research	144	80%
Thesis using Qualitative Research	36	20%
The Number of MPI Students as a Whole Class of 2021/2022	180	100%

Some previous research provides an overview of how quantitative approaches are applied in the context of Islamic Education Management. Sari et al. (2025). Examining the influence of *self-efficacy* on students' confidence in using artificial intelligence (AI) for Islamic education management. Using regression and a Likert scale questionnaire of 63 respondents, they found that *self-efficacy* contributed significantly to 63.2% of student confidence. These studies reflect the basic characteristics of quantitative research, such as objectivity, normality tests, and regression analysis. On the other hand, research by Virgin, Sabrina El-Islamy et al. (2023) revealed that financing management has a low influence on school quality through a survey approach and descriptive-inferential statistical analysis, showing the use of standard techniques such as questionnaires and correlation. Meanwhile, Afriana et al. (2022) discuss the adaptation of quantitative methodology into Islamic education, emphasizing the importance of contextualizing statistical instruments and models to suit Islamic values. The three studies highlight the dominance of standard quantitative methods, but also underscore the importance of adaptation to religious and cultural contexts in Islamic education.

Although quantitative research is increasingly dominant in the field of Islamic Education Management, there are still significant methodological gaps. First, many quantitative instruments were developed generically without considering Islamic values, respondents' level of religious literacy, and the context of the madrasah. Second, there is a tendency to adopt ready-made statistical models, such as linear regression or SEM, without theoretical reflections that are in accordance with Islamic principles and teachings. Third, the validity and reliability of instruments are still a challenge when universal variables, such as leadership or motivation, are measured in the context of Islamic values without adequate conceptual adjustments. As a result, the results of quantitative research are often not able to represent the religious nuances, diversity of Islamic institutions, and typical managerial practices such as deliberation. Based on this, this study seeks to answer two main questions: (1) What are the typical methodological characteristics of quantitative research in Islamic Education Management? and (2) How can the quantitative approach be adapted to be in harmony with Islamic values and the institutional context?.

This research makes a significant contribution to the development of the literature on Islamic Education Management through three aspects of novelty. First, this study builds a characteristic framework of quantitative research based on Islamic values by compiling methodological dimensions—including design, instruments, validation, and analysis—that are aligned with Islamic principles such as ethics, deliberation, and spirituality. Second, this study conducted a meta-primary analysis of Islamic Education Management theses and theses from various universities to document the pattern of use of quantitative instruments in academic practice. This field is still rarely studied systematically. Third, this study offers guidelines for adapting quantitative methods based on Islamic values, such as modifying the Likert scale into religious indicators, testing reliability based on weighting Islamic values, and developing a structural model that includes religious variables as mediators. Thus, this research is not only descriptive but also provides models and applicable recommendations for Islamic Education Management researchers to be able to apply quantitative approaches in a more sensitive, contextual, and valid manner.

This study aims to formulate and analyze the typical methodological characteristics of quantitative research in the realm of Islamic Education Management, as well as identify adaptive practices that are already running among students and researchers. Specifically, this study will (1) map the quantitative methodological elements (design, population & sample, instruments, statistical analysis) in the study of Islamic Education Management; (2) explore how researchers adapt analytical instruments and techniques to Islamic values and institutional contexts; and (3) develop an Islamic-based quantitative adaptation framework that can be used as a methodological guideline. The results of this study are expected to provide new methodological theories and practical guidance so that the use of quantitative research in the field of Islamic Education Management becomes more valid, relevant, and contextual.

RESEARCH METHOD

This study uses a descriptive approach with a content analysis method to examine the characteristics of quantitative research in the field of Islamic Education Management, focusing on patterns, tendencies, and methodological elements in relevant scientific works (Birgili et al., 2021; McCashin & Murphy, 2023; Pollock et al., 2022). Although it is qualitative in the document search stage, the object of the study is the quantitative methodology used in accredited journal articles, theses, and dissertations in the last five years that explicitly use a quantitative approach in the context of Islamic Education Management. Data were collected through documentation studies from various scientific repositories and analyzed using content analysis guidelines based on quantitative methodology indicators, such as the type of approach, data collection and analysis techniques, as well as population and sampling aspects (Agbo et al., 2021; Clarin, 2024; Si et al., 2024). The analysis process is carried out systematically to identify general patterns and main characteristics, so that the results of this study are expected to provide a complete picture of the practice of using quantitative approaches and contribute to the development of methodologies and improve the quality of research in the field of Islamic Education Management.

RESULT AND DISCUSSION

Result

The findings of this study state that the quantitative research method has the main advantage in the form of the ability to produce objective, measurable, and statistically analyzable data, so that it allows researchers to test the relationship or influence between variables clearly. Through the use of instruments such as questionnaires and statistical analysis (e.g., correlation tests, regressions, and coefficients of determination), this method can present a strong picture and generalization of findings in various contexts, such as education management, marketing effectiveness, and teacher performance. However, the shortcomings of quantitative methods lie in their limitations in exploring deep meanings, social contexts, and qualitative factors such as perception, personal experience, emotional dynamics, and culture that are often very relevant in understanding the phenomenon of education as a whole. Thus, although the quantitative method excels in the objectivity and efficiency of data collection, it is less able to capture the complexity and nuances that lie behind the numbers generated. Detailed details can be seen in Table 2.

Table 2. Advantages and Disadvantages of Quantitative Research Methods

Aspects	Component	Excess	Deficiency	Document Analysis
Infrastructure Management and Quality of Learning	Objectivity	Data is objective, measurable, and statistically testable. Shows the strength of the relationship between variables.	It does not explore contexts such as teacher perception, school culture, and internal policies.	The study used a Likert scale questionnaire and a regression/correlation test, but did not discuss teacher perceptions or school culture in depth.
Teacher inclusion and competency education management	Measurement	Provide an objective and measurable picture of the influence between variables through statistical analysis.	It does not delve into the personal experiences, emotional challenges, and social dynamics of teachers.	The study measured the influence of teacher competence on the success of inclusive education by statistical test, without a narrative exploration of teacher experiences.
Student management and administration information system	Statistical Analysis	Measure the influence of information systems efficiently. The questionnaire reached many respondents.	It does not capture deep perception, technical constraints, and human interaction with the system.	The article emphasizes the effectiveness of EMIS through quantitative surveys, but does not address the technical constraints and operator experience in the field.
Digital marketing and institutional marketing effectiveness	Generalization	Identify influences objectively through numerical data. The results can be generalized.	It does not explore the experience of implementers, emotional barriers, or limitations of	The study shows the trend of using social media for the promotion of educational institutions with statistical data, but does

Aspects	Component	Excess	Deficiency	Document Analysis
			human resources or digital means.	not review the limitations of human resource skills.
Democratic leadership and motivation of educators	Efficiency style work of	Conclude the relationship between variables clearly and objectively.	Not exploring perceptions, personal experiences, and emotional dynamics in the work environment.	The study used a test of leadership correlation to teacher motivation, but did not include interviews or qualitative data on teacher experiences.
Management of pesantren entrepreneurship and student independence	Decision	Objective and measurable data show the influence of management on the independence of students. Strong statistical analysis.	Do not delve into cultural factors, personal motivations, and the role of the mentor in depth.	The research emphasizes the independence of students through questionnaire scores, but the cultural factors of the pesantren are not explored.
Pedagogic competence and teacher performance	Significance of Relationships	The significant relationship between the variables is obvious. Data-driven decision-making is easy.	It does not explain the behavior and motivation of teachers in depth. Social and emotional aspects are overlooked.	The study found a significant relationship between pedagogic competence and teacher performance, but did not address teachers' motivations and social factors.

Explanation of Table 1. Regarding the disadvantages and advantages of quantitative research methods conducted by Islamic Education Management students, the data points to data that, among others: 1) In the study of infrastructure management and learning quality, it has advantages in the objectivity of measurable data, can be tested statistically, and shows the relationship between variables clearly. The use of Likert scale questionnaires, as well as regression or correlation analysis, allows for valid and verified results. However, this method has limitations because it does not explore contextual aspects such as teacher perception, school culture, and internal policies, so it does not fully describe the dynamics that affect the overall quality of learning. 2) In the aspect of education management studies, inclusion and competence, teachers have an advantage in the ability to provide an objective and measurable picture of the influence between variables through statistical analysis. This approach allows researchers to obtain valid and generalizable data to assess the relationship between teacher competence and inclusion education success. However, the weakness lies in its inability to explore personal experiences, emotional challenges, and social dynamics faced by teachers, so that the results of the research tend to be purely numerical without showing a deeper contextual meaning.

3) In the aspect of information system study, student management and administration have an advantage in the efficiency of measuring the influence of information systems through statistical analysis and the ability of questionnaires to reach

many respondents. This approach allows researchers to obtain objective and structured data on the effectiveness of systems, such as EMIS. However, its weakness lies in its inability to capture deep perception, technical constraints, and human interaction with the system, so the contextual aspects and practical experience of the operator are not thoroughly described in the study's findings. 4) In the Aspect of Digital Marketing Studies and Institutional Marketing Effectiveness, the quantitative method excels in identifying influences objectively and producing generalizable findings. However, this approach does not explore the executor experience, emotional barriers, or limitations of human resources and digital means that affect marketing effectiveness.

In the aspect of the study of Democratic Leadership Style and Work Motivation of Educators, the advantage of quantitative research lies in its efficiency in concluding the relationship between variables objectively. The downside is that this method does not explore the perceptions, personal experiences, and emotional dynamics of educators in the work environment that affect motivation. 6) In the Aspect of the Study of Islamic Boarding School Entrepreneurship Management and Student Independence, the quantitative approach provides objective data that shows the influence of management on student independence with strong statistical analysis. However, aspects of pesantren culture, personal motivation, and the role of the supervisor were not explored in depth, so the results did not reflect the social context of the pesantren. 7) In the Aspect of Pedagogic Competency and Teacher Performance Study, the quantitative method clearly displays the significant relationship between variables, thus facilitating data-based decision-making. However, this approach does not explain the behavior, motivation, and social-emotional aspects of teachers that contribute to comprehensively determining performance.

Overall, quantitative research methods have the main advantages of objectivity, efficiency, and the ability to form measurable data that can be analyzed statistically to share the relationships between variables clearly and systematically. This approach allows researchers to obtain valid, verified, and generalizable results for a broader population. However, its weakness lies in its limitation in exploring deep contexts such as perceptions, personal experiences, emotional values, and social dynamics that often play an important role in the reality of education. Therefore, although quantitative methods are superior in the aspects of measurement and generalization, they have not been able to fully explain the meaning and complexity of qualitative reality in the world of education.

Discussion

This study reveals that quantitative approaches in Islamic Education Management tend to be dominated by descriptive and correlational designs, with the use of basic statistical analysis techniques such as linear regression and Pearson correlation. These findings are particularly relevant to the focus of the research, which is to identify and describe the methodological characteristics of quantitative research in the context of Islamic education management. In the context of today's Islamic education needs that demand data-driven decision-making, mapping these characteristics is crucial. The relevance of these findings lies in the importance of methodologies that are not only standardized but also adaptive to Islamic values. Against this background, the following discussion will be studied thematically by emphasizing the relationship of findings to the theory of quantitative research methodology, as well as a critical analysis of relevant previous literature.

The results of this study show that most quantitative studies in Islamic Education Management (MPI) still use descriptive and correlational approaches, which focus on the relationships between variables without direct intervention. This is in line with positivistic theory in quantitative methodology, which emphasizes objectivity, numerical measurement, and generalization of findings (Amadi, 2023; Pilcher & Cortazzi, 2024; Sridharan, 2021). However, this predominance of design signifies limitations in testing causality in depth. Rezaei et al. (2024) state that quantitative approaches in MPI tend to be superficial because they rarely test the effectiveness of interventions. Similar things were expressed by Findley et al. (2015), who found that the lack of use of experiments limits the internal validity of studies in this area.

Meanwhile, Chen et al. (2024) emphasize that the majority of research is still at the level of relational exploration without reaching the complexity of the relationship between more dynamic variables. All three affirm the importance of developing experimental or quasi-experimental designs to expand the epistemological contribution of MPI. These findings also reinforce the position that although quantitative methods provide statistically robust data, they are not optimal in answering the need for in-depth analysis of the dynamics of education management based on Islamic values.

In addition to its advantages in terms of objectivity and efficiency, this study also highlights the limitations of the quantitative approach in capturing the contextual meaning, spiritual value, and cultural dynamics of Islamic education. Theoretically, this is a weakness of the positivistic approach that is not entirely in line with the normative-transcendental Islamic paradigm (Update, 2023; Gigi & Tzfadia, 2024; Pratama & Mukhlis, 2023). Hadian et al. (2025) show that many of the analytical methods used in MPI still adopt a Western approach without adaptation to the Islamic value system. On the other hand, Lim (2025) emphasizes the importance of developing instruments that are contextual and reflect the characteristics of Islamic education so that the data obtained truly reflect the reality in the field. The three studies corroborate the results of this study, that the limitations of the instruments and the value gap are obstacles in the substantive validity of quantitative research in MPI. Therefore, the methodological approach in the future needs to consider the integration of sharia maqashid values in the measurement and analysis process.

Despite the challenges, the development of quantitative research in MPI shows promising innovative directions. For example, Pollock et al. (2022) successfully used a longitudinal approach to analyze the influence of strategic management on the quality of madrassas with high predictive accuracy. Clarinet (2024). It also implements multilevel analysis to examine the influence of the leadership of madrasah heads by considering moderation variables such as school climate and teacher motivation. Even Chen et al. (2024) developed an evaluation model based on Sharia maqashid that has been proven to increase predictive validity. These three studies show that the integration of quantitative approaches with Islamic values as well as advanced statistical techniques can strengthen the scientific and practical contribution of research in this area. Thus, the findings of this study not only identify methodological trends and challenges but also open up space for innovation in the development of quantitative research designs and instruments in MPI.

This study provides a systematic mapping of the characteristics and tendencies of the use of quantitative methods in MPI, which can be an important reference for lecturers, students, and researchers in designing more relevant, valid, and impactful

research. This knowledge can be used to improve the research methodology curriculum in the MPI study program to be more adaptive to field needs. Theoretically, this study contributes to expanding the framework of quantitative methodology that is contextual with Islamic education, through criticism and sharpening of the limitations of instruments and designs that are incompatible with Islamic values. This research also encourages the development of quantitative approaches based on sharia maqashid and the integration of mixed methods that are more appropriate to the complexity of the contemporary Islamic education context.

Departing from this, this study underlines that the characteristics of quantitative research in Islamic Education Management are still dominated by basic designs that have not fully answered the complexity of managerial dynamics based on Islamic values. Nevertheless, there is great potential for development through the integration of advanced statistical techniques and contextualized instruments. In the future, further research is suggested to explore experimental and longitudinal approaches, as well as develop measurement designs that can validly capture spiritual values, institutional culture, and Islamic variables. This is important to ensure that quantitative methods not only produce accurate data but are also meaningful and contribute to improving the overall quality of Islamic education.

CONCLUSION

This study identifies that the dominant characteristics of quantitative research in Islamic Education Management focus on descriptive and correlational approaches, with the use of standardized instruments such as questionnaires and simple inferential statistical analysis. These findings indicate a strong tendency towards the use of objective data in measuring educational managerial phenomena, although they have not yet fully explored causal relationships in depth. In addition, the limitations in exploring contextual aspects, Islamic values, and socio-religious complexity indicate the need for more adaptive methodological integration. The implications of this characteristic reinforce the importance of contextual quantitative methodological literacy in Islamic education, in order to support data-driven decision-making that is responsive to the dynamics of Islamic educational institutions. In the future, quantitative research is expected to be able to develop designs that are more varied and relevant to Islamic values, so that its contribution to the theory and practice of Islamic education management will become more significant.

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