THE EFFECTIVENESS OF DIGITAL-BASED RELIGIOUS MODERATION LEARNING: A REVIEW OF THE LITERATURE IN THE ERA OF SOCIETY 5.0

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ABSTRACT

The Society 5.0 era that emphasizes the integration of technology into all aspects of life demands a transformation in Islamic education, including in teaching religious moderation. This study aims to analyze the effectiveness of digital-based religious moderation learning through a literature review approach to relevant articles. Data collection was carried out by selecting articles based on inclusion criteria from databases such as 4 SINTA indexed articles and 10 Scopus indexed articles which were then analyzed thematically. The results of the study indicate that digital-based religious moderation learning has great potential to internalize moderation values such as tolerance, justice, and balance, especially when supported by explicit integration of values into the curriculum, use of interactive media, value-based teacher training, and project-based learning approaches. However, significant obstacles were found, such as the lack of longitudinal studies, excessive emphasis on cognitive aspects, limitations of technological infrastructure, and the absence of systematic value-based learning designs. In conclusion, to ensure the long-term effectiveness of digital-based religious moderation learning, it is necessary to develop an integrative model that includes critical digital literacy, strengthening social values in virtual spaces, and educational policies based on Islamic moderation values. This study recommends the need for further longitudinal research and more systematic value-based learning design to support adaptive Islamic education in the era of Society 5.0.

INTRODUCTIONS

The rapid development of digital technology in the era *Society 5.0* has had a significant impact on all sectors of life, including in the field of Islamic religious education (PAI), which demands a transformation of teaching and learning methods. The use of digital platforms such as e-learning, blended learning, and mobile learning has changed the learning paradigm from conventional methods to technology-based, demanding a new approach in the delivery of religious values. Although the use of technology in learning is becoming more widespread, there is no guarantee that digital learning is automatically effective in forming the character of moderate and tolerant students as expected in religious moderation education. Research (Musyafak & Subhi, 2023) shows that although the digitization of education provides ease of access and flexibility, the success of internalizing the value of moderation still depends heavily on the right pedagogical approach and not solely on the use of technology itself. Therefore, it is important to conduct an in-depth study to evaluate the extent of the effectiveness of digital-based learning in shaping the moderate and tolerant character of students in the era *Society 5.0* as part of efforts to strengthen Islamic religious education that is adaptive to the development of the times.

Changes in student learning styles in the era *Society 5.0* moving quickly towards digital-based learning through *platform* like *e-learning, blended learning,* and *mobile learning,* so as to change the pattern of interaction in the educational process. Students today tend to prefer flexible, personalized, and interactive access to learning offered through digital media rather than traditional face-to-face learning methods. This trend requires educators, including Islamic Religious Education (PAI) teachers, to design learning that is adaptive to students' digital preferences so that religious materials remain relevant and easy to internalize. According to (Nasaruddin et al., 2023; Sugiri et al., 2023) Use *Learning Management System (LMS)* like *Google Classroom, Zoom,* and *Quizizz* in Islamic religious learning has been proven to increase student participation, although its effectiveness in forming a moderate attitude is still a question. Thus, the change in learning style towards digital is not only a challenge in the technical aspect, but also a strategic opportunity to develop a more effective, innovative, and appropriate religious moderation learning model in accordance with the characteristics of the digital generation.

Since 2019, the Religious Moderation Program has become one of the national strategic priorities launched by the Ministry of Religion of the Republic of Indonesia, to build a tolerant, just, and harmonious society in the midst of the diversity of the nation. This program aims to strengthen the integration of moderation values into all lines of social life, including through formal education, with Islamic Religious Education (PAI) as the forefront in shaping the moderate character of students. As part of the national education revolution, the integration of religious moderation values in the PAI curriculum must be able to adapt to the dynamics of the era *Society 5.0* digital-based, without abandoning the essence of friendly and inclusive Islamic teachings. Research by (Imamah, 2023) show that the integration of moderation values in the development of the PAI curriculum is essential to form students who have an awareness of tolerance and pluralistic attitudes; while (Musyahid & Kolis, 2023) Through a systematic review, it was found that the implementation of religious moderation in Islamic education still faces great challenges in facing technological developments and social changes. Thus, the effectiveness of the Religious Moderation Program is highly dependent on the extent to which Islamic education, especially through digital platforms, is able to internalize the values of tolerance, justice, and balance to the young generation of Indonesia in the era of *Society 5.0.*

Although the integration of digital technology in religious education is becoming more widespread, new challenges have arisen regarding the effectiveness of internalizing religious moderation values through digital-based learning. Digital learning tends to emphasize cognitive aspects and quick access to information, but it is not necessarily able to instill character values such as tolerance, justice, and balance that are at the core of religious moderation. The limitations of emotional interaction, direct examples, and habituation of values in the online environment are obstacles in forming students' moderate attitudes as a whole through digital media. Research by (Prastyo & Inayati, 2022) Prasetyo and Inayati (2022) said that although digital literacy has been used to support the strengthening of moderation among students, the process of internalizing values through digital platforms still requires a creative and intensive approach; while (Ardiansyah, 2023) In his study on digital pesantren it was found that the success of instilling moderation values does not only depend on digital media itself, but also on learning design based on experience and example. Therefore, a more comprehensive study is needed to evaluate the effectiveness of digital-based religious

moderation learning, to ensure that the use of technology not only increases access, but also succeeds in forming a moderate character that is firmly rooted in inclusive Islamic values.

Although the adoption of digital learning in Islamic religious education is growing rapidly, there is no guarantee that digital media is automatically effective in shaping the character of moderate and tolerant students. Digital learning tends to focus on delivering material in an informative and technical manner, while the process of internalizing values such as tolerance, justice, and wasathiyah attitudes requires an exemplary-based learning approach, emotional experience, and critical reflection. Without proper learning design and value-strengthening strategies, digital-based learning has the potential to produce only cognitive understanding, without substantial changes in attitudes and behaviors in students. Research by (Musyahid & Kolis, 2023) shows that the implementation of the value of religious moderation in the technology-based Islamic education environment still faces serious challenges, especially in ensuring the internalization of values into the character of students. In addition, research by (Sugiri et al., 2023) also emphasized that the use of digital platforms in Islamic Religious Education is often still administrative and not optimal in shaping students' personality values. This urgency emphasizes the need for a systematic literature review to evaluate how the effectiveness of digital-based religious moderation learning really contributes to the formation of moderate and tolerant character, so that the direction of development of Islamic education in the era of Islamic education is *Society 5.0* more on target.

Most of the previous research on religious moderation in education has focused on the development of strategies or models of the integration of moderation values in the context of conventional classroom learning. The resulting learning models are generally designed for traditional face-to-face interactions, with an emphasis on lecture methods, hands-on discussions, physical examples, and value habituation through learning experiences in a physical school environment. On the other hand, changes towards digital-based learning demand a different new approach, but until now, studies on the effectiveness of digital media in shaping the moderate and tolerant character of students are still very limited and have not been well systematized in the academic literature. According to (Huda, 2022; Musyafak & Subhi, 2023) In their research on religious moderation learning, there is still a lot of emphasis on the role of conventional learning, while the use of digital platforms such as *e-learning* or *mobile learning* to instill the values of moderation has not been discussed in depth. In addition, a systematic review by (Musyahid & Kolis, 2023) also reveals the need for research that focuses more on the context of digitizing Islamic education. Thus, there is a significant research gap related to the effectiveness of digital-based religious moderation learning, which needs to be filled through systematic literature review to answer the challenges of Islamic education in the era of Islamic education. *Society 5.0.*

Research on the effectiveness of digital-based religious moderation learning is still limited in number, fragmented, and generally only in the form of short-term snapshot studies without evaluating changes in student character in the long term. Most of the research focuses on the development of media or digital strategies to teach religious moderation, but not many have systematically assessed the long-term impact on the internalization of the values of tolerance and moderation in students. These studies often stop at the initial analysis of the success of the use of digital platforms from technical and cognitive aspects, without measuring the affective dimensions and character of students on an ongoing basis. Research by (Prastyo & Inayati, 2022) and Survivors (Muhamad Slamet Yahya, 2023) shows that although digital literacy has been used to support moderation learning, evaluations of changes in students' attitudes and character due to digital learning have not been carried out longitudinally, so they have not provided a complete picture of long-term effectiveness. This condition indicates the need for a systematic literature review that not only collects existing empirical evidence, but also analyzes patterns, challenges, and opportunities to optimize digital-based religious moderation learning in shaping students' character in a sustainable manner.

A systematic literature review is needed to collect, analyze, and evaluate research results that discuss the effectiveness of digital-based religious moderation learning. The systematic literature review makes a comprehensive mapping of trends, methodologies, outcomes, and challenges that have been identified in previous studies, so as to provide a more comprehensive picture of the effectiveness of digital-based moderation learning. By conducting a critical synthesis of various research results, new patterns, gaps, and development opportunities can be found that are useful to strengthen the design of value-based learning moderation in the era *Society 5.0*. Research (Musyahid & Kolis,

2023) in their systematic review of the implementation of religious moderation underscores the importance of a comprehensive approach in analyzing the dynamics of moderation integration in Islamic education; However, the focus on digital-based learning is still minimal, so it shows that there is a large room for more specific literature review studies. Therefore, this study seeks to fill this need by conducting a systematic literature review related to the effectiveness of digital-based religious moderation learning, to provide conceptual contributions and direction recommendations for the development of more relevant Islamic education in the digital era.

This study aims to analyze the results of research related to the effectiveness of digital-based religious moderation learning in the context of Islamic education in the era of Islamic education. *Society 5.0*. This analysis is needed to understand the extent to which digital-based learning succeeds in internalizing moderation values such as tolerance, fairness, balance, and respect for diversity in students. In addition, this study also aims to identify key factors that contribute to the success or failure of digital moderation learning, as well as synthesize trends, strengths, and limitations of previous research as the basis for recommendations for the development of more effective digital-based Islamic education. Research (Prastyo & Inayati, 2022) and (Muhamad Slamet Yahya, 2023) Slamet Yahya (2023) revealed that, although digital literacy has begun to be integrated in moderation education, there has been no comprehensive mapping of the factors that support or hinder the effectiveness of learning; Therefore, a critical synthesis of various studies is needed to enrich understanding and development in this field. Thus, this research is expected to make an important contribution in directing future practices and research on digital-based religious moderation education that is adaptive to the challenges and opportunities of the era *Society 5.0*.

Era *Society 5.0* encourage innovation in the field of education, including Islamic religious education, by emphasizing the importance of using digital technology to support value-based character development (Prastyo & Inayati, 2022). Technology-based education in this era is required not only to produce digitally literate students, but also to build moderate characters who are adaptive to the changing times. In this context, the concept of religious moderation or wasathiyah is an important foundation that emphasizes tolerance, justice, balance, and respect for diversity. Religious moderation demands an educational approach that is able to instill a tolerant and fair attitude in multicultural life, a principle that is increasingly relevant in the era of digital globalization. Previous research, such as those conducted by (Huda, 2022; Musyafak & Subhi, 2023) has discussed the importance of integrating the values of moderation in the Islamic Religious Education (PAI) curriculum, but it is still limited to the context of conventional learning and has not studied the effectiveness of the use of digital media for this purpose. In addition, literature on the long-term effectiveness of digital-based moderation learning in Islamic education is still very rare. Snapshot studies in various studies tend to assess short-term outcomes without evaluating the internalization of values in the long term, so they do not provide a complete picture of the impact of digital learning on students' character. Systematic review by (Musyahid & Kolis, 2023) It also confirms that there are still few studies that specifically examine how digital-based learning can shape moderate character in a sustainable manner. Therefore, a systematic literature review is needed to fill this gap, by analyzing trends, success factors, challenges, and providing strategic recommendations for the development of more effective digital-based religious moderation education in the era *Society 5.0*.

This research is expected to make several important contributions, both theoretically and practically. Theoretically, this study will present a systematic literature map on the effectiveness of digital-based religious moderation learning, which until now is still widespread and has not been widely synthesized thoroughly. This mapping will enrich the scientific treasures in the field of technology-based Islamic education, especially in efforts to internalize the value of religious moderation in the Society 5.0 era. Practically, the results of this research are expected to be a reference for educators, curriculum developers, and policymakers in optimizing moderation-based education strategies through digital platforms, so as to strengthen the moderate and tolerant character of the younger generation. In addition, the novelty contribution of this research lies in a critical analysis that not only identifies the strengths and challenges of digital moderation learning, but also offers a direction for future development that is more adaptive, innovative, and contextual in strengthening moderate Islamic values in the midst of the dynamics of globalization and technological transformation.

METHOD

This research uses a qualitative approach with the type of research *library research* or literature study. The main focus of this study is to analyze the integration of religious moderation values in the development of the Islamic Religious Education (PAI) curriculum. The research data is in the form of primary and secondary sources related to the concept of religious moderation, curriculum development, and Islamic Religious Education teaching materials. Primary sources are obtained from relevant scientific books and journals, both in theoretical and empirical contexts. The data collection technique is carried out through documentation, by systematically reviewing, as well as various academic literature that supports the analysis. Researchers identify representations of moderation values such as *Tawassuth* (middle way), *Tasamuh* (tolerance), *i'tidal* (justice), and *muwathonah* (love of the homeland) that appears explicitly or implicitly in the curriculum structure. Data analysis is carried out with a content analysis approach, which allows researchers to examine the content of texts based on predetermined thematic categories. Content analysis is one of the umpteenth types of research methods (Prastowo, 2021). The analysis stages include: (1) data identification, (2) coding of religious moderation values, (3) classification and interpretation of the meaning contained, and (4) comparison with the results of previous research.

This study uses a literature review approach with the aim of collecting, analyzing, and evaluating the results of previous studies related to the effectiveness of digital-based religious moderation learning in the context of Islamic education in the Society 5.0 era. This approach was chosen to obtain a comprehensive picture of trends, success factors, challenges, and strategic recommendations that have been generated from various previous studies. The data in this study were obtained from 4 national and international journal articles indexed by SINTA and 10 articles indexed by Scopus that are relevant to the research topic. The criteria for selecting data sources include: 1) Articles published in the 2020–2025 period. 2) Articles focusing on Islamic education, religious moderation, digital learning, or a combination of the three. 3) Articles are available in full text form. 4) Articles in the form of empirical research results (qualitative, quantitative, mixed methods) and relevant literature studies. The data collection process is carried out through the following steps: 1) Article Search: Using keywords such as "religious moderation", "digital learning", "Islamic education", "Society 5.0", "digital literacy", in the specified journal database. 2) Article Selection: Screening is carried out based on abstracts and full texts to ensure that articles meet the inclusion criteria. 3) Compilation of Article Summary Tables: Each article that passes the selection is classified into a table based on: author name, year of publication, research objectives, research methods, focus of moderation learning, digital media used, main findings, and weaknesses/limitations. Data analysis is carried out through three stages: 1) Thematic Analysis: Identifying the main themes of the research results, such as factors that support the effectiveness of digital-based religious moderation learning, as well as the obstacles faced. 2) Critical: Comparing results between studies to find similarities, differences, and consistent or conflicting patterns. 3) Research Gap Mapping: Compiling a research map to show areas that have been extensively researched and areas that still require further research.

RESULTS
General Research Trends

Most of the studies reviewed show that the integration of moderation values such as tolerance, justice, balance, and respect for diversity is a fundamental component of digital-based learning in Islamic education. These values are believed to be the basis for the formation of students' character to be able to adapt healthily in the midst of a multicultural global society, as well as as a preventive effort against the spread of extreme and intolerant ideologies. The integration of religious moderation in the digital context is becoming increasingly important because digital media is not only a means of communication, but also a new space for socializing values and forming religious attitudes of students. In research (Imamah, 2023; Musyafak & Subhi, 2023) It is emphasized that technology-based Islamic education must pay attention to the internalization of wasathiyah values to avoid learning religion that is dry from substantive moral values. Therefore, current research trends place the value of moderation as a key element in digital learning design, not just as a complement.

In addition to the emphasis on the value of moderation, the study also shows that changes in student learning behavior in the era of *Society 5.0* Strengthening the urgency of integrating value into digital platforms. The digital-native generation tends to access more information and build their religious opinions through online media, so the risk

of misinformation and ideological polarization is a new challenge in religious education. Moderation-based education must be able to compete in the digital space by building a peaceful, adaptive, and contextual narrative of religion in accordance with the digital character of the younger generation. Research (Prastyo & Inayati, 2022) showed that students who were equipped with digital literacy based on moderation values showed a higher level of tolerance for social and religious differences in online spaces. Thus, the trend of digitalization of moderation learning is not only a technological adaptation, but also a transformation of the approach to Islamic education to be more responsive to the challenges of the times.

Although many studies have underscored the importance of moderation-based digital learning, most studies are still exploratory descriptive and have not yet achieved a measurement of the long-term impact on student character changes. Most of the research focuses on the initial implementation stage such as the preparation of teaching media, the design of an LMS based on Islamic values, or the improvement of students' digital literacy. Meanwhile, longitudinal studies on the effectiveness of internalizing the value of moderation through digital learning in forming moderate religious attitudes in a sustainable manner are still very minimal. Research (Musyahid & Kolis, 2023) In a systematic review, they revealed that most research on religious moderation in digital education only assesses cognitive outcomes without going deep into affective outcomes or long-term attitustic changes. This shows the need to strengthen longitudinal research and the development of character evaluation instruments in moderation-based digital learning to fill the existing literature gap.

Despite the use of various technologies such as *e-learning, Google Classroom, Zoom,* application *Mobile* And social media has begun to be adopted in religious moderation learning, most of the research reviewed is still in the early short-term exploration stage. The use of technology generally focuses on optimizing access to learning and material delivery, but not many have studied in depth the impact of internalizing moderation values on sustainable changes in student character. Most of the research focuses more on the analysis of digital learning inputs and processes, such as the use of learning media, interactivity *platform*, and cognitive effectiveness, compared to measuring *Outcome* affective or attitude of religious moderation in the long term. As expressed by (Nasaruddin et al., 2023) and (Muhamad Slamet Yahya, 2023), research on moderation-based digital education is currently still predominantly oriented towards the development of teaching tools and early implementation models, with little research adopting a longitudinal design to assess changes in student attitudes after learning. Thus, although the adoption of digital technology in religious moderation education has progressed, a more in-depth, sustainable, and evaluative research approach is needed to measure the true effectiveness of digital-based learning on students' religious character and attitudes.

In various studies reviewed, it was found that some *platform digital* become the main media in the implementation of religious moderation learning in the era *Society 5.0*. Use *platform digital* It aims to expand the reach of learning, increase the flexibility of students' access to teaching materials, and facilitate collaborative learning based on moderation values. The diversity of platforms used reflects efforts to adapt learning methods to the characteristics of the digital-native generation who are used to the use of technology in daily life. Some of the dominant platforms used include *Google Classroom* (Nasaruddin et al., 2023; Sugiri et al., 2023) for classroom management *online*, Maktabah Syumilah NU 1.0 (Ibda et al., 2023) as a source of digital-based Islamic classical literature, *E-learning* and *Mobile Learning* (Musyafak & Subhi, 2023; Nadifa & Ambarwati, 2024) for flexible learning, as well as social media such as *WhatsApp, Instagram,* and *YouTube* (Prastyo & Inayati, 2022) to expand the reach of communication and the dissemination of moderation values interactively. Thus, the use of these various digital platforms shows that religious moderation education has begun to transform following technological developments, although the long-term effectiveness in shaping the moderate character of students still needs to be studied more deeply.

Factors Supporting Effectiveness

From the analysis, the factors that support the effectiveness of digital-based moderation learning include:

a. Explicit integration of moderation values in the curriculum and digital materials

One of the main factors that supports the effectiveness of digital-based religious moderation learning is the explicit integration of moderation values in the curriculum and digital teaching materials. This integration ensures that digital learning is not only oriented to the delivery of academic content, but also

builds awareness of a moderate, tolerant, fair, and respectful attitude of students in students. Without explicit integration of values, digital-based learning risks becoming a purely cognitive process that fails to touch the affective and behavioral aspects of students, which is precisely the core of moderation-based education. Research by (Imamah, 2023) shows that the Islamic Religious Education curriculum that incorporates the values of religious moderation in all digital-based learning themes is able to increase social sensitivity and tolerance of students. Similarly, research by (Muslimah et al., 2023) found that the use of moderation-based teaching materials in the Islamic Civilization course directly strengthened students' understanding of the values of tolerance, deliberation, and justice in the context of global life. Thus, the success of digital-based moderation learning is largely determined by the extent to which moderation values are systematically integrated, explicit, and consistent into the curriculum, learning materials, and digital learning activities that are designed.

b. Teacher Training in the Use of Value-Based Technology Moderation

Another factor that contributes significantly to the effectiveness of digital-based religious moderation learning is the existence of special training for teachers in the use of technology that is oriented towards strengthening the values of moderation. The training is needed so that teachers are not only technically proficient in operating digital platforms, but also able to design learning that internalizes the values of tolerance, balance, and fairness to students. Comprehensively trained teachers will be able to integrate value-based pedagogical approaches into digital activities, so that learning is not only transactional, but also transformational in shaping students' moderate character. Research by (Nasikin et al., 2024) reveals that the training program is based on *Artificial Intelligence* (AI) for Islamic Religious Education teachers, which integrates the development of moderation value content, significantly improves teachers' ability to compile moderation-based digital teaching materials and increases student engagement in value-oriented learning. Thus, teacher training that focuses on mastering technology based on moderation values is a crucial factor in ensuring the effectiveness of religious moderation learning in the era of religious moderation *Society 5.0*.

c. Use of varied and interactive media to attract students' interest

In addition to the integration of moderation values in curriculum and teacher training, the use of varied and interactive learning media is also an important supporting factor in increasing the effectiveness of digital-based moderation learning. Creative and interactive learning media is able to increase students' motivation, emotional involvement, and absorption of learning materials, including the values of religious moderation that they want to inculcate. The interactivity of digital media encourages active participation of students, builds meaningful learning experiences, and allows the internalization of the value of moderation through more contextual and reflective methods. Research by (Nadifa & Ambarwati, 2024) It shows that the use of interactive media-based digital platforms, such as learning videos, online quizzes, social simulations, and online discussions, significantly improves students' understanding of the concepts of moderation and tolerance. Similarly (Muhamad Slamet Yahya, 2023) found that the integration of digital literacy in Islamic Religious Education learning through creative media such as infographics, moderation vlogs, and *Podcast* Education contributes to students' increasing social awareness of the importance of balance values and anti-radicalism. Thus, the use of varied, innovative, and interactive digital learning media is key in attracting students' interest and strengthening the internalization of moderation values in the context technology-based Islamic education.

d. Project-based learning approach and real-world experience

Project-based and real-experience learning approaches are also important factors that support the effectiveness of digital-based religious moderation learning. Project-based learning provides opportunities for learners to apply moderation values such as tolerance, fairness, and deliberation into real-life contexts through activities that are concrete and relevant to their environment. By actively involving students in project activities, learning does not only stop at the cognitive level, but also develops affective and psychomotor aspects, so that the value of moderation can be internalized through direct experience and personal reflection.

Research by (Mardatillah et al., 2023) shows that the implementation of project-based learning models, such as social projects themed "Building Peaceful Communities" or "Online Cross-Cultural Dialogue", is effective in fostering students' empathy, tolerance, and social concern in the digital context. This real-life experience-based activity makes students not only understand the concept of moderation, but also be able to actualize it in real social interactions in the virtual world and the real world. Thus, a project-based and real-experience learning approach in the context of digital learning is an effective strategy to bring the values of moderation to life in students' lives, making learning more meaningful and has a long-term impact.

Barriers to Digital Moderation Learning

a. Lack of long-term evaluation of changes in student attitudes

One of the main obstacles in digital-based religious moderation learning is the lack of long-term evaluation of changes in students' attitudes. Most of the existing studies only measure the success of moderation learning in a snapshot or short-term, focusing on cognitive outcomes such as understanding the concept of moderation, without making follow-up observations of changes in students' attitudes and behaviors in the long term. Without longitudinal evaluation, it is difficult to know the extent to which the values of tolerance, fairness, and balance taught in digital learning are truly internalized and shape the character of learners in daily life. Research (Musyahid & Kolis, 2023) In a systematic review they stated that most studies on the implementation of religious moderation in digital-based Islamic education are still limited to the initial evaluation of learning, without paying attention to the affective dimension that takes longer to develop and settle in students. Thus, the lack of long-term evaluation is a serious obstacle in assessing the real effectiveness of digital-based moderation learning, so in the future longitudinal research is needed that is able to track the development of students' character in a sustainable manner.

b. Dependence on cognitive aspects, without paying attention to the affective and psychomotor dimensions of the student

Another obstacle identified in digital-based moderation learning is over-reliance on cognitive aspects, without being balanced with the reinforcement of the affective and psychomotor dimensions of students. Most digital learning moderation focuses on information delivery, concept comprehension, or cognitive-based assessments such as quizzes and text assignments, which only measure thinking ability, without encouraging real changes in students' attitudes or behaviors. In fact, the values of religious moderation such as tolerance, justice, and balance require internalization at the affective (feeling, awareness) and psychomotor (real action) levels, which cannot be achieved through mastery of cognitive material alone. According to (Prastyo & Inayati, 2022) In their research, they emphasized that moderation-based digital literacy programs among students often succeed in improving the understanding of the concept of moderation, but have not effectively changed students' religious attitudes due to the lack of learning strategies that target the affective realm and practical experience. Thus, the reliance on cognitive approaches is a serious obstacle in digital moderation learning, so a more balanced learning design is needed, which is able to integrate cognitive, affective, and psychomotor aspects to form a moderate character as a whole.

c. Limited technological infrastructure, especially in rural areas

The limitations of technological infrastructure, especially in rural areas, are also a serious obstacle in the implementation of digital-based religious moderation learning. The low quality of internet access, the limitations of technological devices such as laptops or smartphones, and the unevenness of digital facilities in various regions cause inequality in access to digital learning. This limitation not only hinders the learning process, but also widens the educational gap between urban and rural students, including in the acceptance of moderation values that should be evenly distributed. According to (Ibda et al., 2023) in their research on the use of *software* Maktabah Syumilah NU 1.0 at Islamic boarding schools, revealed that the effectiveness of digitization of moderation learning is greatly influenced by the readiness of infrastructure; In small Islamic boarding schools and rural areas, limited devices and networks are the main obstacles in supporting digital-based moderation learning optimally. Thus, to ensure the success of digital-based moderation learning, there

needs to be systemic efforts in the equitable distribution of technological infrastructure, especially in rural areas, so that all students have equal opportunities to access moderation value education.

d. Lack of systematic value-based learning design

The lack of systematic value-based learning design is also an obstacle to the effectiveness of digital-based religious moderation learning. Many digital-based learning programs emphasize more on mastery of materials or the use of technology, without integrating the values of moderation in a structured manner in each stage of learning, from planning, implementation, to evaluation. As a result, even though students are exposed to religious materials through digital media, this learning often fails to form a moderate attitude consistently because core values are not internalized through a targeted learning design. According to (Huda, 2022) In his study on Islamic Religious Education learning management based on religious moderation, he emphasized that learning that succeeds in forming moderate character must be designed systematically, including the integration of values in core competencies, reflective learning strategies, and attitude- and behavior-based assessments, not just mastery of cognitive materials. Without this systematic framework, digital learning risks becoming a purely informative instrument, not a character transformation. Thus, to increase the effectiveness of digital-based moderation learning, value-based learning planning is needed that is designed systematically and consistently, so that the internalization of moderation values can be achieved in a complete and sustainable manner.

Discussions

Era *Society 5.0* which places humans as the center of technology-based innovation encourages the world of education, including Islamic education, to carry out a fundamental transformation. Islamic religious education is no longer enough to focus only on the delivery of religious material in conventional form, but must direct its learning to the formation of moderate character through digital media that is relevant to the new social reality. Use of technology *digital such as e-learning, mobile learning,* and social media in Islamic education offers expanded access to teaching materials, interactivity, and learning flexibility. However, without the integration of moderate Islamic values, the process of digitizing learning only has the potential to produce technical competencies without building substantive characters based on values *wasathiyah* (balance and moderation). As Prasetyo and Inayati (2022) emphasize, digital-based Islamic education must lead to the formation of a moderate, tolerant, and able to face the challenges of the times with a strong foundation in Islamic values. This is in line with research (Nadifa & Ambarwati, 2024) who found that digital culture in Islamic schools must be accompanied by the internalization of the value of moderation so as not to get caught up in mere technocratic practices. In addition, in line with research (Musyafak & Subhi, 2023) reminding that technology-based learning innovations in the digital era must pay attention to the mission of character education, not just adopting technology without the direction of values. Research by (Muhamad Slamet Yahya, 2023) It also shows that the use of technology in Islamic religious education that is not value-based actually risks deepening the character gap and increasing the potential for radicalism in the digital space. Thus, in the context of *Society 5.0,* Learning religious moderation through digital platforms is not only a strategic choice, but a must. Islamic education must be able to use technology as an instrument to shape moderate character, build an awareness of tolerance, strengthen social justice, and prepare an adaptive and inclusive generation of Muslims in the face of complex global realities.

This literature review shows that digital-based religious moderation learning has significant potential to internalize the values of moderation in students, as long as the learning is designed with a structured and value-based approach. One key approach is to explicitly embed the values of moderation in every digital activity, so that students not only understand the concepts of tolerance, justice, and balance cognitively, but also live and apply them in their daily lives. In addition, the use of active methods such as reflective online discussions, collaborative projects based on moderation values, and technology-assisted critical reflection can strengthen the internalization of these values. The example of online teachers, through behavioral consistency and digital content with nuances of moderation, is

also an important factor in building an inspiring digital role model for students. As criticized by (Musyafak & Subhi, 2023) Without a systematic value-based approach, digital learning risks only strengthening cognitive aspects without resulting in a change in students' religious attitudes. This is reinforced by the findings (Muhamad Slamet Yahya, 2023) which shows that technology-based religious learning that is not accompanied by the internalization of moderation values has the potential to deepen social barriers and increase intolerance. Research by (Mardatillah et al., 2023) It also confirms that the use of real-life experiential projects, such as online cross-cultural tolerance projects, is effective in forming a more complete moderate character in a digital learning environment. Thus, the effectiveness of digital-based moderation learning is highly dependent on the ability of learning design to consciously and consistently integrate moderation values, use active methods, and present authentic digital examples to form moderate, adaptive, and ethical students.

Although digital-based religious moderation learning shows great potential, most current studies are still snapshot and only assess changes in learners in the short term, without examining the long-term effects on the internalization of moderation values. The lack of longitudinal studies results in a lack of understanding of how digitally taught moderation values actually shape learners' attitudes and behaviors in real life over a long span of time. In addition, it is necessary to develop an integrative learning model that not only emphasizes the delivery of moderation materials theoretically, but also involves critical digital literacy activities, strengthening social values in a virtual environment, and school policies based on moderate Islamic values to support the deeper internalization of values. Research (Nadifa & Ambarwati, 2024) shows that the integration of values-based digital culture in Islamic schools is able to encourage the formation of more tolerant and adaptive student characters, provided that it is managed with an integrative approach that combines moderation content, collaborative activities, and consistent school policy support. Research by (Sugiri et al., 2023) and (Nasaruddin et al., 2023) It also emphasizes the importance of digital-based learning design that includes aspects of critical literacy and value collaboration as a strategy to strengthen religious moderation in the era of religious moderation *Society 5.0*. Thus, to strengthen the effectiveness of digital-based moderation learning, more longitudinal studies and the development of integrative models are needed that are able to connect digital literacy, social values, and institutional policies in forming moderate character in a sustainable manner.

CONCLUSION

As a result of a systematic review of the research, it can be concluded that digital-based religious moderation learning in the Society 5.0 era has great potential in supporting the internalization of moderation values such as tolerance, justice, balance, and respect for diversity. Digital technology, if used strategically, not only expands access to religious education, but also becomes an effective medium in shaping the moderate character of students. However, the effectiveness of digital moderation learning is highly dependent on several important factors, namely: the explicit integration of moderation values in the curriculum and digital materials, the improvement of teachers' competence in the use of value-based technology, the use of varied and interactive learning media, and the project-based and real-experience learning approach. However, various obstacles were also found, such as the lack of longitudinal evaluation of changes in students' attitudes, dependence on cognitive aspects without affective and psychomotor reinforcement, limited technological infrastructure in certain areas, and lack of systematic value-based learning design. These obstacles show that technological innovation in Islamic education must be balanced with a learning design based on moderate Islamic values and the continuous strengthening of students' character. Taking into account *the context of Society 5.0*, digital-based moderation learning needs to be directed not only to improve digital literacy, but also to build critical awareness, social empathy, and strong tolerance attitudes. Therefore, it is necessary to develop an integrative learning model that combines critical digital literacy, strengthening social values, and support for schools based on moderate Islamic values, as well as the need for longitudinal studies to measure the effectiveness of moderation learning in the long term.

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