Teachers' Pedagogical Competence for Fostering Religious Moderation Awareness in the Digital Era: A Phenomenological Study of Madrasahs in East Java

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Abstract
The Proliferation of radical content in the Digital world presents both challenges and opportunities for religious education. Teachers play a key role in guiding students to address this, but research on the specific pedagogical competencies needed to foster religious moderation in the classroom remains limited. This research investigated the role of teachers' pedagogical competence in promoting awareness of Islamic moderation in madrasahs during the digital era. Data were collected through in-depth interviews, classroom observations, and document analysis of madrasah teachers in East Java, Indonesia using a qualitative approach with an interpretative phenomenological design. The research findings reveal that teachers' pedagogical competence is manifested through three integrated dimensions: first, curriculum integration by embedding Islamic moderation values into learning materials; second, technological pedagogical mastery through the use of digital tools to facilitate critical discussions on religious issues; and third, management of inclusive learning environments and student character assessment that fosters dialogue and values differences. These findings serve as a framework for designing a Sustainable Professional Development (SPD) program. This program should not only focus on general digital literacy but specifically on enhancing teachers' ability to curate digital moderation-based content, manage sensitive online-offline dialogues, and integrate multi-layered pedagogical evaluations. For policymakers, these findings recommend integrating the principles of Religious Moderation into the core Curriculum of teacher training to prepare educators capable of responding to the dynamics of the Digital age.
Keywords: Religious Moderation, TPACK, Islamic Education, Teacher Training.

Introduction

The digital era has ushered in a paradoxical landscape for Indonesia's religious harmony. While digital platforms offer vast resources for spiritual enlightenment, they have simultaneously become a breeding ground for digital radicalization and the rapid dissemination of exclusive religious ideologies. Indonesia, recognized for its commitment to religious moderation, currently faces significant social challenges as the "Unity in Diversity" (Bhinneka Tunggal Ika) ethos is frequently undermined by online polarization, hate speech, and the echo-chamber effect of social media. Efforts to strengthen this moderation can be traced to various social, political, and educational initiatives that promote tolerance and respect across different faiths. Central to Indonesian identity, this principle encapsulates the nation's ethos, reinforcing the need for mutual coexistence (Idris et al., 2024; Karimullah & Arif Sugitanata, 2023). However, the rising cases of digital-based intolerance among the youth, often fueled by viral radical narratives,

indicate a pressing social crisis that necessitates a more proactive role from educational institutions.

The Indonesian government has prioritized religious moderation as a strategic policy since 2019 to counter these religious extremisms and foster inclusivity. The Ministry of Religious Affairs has spearheaded initiatives, including public campaigns and educational programs. Cholil (2022) emphasizes that such efforts seek to cultivate religious moderation as a core component of national identity. Despite these high-level policies, a significant gap remains at the grassroots level, particularly in madrasahs. Many educators struggle to navigate the complexities of "digital religion," where extremist views are often masked as authentic spiritual expressions. The internet serves as both a medium for positive religious expression and a conduit for extremist narratives, necessitating a concerted effort to foster a balanced and moderate religious narrative (Lomachinska & Hryshyna, 2024; Hjarvard, 2016).

In this context, madrasahs, as formal Islamic educational institutions, hold a strategic and central position in fostering awareness of religious moderation in the digital era. Rather than being mere spectators of digital discourse, madrasahs must serve as filters and laboratories for students to develop critical thinking in response to negative online phenomena, such as radicalization and religious intolerance. Rustandi and Kusnawan (2023) emphasize that educational frameworks within these institutions are pivotal in nurturing an inclusive religious environment that reflects moderation through structured pedagogical interventions. Similarly, while social media is often used to gauge public opinion (Soraya & Wibowo, 2021), within the madrasah setting, the integration of digital literacy into the religious curriculum serves as the primary vehicle for creating a counter-narrative to extremist ideologies. Thus, the school environment, led by competent teachers, serves as the most critical frontline in preparing students to navigate the complexities of faith in a digitally mediated world.

The strategic role of madrasahs in the digital era can only be realized by optimizing teachers' pedagogical competence. This competence is not merely about delivering content, but rather about the teacher's sophisticated ability to shape students' perspectives on religious tolerance and moderation. In this context, pedagogical competence serves as a critical instrument to counter extremist ideologies that students encounter both within and beyond the classroom. Research by Mappiasse and Hayadin (2022) indicates that a robust educational structure driven by competent pedagogical design can significantly influence students' perceptions of religious diversity. They emphasize that pedagogical excellence is required to execute curricular adjustments and instructional activities designed to foster openness. This assertion is further supported by Hamidy et al. (2022), who note that teachers' pedagogical mastery directly dictates how religious moderation values are socialized; an educator's pedagogical approach inherently shapes the teaching methods used to internalize tolerance in a digital-native generation. Therefore, understanding the depth of this competence is essential to ensure that religious moderation is not just a concept, but a lived experience for students.

Beyond these external socio-political pressures, madrasah teachers face profound pedagogical challenges that directly impede their ability to foster religious moderation. While societal resistance exists (Mailin et al., 2023), the more critical barrier lies in the

pedagogical translation of moderation values into classroom practice. Educators often struggle with curriculum integration, specifically how to embed abstract moderation principles into rigid subject matter without losing instructional focus. Furthermore, in the digital era, teachers face a technological-pedagogical gap; many are adept at using digital tools but lack the competence to facilitate "difficult conversations" or critical inquiries regarding sensitive religious content found online. As Naim et al. (2022) suggest, while institutions should serve as laboratories for moderation, this requires teachers to possess advanced classroom management skills to handle diverse and sometimes conflicting student perspectives. Moreover, the effectiveness of these efforts is inherently linked to the teacher's internal pedagogical belief system. Research by Hamidy et al. (2022) indicates that if teachers lack a deep pedagogical understanding of how moderation aligns with learning objectives, their ability to internalize these values in students diminishes. Therefore, the challenge is not merely social but fundamentally rooted in the need for a specialized pedagogical framework that equips teachers to evaluate, manage, and instruct religious moderation within a complex digital landscape.

The Technological Pedagogical Content Knowledge (TPACK) framework has been widely recognized as a standard for digital-era teaching (Miguel-Revilla, 2020; Fraile et al., 2018). Its specific application in fostering religious moderation remains underexplored. Previous studies have largely focused on the general effectiveness of e-learning in Islamic Religious Education (IRE) and its impact on student engagement (Mashudi & Hilman, 2024; Mansir, 2022). However, these studies often overlook the "Pedagogical-Contradiction" that teachers face as they navigate between rigid religious texts and the fluid, often radical, discourse of the digital world. Current literature on religious moderation in madrasahs, such as the work of Mardhiah et al. (2023) and Naim et al. (2022), tends to emphasize policy implementation and teachers' general perceptions. While they acknowledge the need for digital competency, there is a significant research gap regarding how teachers practically synthesize "Digital Pedagogy" with "Moderation Values" to create a resilient student character. Most existing research fails to provide a critical analysis of the specific pedagogical maneuvers, such as digital scaffolding for critical thinking, needed to deconstruct extremist narratives. This study fills this void by moving beyond general digital literacy; it critically investigates the phenomenological experiences of madrasah teachers in East Java as they develop a specialized "Moderation-Based Digital Pedagogy." By identifying the limitations of current professional development programs that focus solely on technical skills (Bandrés et al., 2021), this research offers a novel framework that integrates ethical-religious moderation into the core of technological pedagogical competence.

Digital-based Islamic Religious Education (IRE) has emerged as a pivotal area of study, revealing significant impacts on student engagement and spiritual understanding. Research indicates that the integration of multimedia content and interactive platforms within IRE fosters higher engagement levels, as students find these tools more stimulating compared to traditional methods (Mashudi & Hilman, 2024) The interactive nature of digital resources not only motivates students but also enriches their learning experiences, prompting discussions and more profound reflections on religious concepts (Mansir, 2022). Such changes are essential in an educational landscape in which digital literacy is increasingly important for effective learning in religious studies (Sinclair, 2014). Moreover, the necessity for educators to adapt to the digital era cannot be overstated. The

challenges posed by the digitization of education require Islamic religious educators to embrace innovative teaching methodologies (Mansir, 2022). For instance, studies have shown that using e-learning and various interactive technologies in IRE improves learning outcomes and facilitates access to diverse teaching materials. As a result, students benefit from a more comprehensive understanding of religious values and ethics, enabled by the flexibility and engagement that digital tools offer.

In the contemporary education landscape, the demand for enhanced pedagogical competence in the digital era has become increasingly critical. As the integration of digital technologies in educational institutions continues to evolve, educators need to develop competencies that align with these technological advancements. Key competencies include technological, pedagogical, and content knowledge, often encapsulated within the Technological-Pedagogical-Content Knowledge (TPACK) framework (Miguel-Revilla, 2020) (Fraile et al., 2018).

Research underscores that educators must not only be proficient in using digital tools but also adept in designing pedagogical approaches tailored to technologically enhanced environments. The TPACK framework serves as a comprehensive model that emphasizes the intertwining of content, pedagogy, and technology to foster effective teaching practices.(Fraile et al., 2018) Successful integration of these competencies leads to improved student outcomes, particularly in their engagement with the digital learning environment (Gómez-Trigueros et al., 2019).

Furthermore, a significant aspect of digital pedagogy is the necessity for continuous professional development for educators. Studies indicate that many teachers recognize the imperative need for additional training in digital competencies to keep pace with technological changes (Bandrés et al., 2021). This recognition highlights the importance of institutional support for ongoing professional growth and the adoption of innovative teaching strategies that leverage digital technologies to enhance pedagogy (Mardhiah et al., 2023). For instance, programs focusing on digital pedagogical skills have been shown to positively impact educators' self-assessment of their competencies and teaching effectiveness. The urgency for enhanced digital pedagogy is heightened by scenarios such as the recent COVID-19 pandemic, which forced many educational institutions to pivot to remote learning. This transition illuminated gaps in educators' digital pedagogical knowledge and underscored the need for robust training programs to equip teachers with skills in online instruction and digital engagement techniques (2023, 2021). Incorporating digital competencies into teacher training programs is essential for preparing future educators to navigate the complexities of modern teaching environments (Mardhiah et al., 2023).

In light of the aforementioned gaps, the primary objective of this phenomenological study is to critically explore how madrasah teachers in East Java perceive and implement their pedagogical competence to foster awareness of religious moderation in the digital era. Specifically, this research aims to: (1) identify the specific dimensions of pedagogical competence including curriculum mastery and technological-pedagogical proficiency required to navigate moderation values; (2) investigate the practical strategies employed by teachers in integrating these values into digital-based learning; and (3) analyze the pedagogical challenges teachers encounter in maintaining a

moderate educational environment amidst the rise of digital radicalism. By focusing on these objectives, this study seeks to provide a comprehensive understanding of the "lived experiences" of educators as they bridge the gap between traditional religious values and modern digital pedagogical demands.

Literature Review
PCK and TPACK

The concept of Pedagogical Content Knowledge (PCK) was first introduced by Lee Shulman in the mid-1980s, marking a significant shift in how teacher expertise is understood (Almeida et al., 2019). Shulman argued that effective teaching requires more than just subject matter expertise or general pedagogical skills; rather, it is the "special amalgam" of both. PCK represents the teacher's ability to transform complex disciplinary content into forms that are pedagogically powerful and yet adaptive to the diverse abilities and backgrounds of students. By identifying this unique body of knowledge, Shulman provided a theoretical foundation for teacher professional development that emphasizes how specific topics should be organized, represented, and adapted for instruction(Tallman, 2023).

As digital tools became inseparable from modern classrooms, Mishra and Koehler extended Shulman's work by developing the Technological Pedagogical Content Knowledge (TPACK) framework (Koehler & Mishra, 2009). This model recognizes that technology should not be treated as a standalone entity but must be integrated into the existing relationship between pedagogy and content. TPACK is defined by the complex interplay of three primary forms of knowledge: Content (CK), Pedagogy (PK), and Technology (TK)(Petko et al., 2025). The framework suggests that truly effective technology integration occurs at the intersection of these three domains, where teachers understand how to use digital tools to represent content in novel ways and facilitate innovative pedagogical strategies that were previously difficult to achieve.

In the context of a Learning Ecosystem, the TPACK framework serves as a vital indicator of an environment's capacity for innovation. It emphasizes that the successful adoption of educational technology is not merely a technical issue but a systemic one, involving the teacher's cognitive flexibility and the supportive structures of the school environment. Modern research suggests that TPACK is dynamic and situated, meaning it evolves as teachers interact with new infrastructures, cultural contexts, and student needs. Therefore, fostering an innovative learning ecosystem requires a holistic approach where the development of TPACK is aligned with the social and technical dynamics of the entire educational system (Widiyatmoko et al., 2025).

Research Method
Research Design

This study employed a qualitative research design with a phenomenological approach to uncover the "lived experiences" of madrasah teachers regarding their pedagogical competence in fostering religious moderation. Phenomenology was selected for its capacity to explore how educators interpret and navigate their roles at the complex intersection of digital technology and religious values. Unlike purely descriptive studies, this interpretative phenomenological design focuses on the subjective reality and meaning-making processes of participants, enabling a profound understanding of how

pedagogical techniques are adapted to address cultural sensitivities and the challenges of digital radicalization.

Participants and Research Objects

The participants in this study were selected using a purposive sampling technique to ensure the richness and depth of the data obtained. The primary criteria for selection included: (1) active madrasah teachers in East Java; (2) possessing a minimum of a bachelor's degree (S.Pd./S.Pd.I) in education; and (3) having at least two years of teaching experience within the madrasah environment. These criteria were established to ensure that participants had sufficient exposure to both pedagogical practices and the institutional integration of religious moderation. The final sample consisted of 12 to 15 participants, a size deemed sufficient to achieve data saturation in qualitative phenomenological inquiries.

Data Collection Techniques and Procedures

Data collection was conducted through a multi-method qualitative approach to ensure data triangulation and the validity of the findings. The primary method involved semi-structured in-depth interviews, designed to capture the teachers' narratives and internal perspectives flexibly yet systematically. Additionally, the researchers conducted *in situ* classroom observations to witness the actual manifestation of pedagogical competence during the learning process. Document analysis of lesson plans (RPP) and digital teaching materials was also performed to supplement the primary data. The procedure began with a recruitment phase through madrasah administrations, followed by a formal briefing on the research objectives. During the interview process, the researchers applied reflective practices and the "epoche" or "bracketing" technique to minimize personal bias and ensure an authentic representations on the teachers' experiences,

Data Analysis and interpretation process

The Data were analyzed using thematic analysis, as developed by braun and Clarke (2006), to identify and report meaningful patterns within the dataset, the analysis process commanded with data familiarization through verbatim transcription of the interviews, followed by an initial coding phase of segments relevant to pedagogical competence and religious moderation varables, subsequently, these codes were categorized into broader themes, such as "digital scaffolding" or "curriculum integration" and interpreted deeply to capture the essence of the phenomenon. The final stage involved reviewing and defining the themes to ensure that each accurately reflected the collective experiences of the partici[pantswithin the contemporary digital education landscape.

Trustworthiness and ethical considerations

To ensure scientific rigor or trustworthiness, this study adhered to the criteria of credibility, transferability, dependability, and confirmability as recommended in qualitative research standards. A key technique employed was member checking, where participants were given the opportunity to review and confirm the interview transcripts and the resulting themes to strengthen the authenticity of the findings. Ethically, this

research was conducted under strict participant-protection guidelines. All participants provided written informed consent, maintained the right to withdraw from the study at any time without consequence, and all data were anonymized to protect their identities and professional privacy.

Result

Curriculum Integration: Embedding Moderation Values into Digital-Based Materials

The first theme identifies how teachers exercise their pedagogical competence by curating and modifying learning materials. Teachers not only followed the textbook but also actively integrated moderation values such as *tawassut* (merit) and *tasamuh* (tolerance) into digital platforms.

Participant 1 (P1), a senior teacher, shared:

"I realize that students often find radical content on YouTube. Therefore, in my Google Classroom, I don't just give them the text; I provide links to moderate Islamic scholars' videos and ask them to compare the language used. This is how I integrate 'Tawassut' into their digital literacy."

This shows that pedagogical competence in the digital era involves the ability to filter and re-contextualize religious content.

Technological-Pedagogical Proficiency: Facilitating Critical Online Discourse

The second theme reveals that competent teachers use digital tools not just for delivery, but as a medium for critical dialogue. They use WhatsApp groups or Padlet to discuss "sensitive" religious issues that are viral.

Participant 4 (P4) noted:

"When there was a viral video about Takfiri (declaring others as infidels), I brought it to the class via a QR code. I asked students to analyze it using the principles of religious moderation. It's hard, but as a teacher, I must be competent in managing these 'hot' discussions without being biased."

Inclusive Classroom Management: Creating Safe Digital and Physical Spaces

The third theme identifies the teachers' pedagogical competence in managing a learning environment that encourages openness and psychological safety. In the digital era, the boundaries of the classroom extend to social media and instant messaging, requiring teachers to establish clear "rules of engagement" for discussing sensitive religious topics. Participants emphasized that an inclusive space is not one that avoids conflict, but one that manages disagreement through mutual respect.

Participant 3 (P3), a teacher with ten years of experience, explained his approach in the classroom:

"In my class, I explicitly tell students that the WhatsApp group we use for discussion is a 'safe zone.' If someone has a different interpretation of a verse or a religious phenomenon they saw on TikTok, they shouldn't be afraid of being labeled 'heretic' or 'infidel' by their peers. My job is to moderate the tone so that the digital space remains a place for learning, not for judging others' faith."

Furthermore, integrating physical and digital spaces allows teachers to observe student interactions more holistically. Teachers use "collaborative digital walls" to allow

anonymous questions, which helps students who are hesitant to speak up in person due to the fear of social backlash.

Participant 7 (P7) shared a specific technique:

"I often use Padlet for anonymous reflections. This is a part of my classroom management strategy to foster inclusivity. Students can post their doubts about radical narratives they found online without feeling exposed. By keeping the space safe and inclusive, I can address their concerns pedagogically before they turn into radical beliefs."

These findings suggest that inclusive classroom management in the digital age requires a blend of empathetic communication and the strategic use of anonymous digital platforms to bridge the gap between private doubt and public religious discourse.

Discussion
Teachers' Understanding of Religious Moderation

Teachers in madrasahs and pesantrens often perceive religious moderation as a balance between traditional Islamic teachings and contemporary societal needs. According to Malik, while some ultra-conservative Islamic schools may deviate towards radicalism, most pesantren affiliated with Nahdlatul Ulama (NU) and Muhammadiyah advocate for religious moderation, adhering to educational imperatives that stress inclusivity and tolerance. This stance is echoed in the work of Surawan et al., who assert that the curriculum and atmosphere in Pondok Pesantren prioritize attitudes of moderation, significantly shaping educators' views and approaches to teaching (Surawan et al., 2022).

Moreover, the role of personal beliefs cannot be underestimated. Hadi and Anggraeni articulate that educators' individual interpretations and commitment to promoting moderate values significantly shape the educational environment within these schools, influencing how religious teachings are presented to students (Hadi samsul, 2017). This correlation indicates that a teacher's personal adherence to the principles of moderation can manifest in their teaching, fostering an open-minded and tolerant classroom atmosphere.

The interpretation of religious moderation varies widely across madrasahs, reflecting their distinct ideological foundations and educational practices. For instance, academic institutions with a strong multicultural emphasis, like certain Salaf pesantren, employ inclusive education strategies that are effective in promoting moderate Islamic views and combating radicalism (Hadi samsul, 2017). Similarly, Isti'Anah et al. highlight that at Madrasah Ibtidaiyah, religious moderation is embedded in the very foundation of student training, encompassing both moral and ethical teachings aimed at fostering tolerance.(Isti'anah et al., 2024)

Furthermore, personal beliefs contribute to this diversity. For instance, educators at Ma'had Madinatul Khairaat emphasize teaching students to respect differences within Islam and in relation to other religions, illustrating how personal conviction can drive educational philosophies (Maolana, 2024). This diverging emphasis on relationships and respect demonstrates that a shared curriculum may not uniformly translate into a homogenous understanding of religious moderation among educators.

Personal beliefs significantly shape teachers' interpretations, affecting their pedagogical strategies and student interactions. According to Nur et al., personal convictions can either

reinforce or challenge the implementation of moderation in Islamic teachings, impacting how effectively these beliefs permeate the educational framework (Nur et al., 2023). In their study, they argue for the necessity of having educators deeply grounded in moderate interpretations of Islam, which directly enhances their capacity to instill these values in students.

Additionally, the ethical framework within which educators operate informs their approach towards religious teachings. As Hannan states, the interconnectedness of social networks and religious education is vital for contextualizing how moderation is perceived and taught within specific communities, further emphasizing that personal beliefs and communal religious ideologies are crucial in shaping the educational landscape of religious moderation (Abd Hannan, 2018). In conclusion, religious moderation in madrasah settings is a complex interplay between institutional philosophies, teachers' personal beliefs, and the unique ideological narratives within different madrasahs. This multifaceted relationship underscores the importance of tailored educational frameworks that respect local traditions while promoting universal concepts of tolerance and inclusivity.

Pedagogical Strategies for Fostering Religious Moderation Awareness

Pedagogical strategies that enhance religious moderation typically involve thematic learning and moral education. For instance, one practical approach is to integrate moderate content into thematic lessons that relate religious teachings to contemporary issues. According to Riski and Priyanto, this can be effectively executed through project-based and contextual learning that not only engages students but also reinforces tolerance and respect within educational communities (Riski & Priyanto, 2025). Additionally, as highlighted by Ghufron et al., extracurricular activities such as interfaith discussions and community service projects can empower students and infuse the school environment with principles of moderation (Ghufron et al., 2024).

Moreover, the use of problem-based learning and critical thinking exercises has been shown to cultivate moral decision-making among students. Rohman emphasizes the importance of creating opportunities for dialogue in small groups, allowing students to express their views while learning to appreciate diverse perspectives (Rohman, 2016). Such interactions are essential for developing a moderate worldview, as they encourage students to think critically about their beliefs in relation to others.

The integration of digital tools in religious education has become increasingly relevant, providing innovative ways to reinforce themes of moderation. Ibrahim et al. suggest that a blended learning model combining traditional face-to-face instruction with online platforms can enhance engagement and facilitate the dissemination of diverse religious views (Ibrahim et al., 2024). By utilizing digital resources, educators can introduce a wide array of materials that promote interfaith understanding and dialogue.

Furthermore, digital literacy is crucial to the successful integration of technology into teaching. As noted by Mehmood, teachers with strong digital literacy are better able to integrate technology into their pedagogical practices, thereby enhancing student engagement and fostering a nuanced understanding of religious teachings (Mehmood, 2023). Training programs focused on enhancing teachers' digital skills could significantly improve the implementation of religious moderation principles in the classroom.

Although strategies to promote religious moderation in madrasah education are promising, several challenges impede their effective implementation. For instance, the socio-cultural context surrounding educational institutions can significantly influence the acceptance of moderate ideologies. As Yusuf et al. highlight, external influences from predominantly exclusive social environments can hinder the message of moderation being conveyed within schools (Yusuf et al., 2025). In these cases, fostering a collaborative and inclusive atmosphere becomes crucial yet challenging.

Moreover, the availability of resources and teacher preparedness significantly affect the execution of innovative pedagogical strategies. Challenges related to limited access to suitable teaching materials incorporating moderation principles are prevalent, as indicated by Prasetyo et al. (2025). Addressing these shortcomings requires robust curriculum development efforts that explicitly incorporate religious moderation values in teaching materials.

In summary, fostering religious moderation in madrasah education requires a cohesive approach that combines innovative classroom techniques, strategic use of digital tools, and an understanding of the inherent challenges in educational contexts. By addressing these elements, educators can better help cultivate an inclusive and tolerant environment for students.

Digital Competence and Its Impact on Teaching Religious Moderation

The level of digital literacy among madrasah teachers varies widely, influenced by factors such as age, teaching experience, and access to training. Pahrudin found that mid-career teachers exhibit greater readiness to use artificial intelligence and digital resources than their novice counterparts, suggesting a potential generational gap in technological adaptability (Pahrudin et al., 2025). The research further emphasizes that ICT literacy is the strongest predictor of overall readiness for deep learning, underscoring the need for targeted digital training programs (Pahrudin et al., 2025).

On the other hand, studies like Sya'Bani's illustrate how the culture of religious moderation can be bolstered by improving teachers' digital competencies through contextual scientific approaches that incorporate collaborative and reflective practices (Sya'bani, 2021). Notable deficiencies in teachers' digital literacy can impede the implementation of innovative teaching methods essential to modern educational practices.

Integrating digital resources into religious education can significantly enhance the teaching and learning experience in madrasah settings. According to researchers like Lubis, the role of Islamic education in the era of digitalization is pivotal, with digital literacy serving as a strategic tool for sustainable religious education (Lubis, 2025). The use of multimedia, online platforms, and social media provides educators with diverse methods for effectively presenting Islamic teachings and values. Furthermore, technologies such as Learning Management Systems (LMS) and digital libraries enable teachers to access a wealth of resources that can supplement traditional curricula(Suhirman, 2024).

Research by Wijaya et al. reveals how technology reinforces Islamic values in educational settings, underscoring the importance of digital literacy training for effective implementation (Siti Nurdiana Wijaya et al., 2024). Additionally, teachers' capacity to

curate and create digital content can foster a more engaging learning environment, thereby enhancing students' understanding of religious moderation and values (Anam & Mubin, 2023).

Teachers' attitudes towards technology play a crucial role in fostering an environment where religious moderation can flourish. Survey and qualitative data suggest that teachers with a positive disposition towards technology tend to implement more innovative teaching methodologies, which are vital for promoting tolerance and understanding among students. For instance, a study conducted by Nyanasuryanadi et al. emphasizes that utilizing digital tools for literacy, such as webinars and online resources, is essential for educating students about religious moderation in a diverse society (Nyanasuryanadi et al., 2023).

However, challenges remain regarding inconsistent technology adoption and prevailing negative perceptions among some educators. As noted by Mubin et al., fostering a culture of acceptance towards digital tools can be complicated by existing teaching practices that rely heavily on traditional methods (Anam & Mubin, 2023). Encouraging professional development and cultivating an openness to technology in teacher training programs can significantly shift attitudes, thereby enhancing the facilitation of religious moderation across the educational landscape.

Barriers and Facilitators in Promoting Religious Moderation

Institutional support for promoting religious moderation in madrasahs is essential for creating an enabling environment. According to Tutik and Aditoni, effective management of madrasahs begins with defining a clear vision and mission that guide the implementation of religious moderation in educational programs (Tutik & Aditoni, 2023). Limited institutional support, whether due to inadequate funding, poor strategic planning, or insufficient resources, can pose significant barriers. For instance, the research by Irman et al. indicates that internal constraints, such as teachers' low understanding of the integrated curriculum, can hinder effective management of Islamic education and the promotion of moderation within schools (Irman et al., 2023).

Conversely, institutional frameworks that prioritize integrating religious moderation can greatly facilitate its promotion. The study by Yudin et al. emphasizes the critical role that Islamic Religious Education (IRE) teachers play in fostering moderate religious perspectives when adequately supported through targeted training and resource provision (Yudin et al., 2025). Moreover, as outlined by Sudarman et al., systematic implementation processes, supported by continuous evaluation, contribute to the effectiveness of moderation programs in madrasahs (Sudarman et al., 2025).

Community and parental influences significantly impact how religious moderation is perceived and implemented in madrasahs. As discussed by Syaikhon et al., engaging both educators and parents in programs aimed at promoting religious moderation creates a collaborative environment that enhances the value of moderation among young learners (Syaikhon et al., 2023). This collaboration can be further strengthened through community outreach initiatives that educate parents on the importance of moderation in religious teachings.

However, challenges arise when community perspectives conflict with the principles of religious moderation. Research suggests that societal pressures and prevailing conservative attitudes can pose barriers to the implementation of a more

inclusive religious education curriculum (Yudin et al., 2025). Findings by Pahrudin indicate that external social environments influence teachers' readiness to embrace deep learning in Islamic education, necessitating active community engagement to overcome potential opposition (Pahrudin et al., 2025).

Personal and professional development opportunities for teachers are critical in equipping them to promote religious moderation effectively. Research has shown that comprehensive training programs that enhance teachers' digital literacy and pedagogical skills can significantly empower them to implement moderation principles in their teaching (Pahrudin et al., 2025). According to Tutik and Aditoni, professional development that addresses both teaching methods and the underlying values of moderation is crucial for fostering an appropriate learning environment (Tutik & Aditoni, 2023).

However, barriers remain, such as resistance to change and insufficient access to practical training programs, which can limit teachers' abilities to adopt innovative pedagogical practices (Irman et al., 2023). Pahrudin's analysis underscores the importance of ongoing support and adequate training to develop teachers' competencies in implementing deep learning models that embrace religious moderation (Pahrudin et al., 2025). Addressing these barriers through well-structured professional development initiatives can lead to more effective teaching of religious moderation principles in madrasah settings.

Teachers' engagement in promoting religious moderation through practical pedagogical approaches is crucial in educational contexts such as madrasahs. The analysis of teachers' pedagogical competencies reveals significant gaps that need to be addressed to foster better environments for religious education and moderation. Studies indicate that community support and a clear understanding of social environments greatly influence the effectiveness of professional development for madrasah teachers (Tambak & Sukenti, 2020). It is vital for educators not only to adopt advanced pedagogical competencies but also to contextualize their approaches within the framework of religious moderation principles, which often necessitates a shift in traditional teaching models.

Current teaching strategies in madrasahs often require integration with digital tools to facilitate enhanced learning experiences. The advancements of the digital era demand a re-evaluation of pedagogical strategy, where integrating technology can significantly improve the engagement and effectiveness of instructional practices (Rukajat et al., 2024). Continuous professional development tailored to include information and communication technology (ICT) integration is paramount; this would equip teachers with the necessary skills to adapt to digital learning environments, as highlighted in several studies (Pérez-Jorge et al., 2024). Furthermore, the integration of ICT in teaching practices is essential not just for technical proficiency but also for creating inclusive educational environments that promote critical thinking (Carrillo-López & Hernández-Gutiérrez, 2023) (Montenegro Rueda & Fernández Cerero, 2019).

The impact of the digital era on religious moderation education in madrasahs is multifaceted. The role of ICT and digital competencies among teachers is crucial, as they enable a more dynamic teaching approach that facilitates the delivery of both content knowledge and moral teachings. Additionally, teachers' attitudes towards ICT integration

often indicate a readiness to embrace new pedagogical paradigms, despite challenges such as resource limitations and initial training inadequacies (Alvarado, L. E., Aragón, R. R. & Bretones, F. D, 2020). Addressing these challenges through structured professional development programs could lead to rich educational experiences that promote religious moderation and inclusivity.

The implications for madrasah education extend beyond immediate teaching practices; they encompass curriculum development and policy formation. There is a growing need for educational policies that align with the demands of the digital age while maintaining the core principles of religious moderation. Such policies should promote a comprehensive framework for teacher training that includes ICT pedagogical content knowledge (PCK) to enhance their effectiveness in the classroom. Furthermore, research indicates that fostering a supportive professional community among teachers can significantly boost their confidence and competence in implementing new educational strategies (Didane, 2023; Sumaryanta et al., 2019).

To enhance teachers' pedagogical competence in religious moderation, regular and targeted training programs should be implemented. These programs should encompass both pedagogical skills and digital literacy, with a focus on integrating technology into teaching practices. For example, incorporating community-based training initiatives can further motivate and sustain continuous professional development among madrasah educators (Didane, 2023) (Sumaryanta et al., 2019).

To integrate digital tools effectively in religious moderation education, practical frameworks similar to existing pedagogical models should be developed. Ensuring that both teachers and students engage with digital resources can enrich their understanding of religious tolerance and moderation (Komarudin, 2021) (Marzuki et al., 2020).

Finally, policy implications must prioritize not only the infrastructural development of madrasahs but also the preparation of a digitally competent teaching workforce. Investing in ongoing training that reflects both technological advancements and the contextual needs of Islamic education is essential to nurturing a generation of educators capable of guiding students toward moderation in their religious understanding. The theoretical contributions of these studies emphasize the transformation needed in madrasah education, especially in the digital era, and reflect on pedagogical competencies that resonate with religious moderation. The practical implications of this analysis offer insights that can help educators and administrators reinforce their approach not just to comprehension but also to fostering values critical to a modern, inclusive Islamic education.

Conclusion

This phenomenological study thoroughly examined the essential role of teachers' pedagogical competence in fostering students' awareness of religious moderation in madrasahs amid the rapidly evolving digital era. The research successfully achieved its primary objective by identifying specific, impactful strategies employed by highly competent educators. Key findings reveal three core pedagogical strategies central to fostering a culture of tolerance and moderation: first, the demonstrated ability to contextually integrate Islamic moderation values directly with learning materials, second, the strategic utilization of digital tools to facilitate critical and nuanced discussions about complex religious issues actively, and third, the consistent effort to create inclusive

dialogue spaces within the classroom that actively value and respect differences. These strategies are instrumental in counteracting the Proliferation of radical content, positioning teachers as crucial navigators for students in the digital landscape, and effectively embedding the national value of religious moderation as a foundational principle.

Reflecting on the research objectives, this study made a significant contribution by detailing the mechanisms by which pedagogical competence translates into effective religious moderation education, thereby confirming the critical link between a teacher's professional capability and their ability to address contemporary socio-religious challenges. However, the inherent limitations of this study must be acknowledged; as a qualitative, phenomenological inquiry, the findings are deeply rooted in the specific experiences and contexts of Madrasahs in East Java, Indonesia. Consequently, the generalizability of these findings is restricted to this particular geographical and institutional setting, and the methodological choice prioritized depth of understanding over broad statistical representation. Furthermore, while the study emphasizes the need for digital literacy, it did not quantitatively assess the current State of Technological Pedagogical Content Knowledge (TPACK) competency among all madrasah teachers, nor did it examine the direct correlation between TPACK competency and student outcomes, nor did it explore broader external challenges related to social conservatism or resource availability.

The implications of this investigation suggest several promising directions for future research. Foremost among these is the urgent need for studies focused on the design, development, and rigorous evaluation of the proposed Sustainable Professional Development (SPD) Program, specifically targeting the enhancement of digital pedagogical competence among madrasah teachers. Future research should transition from identifying *what* competent teachers do to quantifying the *impact* and *effectiveness* of these strategies. Secondly, to test the generalizability of the findings, comparative studies are highly recommended. Specifically, comparative research should be conducted across different educational contexts, such as between madrasahs in other provinces, or between Islamic educational institutions and public high schools, to determine if the identified pedagogical strategies remain effective regardless of institutional type. Finally, quantitative research using the TPACK framework should be conducted to establish a measurable correlation between a teacher's digital competency and students' measurable awareness and positive attitudes toward religious moderation, further strengthening the evidence base for technology integration in religious education.

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