

Digitalizing Menstrual Fiqh Education: The Use of RIMA Application to Support Haid Cycle Monitoring among Female Islamic Boarding School Administrators

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Abstract

This study aims to explore how the use of the RIMA application as a digital learning medium supports menstrual fiqh education among female administrators at Al Ishlah Assalafiyah Islamic Boarding School, Luwungragi. Employing a qualitative case study approach, data were collected through in-depth interviews, participant observation, and document analysis. The findings indicate that the RIMA application significantly enhances participants' understanding of Islamic jurisprudence related to menstruation, particularly in distinguishing between ḥayḍ (menstruation), istiḥāḍah (irregular bleeding), and periods of ritual purity. The application also facilitates systematic menstrual cycle monitoring, enabling users to connect their personal biological experiences with the principles of Islamic law. Furthermore, the integration of menstrual cycle data into the learning process promotes experiential and student-centered learning, leading to greater engagement and more critical reflection. Although challenges related to digital literacy and technology adoption were identified, the study demonstrates that digital tools can enhance the effectiveness of Islamic education. These findings highlight the potential of the RIMA

application as an innovative model for the digitalization of women's fiqh education in Islamic boarding schools.

Keywords: Digital Learning, Menstrual Fiqh Education, RIMA Application

Abstrak

Penelitian ini bertujuan untuk mengeksplorasi bagaimana penggunaan aplikasi RIMA sebagai media pembelajaran digital berfungsi untuk mendukung pendidikan fiqh menstruasi di kalangan administrator perempuan di Pesantren Al Ishlah Assalafiyah, Luwungragi. Dengan menggunakan pendekatan studi kasus kualitatif, data dikumpulkan melalui wawancara mendalam, observasi partisipan, dan dokumentasi. Temuan menunjukkan bahwa aplikasi RIMA berkontribusi secara signifikan dalam meningkatkan pemahaman peserta tentang fiqh terkait menstruasi, khususnya dalam membedakan antara haid, istihadhah, dan masa suci. Aplikasi ini juga memfasilitasi pemantauan siklus menstruasi secara sistematis, memungkinkan pengguna untuk menghubungkan pengalaman biologis pribadi dengan prinsip-prinsip hukum Islam. Lebih lanjut, integrasi data menstruasi ke dalam kegiatan pembelajaran mendorong pembelajaran berbasis pengalaman dan berpusat pada siswa, menghasilkan keterlibatan yang lebih besar dan refleksi kritis. Meskipun tantangan terkait literasi digital dan adaptasi teknologi telah diidentifikasi, studi ini menunjukkan bahwa alat digital dapat meningkatkan efektivitas pembelajaran Islam. Temuan ini menyoroti potensi RIMA sebagai model inovatif untuk mendigitalisasi pendidikan fiqh perempuan di pesantren.

Kata Kunci: Pembelajaran Digital, Pendidikan Fiqh Menstruasi, Penerapan RIMA.

A. Introduction

The development of digital technology in the last two decades has brought significant changes to various aspects of life, including the education sector.¹Digital transformation has not only changed the way students access information, but also influenced the learning methods, media, and strategies used by educational institutions.²The Education 4.0 concept places technology as the main instrument in creating more flexible, personal, and student-centered learning.³Various digital platforms, mobile applications, and technology-based learning systems have been proven to enhance learning effectiveness through broader access to information and more interactive learning experiences. In the context of Islamic education, the use of digital technology has also experienced rapid development, particularly in the teaching of the Quran, Arabic language, and the management of Islamic educational institutions.⁴⁵However, the digitalization of learning in the field of fiqh, especially

¹ Asmayawati dkk., "Pedagogical innovation and curricular adaptation in enhancing digital literacy: A local wisdom approach for sustainable development in Indonesia context," *Journal of Open Innovation: Technology, Market, and Complexity* 10, no. 1 (2024): 100233, <https://doi.org/10.1016/j.joitmc.2024.100233>.

² Emma Bucher dkk., "An evaluation of menstrual health apps' functionality, inclusiveness, and health education information," *BMC Women's Health* 25 (May 2025), <https://doi.org/10.1186/s12905-025-03812-1>.

³ Abdurrohman Abdurrohman, "The Humanist-Religious Paradigm: Its Significance and Implications for Islamic Education," *Madinatul Iman* 3, no. 2 (2024): 9–30.

⁴ Madhar Madhar, "Imam Al-Ghazali's Educational Thoughts and Their Relevance in the Contemporary Islamic Education System," *Tarqiyatuna: Journal of Islamic Religious Education and Elementary Madrasahs* 3, no. 2 (2024): 115–26, <https://doi.org/10.36769/tarqiyatuna.v3i2.813>.

women's fiqh, is still relatively limited and has not received adequate attention.⁶In fact, the material on women's jurisprudence has very contextual characteristics and is closely related to the biological experiences experienced directly by female students.

One of the important subjects in Islamic education for women is the jurisprudence of menstruation. This topic holds a very strategic position because it is directly related to the implementation of various religious obligations for Muslim women. A proper understanding of the provisions of menstruation determines the validity of religious activities such as prayer, fasting, reading the Quran, circumambulating (tawaf), and other religious activities. Misunderstanding the status of blood loss can lead to errors in religious practices and impact aspects of religious law. Various studies show that many Muslim women still have difficulty distinguishing between menstrual blood, istihadah, and nifas, especially when faced with irregular menstrual cycles. This situation indicates that learning the jurisprudence of menstruation cannot be delivered solely theoretically; it requires an approach that connects Islamic legal concepts with the biological experiences experienced by students. Therefore, learning innovations are needed that can help Muslim women understand the jurisprudence of menstruation in a more contextual, applicable, and easily practiced way in everyday life.

In the context of Islamic boarding school education, learning about menstruation jurisprudence is a crucial part of the process of developing the religious understanding of female students. Islamic boarding schools have long been known as Islamic educational institutions that play a role in transmitting Islamic knowledge through the study of classical texts, which serve as primary references for learning Islamic jurisprudence.⁷However, the dominant learning methods are still centered on lectures, reading books, and normative explanations which require a high level of interpretation skills from students.⁸In practice, many female Islamic boarding school students and administrators face difficulties connecting the Islamic jurisprudence (fiqh) theories they learn with their monthly biological experiences. Furthermore, menstrual cycle recording is often done manually or not at all, making it difficult to determine the legal status of menstruation. As a result, a gap exists between theoretical understanding of menstrual jurisprudence and its application in everyday life.⁹This gap presents a challenge for Islamic boarding schools in developing

⁵ Tunde Ahmed Alfabanni dan Ibnu Abinnashih, "Humanization of Islamic Education Within the Framework of Constructivism (Literature Analysis on the Dialectic of Paulo Freire and Al-Ghazali's Thought)," *Indonesian Journal of Islamic Education Studies (INJURIES)* 3, no. 3 (2025): 144–55, <https://doi.org/10.61227/injuries.v3i3.205>.

⁶Desi Ramandani Putri and Maskanatul Fiqiyah, "Development of Child's Islamic Religious Aspects Through the Method of Training Education," *TATHO: International Journal of Islamic Thought and Sciences*, February 6, 2025, 70–86, <https://doi.org/10.70512/tatho.v2i1.62>.

⁷Fauzi Ananda et al., "Demonstration Method on Prayer Material in Fiqh Lessons in Elementary Madrasahs," *Bunayya: Journal of Elementary School Teacher Education* 6, no. 1 (2025): 25–35, <https://doi.org/10.61082/bunayya.v6i1.456>.

⁸Muhammad Zein Damanik and Rudi Herdi Nurmawan, "Classification of Islamic Education Learning Methods," *At-Tarbiyah: Journal of Islamic Religious Research and Education* 2, no. 2 (2025): 350–53.

⁹Rohimah et al., "School Management in Developing Synergy of Islamic Religious Education Teachers," *MUWAHID ADMINISTRATION* 8, no. 1 (2024): 31–52, <https://doi.org/10.30997/jtm.v8i1.12802>.

learning models that are more relevant to the needs of female students in the digital era.¹⁰

In line with the development of digital health technology, various menstrual tracking applications have developed rapidly and are used by millions of women in various countries. These applications allow users to record menstrual periods, monitor cycle changes, predict the next period, and understand various reproductive health indicators more accurately.¹¹ Various studies have shown that using menstrual tracking apps can increase users' awareness of their body's biological condition and aid decision-making regarding reproductive health. However, most currently available apps focus primarily on medical and reproductive health aspects, while religious dimensions, particularly Islamic law regarding menstruation, have not been widely integrated into their features or user objectives. This situation suggests an opportunity to develop the use of menstrual technology not only as a means of health monitoring but also as a medium for religious learning relevant to the needs of Muslim women.¹²

One innovation that has the potential to meet this need is the use of the RIMA application as a supporting medium for learning menstrual jurisprudence. This application allows users to systematically record their menstrual cycles, allowing the resulting data to be used as a reflection on understanding menstrual jurisprudence provisions based on their direct experiences. Through structured recording, users can identify menstrual patterns, calculate their duration, and analyze various conditions related to determining the laws of worship. The integration of biological data and fiqh material allows the learning process to be more contextual, personalized, and based on real-life experiences. This approach aligns with experiential learning theory, which emphasizes that direct experience is the primary source in the process of developing meaningful knowledge and understanding.¹³ Thus, the RIMA application not only functions as a tool for recording menstrual cycles, but also as a learning medium that supports increasing women's fiqh literacy.

Although various studies have examined the use of digital technology in Islamic education and the use of menstrual applications in the field of reproductive health, studies that integrate these two aspects are still very limited.¹⁴ Most previous research has focused on the effectiveness of learning technology in general or the health benefits of menstrual apps, while research specifically linking menstrual cycle tracking apps to menstrual fiqh learning in Islamic boarding schools (pesantren) is still rare. To date, there has been little research exploring how menstrual tracking

¹⁰Riska Oktaviani, "Integration of Deep Learning Technology in Islamic Religious Education in the Digital Era," *Journal of Educational Sciences* 1, no. 1 (2024): 61–67.

¹¹Khoirul Mudawinun Nisa et al., "MODEM House: Application Innovation as an Effort to Build Religious Moderation at MAN 2 Tulungagung," *Southeast Asian Journal of Islamic Education Management* 3, no. 1 (2022): 1–12, <https://doi.org/10.21154/sajiem.v3i1.75>.

¹²Basuki Basuki et al., "Training on the Use of Artificial Intelligence Learning Media in Deep Learning for English Teachers," *Community Empowerment: Journal of Social Action* 2, no. 3 (2025): 40–50, <https://doi.org/10.62383/aksisosial.v2i3.2135>.

¹³Ulya Amelia, "The Challenges of Learning in the Society 5.0 Era from an Educational Management Perspective," *Al-Marsus: Journal of Islamic Education Management* 1, no. 1 (2023): 68–82, <https://doi.org/10.30983/al-marsus.v1i1.6415>.

¹⁴Ilham Lucky Alamsyah et al., "MEDIA TRANSFORMATION AND COMMUNICATION DYNAMICS IN THE DIGITAL ERA: CHALLENGES AND OPPORTUNITIES FOR COMMUNICATION SCIENCE," *SCIENTIFIC JOURNAL OF STUDENT RESEARCH* 1, no. 3 (2024): 168–81, <https://doi.org/10.61722/jirs.v1i3.554>.

technology can be utilized as a learning tool for Islamic law, connecting women's biological experiences with a more comprehensive understanding of fiqh.¹⁵ These limitations indicate a research gap that needs to be filled through studies that integrate the dimensions of digital technology, Islamic education, and women's biological experiences within a coherent learning framework.

Based on the above description, this study offers a novelty in the form of integrating the RIMA application as a learning medium for menstrual fiqh based on personal menstrual data for the administrators of the Al Ishlah Assalafiyah Islamic Boarding School in Luwunragi. This research is important because it provides an empirical contribution regarding the implementation of digital technology in women's fiqh learning in Islamic boarding schools, a field that has so far received relatively little research. Furthermore, this research is expected to enrich the scientific body of knowledge regarding the digitalization of Islamic education, improve women's fiqh literacy based on real-life experiences, and produce a learning model that can be replicated in various other Islamic educational institutions. Thus, this research not only contributes to the development of technology-based learning theory but also supports the digital transformation of Islamic education that is more responsive to the needs of Muslim women in the era of Society 5.0.

B. Literature Review

The development of digital technology has brought fundamental changes to the world of education, including Islamic educational institutions. The concept of digital learning refers to the use of information and communication technology to support a more effective, flexible, and student-centered learning process. According to Dita Nanda Fitriana, digitalization in education is not only related to the use of technological devices but also encompasses a transformation of learning methods that enable students to have a more personalized and interactive learning experience.¹⁶ In line with this, M Naufal Azmi explained that digital technology can increase student engagement through broader access to information, more intensive communication, and learning that can be tailored to individual needs.¹⁷ In the context of Islamic education, digitalization of learning is a crucial part of efforts to modernize the education system without abandoning the Islamic values that serve as the primary foundation of learning. Therefore, the use of digital applications in Islamic jurisprudence (fiqh) learning is a form of innovation relevant to the demands of education in the Society 5.0 era.¹⁸

The study of menstrual jurisprudence occupies a crucial place in Islamic education for women because it directly relates to the practice of worship and the daily lives of Muslim women. From an Islamic jurisprudence perspective, menstruation is a biological condition that has legal implications for various forms of

¹⁵Dimas Alva Rizki et al., "Menstrual Cycle Monitoring System as a Media for Reproductive Health Management Using the Forward Chaining and Certainty Factor Methods," *Bulletin of Computer Science Research* 6, no. 3 (2026): 920–30, <https://doi.org/10.47065/bulletincsr.v6i3.1064>.

¹⁶Dita Nanda Fitriana and Essa Nindia R, "The Role of Digital Innovation in the Development of Educational Technology in the Era of Learning Transformation," *Indonesian Journal of Education, Learning, and Evaluation* 1, no. 1 (2025): 41–48, <https://doi.org/10.63199/idjele.v1i1.63>.

¹⁷Muhammad Naufal Azmi et al., "The Potential of Using Virtual Reality as a Learning Medium in the Digital Era," *Journal of Dimensions of Education and Learning* 12 (July 2024): 211–26, <https://doi.org/10.24269/dpp.v12i1.9746>.

¹⁸Amelia, "Learning Challenges in the Society 5.0 Era from an Educational Management Perspective."

worship, such as prayer, fasting, reading the Quran, and other religious activities. Nur Aisah Rahmah explains that a proper understanding of menstrual law is essential for Muslim women to perform their worship in accordance with sharia.¹⁹ However, various studies show that many Muslim women still experience difficulty distinguishing between menstruation, istihadah, and nifas, especially when faced with irregular menstrual cycles. This situation suggests that learning about menstrual jurisprudence requires a more contextual and applied approach so that students not only understand the concepts theoretically but also are able to apply them in their daily lives based on real-life situations.

To understand the effectiveness of using the RIMA application in learning menstrual fiqh, this study utilized the Experiential Learning theory developed by Kristine. This theory explains that learning occurs through the process of transforming experience into knowledge. According to Kolb, concrete experience, reflective observation, abstract conceptualization, and active experimentation are the four main stages in knowledge formation.²⁰ In the context of this research, menstrual data recorded through the RIMA application becomes a concrete experience that can be reflected on and analyzed based on the concepts of menstrual jurisprudence that have been studied.²¹ In this way, students not only passively receive information but also construct understanding through their own biological experiences. This approach aligns with contemporary educational perspectives that position students as active participants in the learning process. Therefore, integrating menstrual data with menstrual jurisprudence learning can create a more meaningful and relevant learning experience for Muslim women.

Besides theory **Experiential Learning** This study also utilizes the Technology Acceptance Model (TAM) developed by Davis as a basis for understanding user acceptance of the RIMA application. According to TAM, the level of acceptance of a technology is influenced by two main factors: perceived usefulness and perceived ease of use. The greater the perceived usefulness and the easier the technology is to use, the higher the level of acceptance of the technology. In an educational context, this model is widely used to explain the successful implementation of various digital innovations. The use of the RIMA application as a learning medium for menstrual fiqh not only functions as a tool for recording menstrual cycles but also as a tool that helps participants understand Islamic legal provisions more accurately and data-driven. By combining the perspectives of Experiential Learning and the Technology Acceptance Model, this study seeks to explain how digital technology can be accepted by users while contributing to improving the quality of women's fiqh learning in Islamic boarding schools.

C. Method

¹⁹Nur Aisah Rahmah and Santiani Santiani, "Efforts to Form Women's Understanding of Fiqh Regarding Menstruation Among the Students of MA'HAD AL-JAMI'AH at IAIN," *Student Research Journal* 3, no. 2 (2025): 524–34, <https://doi.org/10.61722/jssr.v3i2.4353>.

²⁰Kristine Pole and Mark McGee, "Experiential Learning," in *Teaching and Learning in Higher Education*, ed. by Shidong Wang et al. (Springer Nature, 2025), https://doi.org/10.1007/978-981-95-2415-0_4.

²¹Yunida Turisna Simanjuntak, "EDUCATION ON MANAGEMENT OF MENSTRUAL DISORDERS IN ADOLESCENTS AT STATE SENIOR HIGH SCHOOL 12 MEDAN," *Journal of Community Service in the Field of Nursing Science "Optimal,"* advance online publication, 28 Februari 2025, <https://doi.org/10.5281/zenodo.15876000>.

This study uses a qualitative approach with a case study design to explore the use of the RIMA application as a supporting medium for learning menstrual fiqh among administrators of the Al Ishlah Assalafiyah Islamic Boarding School in Luwungragi. This approach was chosen because it allows researchers to gain an in-depth understanding of the experiences, perceptions, and practices of using the RIMA application to support menstrual cycle monitoring and improve understanding of menstrual fiqh. The research subjects consisted of female Islamic boarding school administrators selected using a purposive sampling technique based on the criteria of having experience using the RIMA application and being involved in menstrual fiqh learning activities. Research data were collected through participatory observation, in-depth interviews, documentation, and analysis of application use during the learning process. To ensure data validity, the study applied triangulation techniques of sources, methods, and time. The data obtained were analyzed using the interactive model of Miles, Huberman, and Saldaña which includes the stages of data condensation, data presentation, and drawing and verifying conclusions.²² Through this procedure, this study seeks to comprehensively reveal the contribution of the RIMA application in supporting the digitalization of menstrual fiqh learning and strengthening women's fiqh literacy in Islamic boarding schools.

D. Result

I. Transformation of Understanding of Menstrual Fiqh through the Utilization of the RIMA Application

The results of the study indicate that before using the RIMA application, most administrators of the Al Ishlah Assalafiyah Islamic Boarding School in Luwungragi had an understanding of menstrual jurisprudence obtained through studying yellow books and classical learning carried out routinely in the Islamic boarding school environment. However, this understanding is still theoretical and does not fully address the various problems they face in their daily lives. Based on the results of interviews with several informants, it was found that some administrators still experience doubts when having to determine the status of blood that comes out outside of normal menstrual habits. These doubts especially arise when faced with irregular cycles, longer than usual periods, or the appearance of blood spots after the holy period. One informant stated that until now she had only relied on memory to estimate the date of her previous menstruation, so she often had difficulty calculating the number of menstrual days, which is the basis for determining the law of worship. Another informant revealed that the material on menstrual jurisprudence studied in the books is often difficult to understand because it contains many legal categories that require real-life examples to be easier to understand. Observations made during the learning process also showed that participants tended to be passive when the discussion touched on *istihadhah* and the calculation of the holy period because they had difficulty connecting theory with personal experience. This finding was reinforced by documentation of learning notes, which showed that discussions on menstrual jurisprudence had focused more on conceptual aspects than on practical case analysis based on the real-life experiences of students and Islamic boarding school administrators. This situation indicates a gap between mastery of menstrual jurisprudence concepts and the ability to implement them in everyday life. Therefore, learning media are needed that can bridge the relationship

²²Sugiyono, *Case Study Research Method (Approaches: Quantitative, Qualitative, and Combination)* (Alphabet, 2023).

between Islamic jurisprudence theory and women's biological experiences to make the learning process more meaningful and able to increase practical understanding.

After using the RIMA app, the study found significant changes in how administrators understood the concepts of menstruation, *istihadhah*, and the period of purity. Interviews showed that the app helped users systematically document their entire menstrual cycle, providing data that could be used as a basis for legal analysis. Previously, most administrators only generally remembered the time of their menstruation each month, but after using the RIMA app, they were able to obtain detailed information about the start and end dates of menstruation, cycle duration, and the intervals between periods. This data allowed users to reflect on their biological conditions and relate them to the Islamic jurisprudence (*fiqh*) material they had studied. One informant explained that she better understood the difference between menstruation and *istihadhah* because she could compare the blood patterns she experienced with the menstrual history stored in the app. Another informant stated that the app helped her understand the maximum and minimum menstrual cycle limits based on clearly documented experiences. Observations showed that during the learning process, participants began actively sharing personal experiences supported by data in the app. Discussions that were previously theoretical became more contextual as participants were able to present real-life case studies based on their own experiences. Documentation of app usage also shows that most users consistently recorded their menstrual cycles throughout the study period. The presence of digitally documented data makes the learning process more focused, as participants no longer rely solely on memory. Thus, the RIMA app serves as a tool that strengthens the internalization of menstrual jurisprudence concepts through a real-life, experiential approach.

Furthermore, the study found that the use of the RIMA application contributed to improving the ability of Islamic boarding school administrators to determine religious rulings related to menstruation. Interviews showed that users felt more confident when having to make decisions regarding prayer, fasting, reading the Quran, and other acts of worship because they had data that could be used as a basis for legal considerations. Before using the application, some informants admitted to often delaying decision-making due to concerns about making mistakes in determining their blood status. However, after regularly recording their menstrual cycles through the RIMA application, they were able to identify menstrual patterns more clearly, making the legal determination process easier. Observations also showed that participants were able to conduct simple analyses of cases of menstrual jurisprudence presented by female religious teachers, using their personal experiences as learning materials. In several discussion sessions, participants were able to explain legal reasons based on menstrual data stored in the application and relate them to Islamic jurisprudence provisions contained in reference books. Documentation of learning outcomes showed an increase in the quality of participants' arguments when discussing women's Islamic jurisprudence issues compared to before using the application. In addition to improving legal analysis skills, the RIMA application also fostered a new awareness of the importance of reproductive health literacy and its relationship to religious practice. Users not only understand when menstruation occurs but also the legal implications of each condition. These findings demonstrate that integrating digital technology into menstrual *fiqh* learning can create a more personalized, reflective, and applicable learning experience, resulting in a more comprehensive increase in women's *fiqh* literacy in Islamic boarding schools.

2. Effectiveness of the RIMA Application in Monitoring the Menstrual Cycle of Islamic Boarding School Administrators

The research results show that the RIMA application is highly effective in helping administrators of the Al Ishlah Assalafiyah Islamic Boarding School in Luwungragi independently and continuously monitor their menstrual cycles. Prior to using the application, most administrators admitted to not having a structured menstrual cycle recording system. Based on interviews, the majority of informants stated that they only memorized the approximate time of their menstruation each month without recording the detailed start and end dates, or cycle duration. As a result, they often experienced difficulties when determining long-term menstrual patterns or calculating the provisions of Islamic jurisprudence regarding menstruation. One informant explained that she often forgot her last menstrual period and had to estimate the time of her next cycle based on memory. However, after using the RIMA application, users could systematically record all menstrual information, which was stored in a single digital platform that was easily accessible at any time. Observations showed that administrators were able to operate the application with relative ease despite varying levels of digital literacy. During the research process, most participants actively entered menstrual data at the start and end of each cycle. Documentation of application use showed an increase in the regularity of cycle recording compared to before using the application. The data stored in the system allows users to obtain more accurate information about their menstrual conditions. These findings demonstrate that the RIMA application successfully addresses users' needs for a practical, efficient, and easy-to-use note-taking tool in everyday life. This ease of use is a crucial factor in the successful implementation of the application in Islamic boarding schools, which previously relied on manual note-taking methods or even did not use any note-taking at all.

In addition to making recording easier, the RIMA app has also proven effective in generating data that helps users understand menstrual cycle patterns more accurately. Based on interviews, most informants stated that they only became aware of certain patterns in their menstrual cycles after reviewing the data recorded by the app over several months. Informants revealed that they previously thought their periods were always normal, but after reviewing the history stored in the app, they discovered significant variations in menstrual duration and cycle intervals. These findings indicate that the app serves not only as a data recording tool but also as a reflection tool that helps users understand their biological condition in greater depth. Observations showed that participants routinely used the menstrual history feature to track their cycle development from month to month. The next menstruation prediction feature was also one of the most frequently used features because it helps users prepare for personal needs and religious activities. App documentation shows that all menstrual data is stored chronologically, allowing users to evaluate the regularity of their cycles. Some users were even able to identify symptoms of irregular menstruation that they had previously not noticed. In the context of menstrual jurisprudence learning, accurate data is a crucial source of information because it can be used to determine the legal status of menstrual conditions based on documented empirical facts. Therefore, the effectiveness of the RIMA application lies not only in its data storage capacity but also in its ability to generate information that can be used to support decision-making related to reproductive health and the user's religious practices.

The research findings also indicate that the effectiveness of the RIMA application is reflected in the increased consistency of users in continuously

monitoring their menstrual cycles. Based on interviews, informants reported being more motivated to record their menstrual cycles because the application provides reminders and easy-to-understand data displays. Before using the application, most administrators rarely recorded their menstrual cycles regularly because they considered the process cumbersome and offered little immediate benefit. However, after using the RIMA application, they began to realize that consistent recording provided numerous benefits, both in terms of health and understanding of Islamic jurisprudence. Observations showed that almost all study participants continued to actively use the application throughout the study period. Compliance with data entry was also relatively high because users felt the application helped them obtain information that was previously difficult to obtain through manual recording. Documentation obtained from the application's usage history showed that most users had complete and continuous menstrual data for several months. This continued use indicates that the application can create new habits of more disciplined menstrual cycle monitoring. Informants also assessed that the application provided a sense of security because all information was stored privately and could be accessed at any time when needed. In the context of Islamic boarding school education, consistent monitoring has strategic value because it provides authentic data that can be used in the learning process of menstrual jurisprudence. Continuously documented data allows participants to understand the relationship between biological experiences and Islamic legal provisions more comprehensively. Therefore, the findings of this study confirm that the RIMA application is an effective digital medium for supporting menstrual cycle monitoring while strengthening the process of learning women's fiqh based on data and real-life experiences.

3. Integration of Menstrual Data and Menstrual Fiqh Learning in Islamic Boarding School Environments

The research results show that the use of the RIMA application has encouraged a strong integration between personal menstrual data and the learning process of menstrual jurisprudence at the Al Ishlah Assalafiyah Islamic Boarding School in Luwungragi. Before the application was used, menstrual jurisprudence learning focused more on theoretical studies sourced from classical fiqh books. Although the material presented included discussions of menstruation, *istihadhah*, *nifas*, the period of purity, and the legal implications of accompanying worship, most administrators still experienced difficulty connecting these concepts to their own biological experiences. Based on the results of interviews, several informants revealed that they often understood the theory taught by the female teacher, but experienced confusion when faced with real-life cases that occurred to them. One informant explained that she understood the theoretical definition of *istihadhah*, but had difficulty determining whether the blood that came out after menstruation was menstruation or *istihadhah*. After using the RIMA application, participants had well-documented data that could be used as a basis for more accurate legal analysis. Observations showed that during learning activities, participants began to bring menstrual data stored in the app into discussions with female teachers. This situation created a shift in learning patterns, where participants no longer passively received information but actively connected Islamic jurisprudence theory with digitally documented personal experiences. Documentation of learning activities showed that data from the app was often used as case studies in the study of women's Islamic jurisprudence. These findings demonstrate that the RIMA app successfully bridged the gap between women's biological experiences and Islamic legal concepts learned in Islamic boarding schools.

Furthermore, the study found that the data generated by the RIMA application significantly contributed to the quality of discussions and analysis of cases on menstruation jurisprudence in Islamic boarding schools. Interviews revealed that administrators found it easier to understand various Islamic jurisprudence provisions when they could directly view their menstrual data. Prior to the application, discussions on menstruation jurisprudence often involved hypothetical examples found in religious texts or presented by female religious teachers. While this method remains important, participants sometimes found it difficult to visualize its application in real-life situations. The RIMA application changed this situation by allowing participants to use their own experiences as learning objects. Observations showed that during the study process, participants actively compared their menstrual data with the legal provisions being discussed. For example, when discussing the maximum menstrual period or provisions regarding abnormal bleeding, participants could directly refer to their menstrual histories stored in the application. This made the learning process more concrete and relevant to the participants' needs. Documentation of the discussion results showed an improvement in the quality of questions and arguments presented by Islamic boarding school administrators. While previously questions were more general, after using the application, the questions posed became more specific and based on real-life cases. The female Islamic scholar also revealed that participants found it easier to understand the material because they had supporting data to explain various legal categories in menstrual jurisprudence. Thus, the RIMA app serves not only as a tool for recording menstruation but also as a source of learning data, enriching the process of studying women's fiqh in a more practical and experience-based way.

The research findings also indicate that the integration of menstrual data and menstrual jurisprudence learning has fostered a more participatory and experiential learning model. Based on interviews with female Islamic teachers and Islamic boarding school administrators, the use of the RIMA application provides space for participants to become active participants in the learning process. Participants not only receive explanations regarding menstrual laws but also reflect on their experiences through data stored in the application. Observations indicate that the learning activities have developed into a dialogic forum involving the exchange of experiences, case analysis, and collaborative problem-solving. In several learning sessions, participants were seen able to identify the legal status related to their menstrual conditions themselves before seeking confirmation from female Islamic teachers. This situation indicates an increase in critical thinking skills and the ability to apply Islamic jurisprudence concepts in real-life contexts. Documentation of learning activities shows that the use of the RIMA application has encouraged a shift in teaching methods from teacher-centered to student-centered learning. The female Islamic teacher acted as a facilitator, helping participants interpret menstrual data based on the principles of Islamic jurisprudence (fiqh) contained in the reference books. Furthermore, participants demonstrated greater confidence in expressing their opinions and experiences during the discussion. This integration of digital technology and Islamic jurisprudence (fiqh) learning resulted in a more meaningful learning experience because participants could directly see the relevance of the material being studied to their daily situations. Therefore, the findings of this study confirm that the RIMA application plays a strategic role in supporting the transformation of menstrual fiqh learning toward a more contextual, participatory learning model that is tailored to the needs of Muslim women in the digital era.

4. Challenges and Opportunities for Digitalizing Menstrual Fiqh Learning through the RIMA Application

The research results show that the implementation of the RIMA application in menstrual jurisprudence learning at the Al Ishlah Assalafiyah Islamic Boarding School in Luwungragi is not without challenges faced by users. Based on interviews, one of the main obstacles identified was the difference in digital literacy levels among Islamic boarding school administrators. Although most informants were accustomed to using smartphones in their daily lives, not all had experience utilizing digital applications for learning purposes or systematically recording personal data. In the initial stages of implementation, several informants admitted to having difficulty understanding certain functions within the application, such as entering cycle data, setting notifications, and interpreting information displayed by the system. Furthermore, several participants also stated that they were not yet accustomed to recording their menstruation routinely and therefore often forgot to enter data at the correct time. Observations showed that in the initial weeks of application use, some participants still required intensive guidance from researchers and female religious teachers to ensure that the data entered reflected actual conditions. Documentation of application training activities also showed that the adaptation process took different amounts of time for each participant. Some users were able to grasp the application's features quickly, while others required further guidance. In addition, several informants revealed technical challenges, including limited smartphone memory capacity and unstable internet connection quality. While the app remained usable under certain conditions, these technical challenges sometimes impacted user experience in accessing available features. These findings suggest that the success of digital learning is not solely determined by the quality of the app used, but also by user readiness and the availability of technological infrastructure supporting the implementation process in Islamic boarding schools.

In addition to technical challenges and digital literacy, this study also identified challenges related to changes in learning culture within Islamic boarding schools. Interviews revealed that several informants initially expressed skepticism about the use of digital technology in religious instruction. Some participants were accustomed to conventional learning methods centered on religious texts and direct explanations from female religious teachers, requiring time to accept the new approach involving the use of digital applications. However, over time, this perception began to change after users experienced the direct benefits of the RIMA application in helping them understand the Islamic jurisprudence (fiqh) of menstruation. Observations showed that participants' acceptance of the technology gradually increased after they successfully connected the menstrual data recorded in the application with the legal discussions studied in class. Documentation of group discussions also showed a shift in attitudes from initial skepticism to a more open attitude toward the use of technology in religious instruction. Some participants even stated that using the application actually helped them understand the contents of Islamic jurisprudence books more concretely than before. Furthermore, the female religious teacher (ustadzah) explained that the use of digital applications requires appropriate mentoring strategies so that technology is not viewed as a substitute for the role of teachers, but rather as a medium that supports the learning process. These findings demonstrate that digital transformation in Islamic education is not solely about technology, but also involves adapting to the learning culture that has long developed within Islamic boarding schools. Therefore, the successful implementation of digital

innovation requires institutional support, ongoing mentoring, and a sound understanding of the purpose of using technology in religious learning.

Despite the challenges identified, this study also revealed significant opportunities for developing digitalization of menstrual fiqh learning in Islamic boarding schools. Based on interviews, almost all informants stated that the RIMA application provided tangible benefits in helping them understand the menstrual cycle and more accurately relate it to Islamic fiqh provisions. Most participants even hoped that the application's use could be expanded to all female students, as it was seen as improving the quality of ongoing learning. Observations showed that the integration of digital technology and Islamic fiqh learning resulted in a higher level of participant engagement compared to conventional learning methods. Participants appeared more active in asking questions, discussing, and reflecting on their experiences. Documentation of learning activities also showed an increase in the number of Islamic fiqh cases that could be analyzed more deeply due to the availability of valid and well-documented menstrual data. Furthermore, Islamic boarding schools demonstrated a positive attitude toward the development of technology-based learning innovations as part of efforts to adapt Islamic education to the demands of the digital era. The research findings also indicate that the learning model integrating the RIMA application has the potential to be replicated in other Islamic boarding schools and Islamic educational institutions with similar characteristics. The existence of digital applications enables a more personalized, contextual, and data-driven learning process, thereby addressing the needs of Muslim women in understanding menstrual jurisprudence more comprehensively. Thus, the opportunity to develop digital menstrual jurisprudence learning is not limited to improving the quality of learning in a single Islamic boarding school but also has the potential to become a model for Islamic education innovation that can be applied more broadly to support technology-based educational transformation in the Society 5.0 era.

E. Discussion

The results of the study indicate that the use of the RIMA application has contributed to the transformation of the understanding of menstrual fiqh from a conceptual one to a more contextual and applicable one. This finding can be analyzed using the Experiential Learning theory proposed by Kolb (2015), which explains that knowledge is formed through the process of transforming experience into meaningful understanding. In the context of this study, the biological experiences experienced by Islamic boarding school administrators are no longer positioned as merely personal experiences, but rather as learning resources that can be analyzed based on the provisions of Islamic fiqh. Before using the RIMA application, participants gained knowledge about menstruation, *istihadhah*, and postpartum bleeding through studying fiqh books that tended to emphasize normative aspects. Although this approach is important in building a scientific foundation, the results showed that participants still experienced difficulties when having to apply these concepts to real-life situations. The presence of the RIMA application allows participants to systematically document biological experiences so that the learning process takes place not only through the transfer of knowledge from the *ustadzah* to the participants, but also through reflection on the documented experiences. These findings reinforce Kolb's view that concrete experience is a crucial initial step in developing deeper understanding. Menstrual data stored in the app then becomes material for reflective observation, allowing participants to analyze their experiences. This process further fosters the formation of abstract conceptualizations that

connect biological experiences with the learned Islamic jurisprudence theories.²³ Thus, the use of the RIMA application not only improved participants' understanding of the concept of menstrual jurisprudence but also resulted in a more meaningful learning process because knowledge was built on the participants' own real-life experiences. These findings also demonstrate that integrating digital technology into Islamic education can be a means to implement experiential learning more effectively and relevantly to the needs of female students.

Findings regarding the effectiveness of the RIMA app in monitoring menstrual cycles can also be explained using the Technology Acceptance Model (TAM) framework developed by Davis. According to this theory, user acceptance of a technology is heavily influenced by perceptions of its usefulness and perceived ease of use.²⁴ The results of the study indicate that both aspects are strongly present in the experiences of Islamic boarding school administrators. Informants assessed that the RIMA application provided tangible benefits in helping them systematically record their menstruation, easily access cycle history, and obtain information that can be used to support decision-making regarding worship. At the same time, the application was also considered easy to use because it has simple features and does not require complex technological skills. This finding aligns with various previous studies showing that the success of educational technology implementation is highly dependent on the extent to which users perceive direct benefits from the technology. In the context of Islamic boarding schools, perceptions of usefulness relate not only to the technical aspects of data recording but also to the application's ability to support understanding of menstrual jurisprudence. This indicates an expansion of technology's function from merely an administrative tool to a learning medium with educational value. Interestingly, this study also found that user acceptance increased after they gained direct experience using the application. This phenomenon demonstrates that technology acceptance in Islamic educational environments is determined not only by the technology itself, but also by its ability to address the real needs of users. Therefore, the results of this study strengthen the argument that the successful digitalization of Islamic education requires the development of technology that is not only easy to use, but also has strong relevance to the academic, social, and religious needs of students.

The integration of menstrual data with menstrual jurisprudence learning found in this study can be analyzed using the Situated Learning theory developed by Lave and Wenger. This theory asserts that learning will be more effective when knowledge is learned in a context relevant to students' real lives. In this study, the menstrual data stored in the RIMA application served as an authentic context that allowed participants to understand menstrual jurisprudence concepts through their own experiences. Prior to the application, menstrual jurisprudence learning mostly took place through abstract, text-based delivery.²⁵ After using the application, the learning process underwent significant changes because participants were able to connect the material they were learning with their own empirical data. This finding

²³ Pole dan McGee, "Experiential Learning."

²⁴ Fred D. Davis and Andrina Granić, *The Technology Acceptance Model: 30 Years of TAM*, Human-Computer Interaction Series (Springer International Publishing, 2024), <https://doi.org/10.1007/978-3-030-45274-2>.

²⁵ Lina Lisnawati, "Fiqh Teaching Strategies for Elementary Madrasah Students at MI Datarbungur," *Character: Journal of Islamic Education Research* 1, no. 3 (2024): 112–22, <https://doi.org/10.61132/karakter.v1i3.800>.

indicates that learning no longer focused on memorizing concepts but evolved into a process of analysis and problem-solving rooted in the participants' lived realities.²⁶ The research results also showed that participants became more active in discussions, more confident in expressing their opinions, and better able to interpret the fiqh cases they encountered. These conditions reflect the main characteristics of situated learning, namely the construction of knowledge through active engagement in social contexts and real-life practices. From an Islamic education perspective, this approach is highly relevant because much fiqh material is fundamentally related to everyday life practices. Therefore, the use of the RIMA application can be seen as an innovation capable of providing an authentic learning context, helping participants understand Islamic law more deeply and practically. These findings also demonstrate that the digitalization of Islamic education does not have to eliminate the scholarly tradition of Islamic boarding schools (*pesantren*) but can instead strengthen the learning process by providing a context closer to the students' experiences.

Research findings showing a shift in learning patterns from a teacher-centered approach to a more participatory one can be explained through Vygotsky's theory of social constructivism. According to this theory, knowledge is constructed through social interaction and collaboration between individuals and their environment.²⁷ The research results show that the RIMA application has created a new space for more active interaction between participants, female teachers, and learning resources used in menstrual jurisprudence learning. Prior to the application, the female teachers tended to be the primary source of knowledge, while participants primarily served as recipients of information. After using the application, participants began to actively engage in the learning process by bringing their menstrual data to be analyzed together. This resulted in a more dynamic dialogue and enabled participants to build understanding through discussion and shared reflection. Within a social constructivist framework, the RIMA application functions as a mediating tool that bridges the process of knowledge construction between individual experiences and collective understandings built through social interaction. This change demonstrates that digital technology can act as a catalyst, encouraging the creation of a more collaborative learning environment. In addition to increasing participant participation, this learning model also has the potential to develop critical thinking, problem-solving, and decision-making skills based on scientific and religious arguments.²⁸ Therefore, the results of this study strengthen the view that the digitalization of Islamic education can be a means to develop a more dialogic and learner-centered learning approach without eliminating the important role of teachers as guides and facilitators of learning.

Findings regarding the challenges and opportunities for digitizing menstrual fiqh learning indicate that digital transformation in Islamic education is a complex and multidimensional process. Analysis of these findings can be linked to Rogers' Diffusion of Innovation theory. According to Rogers, the successful adoption of an

²⁶Efridawati Harahap, "EFFECTIVENESS OF USING AUDIO VISUAL MEDIA IN IMPROVING FIQH LEARNING IN MIN 2 PADANGSIDIMPUAN," *THE EARLY CHILDHOOD* 4, no. 2 (2024): 192–202, <https://doi.org/10.24952/ibtidaiyah.v4i2.12947>.

²⁷Rif'atul Makhrisa and Sugeng Pradikto, "Analysis of the Role of the Social Environment on Students' Interest in Choosing Higher Education," *Journal of General Studies and Research* 3, no. 1 (2025): 78–98, <https://doi.org/10.47861/jkpu-nalanda.v3i1.1503>.

²⁸Roni Harsoyo, "Bernard M. Bass' Transformational Leadership Theory and Its Application in Improving the Quality of Islamic Educational Institutions," *Southeast Asian Journal of Islamic Education Management* 3, no. 2 (2022): 247–62, <https://doi.org/10.21154/sajiem.v3i2.112>.

innovation is influenced by the characteristics of the innovation itself, the characteristics of the user, and the social environment in which the innovation is implemented. The results of the study indicate that the RIMA application has characteristics that support innovation adoption because it provides clear benefits, is easy to use, and meets user needs.²⁹ However, the study also identified obstacles in the form of limited digital literacy, technical constraints, and the need to adapt to the long-established learning culture within Islamic boarding schools. These findings align with Rogers's view that the process of adopting innovation is not instantaneous, but rather requires stages of introduction, persuasion, decision-making, implementation, and confirmation. In the context of this research, the support of female Islamic teachers and Islamic boarding schools plays a crucial role in accelerating the technology adoption process among Islamic boarding school administrators. Furthermore, the opportunities identified in the study indicate that the RIMA application has the potential to be developed into a technology-based model for women's fiqh learning that can be replicated in various other Islamic educational institutions. This potential becomes increasingly relevant in the context of Society 5.0, which demands the harmonious integration of technology and human needs. Therefore, this study provides both theoretical and practical contributions to the development of a digital model for Islamic education that is not only oriented towards technological modernization but also able to maintain religious values and the contextual needs of students. These findings indicate that digital innovations such as the RIMA application can be an effective strategy in supporting the transformation of Islamic education to be more adaptive, inclusive, and sustainable in the future.

²⁹ Alisya Lutfiana Fiana et al., "Pai Learning Innovation in Shaping Student Creativity (Case Study at Galunggung Elementary School, Tasikmalaya)," *KAMALIYAH: Journal of Islamic Religious Education* 3, no. 1 (2025): 275–86, <https://doi.org/10.69698/jpai.v3i1.803>.

Conclusion

Based on the research results, it can be concluded that the use of the RIMA application as a digital medium in learning menstrual fiqh can improve the understanding of the administrators of the Al Ishlah Assalafiyah Luwungragi Islamic Boarding School regarding the concepts of menstruation, istihadhah, and nifas in a more contextual and experience-based manner. The RIMA application has proven effective in helping monitor menstrual cycles, providing accurate menstrual data, and supporting the integration of women's biological experiences with fiqh learning which has tended to be theoretical. The research findings also show that the use of the application encourages changes in the learning model to be more participatory, reflective, and oriented towards experiential learning, so that participants are better able to determine the laws of worship based on systematically documented data. In addition, the digitalization of learning through the RIMA application opens up opportunities for the development of Islamic education innovations that are more adaptive to the needs of Muslim women in the Society 5.0 era. However, this study has limitations because it was only conducted at one Islamic boarding school with a limited number of informants and focused on the experiences of female Islamic boarding school administrators, so the results cannot be generalized widely. Therefore, further research is recommended to involve more Islamic educational institutions, use a mixed methods approach, and test the effectiveness of the application over a longer period of time to obtain a more comprehensive picture of the impact of digitalization of menstrual fiqh learning on increasing women's fiqh literacy and the development of technology-based learning models in Islamic boarding schools and other Islamic educational institutions.

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