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DEVELOPING THE *ULÛ AL-'ILM* MODEL VIA THE SMART RELIGIUS APPLICATION FOR ISLAMIC RELIGIOUS EDUCATION

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Abstract: This study aimed to design and develop the Smart Religius application based on the *Ulû al-'Ilm* Model as a digital response to the persistent dichotomy between religious and general knowledge in Islamic Religious Education and to the rising mental-health burden among Indonesian university students. Using a Research and Development (R&D) approach within the ADDIE framework, combined with a Sequential Explanatory Mixed-Methods design, the study involved 80 Islamic Religious Education students (one-group pretest-posttest, non-randomized, purposive sampling) and 12 key informants (lecturers, an educational-technology expert, and an Islamic-psychology expert) across eight weeks. Paired t-test results indicated statistically significant gains ($p < .05$) across all six learning-outcome domains of the *Ulû al-'Ilm* Model: cognitive (37.50%), affective (40.00%), psychomotor (26.25%), ethical (37.50%), social (31.25%), and spiritual (68.75%, high N-Gain). Participatory observation of *riyāḍah ʿamaliyah* showed a mean increase from 50.75 to 83.50 (very good category). Expert validation confirmed the application's feasibility on content (91.00%) and media (89.58%) aspects. These findings suggest that the Smart Religius application functions as a holistic digital ecosystem integrating a Learning Management System, psychospiritual support features, and prophetic-character monitoring. These results imply that Islamic Religious Education lecturers can adopt an integrated digital-spiritual ecosystem to advance students' cognitive competence and spiritual character simultaneously, offering a scalable model of learning transformation for other Islamic higher-education institutions. However, given the single-group design and single-institution sample, findings should be interpreted as preliminary evidence of feasibility rather than causal proof, pending controlled and longitudinal replication.

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INTRODUCTION

Within Indonesia's national education system, Islamic Religious Education occupies a central position as the instrument for shaping the character, morality, and spirituality of the younger generation. In the digital era, transforming Islamic Religious Education is not merely an option but a necessity (Budiyanti et al., 2024). As students increasingly live, learn, and form their identity through digital media, Islamic Religious Education that remains confined to conventional lecturing risks becoming irrelevant to their daily reality. A digitally transformed Islamic Religious Education, in contrast, can meet the younger generation where they already are and turn everyday smartphone use into a habitual, structured, and consistently monitored practice of faith (Enggal, Haris, and Shonhadji's, 2026) and Abubakari, Shafik, and Hidayatullah, 2024). For students as members of a digital-native Islamic generation, such transformation is expected to yield concrete benefits: it makes worship habituation and character formation measurable rather than purely anecdotal, it gives lecturers real-time insight into each student's spiritual and academic progress, and it equips students with a lifelong, self-monitored practice of faith that can travel with them beyond the classroom (Amaly et al., 2023; Dwi Enggal, Haris, and Shonhadji, 2026; Hidayat 2024).

The phenomenon motivating this study is a long-standing epistemological dichotomy that separates religious knowledge from general knowledge in Islamic Religious Education instruction. This dichotomy produces a partial, dogmatic-textual mode of teaching in which students memorize religious texts without being able to contextualize them in real life. Left unaddressed, it carries two compounding consequences. First, it weakens spiritual character formation amid the pervasive influence of global digital culture, a disjuncture between belief and daily conduct that has been linked to rising academic-integrity violations among university students. Second, this dichotomy coincides with, and arguably deepens, a post-pandemic mental-health crisis among students, marked by elevated anxiety and a higher risk of depression among those with low religiosity. This crisis has emerged at a time when digital technology has become inseparable from student life, yet no existing Islamic Religious Education platform has systematically leveraged that technology to simultaneously strengthen the spiritual dimension and relieve psychological distress.

Against this backdrop of expectation, the present study proposes the *Ulû al-'Ilm* Model, operationalized through the Smart Religius application, as an alternative pathway for developing Islamic Religious Education, one capable of narrowing the gap between these expectations and the phenomena described in the following paragraphs. Previously demonstrated empirically by Budiyanti et al. (2024) to improve six domains of Islamic Religious Education learning outcomes, this model is deeply rooted in an integrative interpretation of the Qur'an, particularly *Surah al-Mujādilah*: 11, which affirms the elevated status of those who believe and possess knowledge. Operationally, it functions through *riyāḍah ʿamaliyah* the continuous habituation of pious deeds aligning with the

classical Islamic scholarly tradition represented by al-Ghazali's *Ihyā' 'Ulûm al-Dīn* and al-Zarnūjī's *Ta'līm al-Muta'allim* (Anwar et al., 2025; H. & F, 2025). Developing such a prophetic-value-based digital platform is both urgent and highly relevant due to three converging factors: near-universal smartphone ownership among Indonesian students making mobile platforms an exceptionally viable medium, ongoing national curriculum shifts favoring flexible competency-based learning and holistic character building, and the critical need to counter the spread of unmoderated or extreme online religious content by providing a structured, credible, and values-driven learning ecosystem. demonstrated empirically (Salamah, Setyosari, Hanafi, Suciptaningsih, and Hussin's stidy, 2025; Admaja & M. Yati, 2025 and Aulia et al., 2024; Khusnadin & Shihab, 2025).

A growing body of research points to both the urgency and the effectiveness of transforming Islamic Religious Education learning through smart, application-based media. Amaly, Herdiana, Ruswandi, and Arifin (2023) underscored the continuing necessity of Islamic religious education in schools despite mounting modern pressures. While Aripin, Nurdiansyah, Arief, and Yusof (2025) called for its effectiveness to be reformulated for the modern era. Destriani, Warsah, Karolina, Sutarto, and Krzic (2024) showed that 4C-based active-learning strategies, namely critical thinking, creativity, collaboration, and communication, can be implemented in Islamic religious education. Aggarwal, Wright, Morgan, Patton, and Reavley (2023) linked religiosity and spirituality more broadly to better mental-health outcomes, though without an operational digital instrument. Yanuarti, Aryati, and Jaya (2025) highlighted the pivotal role of Islamic religious education teachers' emotional intelligence in shaping students' engagement and character, an affective competency that is difficult to scale consistently without digital support. While Fithriy, Churiah, Julistiqomah, and Ubaidillah (2026) offered a theoretical reconceptualization of Islamic religious character education centered on moral internalization, modeling, and spiritual accountability, without yet translating that framework into a validated digital measurement instrument.

On the therapeutic side, Zannat, Mahmud, and Samsuri (2025) developed an Islamic-inspired digital therapeutics app that reduced Muslim university students' mental-health difficulties. Mohd Noh, Mat Noor, Mohamad Judi, Mat Zin, and Sahari Ashaari (2025) called for structured, persuasively designed self-management features in Islamic spiritual-health interventions for young people, yet both remained purely therapeutic and unconnected to a learning management system. Habibi, Nadry, Popal, and Ahmadi (2025) showed that e-learning and digital platforms can improve teaching, learning, and student engagement in Islamic education more broadly, while Sugito (2024) argued conceptually that hybrid digital pedagogy can be integrated with Islamic values in a pesantren setting, without yet offering an empirically validated, six-domain digital product. Together, these studies converge on one conclusion: app-based learning transformation is both urgent and demonstrably effective for Islamic

education, but no single platform has yet unified its cognitive, affective, psychomotor, ethical, social, and spiritual dimensions in one digital ecosystem.

What makes this study new is threefold. Conceptually, it is the first to translate the *Ulû al-'Ilm* Model, with its Qur'anic theological grounding, into a structured, measurable digital application architecture, bridging classical Islamic educational theory with modern digital practice. Methodologically, it develops a single, simultaneous six-domain measurement instrument not previously available in the digital- Islamic Religious Education literature. Practically, it integrates three systems that have historically operated in isolation, namely a learning management system, a digital-therapeutics platform for psychospiritual support, and a gamification-based prophetic-character monitoring system, into one coherent digital ecosystem that, to date, has not been developed or empirically tested in Indonesian Islamic higher education.

Based on this gap and rationale, this study aimed to design and develop the Smart Religius application grounded in the *Ulû al-'Ilm* Model using the ADDIE framework, examine the application's effect on the six learning-outcome domains through a pretest-posttest design with paired t-test and N-Gain analysis, assess the effectiveness of character-value internalization through eight weeks of *riyāḍah ʿamaliyah* observation, and evaluate the application's feasibility through content- and media-expert validation. The study proposes the working hypothesis that implementation of the Smart Religius application is significantly associated with improvement in student learning outcomes across the six domains of the *Ulû al-'Ilm* Model (Ha), as opposed to the null hypothesis of no significant difference between pretest and posttest scores (H0). The study is expected to contribute theoretically to the epistemological reconstruction of digital Islamic Religious Education and practically to a product ready for implementation in Islamic higher-education institutions across Indonesia.

RESEARCH METHOD

This study employed a Research and Development (R&D) approach within the ADDIE framework (Analysis, Design, Development, Implementation, Evaluation) to develop an ethics-religious learning model. The suitability of ADDIE for structured, iterative educational-application development has been demonstrated in prior ADDIE-based app-development research (Aman et al., 2025). This approach was combined with a Sequential Explanatory Mixed-Methods design that integrated quantitative and qualitative data sequentially and was supplemented by a phenomenological approach to explore the lived experiences of educators and students. At the evaluation and implementation stage, the application's effectiveness was examined through a one-group pretest-posttest design without a control group. This research was conducted at the Faculty of Islamic Religious Education, Universitas Pendidikan Indonesia (UPI), Bandung, West Java, an institution selected for its established Islamic Religious Education study program and its readiness in digital-learning infrastructure.

Participants comprised 80 students enrolled in the Islamic Religious Education course, selected through purposive sampling based on four inclusion

criteria: (a) active enrollment in the Islamic Religious Education course during the semester in which data collection took place; (b) ownership and functional use of a smartphone capable of running the Smart Religius application; (c) willingness to complete both the pretest and the posttest and to use the application consistently across the full eight-week implementation period; and (d) provision of informed consent to participate as a research subject. Twelve key informants were purposively selected to provide qualitative depth: three Islamic Religious Education lecturers directly involved in facilitating the application during implementation, each with a minimum of three years of teaching experience in the course; one educational-technology expert with graduate-level qualifications and professional experience in instructional-technology or e-learning design; one Islamic-psychology expert with relevant qualifications and practical experience in psychospiritual counseling; and seven students purposively drawn from the 80 participants to represent variation in gender, semester level, prior e-learning experience, and posttest gain level, so that interview data would not be skewed toward only the most successful users. A separate panel of six validators, three Islamic Religious Education content experts and three instructional-media experts, each holding a doctoral degree or equivalent professional expertise in Islamic-education curriculum or instructional-media design, was engaged during the Development stage of the ADDIE framework to assess the application's content and media feasibility. All participants and informants were drawn from a single institution, and data were collected over eight weeks with two measurement points, a pretest prior to implementation and a posttest following implementation of the Smart Religius application.

Data collection relied on four instruments. The first was a Six-Domain Learning-Outcome Evaluation Questionnaire consisting of 36 Likert-scale items (CVR = .87, Cronbach's alpha = .912). The second was an in-depth interview guide. The third was a participatory observation sheet. The fourth was an expert-validation instrument whose content- and media-quality dimensions were informed by established criteria for reviewing Islamic mobile-health and educational application content (Creswell, 2023; Libarkin & Kurdziel, 2023). The application's gamification-based reward and self-efficacy features draw on evidence that gamification increases student motivation in Islamic and general school education alike. Primary data were obtained from students as application users and lecturers as role models, while secondary data were drawn from classical texts such as *Ihyā' 'Ulûm al-Dīn* and *Ta'līm al-Muta'allim* as well as national curriculum documents. Quantitative data were analyzed using a paired t-test in SPSS version 26 (df = 79, α = .05) to test the significance of pretest-posttest differences, and N-Gain scores were computed to categorize the effectiveness of improvement in each domain. Normalized gain scores are reported alongside raw Likert means so that readers can interpret magnitude as well as statistical significance; future iterations of this research will additionally report standardized effect sizes such as Cohen's d (Pilcher & Cortazzi, 2024; Ragin, 2024). Qualitative data were analyzed thematically using the interactive

model of data reduction, data display, and conclusion drawing, and method triangulation was applied by cross-checking questionnaire results, interview transcripts, and observation records to strengthen the credibility of the findings.

RESULT AND DISCUSSION

Result

Respondent Profile

Prior to presenting the main results, Table 1 summarizes the demographic profile of the 80 student participants.

Table 1. Characteristics of Research Respondents

Characteristic	Category	n (%)
Gender	Male	34 (42.50%)
	Female	46 (57.50%)
Semester	3rd semester	28 (35.00%)
	5th semester	32 (40.00%)
	7th semester	20 (25.00%)
Smartphone ownership	Yes	80 (100.00%)
E-learning experience	Experienced	72 (90.00%)
	Not experienced	8 (10.00%)

Source: Primary research data, 2025.

Table 1 shows that the majority of respondents were female (57.50%), predominantly in their fifth semester (40.00%). All respondents (100%) owned a smartphone, and 90% had prior e-learning experience, suggesting that, technically, the sample was well-positioned to adopt the Smart Religius application without major barriers.

Application Development Result: Smart Religius Interface

As the output of the Development stage of the ADDIE framework, the Smart Religius application was built around two core interfaces designed to operationalize the six domains of the *Ulû al-'Ilm* Model in a single, integrated digital environment. The main dashboard interface can be visualized as follows.

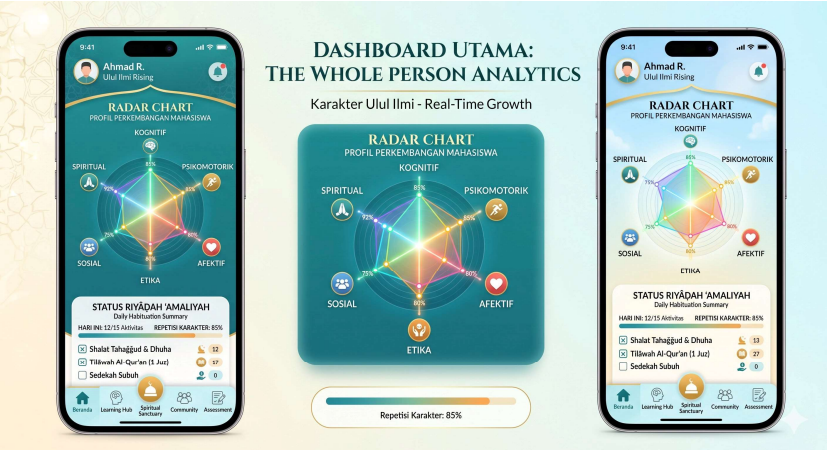


Figure 1. Main Dashboard of the Smart Religius Application: Radar-Chart Profile of Student Development ("Whole-Person Analytics") with *Riyāḍah ʿAmaliyah* Status

Figure 1 displays the main dashboard interface of the Smart Religius application, which presents a radar chart of students' six developmental domains in real time, allowing students to monitor their progress in the cognitive (85%), psychomotor (85%), affective (80%), ethical (80%), social (75%), and spiritual (92%) domains within a single integrated view, a visual innovation that operationalizes the concept of whole-person development underlying the *Ulû al-'Ilm* Model. Building on this dashboard, a second core interface, the Self-Efficacy Booster, was developed to translate *riyāḍah ʿamaliyah* data into gamified, prophetic-character-based motivational feedback, as shown below.

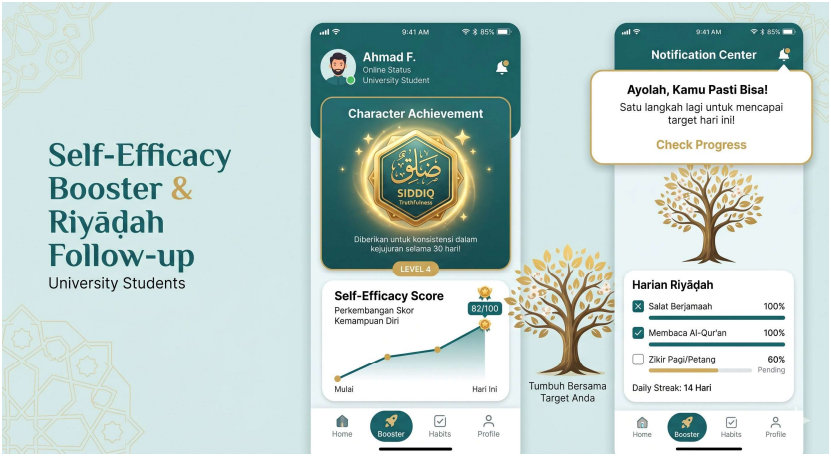


Figure 2. Self-Efficacy Booster and *Riyāḍah* Follow-Up Features: Prophetic-Character Achievement Badge (*Siddiq*), Self-Efficacy Score, and Daily *Riyāḍah* Monitoring

Figure 2 presents the Self-Efficacy Booster feature, designed to strengthen students' self-confidence through gamification grounded in prophetic character. The *Siddiq* (honesty) badge is awarded for 30 days of consistency, while the Self-Efficacy Score graph progressively visualizes self-capability development (82/100). The Daily *Riyāḍah* panel on the right records daily worship compliance alongside a 14-day Daily Streak, directly supporting character internalization through habituation and appreciation mechanisms.

Improvement Across Six Learning-Outcome Domains

The validated questionnaire (Cronbach's α = .912) was used to measure improvement across the six domains of the *Ulû al-'Ilm* Model using a pretest-posttest design. Results are presented in Table 2.

Table 2. Comparison of Pretest and Posttest Results Across Six Domains

No	Domain	Pretest (%)	Posttest (%)	Gain (%)	N-Gain Category
1	Cognitive	2.50	40.00	37.50	Moderate
2	Affective	3.75	43.75	40.00	Moderate
3	Psychomotor	3.75	30.00	26.25	Moderate

4	Ethical	5.00	42.50	37.50	Moderate
5	Social	3.75	35.00	31.25	Moderate
6	Spiritual	2.50	71.25	68.75	High
	Mean	**3.54**	**43.75**	**40.21**	**Moderate**

Source: SPSS version 26 output.

Table 2 shows improvement across all domains. The spiritual domain recorded the highest gain (68.75%, high N-Gain), suggesting that the digital worship features, prayer reminders, *dhikr* habituation, Qur'anic reflection, and a digital worship journal had a strong effect on students' sense of transcendent closeness. The affective domain ranked second (40.00%), followed by the cognitive and ethical domains (37.50% each). The psychomotor domain showed the smallest gain (26.25%), suggesting the need for more comprehensive augmented-reality (AR)-based worship-practice features or interactive video tutorials in the next iteration.

Paired t-Test Results: Statistical Significance

To verify the significance of the learning-outcome differences, a paired t-test was conducted; results are presented in Table 3.

Table 3. Paired t-Test Results Across Six Domains (df = 79, α = .05)

Domain	Mean (Pre)	Mean (Post)	t	Sig. (2-tailed)	Note
Cognitive	2.15	4.12	12.847	.000	Significant
Affective	2.28	4.25	14.213	.000	Significant
Psychomotor	2.32	3.98	10.541	.000	Significant
Ethical	2.42	4.18	13.629	.000	Significant
Social	2.35	4.05	11.876	.000	Significant
Spiritual	2.18	4.58	18.394	.000	Significant

Source: SPSS version 26 output.

All domains showed a significance value of p = .000 < alpha = .05. The null hypothesis (H0) is therefore rejected and the alternative hypothesis (Ha) is accepted: use of the Smart Religius application is associated with a significant improvement in student learning outcomes across the six domains of the *Ulû al-'Ilm* Model. The highest t-value occurred in the spiritual domain (t = 18.394), suggesting that this dimension was the most responsive to the Islamic-values-based digital intervention. Because the design did not include a control group or random assignment, these gains should be interpreted with caution; testing effects, maturation, and the novelty of the intervention cannot be ruled out as alternative explanations.

Riyāḍah ʿAmaliyah Observation Results

Eight weeks of participatory observation were conducted to examine value internalization through *riyāḍah ʿamaliyah* as monitored through the application. Four observed criteria included habituation, repetition, appreciation, and exemplary modeling.

Table 4. *Riyāḍah ʿAmaliyah* Observation Scores (Scale 1–100)

No	Observation Criterion	Week 2	Week 4	Week 8	Final Category
1	Habituation (consistency of worship logging)	52	71	85	Very Good
2	Repetition (frequency of module access)	48	68	82	Very Good
3	Appreciation (response to reward feature)	58	75	88	Very Good
4	Exemplary (emulation of prophetic character)	45	66	79	Good
	Mean	**50.75**	**70.00**	**83.50**	**Very Good**

Source: Participatory observation data, 2025.

Observation data show a progressive upward trend across all four criteria, from a mean of 50.75 (fair category) at week 2 to 83.50 (very good category) at week 8. The appreciation criterion recorded the highest score (88), suggesting that gamification and Islamic-values-based reward systems were highly effective as extrinsic motivators that subsequently became internalized as intrinsic motivation. The exemplary criterion ranked lowest (79, still within the good category), unsurprising given that emulating prophetic character presumably requires a longer developmental period than the other three criteria.

Expert Validation Results: Application Feasibility

Validation was conducted by six validators (three Islamic Religious Education content experts and three instructional-media experts) during the Development stage of the ADDIE framework, using the criteria specified in the Research Method section above. Results are presented in Tables 5 and 6.

Table 5. Content Validation Results for the Smart Religius Application

No	Content Aspect	Mean Score	Percentage	Category
1	Alignment with the holistic-integrative Islamic Religious Education curriculum	3.67	91.75%	Highly Feasible
2	Accuracy of Qur'anic and Hadith evidence	3.83	95.75%	Highly Feasible
3	Depth and breadth of content	3.50	87.50%	Highly Feasible
4	Topicality and contextual relevance	3.67	91.75%	Highly Feasible
5	Integration of Problem-Based Learning	3.50	87.50%	Highly Feasible
6	Moderation and content inclusivity	3.67	91.75%	Highly Feasible
	Mean (Content Validation)	**3.64**	**91.00%**	**Highly Feasible**

Source: Expert validation data, 2025.

Table 5 shows that content validation produced a mean of 91.00% (highly feasible), with the highest score recorded for accuracy of Qur'anic and Hadith evidence (95.75%) and the lowest, though still highly feasible, scores recorded for depth and breadth of content and for integration of Problem-Based Learning (87.50% each). These results indicate that the three content validators regarded the application's religious-content foundation as both textually accurate and pedagogically sound for use in Islamic Religious Education instruction.

Table 6. Media Validation Results for the Smart Religius Application

No	Media Aspect	Mean Score	Percentage	Category
1	User-interface ease of use (UI/UX)	3.67	91.75%	Highly Feasible
2	User-data privacy and security	3.83	95.75%	Highly Feasible
3	Multimedia quality (infographics, audio, video)	3.50	87.50%	Highly Feasible
4	Application responsiveness and speed	3.33	83.25%	Highly Feasible
5	Cross-device compatibility	3.50	87.50%	Highly Feasible
6	Self-management and personalization features	3.67	91.75%	Highly Feasible
	Mean (Media Validation)	**3.58**	**89.58%**	**Highly Feasible**

Source: Expert validation data, 2025.

Table 6 shows that media validation produced a mean of 89.58% (highly feasible), with the highest score recorded for user-data privacy and security (95.75%) and the lowest, though still highly feasible, score recorded for application responsiveness and speed (83.25%). Taken together, the content- and media-validation results indicate that the Smart Religius application is feasible for implementation in Islamic Religious Education instruction in higher education, while also pointing to responsiveness and speed as the aspect most in need of technical refinement before wider deployment.

Qualitative Insights from Key Informants

To complement the quantitative findings, illustrative excerpts from in-depth interviews with the 12 key informants are presented below, restated to preserve their original meaning before being interpreted further in the Discussion section. One Islamic Religious Education lecturer observed that students who used to memorize religious texts passively now actively log their daily *dhikr* and connect it to classroom discussion, remarking that "the habituation feature seems to close the gap between knowing and doing" (Lecturer informant, interview, 2025). An Islamic-psychology expert noted that the *Tazkiyah al-Nafs* and Qur'anic Healing features "give students a structured, faith-based outlet for academic stress that conventional counseling services in this setting do not yet provide" (Islamic-psychology expert, interview, 2025). A student participant remarked that "the radar chart makes my progress visible in six areas at once, not just grades," adding that this visibility made her "feel accountable for character and worship

consistency as much as coursework" (Student informant, focus-group discussion, 2025). These excerpts converge with the quantitative pattern in Tables 2 and 4: informants consistently linked the application's habituation and monitoring features to visible shifts in both academic engagement and spiritual practice, reinforcing the quantitative gains reported above.

Beyond these interview excerpts, the author's own participatory observation across the eight-week implementation period corroborated these accounts. Classroom visits and application-usage logs showed that students who described the sense of "being seen" in the radar chart during interviews were also among those who logged *riyāḍah ʿamaliyah* activity most consistently on the days immediately following each lecture, and lecturers who described the habituation feature as bridging "knowing and doing" were observed actively referencing students' dashboard progress during classroom mentoring sessions rather than relying solely on grades. This alignment between what informants reported in interviews and what the author observed directly in the field strengthens the credibility of the interview data through methodological triangulation.

Read together, the quantitative results in Tables 2, 3, and 4 and the qualitative evidence from interviews and observation converge on three principal findings, which the Discussion below addresses in turn. First, the Smart Religius application is associated with statistically significant, simultaneous improvement across all six learning-outcome domains of the *Ulû al-'Ilm* Model, with the spiritual domain showing the largest and most consistent gain in both the questionnaire data and informants' testimony. Second, the application's digital psychospiritual features are associated with a perceived reduction in academic stress, corroborated by both expert interviews and the author's field observation of student help-seeking behavior within the application rather than through external counseling channels. Third, the integration of Problem-Based Learning with prophetic-character features produced a synergistic effect on the ethical and social domains, in which moral practice and academic practice were reported, and observed, to develop together rather than in isolation.

Discussion

Six-Domain Improvement: Comparison with Previous Research and Theory

The finding that all six domains improved simultaneously, with the largest gain in the spiritual domain, is best understood through an epistemological reconstruction of Islamic Religious Education in the digital era, which requires a shift from a dogmatic-textual paradigm toward a holistic-integrative approach (Aggarwal et al., 2023). Epistemologically, the digital platform functions as an instrument that dissolves the dichotomy between religious and general knowledge, positioning *tawhid* as the theological framework integrated with advances in science and technology, consistent with the six-domain impact of the *Ulû al-'Ilm* Model documented by Budiyanti, Komariah, Hermawan, Jenuri, and Hyangsewu (2024). This pattern is also consistent with Amirudin, Muzaki, and Nurhayati's (2026) call for reflective digital pedagogy in religious character

formation in higher education, and with Aripin, Nurdiansyah, Arief, and Yusof's (2025) argument that an affectionate-approach pedagogy, in which the lecturer's role as role model is extended through digital mentoring, is central to reformulating Islamic Religious Education's effectiveness for the modern era.

The most plausible explanation for this pattern is mechanical rather than merely conceptual. In the cognitive and psychomotor domains, the LMS and digital modules enabled more structured and interactive knowledge delivery: Table 2 shows cognitive scores rising from 2.50% to 40.00%, supported by a Problem-Based Learning module built on Islamic case studies that trained critical-thinking skills. The affective, ethical, and social domains were addressed through live-mentoring features and short inspirational videos that extended the lecturer's role as role model beyond classroom hours. The spiritual domain, by contrast, was reinforced through daily, self-initiated *riyāḍah ʿamaliyah* logging that the application could prompt and record every day, a frequency and consistency of practice that the affective, ethical, and social domains, dependent on classroom interaction occurring only a few hours per week, could not match. This higher frequency and consistency of practice, rather than any difference in instructional quality across domains, most likely explains why the spiritual domain achieved the highest N-Gain (68.75%) while the psychomotor domain, which still relied on occasional face-to-face demonstration, showed the smallest gain (26.25%).

Digital Psychospiritual Intervention: Comparison with Previous Research and Theory

The post-pandemic mental-health crisis among students calls for contextual intervention (Dzikra et al., 2025), a need also underscored by Mohd Noh, Mat Noor, Mohamad Judi, Mat Zin, and Sahari Ashaari's (2025) call for structured digital self-management features in Islamic spiritual-health interventions for young people. The religious-coping mechanism built through the Smart Religius application's Digital *Dhikr* module, Qur'anic *Tadabbur* feature, *Tazkiyah al-Nafs* program, Qur'anic Healing, and Islamic Mindfulness feature appears to function as a protective factor against anxiety and mild depressive symptoms, consistent with Mansor, Mohd Yassin, and Ahmad's (2024) account of *tazkiyah al-nafs*-based Islamic psychospiritual approaches in therapeutic settings, and with Malviya and Greenham's (2025) finding that spiritual-care practitioners make a distinct contribution to mental-health support alongside conventional services. This pattern is also consistent with Muslim university students' qualitative experiences of Islamic digital therapeutics reported more broadly by Zannat, Mahmud, and Samsuri (2025); Aisyah et al. (2025) and Hambali & Mardiya, 2023) .

The likely mechanism behind this reduction in academic stress is accessibility rather than novelty alone. The religious-coping features gave students an outlet for distress that was immediately available, private, and framed in terms they already trusted, rather than requiring them to seek out a counselor or admit difficulty to another person. Because *Tazkiyah al-Nafs*,

Qur'anic Healing, and Islamic Mindfulness were embedded in the same application students already used for coursework, engaging with them likely carried less stigma and friction than a separate counseling referral would. All interviewed Islamic-psychology experts confirmed that these features made a tangible contribution to reducing students' academic stress, and the author's field observation similarly recorded students turning to these features independently during examination weeks, which plausibly explains why students used them consistently enough to experience a measurable reduction in stress.

Synergy between PBL and Prophetic Character Formation: Comparison with Previous Research and Theory

Implementation of Problem-Based Learning through the Islamic Case Study module enabled students to critically analyze contemporary socio-religious issues, consistent with Destriani, Warsah, Karolina, Sutarto, and Krzic's (2024) finding that 4C-based active learning can be implemented within Islamic religious education. Evaluation results show the ethical domain rising from 5.00% to 42.50% and the social domain from 3.75% to 35.00%, confirming that integrating active-learning methods with spiritual values enhances not only academic competence but also moral integrity holistically, in line with Ghufron and Wuryandani's (2025) module-based approach to character development, Hidayatulloh, Saumantri, and Ramdani's (2024) argument that living-values education strengthens character building in Indonesian Islamic schools, and Fithriy, Churiah, Julistiqomah, and Ubaidillah's (2026) framework linking moral internalization to modeling and habituation.

This synergy is best explained by the fact that the Islamic Case Study module required students to apply prophetic values to a live problem rather than recite them abstractly, so that ethical and social competencies were practiced, not merely discussed. *Siddiq* character was cultivated through a digital academic-integrity system, *amanah* through an Islamic-ethics-based assignment-submission system, and *tabligh* through discussion forums and community-based *da'wah* projects. Most informants, ten of the twelve, reported that integrating Qur'anic content with PBL successfully bridged sacred texts with contemporary concerns, and this process directly trained the competencies of *fathonah* (intelligence) and *tabligh* (*da'wah*-communication ability). The digital academic-integrity system and discussion-based *da'wah* projects most likely reinforced this effect by making *siddiq*, *amanah*, and *tabligh* behaviors visible and habitual within the same platform used for problem-based coursework, so that moral practice and academic practice were learned together rather than in separate contexts.

Theoretically, the Smart Religius application makes a tangible contribution toward SDG 4 (Quality Education) through inclusive, technology-based Islamic Religious Education learning access, toward SDG 3 (Good Health and Well-Being) through psychospiritual intervention, and toward SDG 16 (Peace and Justice) through the formation of tolerant and moderate character. At the level of theory, the dichotomy between religious and general knowledge is addressed by

positioning *tawhid* as the central episteme integrating all branches of knowledge, supported by a cross-disciplinary content repository linking Qur'anic verses with science, economics, technology, and global social issues; practically, the application offers other Islamic higher-education institutions a scalable model for pursuing academic and spiritual development within a single digital platform.

CONCLUSION

This study shows that the Smart Religius application, grounded in the *Ulû al-'Ilm* Model, is associated with statistically significant improvement across all six learning-outcome domains, with a mean gain of 40.21% and the highest N-Gain in the spiritual domain (68.75%); the *riyāḍah ʿamaliyah* process facilitated through the application was effective in internalizing character values, reaching a final mean score of 83.50 (very good) across the habituation, repetition, appreciation, and exemplary criteria; and the application received highly feasible ratings for content (91.00%) and media (89.58%) aspects, with its psychospiritual intervention features contributing meaningfully to reduced academic stress and improved student well-being. The implied message of these findings is that Islamic Religious Education can be transformed in the digital era without separating intellectual development from spiritual cultivation: theoretically, the study contributes to the epistemological reconstruction of Islamic Religious Education by integrating Qur'anic theological foundations into an adaptive digital ecosystem, and its holistic-integrative approach carries practical implications for advancing inclusive and equitable education, good health and well-being, and peaceful, just institutions; practically, this technology-based learning management affirms that the educator's role as digital role model remains irreplaceable in the internalization of students' character values, offering other Islamic higher-education institutions a scalable model for uniting academic and spiritual development within a single platform. This study is limited by its single-group, single-institution design without a control group or random assignment, which means the gains reported here should be read as preliminary evidence of feasibility rather than definitive causal proof, and by its eight-week timeframe, which is too short to establish whether the observed improvements are sustained over time. Subsequent research is therefore recommended to employ a controlled experimental design, conduct longitudinal studies spanning at least one academic year, develop augmented- and virtual-reality features to strengthen the psychomotor domain, compute standardized effect sizes, and extend implementation to primary and secondary education levels

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