Nusantara: Jurnal Pendidikan Indonesia
P-ISSN: 2774-3829|E-ISSN: 2774-7689
Vol. 5, No. 4, October 2025
https://journal.rumahindonesia.org/index.php/njpi/index

Developing and Validating a Religious Literacy Scale for Prospective Teachers: An EFA–CFA Study in The Society 5.0 Era

Nur Anisyah Rachmaningtyas[1], Hanif Cahyo Adi Kistoro[1], Khairul Hamimah Mohamad Jodi[2]
[1]Universitas Ahmad Dahlan, Daerah Istimewa Yogyakarta, Indonesia
[2]Open University Malaysia, Selangor, Malaysia

ABSTRACT
Purpose – This study aims to develop a valid and reliable instrument to measure the religious literacy of prospective teachers in the Society 5.0 era. Religious literacy is a crucial aspect that prospective teachers must possess to face the challenges of 21st-century education and serve as role models for students.
Method – This study employed a development model with FGDs involving 7 experts to validate the instrument. The 25-item instrument covers five dimensions: religious knowledge, digital literacy use, digital learning skills, attitudes and values, and digital ethics. It was tested on 172 Islamic Education teacher candidates from various LPTKs, with data analyzed using EFA and CFA. Despite using a Likert scale, ML estimation was applied, as commonly done when scales have five or more categories.
Findings – The analysis results showed that the instrument had good construct validity and high reliability (α = 0.915). The instrument developed in this study initially consisted of 34 items, which were then reduced to 25 items based on the results of a review by 9 experts using the Aiken Formula.
Research Implications – This instrument acts as a competency map to guide educational institutions in developing more focused and contextual digital religious literacy programs. Thus, integrating digital religious literacy into the curriculum and academic culture is essential to prepare Islamic Education teachers who are both professional and exemplary in promoting moderate, wise, and relevant religious values in the digital era.

OPEN ACCESS

ARTICLE HISTORY
Received: 11-08-2025
Revised: 15-09-2025
Accepted: 17-09-2025

KEYWORDS
religious literacy, assessment, future educators

Corresponding Author:

Nur Anisyah Rachmaningtyas
Faculty of Islamic Studies, Universitas Ahmad Dahlan, Daerah Istimewa Yogyakarta, Indonesia
Email: nur.ar@pai.uad.ac.id

Introduction

In the era of Society 5.0, demands on teacher quality are increasingly complex. Teachers are not only required to master pedagogical and professional competencies, but also to possess strong religious literacy to serve as role models for students ((Kuusisto et al., 2021; Soules & Jafralie, 2021). Within a human-centered and technology-integrated framework, religious literacy for future educators must encompass multiple dimensions. Religious knowledge reflects teachers' capacity to integrate spiritual and moral foundations into their practice, while the utilization of digital literacy and digital skills in learning highlight the ability to engage with technology responsibly and innovatively. Attitudes and values embody the human-centered aspect of Society 5.0, ensuring that digital advancement is grounded in ethical, empathetic, and inclusive orientations. The reality on the ground shows that the religious literacy of prospective teachers remains varied and uneven. Some prospective teachers struggle to distinguish valid sources of religious information from misleading ones, particularly in the digital space filled with information (Deroo & Mohamud, 2022). This explains the importance of developing a comprehensive instrument to assess the religious literacy of prospective Islamic Religious Education teachers. Finally, the focus on welfare and digital ethics represents the synergy of human well-being with technological development, positioning teachers as both moral guides and adaptive users of technology in educational contexts.

Adequate religious literacy will help prospective teachers develop mature characters and guide students in addressing various religious issues. 21st-century education must encourage the development of critical, creative, and adaptive thinking skills, as well as possessing strong religious values (Kuusisto et al., 2021). This aligns with the World Economic Forum's ten key skills for the future workforce, including complex problem-solving, emotional intelligence, decision-making, and adaptability (Henry, 2021). Teachers, as agents of education, are required to integrate these skills with sound religious literacy.

In addition to 21st-century skills, prospective teachers also need to master three key literacies: digital literacy, data literacy, and humanities literacy. Digital literacy is crucial for prospective teachers to utilize technology to access, process, and disseminate appropriate religious information (Tyner, 2014). Data literacy helps them think critically about the information they receive, while humanities literacy instills a deeper understanding of human values (Reksiana et al., 2024). These three literacies are closely related to religious literacy, as wise use of technology will help prospective teachers uphold religious values in educational practices. Religious literacy in prospective teachers is also closely linked to the formation of attitudes and character (Reksiana et al., 2024). Teachers with strong religious literacy will be better able to present themselves as wise individuals with noble morals and serve as role models in society (Richardson, 2017). Conversely, low religious literacy can impact teachers' ability to address contemporary religious issues, particularly in a digital space rife with hoaxes and hate speech. Therefore,

systematic development of religious literacy in prospective teachers needs to be carried out starting from their undergraduate studies.

Effective efforts to foster religious literacy require valid and reliable instruments to measure it. However, to date, there are still limited instruments specifically designed to assess the religious literacy of prospective teachers in the Society 5.0 era (Budi Santoso et al., 2024; Nasikin et al., 2024). Existing instruments generally only measure general religious aspects and do not address digital literacy or data literacy, which are highly relevant to today's educational context. The absence of these instruments hinders LPTK (Teachers' Training Institutions) in designing targeted development programs. Developing a religious literacy instrument for prospective teachers in the Society 5.0 era is a strategic step to map their level of religious literacy mastery. This instrument is expected to cover various dimensions of religious literacy, from religious knowledge and technology utilization to critical thinking skills, to attitudes and values. Thus, the measurement results can provide a comprehensive picture of prospective teachers' readiness to face increasingly complex educational challenges.

The results of this religious literacy measurement can then serve as a basis for LPTK to design development interventions tailored to students' needs. An appropriate development program will help prospective teachers improve the quality of their religious literacy, across knowledge, skills, and attitudes. Ultimately, teachers with strong religious literacy will be better prepared to face the dynamics of 21st-century education and become inspiring role models for students. Based on the above description, this study aims to develop a valid and reliable instrument to measure the religious literacy of prospective teachers in the Society 5.0 era. This instrument is expected to serve as a reference in the evaluation and development of religious literacy in LPTK (Teaching and Training Institutions), thus producing prospective teachers who are not only academically competent but also possess strong character and are able to adapt to current developments.

Methods

This research is a developmental study aimed at developing an instrument to measure the religious literacy of prospective teachers in the Society 5.0 era. The instrument development procedure was carried out through the following stages Mardapi (2017) is (1) formulating measurement objectives, (2) determining the scope of religious literacy relevant to prospective teacher competencies in the 21st century, which includes understanding religious teachings, critical thinking skills, problem solving, creativity, collaboration, effective communication, emotional intelligence, decision-making, service orientation, and openness to diversity; also integrating three main literacies: digital literacy, data literacy, and humanities literacy; (3) compiling an instrument grid as a guide so that each item can represent the dimensions of religious literacy and 21st-century

competencies; (4) compiling instrument items; (5) conducting focus group discussions (FGDs) with experts; (6) conducting readability tests and revising the instrument; (7) piloting the instrument on target respondents; and (8) conducting final revisions and assembling the instrument.

The instrument items are developed based on context or case studies where the results are reviewed based on the integration of literacy theory and good religious attitudes. The research team conducted focus group discussions (FGDs) with seven experts representing religious education, general education, and psychometrics. The experts provided input that was used to revise the instrument before the pilot testing phase. The pilot study was conducted with 172 prospective Islamic Religious Education teachers recruited from several universities. A purposive sampling technique was employed to ensure that participants represented a diverse range of institutional backgrounds relevant to teacher education. Demographically, respondents consisted of male and female university students, primarily between the ages of 18 and 20, reflecting the general characteristics of prospective undergraduate teachers. Furthermore, respondents were selected who had taken courses based on basic teaching and Islamic integration. The pilot data were then analyzed using exploratory factor analysis (EFA) to identify the instrument's factor structure, followed by confirmatory factor analysis (CFA) to ensure the instrument's construct validity.

In this study, the religious literacy assessment instrument was subjected to content validity evaluation conducted by seven experts specializing in religious education and learning assessment. The experts assessed each item based on three main aspects: relevance to religious literacy indicators, clarity of formulation, and representativeness of the construct to be measured. The assessment results were analyzed using Aiken's V-index Azwar (2012) to determine the level of agreement among experts regarding item quality. Furthermore, construct validity was tested using Confirmatory Factor Analysis (CFA) to examine model suitability and factor loading values, thereby ensuring that the instrument empirically measures the dimensions of religious literacy as designed. In confirmatory factor analysis (CFA), model fit is generally evaluated using several fit indices. According to methodological guidelines, the Tucker–Lewis Index (TLI) and the Comparative Fit Index (CFI) are considered acceptable when values are ≥ 0.90, while the Standardized Root Mean Square Residual (SRMR) ≤ 0.08 and the Root Mean Square Error of Approximation (RMSEA) ≤ 0.08 indicate a good fit between the hypothesized model and the observed data (Zulkifli et al., 2024).

Instrument reliability to measure internal consistency was calculated using Cronbach's Alpha, with a minimum acceptance limit of 0.70. The statistical procedures were conducted with JASP software version 0.18.3, which provided reliable computational accuracy and impartial evaluation of both item-level and construct-level performance of the instrument. JASP was selected because it is an open-source statistical package that

provides a user-friendly interface while supporting advanced psychometric analyses such as exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). In addition, JASP offers robust estimation methods for ordinal data, including WLSMV with polychoric correlations, which makes it suitable for analyzing Likert-type items in scale development and validation studies.

Result

The results of this study produced an instrument designed to measure the level of religious literacy in prospective Islamic Religious Education (ISE) teacher students. This instrument is a systematic and scientifically developed tool to address the need for mapping religious literacy competencies in the digital era. This instrument is crucial because prospective Islamic Religious Education (ISE) teachers are expected not only to possess a strong understanding of religion but also to be able to integrate these values into the context of digital learning and life (Al Mursyidi & Darmawan, 2023).

This instrument is based on five main indicators: (1) religious knowledge, which encompasses an understanding of the basic teachings of the religion; (2) utilization of digital literacy, which relates to the ability to access and use online religious resources; (3) digital skills in religious learning, which assess the extent to which students can use technology in the learning process; (4) attitudes and values, which reflect how tolerant, polite, and wise students are in digital interactions; and (5) orientation toward the welfare and digital ethics, which assess students' awareness of maintaining privacy, spreading goodness, and avoiding negative content online. Each of these indicators is developed into several structured statements.

The complete statement items derived from the five indicators are presented in Table 1. This table details the items that have been validated and deemed appropriate based on expert analysis and statistical testing. The scoring procedure of the developed instrument is based on a four-point Likert scale ranging from 1 (Strongly Disagree) to 4 (Strongly Agree). To reduce response bias, several negatively phrased items are reverse-coded so that higher scores consistently reflect stronger levels of religious literacy and digital competence. With 25 items in total, possible scores range from 25 to 100, where lower scores indicate weak literacy, mid-range scores suggest moderate literacy, and higher scores demonstrate strong literacy. Each of the five underlying factors religious knowledge, utilization of digital literacy, digital skills in learning, attitudes and values, and orientation to welfare and digital ethics can be separately interpreted, with subscale scores categorized as low, medium, or high. This multidimensional approach allows for both overall and factor-specific evaluations of teacher candidates' readiness (Schwab et al., 2025).

Beyond its psychometric rigor, the instrument provides educational institutions with practical implications for both assessment and intervention. By generating individual and

group profile reports, institutions can obtain a comprehensive picture of strengths and weaknesses among prospective Islamic Religious Education teachers (Samsuddin & Siregar, 2024). For example, a teacher candidate may demonstrate strong religious knowledge and ethical values but reveal moderate competence in digital literacy utilization, signaling the need for targeted training in integrating digital technologies into pedagogy. In this way, the instrument functions not only as an academic evaluation tool but also as a strategic basis for designing digital-based religious character development programs at teacher education institutions (LPTK). Ultimately, this dual utility positions the instrument as both a diagnostic measure and a planning framework to cultivate future educators who are spiritually grounded, pedagogically capable, and digitally adaptive within the Society 5.0 paradigm. Beyond functioning as an academic evaluation instrument, this scale provides a framework for LPTK to plan digital-based initiatives in religious character formation (Samsuddin & Siregar, 2024). It offers institutions comprehensive insights into candidates' religious literacy profiles, guiding the development of interventions that strengthen their spiritual, pedagogical, and digital readiness as future Islamic Religious Education teachers.

Table 1. Grid of Religious Literacy Assessment Instruments for Prospective Teachers

Aspect	Indicator	Item Number
Religious Knowledge	Understand the main teachings of religion (beliefs, worship, morals)	1, 2, 3
	Distinguishing between authentic and deviant religious teachings	4
	Understanding contemporary religious issues that are developing in society	5
Utilization of Digital Literacy	Finding reliable sources of religious literature via the internet	6, 7
	Verifying the truth of religious news or information	8, 9
	Using digital platforms to deepen religious understanding	10
Digital Skills in Religious Learning	Creating educational religious content on social media	11
	Using technology to teach religious material creatively	12, 13
	Using Learning Management System (LMS) and interactive media for religious learning	14, 15
Attitudes and Values	Do not spread religious information whose truth is not yet clear	16
	Show openness to varying religious perspectives across real and online environments.	17, 18

Aspect	Indicator	Item Number
Well-being Orientation and Ethical Digital Engagement	Using social media to spread messages of kindness and avoid hate speech	19, 20
	Utilizing technology for constructive religious communication and educational engagement	21
	Maintaining data privacy and security in digital activities.	22
	Be selective in choosing sources or religious figures to follow on social media.	23
	Prioritizing religious values in digital activities.	24, 25

The instrument developed in this study initially consisted of 34 items, which were reduced to 25 items following an expert judgment process involving 7 raters, analyzed with the Aiken's V formula. With 7 raters and 5 assessment scales, the minimum required V value was 0.75, and the obtained result of 0.890 demonstrated high content validity. Construct validation was subsequently pursued through exploratory factor analysis (EFA) using Maximum Likelihood (ML) as the extraction method, combined with oblique rotation (Promax) to account for possible correlations among factors (Ahmed & Maruod, 2025; Jafarnezhad et al., 2025). During the initial stage, 9 items were eliminated because their Measure of Sampling Adequacy (MSA) values on the diagonal of the anti-image correlation matrix fell below the 0.50 threshold, indicating that these items did not share sufficient common variance with the rest of the scale.

After item elimination, the Kaiser-Meyer-Olkin (KMO) measure reached 0.908, which is considered marvelous, confirming sampling adequacy for factor analysis. The communalities of the remaining 25 items were all > 0.50, and factor loadings met the recommended cut-off of ≥ 0.50, while no substantial cross-loading (> 0.30 on multiple factors) was observed (Ximénez et al., 2022). These results indicate a stable and interpretable factor structure (Hajaroh et al., 2023). To further strengthen construct validity, confirmatory factor analysis (CFA) was then conducted, as shown in Figure 1. Consistent with Cramer's argument, EFA was used to explore the latent constructs, while CFA was performed to statistically test the model fit of the hypothesized structure derived from theoretical and empirical considerations.

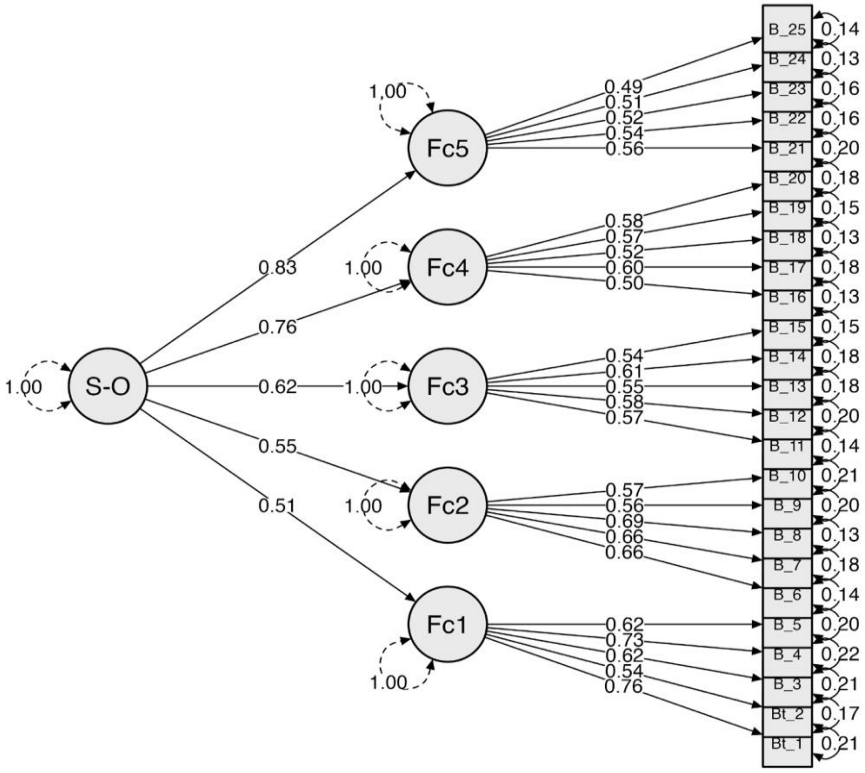

Figure 1. The result of the exploratory factor analysis with EFA

Figure 1 presents the confirmatory factor analysis (CFA) results, which support the construct validity of the digital religious literacy instrument for prospective teachers. The Chi-square test yielded a value of 497.098 with 270 degrees of freedom (df), p = 0.001. Although statistically significant, this result is not necessarily indicative of poor fit, as the Chi-square statistic is well known to be highly sensitive to large sample sizes. Therefore, model evaluation should be based on a combination of relative and absolute fit indices. The model demonstrated acceptable fit across multiple indices: the Root Mean Square Error of Approximation (RMSEA) was 0.070 with a 90% confidence interval of [0.060, 0.080], which falls within the conventional cut-off values (≤ 0.08) (Long et al., 2023). The Comparative Fit Index (CFI = 0.921) and the Tucker-Lewis Index (TLI = 0.908) both exceeded the threshold of 0.90, indicating good incremental fit. In addition, the Standardized Root Mean Square Residual (SRMR = 0.054) was below the recommended maximum of 0.08. Collectively, these indicators confirm that the hypothesized factor structure provides a satisfactory representation of the observed data.

In terms of reliability, the Cronbach's Alpha estimate yielded a value of 0.915. This value is well above the recommended minimum threshold of 0.70 Long et al. (2023), indicating that the instrument's items have very high internal consistency. This means that all items in the instrument perform stably and reliably in measuring the same construct, namely digital religious literacy. Thus, the final product of this study is a valid and reliable

instrument, which can be used to measure the level of religious literacy of prospective teachers, as presented in detail in Table 2.

Table 2. Factor Loading Results of The Religious Literacy Measurement Instrument for Prospective Teacher Students

Indicator	Item	Loading Factor
Understand the main teachings of religion (beliefs, worship, morals)	I understand well the main teachings of the religion that I follow (beliefs, worship, morals).	0.764
	I am able to explain the relationship between religious teachings and everyday life.	0.539
	I know the sources of religious law that can be used as a guide to life.	0.616
Distinguishing between authentic and deviant religious teachings	I can distinguish between authentic religious teachings and deviant ones.	0.732
Understanding contemporary religious issues that are developing in society	I understand contemporary religious issues that are developing in society.	0.616
Finding reliable sources of religious literature via the internet	I am able find source literature religious trusted via the internet	0.664
	I am used to reading religious books, articles, or journals in digital form.	0.656
Verifying the truth of religious news or information	I can verify the truth of religious news or information on social media.	0.693
	I am able to critically evaluate religious information to avoid being influenced by hoax or slanderous news	0.558
Using digital platforms to deepen religious understanding	I use digital applications or platforms to deepen my religious understanding.	0.568
Creating educational religious content on social media	I am able to create educational religious content on social media	0.574
Using technology to teach religious material creatively	I can use technology to teach religious material creatively.	0.578
	I am able to design technology-based religious teaching materials (e.g. videos, e-modules).	0.552
Using Learning Management System (LMS)	I can use Learning Management System (LMS) for religious learning.	0.614

Indicator	Item	Loading Factor
and interactive media for religious learning		
	I use interactive media (for example online quizzes) to convey religious material.	0.543
Do not spread religious information whose truth is not yet clear	I do not spread religious information whose truth is not yet clear.	0.501
Be tolerant of differences in religious understanding, both in real and digital environments.	I am tolerant of differences in religious understanding in the digital environment.	0.602
	I am able to have polite discussions with people who have different religious views.	0.519
Using social media to spread messages of kindness and avoid hate speech	I use social media to spread messages of kindness.	0.574
	I avoid hate speech related to religion.	0.581
Utilizing technology for positive preaching and education	I utilize technology for the purposes of positive preaching and education.	0.564
Maintaining data privacy and security in digital activities.	I maintain privacy and data security when accessing religious content online.	0.541
Be selective in choosing sources or religious figures to follow on social media.	I am selective in choosing the accounts or religious figures I follow on social media.	0.520
Prioritizing religious values in digital activities.	I prioritize religious values in every digital activity.	0.511
	I strive to be a role model of religious behavior in digital spaces.	0.487

As presented in Table 2, the digital religious literacy instrument constructed in this study comprises five underlying factors encompassing a total of 25 items. But, the factor loading of on the last item (0.487) is slightly below the conventional threshold of 0.50, it was retained because it represents a theoretically significant construct teachers' role-modeling of religious behavior in digital spaces which is not sufficiently captured by other items. These five factors represent various important aspects of prospective teachers' religious literacy, from understanding the basic teachings of religion to digital skills that support the dissemination of religious values. All items in this instrument underwent content validation by nine experts using the Aiken Formula, and construct validity was tested through Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA).

Furthermore, the high Cronbach's Alpha reliability value of 0.915 confirms the instrument's internal consistency in measuring the intended construct.

Discussion

Based on the results of the construct validity analysis using Confirmatory Factor Analysis (CFA), each instrument item was evaluated using its factor loading value to determine the extent to which the item represented the religious literacy construct being measured. Higher factor loading values indicate a stronger contribution of the item to the construct dimension, while lower values indicate the need for attention to the appropriateness of the content to the measured indicators. The results of the factor loading analysis showed that all items had values above 0.500, indicating good construct validity. The highest loading value was found in the indicator of understanding the basic teachings of religion, specifically the statement "I understand well the basic teachings of my religion (faith, worship, morals)" with a loading of 0.764. This reinforces the assumption that mastering the basic teachings of religion is the main foundation for developing digital religious literacy. Meanwhile, items related to the application of religious values in daily life had loadings ranging from 0.50 to 0.60. This indicates a gap between theoretical understanding and the contextual implementation of religious values in digital life.

In addition, this instrument also explores dimensions of religious digital skills, such as the ability to search for reliable religious literature, verify religious information, and create faith-based educational content on social media. The loading values for these items range from 0.55 to 0.66, indicating that digital competency in the religious domain is beginning to develop among prospective teachers. However, these competencies still need to be strengthened through ongoing training and coaching to better prepare them for the challenges of the dynamic digital era. The use of social media and technology should be directed not only towards information consumption but also towards the production of educational and ethical religious content.

Other interesting indicators relate to attitudes of religious tolerance, caution in selecting digital religious figures, and rejection of religious-based hate speech. Although these items have lower loading values than the cognitive indicators, they remain statistically valid and contextually relevant. This demonstrates that digital religious literacy encompasses ethical and affective dimensions, not just technical skills or knowledge (Huda & Hashim, 2022). In this context, comprehensive digital religious literacy is one that balances religious understanding, skills, and wise religious attitudes in the digital space (Lowe & Lowe, 2018). The results of this study also indicate that the digital religious literacy level of prospective teachers is in the intermediate category. Although the instrument generally demonstrates good validity and reliability, individual scores may indicate variations in the competencies of prospective teachers (Aldrup et al., 2020). This finding

suggests that not all students possess the understanding and religious literacy skills required for the teaching profession, particularly in the digital era, which is rife with disinformation, intolerance, and online radicalism. Therefore, strengthening religious literacy needs to be a serious focus in the curriculum of LPTK.

Digital religious literacy development for prospective teachers must be an integral part of the educational process at LPTKs and cannot be done only temporarily or as a mere formality (Lowe & Lowe, 2018; Nasucha et al., 2023). This literacy encompasses more than just the ability to understand religious texts or use digital media, but also instills living and relevant religious values in everyday life, particularly in the digital space. Given the increasingly complex religious challenges in the digital era such as the rise of hoaxes, hate speech, and media-based radicalism prospective teachers must be equipped with the skills to filter information, be critical, and become agents of religious moderation. The transformation from knowledge into wise digital religious attitudes and behaviors is not an instant process, but rather the result of consistent practice and real role models (Ilaihi & Nurdin, 2025). Therefore, digital religious literacy development needs to be carried out through a holistic approach that involves contextual and applicable learning design (Sukmawati & Inayati, 2025). Learning materials need to be packaged so that they not only enhance cognitive intelligence but also address students' affective and psychomotor aspects (Ilaihi & Nurdin, 2025). Evaluation is not solely test-based but also includes observation, portfolios, and in-depth reflection on religious experiences in the digital space.

Another important aspect to foster is the role model of lecturers and the campus ecosystem, which is crucial in shaping the religious literacy character of prospective teachers. Lecturers, as central figures in learning, must be able to model religious behavior and ethical media use (Al Mursyidi & Darmawan, 2023). The campus environment must also foster an inclusive religious atmosphere, open to differences, while remaining grounded in values of moderation. Such development will not only produce academically competent teachers but also teachers with integrity in bringing religious values into the dynamic and challenging digital space (Taja et al., 2021). Instilling digital religious literacy must also address the current challenges facing the younger generation, such as information transparency, media polarization, and the influence of algorithms in shaping religious opinions. The instrument developed in this research can be an effective diagnostic tool for comprehensively mapping student competencies (Sukmawati & Inayati, 2025). This way, intervention and coaching programs can be tailored to meet specific targets based on accurate and valid data. Ultimately, digital religious literacy is not only a personal need but also a professional responsibility of prospective teachers as educators of the future generation. Teachers who possess strong religious literacy will be able to become agents of religious moderation and pioneers of narratives of goodness in the digital space.

Conclusion

This research has successfully developed a valid and reliable instrument to measure the level of digital religious literacy of prospective Islamic Religious Education teacher students. The validity score was 0.890 (high category) and the reliability score was 0.915 (very high category). The instrument covers five main aspects: religious knowledge, utilization of digital literacy, digital skills in learning, religious attitudes and values, and orientation towards the welfare and digital ethics. Through a series of rigorous validity and reliability tests, this instrument has been proven to have a strong and reliable construct structure for use in the context of higher education, particularly in Teacher Training Institutions (LPTK). More than just a measuring tool, this instrument serves as a competency map that can help educational institutions design religious literacy development programs that are more focused, contextual, and responsive to the challenges of the digital era. Digital religious literacy is not only about understanding religious texts or media skills, but also concerns the character and integrity formation of prospective teachers in facing the complex dynamics of the digital space. Thus, strengthening digital religious literacy must be an integral part of the curriculum and academic culture at LPTK so that it can produce PAI teachers who are not only capable of teaching, but also become role models in bringing moderate, wise, and relevant religious values in the digital era.

References

Ahmed, A., & Maruod, W. (2025). Comparative analysis of varimax and Promax rotation methods in exploratory factor analysis. *Edelweiss Applied Science and Technology*, *9*(5), 501–513. https://doi.org/10.55214/25768484.v9i5.6929

Al Mursyidi, B. M., & Darmawan, D. (2023). The Influence of Academic Success of Islamic Religious Education and Social Media Involvement on Student Morality. *Al-Fikru: Jurnal Ilmiah*, *17*(2), 321–331. https://doi.org/10.51672/alfikru.v17i2.278

Aldrup, K., Carstensen, B., Köller, M. M., & Klusmann, U. (2020). Measuring Teachers' Social-Emotional Competence: Development and Validation of a Situational Judgment Test. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.00892

Azwar, S. (2012). *Reliabilitas dan Validitas* (4th ed.). Pustaka Pelajar.

Budi Santoso, Triono, M., Ash Shiddiq, M. A., & Arifin, S. (2024). The Readiness of Islamic Religious Education Teachers to Enter the Era of Industrial Society 5.0. *Tafkir: Interdisciplinary Journal of Islamic Education*, *5*(4), 624–636. https://doi.org/10.31538/tijie.v5i4.1183

Deroo, M. R., & Mohamud, I. (2022). "I Would Rather Be Informed Than Misinformed": Critical Conversations Supporting Transnational Religious Identity Across Time and Space. *English Teaching: Practice & Critique*, *21*(3), 254–266.

https://doi.org/10.1108/ETPC-08-2021-0105

Hajaroh, M., Dwiningrum, S. I. A., & Rukiyati, R. (2023). Development of The Theoretical Construction Model of Muslim Religious Character with Confirmatory Factor Analysis to Develop a Measurement Scale. *International Journal of Islamic Thought*, *23*(1). https://doi.org/10.24035/ijit.23.2023.257

Henry, A. M. (2021). Religious Literacy in Social Media: A Need for Strategic Amplification. *Religion & Education*, *48*(1), 89–101. https://doi.org/10.1080/15507394.2021.1876507

Huda, M., & Hashim, A. (2022). Towards Professional and Ethical Balance: Insights Into Application Strategy on Media Literacy Education. *Kybernetes*, *51*(3), 1280–1300. https://doi.org/10.1108/K-07-2017-0252

Ilaihi, W., & Nurdin, A. (2025). Religious Iconography in Digital Media: Analyzing its Influence on the Untouchable Society. *KOMUNIKA: Jurnal Dakwah Dan Komunikasi*, *19*(1), 59–74. https://doi.org/10.24090/komunika.v19i1.11864

Jafarnezhad, A., Maralani, H. G., Sahraian, A., & Hassanzadeh, J. (2025). Comparison of Common Methods of Extraction and Rotation in Exploratory Factor Analysis to Validate the Addiction Potential Questionnaire of 12-18-Year-Old Iranian Children. *Acta Medica Iranica*. https://doi.org/10.18502/acta.v63i1.18592

Kuusisto, E., Ubani, M., Nokelainen, P., & Toom, A. (2021). *Good Teachers for Tomorrow's Schools: Purpose, Values, And Talents in Education*, 16. Brill.

Long, C., Zheng, L., Liu, R., & Duan, Z. (2023). Structural Validation and Measurement Invariance Testing of the Chinese Version of the eHealth Literacy Scale Among Undergraduates: Cross-Sectional Study. *Journal of Medical Internet Research*, *25*, e48838. https://doi.org/10.2196/48838

Lowe, S. D., & Lowe, M. E. (2018). *Ecologies of Faith in a Digital Age: Spiritual Growth through Online Education*. InterVarsity Press. https://books.google.co.id/books?id=7-9dDwAAQBAJ

Mardapi, D. (2017). *Pengukuran, Penilaian, dan Evaluasi Pendidikan*. Parama Publishing.

Nasikin, M., Abzar, M., & Afandi, N. K. (2024). Strengthening Islamic Religious Education Teacher Competencies in the Society 5.0 Era: Challenges and Interventions. *AL-ISHLAH: Jurnal Pendidikan*, *16*(3). https://doi.org/10.35445/alishlah.v16i3.5728

Nasucha, M. R., Khozin, K., & Thoifah, I. (2023). Synergizing Islamic Religious Education and Scientific Learning in the 21st Century: A Systematic Review of Literature. *Jurnal Pendidikan Agama Islam (Journal of Islamic Education Studies)*, *11*(1), 109–130. https://doi.org/10.15642/jpai.2023.11.1.109-130

Reksiana, Abuddin Nata, Dede Rosyada, Maila Dinia Husni Rahiem, & Abdulbosit R. Rafikjon Ugli. (2024). Digital Extension of Digital Literacy Competence for Islamic Religious Education Teachers in the Era of Digital Learning. *Jurnal Pendidikan Agama Islam*, *21*(2), 402–420. https://doi.org/10.14421/jpai.v21i2.9719

Richardson, M. J. (2017). Religious Literacy, Moral Recognition, and Strong Relationality.

Journal of Moral Education, *46*(4), 363–377. https://doi.org/10.1080/03057240.2017.1324771

Samsuddin, S., & Siregar, I. S. (2024). Optimizing Islamic Religious Education: A Case Study on Curriculum Management in Planning, Implementation, and Evaluation. *AL-ISHLAH: Jurnal Pendidikan*, *16*(4), 5150–5162. https://doi.org/10.35445/alishlah.v16i4.6389

Schwab, S., Lüftenegger, M., & Hassani, S. (2025). Legitimacy, Effectiveness, and Feasibility of Language Pull-Out Classes – Assessing In-Service Teachers' Attitudes Towards Segregated Language Support. *International Journal of Inclusive Education*, 1–17. https://doi.org/10.1080/13603116.2025.2546921

Soules, K. E., & Jafralie, S. (2021). Religious Literacy in Teacher Education. *Religion & Education*, *48*(1), 37–56. https://doi.org/10.1080/15507394.2021.1876497

Sukmawati, S., & Inayati, N. L. (2025). Optimization of Islamic Religious Education and Ethics Learning with The Integration of Contextual Teaching and Learning with Digital Technology. *Jurnal Cendekia Media Komunikasi Penelitian Dan Pengembangan Pendidikan Islam*, *17*(01), 286–306. https://doi.org/10.37850/cendekia.v17i01.981

Taja, N., Nurdin, E. S., Kosasih, A., Suresman, E., & Supriyadi, T. (2021). Character Education in the Pandemic Era: A Religious Ethical Learning Model through Islamic Education. *International Journal of Learning, Teaching and Educational Research*, *20*(11), 132–153. https://doi.org/10.26803/ijlter.20.11.8

Tyner, K. (2014). *Literacy in a Digital World*. Routledge. https://doi.org/10.4324/9781410601971

Ximénez, C., Revuelta, J., & Castañeda, R. (2022). What are the consequences of ignoring cross-loadings in bifactor models? A simulation study assessing parameter recovery and sensitivity of goodness-of-fit indices. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.923877

Zulkifli, N. R., Aimran, N., & Deni, S. M. (2024). The Effect of Regularized Unweighted Least Squares on CFI, TLI, RMSEA and TLI in Structural Equation Modeling. *International Research Journal of Multidisciplinary Scope Учредители: Iquz Galaxy Publisher*, *5*(4), 392-401.