
Structural Model of Instructional Media Course Effectiveness and Emotional Intelligence on the Teaching Readiness of Islamic Religious Education Students: The Mediating Role of Instructional Media Design Competence

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ABSTRACT

In the digital era, prospective Islamic Religious Education (PAI) teachers are expected to integrate religious knowledge with the ability to design appropriate technology-supported instruction. Preliminary observations at Universitas Singaperbangsa Karawang indicated a gap between students' coursework experiences and their perceived readiness to develop interactive instructional media. This study examined the structural relationships among Learning Media Course Effectiveness, Emotional Intelligence, Media Design Competence, and Teaching Readiness, positioning Media Design Competence as a proposed mediating variable. A quantitative, cross-sectional design was employed, with structured questionnaire data collected from 58 third-semester PAI students and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). Course Effectiveness ($\beta = 0.295$) and Emotional Intelligence ($\beta = 0.411$) were positively and significantly associated with Media Design Competence, jointly explaining 35.0% of its variance. Emotional Intelligence exhibited a numerically larger path coefficient, although the statistical significance of the difference between the coefficients was not established. Media Design Competence was strongly associated with Teaching Readiness ($\beta = 0.728$; $f^2 = 1.126$), with the model explaining 53.0% of the variance in readiness. These findings highlight the relevance of academic experiences and emotional abilities to media design competence and its association with teaching readiness. However, these findings do not establish full mediation because the corresponding direct paths are not reported, and the cross-sectional design precludes definitive causal conclusions. The study suggests integrating practical media design activities with support for managing learning challenges in PAI teacher education, while further research should test the proposed indirect effects and evaluate the effectiveness of such instructional approaches.

Keywords: Teaching Readiness, Learning Media Design, Emotional Intelligence

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INTRODUCTION

Islamic Religious Education (PAI) in the contemporary era faces fundamental challenges as the global educational landscape shifts toward the digital age. The conventional methods of transferring religious knowledge, such as one-way lectures and text memorization, are increasingly insufficient to meet the learning needs of today's students, particularly Generation Alpha. Recent empirical studies suggest that modern learners benefit significantly from interactive, technology-enhanced, and visually engaging learning environments. Consequently, the integration of digital competence and the Technological Pedagogical Content Knowledge (TPACK) framework has become crucial in teacher education. For PAI, where materials often involve abstract concepts of faith, Islamic civilization, and jurisprudence (fiqh), the ability to design engaging digital media helps translate abstract values into concrete, comprehensible visualizations. Aligning with contemporary pedagogical standards, mastering learning media design skills is now recognized as an essential competency for prospective PAI teachers to effectively contextualize religious values in the digital era.¹

While the transfer of religious knowledge was once achieved through conventional methods such as step-by-step lectures and text memorization these "Digital Immigrant" approaches now face a critical disconnect. Today's learners are "Digital Natives" (including Generation Alpha), a demographic that processes information at "twitch speed" through interactive, non-linear, and visual media, rendering traditional "tell-test" instruction largely ineffective.² For this generation, technology is not just a tool; it is their living ecosystem. Therefore, rigid Islamic Education (PAI) learning with minimal digital visualization will be considered boring and will fail to internalize spiritual values into the minds of modern learners.³ This phenomenon requires the Teacher Training Institution to produce prospective Islamic Religious Education teachers who are not only theologically competent, but also technologically adaptive in presenting teaching materials.

The educational value of digital media extends beyond the delivery of religious content to the creation of more participatory learning experiences. Pujawardani et al. (2026), drawing on a qualitative study involving a literature review and observations of digital learning practices, highlight the potential of digital platforms, interactive applications, and multimedia resources to support students' motivation, participation, and understanding of Islamic values. Their study also identifies digital literacy gaps, limited resources, and the need for educator guidance as challenges to meaningful implementation. These findings provide a rationale for examining how prospective PAI teachers develop the competence to design instructional media that align with learning objectives and learners' needs. In this context, media design competence becomes a relevant aspect to investigate in relation to teaching readiness.⁴

¹ Ahmad Sa'roni and others, 'Integration of Technology and Innovation in Islamic Religious Education Learning Models in the Digital Era: A Systematic Literature Review', *Edusoshum : Journal of Islamic Education and Social Humanities*, 6.2 (2026), pp. 890–99, doi:10.52366/EDUSOSHUM.V6I2.368.

² Marc Prensky, 'Digital Natives, Digital Immigrants Part 1', *On the Horizon*, 9.5 (2001), pp. 1–6, doi:10.1108/10748120110424816.

³ Azhar Arsyad, *Media Pembelajaran*, Edisi Revisi (Jakarta: Rajawali Pers, 2019).

⁴ Hani Hadiati Pujawardani and others, 'The Role of Digital Media in Improving Student Engagement in Islamic Religious Education', *Eduprof: Islamic Education Journal*, 8.1 (2026), pp. 103–16,

The paradigm shift from teacher-centered to student-centered pedagogy positions learning media as a vital component of the pedagogical process.⁵ Islamic Religious Education (PAI) material, often abstract, such as concepts of faith, the history of Islamic civilization, or Islamic jurisprudence (fiqh), requires concrete visualizations for easy comprehension.⁶ Reliance on one-way lectures has been shown to decrease student attention and diminish the essence of learning. Conversely, integrating interactive learning media is believed to increase student motivation, memory retention, and conceptual understanding. Therefore, mastering learning media design skills is a mandatory competency, not an optional one, for prospective Islamic Religious Education (PAI) teachers. Without this skill, Islamic Religious Education (PAI) teachers will lose their connection with the world of their students, leading to alienation from religious values in their lives.⁷

Ideally, Islamic Education students who have taken courses related to media and educational technology are well-prepared to teach.⁸ This phenomenon is clearly illustrated by students in the Islamic Religious Education Study Program (bachelor's degree) at Singaperbangsa University, Karawang (UNSIKA), particularly in their third semester. Based on preliminary studies and field observations conducted by students at partner schools, it was found that students require a much more varied media approach than conventional methods alone. Students received direct input that the success of transferring religious values is highly dependent on the media instruments used (Field Observation, 2025).

Specifically, field findings demonstrate an apparent disparity in needs. At the secondary school level, as observed at SMPN 3 Telagasari, students' ability to recite the Quran remains low, is not in accordance with the rules of tajwid, and their motivation to study religion is minimal. Real needs in the field require interactive and visual Islamic Religious Education learning media to attract the interest of adolescent students, not just static textbooks. Meanwhile, observations at SDN Karangpawitan 1 (Grade 6) revealed a different challenge: although students come from middle- to upper-socioeconomic backgrounds and have good access to technology, they have very diverse learning styles. Teachers face the challenge of designing differentiated learning because some students can absorb material quickly, while others require repetition. This condition emphasizes that prospective teachers must have the technical competence to design adaptive and contextual media.

In addition to technical competency, field findings also highlight psychological aspects.

doi:10.47453/EDUPROF.V8I1.432.

⁵ Kamarul Azmi Jasmi, Rasidah Sahran, and Muhamad Amirul Amin Mohamad Nazim, 'A Student-Centered Teaching and Learning Approach Among Excellent Teachers of Islamic Education', *SYAMIL: Journal of Islamic Education*, 10.2 (2022), doi:10.21093/sy.v10i2.6156.

⁶ Suparjo, Muh Hanif, and S. Dimas Indianto, 'Developing Islamic Science Based Integrated Teaching Materials for Islamic Religious Education in Islamic High Schools', *Pegem Journal of Education and Instruction*, 11.4 (2021), pp. 282–89, doi:10.47750/PEGEGOG.11.04.27.

⁷ Gusti Sab'an Wildan and Bunyamin, 'Pemanfaatan Media Pembelajaran Interaktif Untuk Meningkatkan Pemahaman Konsep Keislaman Dalam Pendidikan Agama Islam', *Jurnal Bilqolam Pendidikan Islam*, 6.1 (2025), doi:10.51672/jbpi.v6i1.582.

⁸ Fentika Zahra Qoirunnisa and Ikhrom Ikhrom, 'Problematika Implementasi Kurikulum Merdeka Pada Mata Pelajaran PAI Di SMK Islamic Center Baiturrahman', *JIES: Journal of Islamic Education Studies*, 3.2 (2025), p. —, doi:10.58569/jies.v3i2.1132.

Observations at MA Nihayatul Amal and SDN Karangpawitan 1 confirmed that teacher success is not only measured by students' academic achievement, but also by their ability to handle learning difficulties with a patient, empathetic, and structured approach. This indicates that Teaching Readiness (KM) is not only built on hard skills but also requires a foundation in soft skills, specifically Emotional Intelligence (EQ). Students with low emotional intelligence tend to give up easily when faced with challenging tasks or become frustrated when they fail to design complex media. Therefore, emotional stability and empathy are crucial internal fuels for prospective Islamic Religious Education (PAI) teachers.⁹¹⁰

Psychological perspectives provide an important foundation for understanding the preparation of prospective Islamic Religious Education teachers. Through a literature review, Sodikin et al. (2026) emphasize the integration of psychology into educational goals, curriculum design, and teaching methodologies to support balanced cognitive, affective, and spiritual development. Their discussion suggests that Islamic education should attend to learners' psychological needs alongside intellectual growth and religious understanding. Applied to teacher preparation, this perspective provides a conceptual rationale for considering emotional abilities alongside pedagogical and technical competencies. Accordingly, the present study examines emotional intelligence as a potential correlate of instructional media design competence, extending the discussion toward a specific relationship that requires empirical investigation.¹¹

Although the urgency of technical competence and emotional maturity is very real, problems arise when the lecture process is not fully effective in bridging these needs.¹² It is common for students to achieve high theoretical grades in their Learning Media courses but struggle technically when asked to produce media independently. Previous research has shown that entrepreneurship education (in this context, analogous to media education) has a positive impact on intention and readiness. However, its effectiveness depends heavily on how it shapes attitudes and actual competencies. If Course Effectiveness (EMP) focuses solely on the cognitive domain without adequate design practice, students will feel unprepared when entering the real world. Furthermore, the role of emotional intelligence is often overlooked in overly technical curriculum development. However, designing creative media requires perseverance and effective emotional management. Various previous studies have made significant contributions by demonstrating that teachers' practical skills in using learning media are directly proportional to their conceptual understanding, particularly regarding technology-based media.¹³ Building upon these valuable

⁹ Daniel Goleman, *Kecerdasan Emosional* (Jakarta: Gramedia Pustaka Utama, 2000).

¹⁰ Fauziah, 'Hubungan Kecerdasan Emosional Dengan Prestasi Belajar Mahasiswa Semester II Bimbingan Konseling UIN Ar-Raniry', *Jurnal Edukasi (Mendia Kajian Bimbingan Konseling)*, 1 (2015), pp. 90–98.

¹¹ Unang Sodikin and others, 'The Urgency of Psychology in Islamic Education: Building Cognitive, Affective, and Spiritual Balance in Education', *Eduprof: Islamic Education Journal*, 8.1 (2026), pp. 1–16, doi:10.47453/EDUPROF.V8I1.324.

¹² Cuong Quoc Nguyen, Anh Minh Tu Nguyen, and Long Ba Le, 'Using Partial Least Squares Structural Equation Modeling (PLS-SEM) to Assess the Effects of Entrepreneurial Education on Engineering Students's Entrepreneurial Intention', *Cogent Education*, 9.1 (2022), doi:10.1080/2331186X.2022.2122330.

¹³ Siska Yulia Rahmi and Febby Nurhaliza, 'Studi Kesiapan Calon Guru PAI Dalam Mengadopsi Media Pembelajaran Manual Dan Teknologi', *Al-Irsyad: Journal of Education Science*, 4.2 (2025), pp. 275–85, doi:10.58917/AIJES.V4I2.245.

findings, there remains an opportunity to enrich the existing literature. First, while previous research has extensively explored the utilization of digital media in general, this study aims to broaden that perspective by detailing a specific comparison of prospective teachers' readiness in both selecting and using manual versus technology-based media. Second, to complement prior studies that generally focused on the level of mastery or the frequency of media usage, this research adopts a more holistic approach. The aspect of readiness to teach in this study is evaluated not only from an operational standpoint but is also expanded to encompass the dimensions of knowledge, technical skills, attitudes, and implementation readiness. Through this approach, this research is expected to complement the existing discourse regarding the adaptive readiness of prospective Islamic Religious Education (PAI) teachers toward various types of learning media.

Based on the rationale above, this study aims to evaluate the extent to which Course Effectiveness (EMP) and Emotional Intelligence (EQ) contribute to the Teaching Readiness (KM) of prospective Islamic Religious Education (PAI) teachers, both directly and through the mediating role of Learning Media Design Competence (KDM). By addressing these relationships, this research offers meaningful theoretical insights into the development of adaptive teacher education models for PAI. Furthermore, the empirical findings provide actionable input for curriculum developers and institutional policy makers in higher education to foster a balanced learning ecosystem, one that effectively integrates practical digital design skills with emotional and psychological support to prepare prospective educators for contemporary classroom dynamics.

RESEARCH METHODOLOGY

This study employs a quantitative approach with a cross-sectional survey design to test the structural model of the influence among variables. The research design aims to predict the influence of the Effectiveness of Learning Media Courses and Emotional Intelligence on Teaching Readiness, with Media Design Competence as a mediating variable.

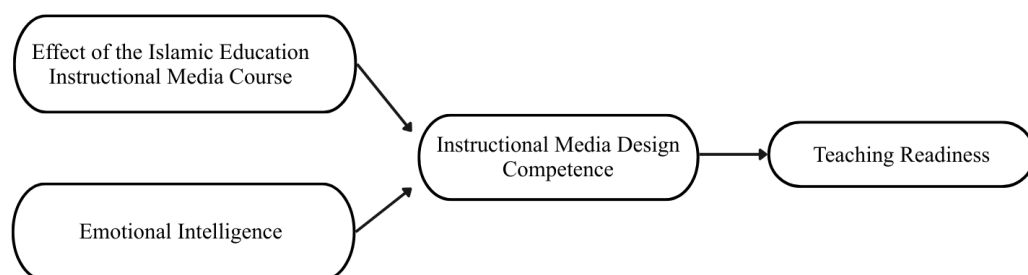


Figure 1. Research Path Model

The research was conducted at the Islamic Religious Education (PAI) Study Program, Faculty of Islamic Studies, Singaperbangsa University, Karawang (UNSIKA). The location was chosen based on the consideration that students in this study program are prepared to become future educators who must master learning technology. Prior to conducting the primary survey, the researchers also conducted a preliminary study in the form of observations and interviews at

partner schools, namely SDN Karangpawitan 1, SMPN 3 Telagasari, and MA Nihayatul Amal, to map the actual needs of media competencies in the field.¹⁴

This study was conducted in the Islamic Religious Education (PAI) Study Program at UNSIKA, involving a sample of 58 third-semester students (Classes A and B) selected via purposive sampling based on the criteria of having completed the Learning Media course and conducted field observations in partner schools.¹⁵ Data were collected using a 4-point Likert scale questionnaire (13 items) measuring four variables: Course Effectiveness/EMP (3 items, adapted from Marsh's SEEQ), Emotional Intelligence/EQ (3 items, Goleman's theory), Media Design Competence/KDM (3 items, Mishra & Koehler's TPACK framework), and Teaching Readiness/KM (4 items, adapted from Bandura's Self-Efficacy theory). The content validity of the instrument was verified through expert judgment by two faculty expert lecturers from FAI UNSIKA.¹⁶ Data analysis was conducted using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach with SmartPLS version 4.¹⁷ The evaluation was carried out in two main stages: measurement model (outer model) evaluation to assess convergent validity (factor loadings > 0.70 and AVE > 0.50), discriminant validity (HTMT and Fornell-Larcker criteria), and reliability (Composite Reliability and Cronbach's Alpha); followed by structural model (inner model) evaluation using a bootstrapping procedure with 5,000 subsamples to test path coefficient hypotheses, along with evaluating R², f², and Q² values.¹⁸

RESULTS AND DISCUSSION

Results

This section presents research findings from variance-based Structural Equation Modeling (PLS-SEM) analyses. The analysis was conducted in stages: the measurement model (outer model) was evaluated, followed by the structural model (inner model), and finally, hypothesis testing.

Evaluation of Measurement Model (Outer Loading)

The first step in PLS-SEM analysis is to test the validity of the indicator using the Outer Loading value. This value indicates the degree of correlation between the indicator and its latent variable. An indicator is considered valid if its loading value is above 0.70. However, in development research, loading values between 0.60 and 0.70 can be maintained if other convergent validity criteria are met.

Table 1. Outer Loading Results

Variables	EMP	KDM	TO	KM
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¹⁴ John W. Creswell and J. David Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed. (Los Angeles, CA: Sage Publications, 2018).

¹⁵ Joseph F. Hair and others, *Multivariate Data Analysis*, 8th ed. (Cengage Learning, 2022).

¹⁶ A. Muri Yusuf, *Metode Penelitian Kuantitatif Kualitatif Dan Penelitian Gabungan* (Jakarta: Prenadamedia Group, 2015).

¹⁷ Jr. Joseph F. Hair and others, *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 2nd ed. (Thousand Oaks, CA: Sage Publications, 2017).

¹⁸ Nguyen, Nguyen, and Ba Le, 'Using Partial Least Squares Structural Equation Modeling (PLS-SEM) to Assess the Effects of Entrepreneurial Education on Engineering Students's Entrepreneurial Intention'.

EMP1	0.743	
EMP2	0.851	
EMP3	0.844	
KDM1		0.861
KDM2		0.822
KDM3		0.833
KE1		0.783
KE2		0.684
THE 3RD		0.661
KM1		0.774
KM2		0.815
KM3		0.814
KM4		0.683

Based on Table 1, the majority of indicators have loading values above 0.70. Several indicators, such as KE2, KE3, and KM4, have values in the range of 0.60-0.70. These indicators were retained in the model because they contribute to content validity and do not affect the average variance extracted (AVE) of the variables concerned.

Reliability and Construct Validity

After ensuring the indicators' validity, the next step is to evaluate internal consistency and convergent validity. Internal consistency is measured using Cronbach's Alpha and Composite Reliability (rho_c) with a threshold of >0.70. Convergent validity is assessed by the Average Variance Extracted (AVE) value, which must be >0.50.

Table 2. Construct Reliability and Validity

Variables	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
EMP	0.753	0.787	0.855	0.663
KDM	0.790	0.795	0.877	0.703
KE	0.511	0.520	0.753	0.506
KM	0.775	0.785	0.856	0.598

The data in Table 2 show that all variables have AVEs above 0.50, indicating convergent validity. In terms of reliability, the Composite Reliability (rho_c) value for all variables is above 0.70. Although the Cronbach's Alpha value for the KE variable (0.511) falls below the standard of 0.60, the variable is still considered reliable because its Composite Reliability value is high (0.753), which is a more recommended measure of reliability in PLS-SEM.

The data in Table 2 show that all variables have AVE values above 0.50, indicating convergent validity. Regarding reliability, all constructs meet the Composite Reliability (rho_c) threshold of > 0.70. However, the Emotional Intelligence construct yielded a Cronbach's Alpha value of 0.511, falling below the standard 0.60 threshold. Although the Composite Reliability value of 0.753 indicates acceptable internal consistency within the PLS-SEM framework given

that Cronbach's Alpha often underestimates reliability in constructs with a small number of items, relatively low Cronbach's Alpha is explicitly acknowledged as a limitation of the measurement instrument, necessitating further item refinement in future studies.¹⁹

Discriminant Validity

Discriminant validity is tested to ensure that each latent variable is statistically distinct from the others. This test uses the Fornell-Larcker criterion, where the square root of the AVE (numbers on the diagonal) must be greater than the correlation value between the variables (numbers below the diagonal).

Table 3. Discriminant Validity (Fornell-Larcker Criterion)

Variables	EMP	KDM	KE	KM
EMP	0.814			
KDM	0.455	0.839		
KE	0.390	0.526	0.711	
KM	0.290	0.728	0.478	0.773

The results in Table 3 show that the square root of each variable's AVE (in bold) is higher than the correlation between the variables. For example, the square root of the AVE for Media Design Competence (KDM) is 0.839, which is greater than its correlation with Teaching Readiness (0.728). This indicates that the requirements for discriminant validity have been met.

Collinearity Test (VIF)

Before conducting hypothesis testing, it is necessary to ensure that there is no multicollinearity problem among the independent variables in the structural model. The Variance Inflation Factor (VIF) value must be below 3 (or at most 5) to indicate that the model is free of collinearity bias.

Table 4. Collinearity Test Results (Inner VIF)

Relationship Path	VIF
EMP -> KDM	1,180
KE -> KDM	1,180
KDM -> KM	1,000

Based on Table 4, all VIF values are between 1,000 and 1,180, which is far below the threshold of 3. Thus, there is no collinearity problem among the predictor variables in this model, so that hypothesis testing can proceed.

¹⁹ Joseph F. Hair and others, 'When to Use and How to Report the Results of PLS-SEM', *European Business Review*, 31.1 (2019), pp. 2–24, doi:10.1108/EBR-11-2018-0203.

Coefficient of Determination (R-Square)

The quality of the structural model is evaluated by examining the coefficient of determination (R²), which indicates the extent to which the independent variables explain the variance in the dependent variable. R² values of 0.75, 0.50, and 0.25 are categorized as strong, moderate, and weak models, respectively.

Table 5. Coefficient of Determination (R²)

Endogenous Variables	R-Square	R-Square Adjusted	Category
KDM	0.350	0.326	Moderate
KM	0.530	0.521	Moderate - Strong

Table 5 shows that the Course Effectiveness (CEM) and Emotional Intelligence (EQ) variables explain 35.0% of the variability in Media Design Competence (MDC). Meanwhile, Media Design Competence (KDM) explains 53.0% of the variability in Teaching Readiness (KM). This indicates that the model has substantial predictive power, especially for the final variable.

Effect Size (f-Square)

In addition to significance, this study also tested the effect size (F²) to determine the substantive influence of a predictor variable on its dependent variable. F² values of 0.02, 0.15, and 0.35 indicate small, medium, and large effects, respectively.

Table 6. Effect Size (F²)

Relationship Path	f-Square	Effect Category
EMP -> KDM	0.113	Small - Medium
KE -> KDM	0.220	Medium
KDM -> KM	1,126	Large

The results in Table 6 show an interesting finding: the relationship between learning media design skills and teaching readiness has an effect size of 1.126, which is classified as a "substantial" effect. This implies that media design competency is a crucial predictor of students' teaching readiness.

Relevance of Prediction

To measure the model's ability to predict unobserved data (out-of-sample prediction), the PLSpredict procedure is used. The predicted Q²_predict value must be positive (> 0).

Table 7. Prediction Relevance Results

Variables	Q ² _predict	RMSE	MAE
KDM	0.268	0.889	0.644

KM	0.176	0.941	0.666
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Table 7 shows the Q^2 values for the variables Learning Media Design Competence (0.268) and Teaching Readiness (0.176). Because both values are above zero, this research model is declared to have good predictive relevance.

Model Fit

Model fit testing was performed using the Standardized Root Mean Square Residual (SRMR) index. The recommended SRMR value is below 0.08 or 0.10 for an acceptable model.

Table 8. Model Fit Test Results

Criteria	Saturated Model	Estimated Model
SRMR	0.112	0.114
d ULS	1,145	1,191
d G	0.424	0.433
Chi-square	139,199	140,875
NFI	0.577	0.571

The model fit evaluation yielded an SRMR value of 0.114, which exceeds the standard threshold of 0.08. This result is explicitly acknowledged as a limitation of the structural model, and the model fit should therefore be interpreted with caution. Nevertheless, because PLS-SEM is primarily prediction-oriented rather than fit-oriented, the primary evaluation of the model relies on its predictive power. The model demonstrates satisfactory predictive relevance, as indicated by an R^2 value of 0.530 for Teaching Readiness and positive Q^2_{predict} values (>0)²⁰

Direct Effect Hypothesis Testing

Hypothesis testing was conducted using the bootstrapping method with 5,000 subsamples. The hypothesis was accepted if the T-statistic value was > 1.96 and the P-value was < 0.05 . The following table presents the results of the direct effect test.

Table 9. Results of the Direct Effect Hypothesis Test

Hypothesis	Relationship Path	Original Sample (O)	T Statistics	P Values	Decision
H1	EMP -> KDM	0.295	2,974	0.003	Accepted
H2	KE -> KDM	0.411	3,908	0.000	Accepted
H3	KDM -> KM	0.728	10,168	0.000	Accepted

The analysis results prove that all three direct influence hypotheses are accepted. Course Effectiveness (EMP) has a significant effect on Design Competence (KDM) with a significance of 0.003. Emotional Intelligence (KE) has a significant effect on KDM with a significance of

²⁰ Hair and others, *Multivariate Data Analysis*.

0.000. The most decisive influence is shown in the relationship between KDM and Teaching Readiness (KM), with a very high T-statistic (10.168).

Testing the Indirect Effect Hypothesis (Mediation)

To test the mediating role of Media Design Competence, a specific indirect-effect test was conducted. The test results are presented in Table 10.

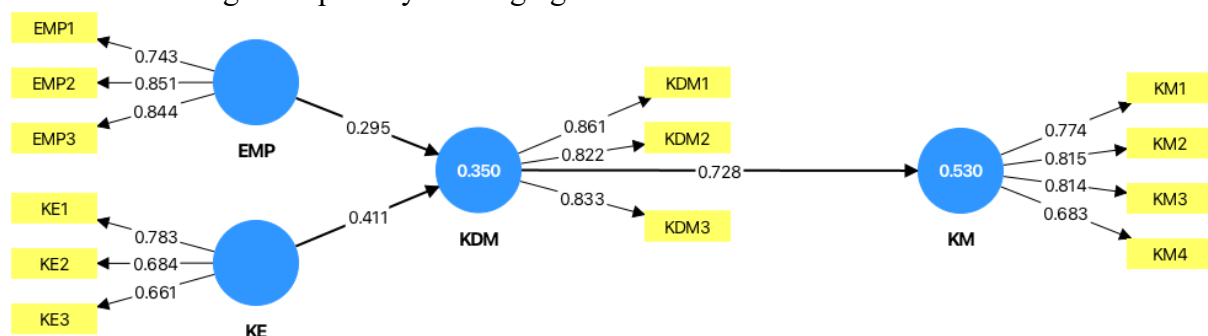
Table 10. Results of the Mediation Hypothesis Test

Hypothesis	Relationship Path	Original Sample (O)	T Statistics	P Values	Decision
H4	EMP -> KDM -> KM	0.215	2,974	0.003	Accepted
H5	KE -> KDM -> KM	0.299	3,261	0.001	Accepted

Table 10 confirms that Media Design Competence (KDM) significantly mediates the relationships between Course Effectiveness (CEM) and Teaching Readiness (TREA), as well as between Emotional Intelligence (EQ) and Teaching Readiness. This demonstrates that design competence is a vital intermediary variable in this model.

Discussion

This section discusses the interpretation of the data analysis results by linking them to established theory, prior research, and field observations. The discussion focuses on the central role of media design competency in bridging students' internal and external factors.



Picture 1 Visualization of Structural Model (Path Model)

The path model illustrates the estimated statistical relationships among the constructs. Course Effectiveness ($\beta = 0.295$) and Emotional Intelligence ($\beta = 0.411$) are positively associated with Media Design Competence, jointly explaining 35.0% of its variance ($R^2 = 0.350$). Media Design Competence is positively associated with Teaching Readiness ($\beta = 0.728$), with the model explaining 53.0% of its variance ($R^2 = 0.530$). These results do not establish causality.

The findings position Media Design Competence (KDM) as a connecting variable in the model linking Course Effectiveness (EMP), Emotional Intelligence (KE), and Teaching Readiness (KM).

(KM) among prospective Islamic Religious Education (PAI) teachers. EMP and KE are positively associated with KDM, with path coefficients of 0.295 and 0.411, respectively. Together, these variables explain 35.0% of the variance in KDM ($R^2 = 0.350$). KDM, in turn, is positively associated with KM, with a path coefficient of 0.728 and an R^2 value of 0.530 for KM. These findings suggest that teaching readiness is closely related to students' ability to translate knowledge and personal resources into instructional media designs. However, given the cross-sectional design, these relationships should be interpreted as statistical associations within the proposed model rather than definitive evidence of causality.²¹

Media Design Competence: The Intersection of Coursework Experiences and Emotional Management

The larger path coefficient for KE–KDM than for EMP–KDM indicates that, within this sample and model, emotional intelligence has a numerically stronger association with media design competence. This comparison is based on the path coefficients rather than the magnitude of the t-statistics. Nevertheless, the difference between the coefficients cannot be considered statistically significant without a specific test of that difference.

One possible explanation is that media design requires an iterative learning process involving mistakes and technical uncertainty. Coursework provides knowledge, guidance, and opportunities for practice, but students' ability to benefit from these experiences may also depend on how they manage frustration, respond to feedback, and sustain engagement when their designs are unsuccessful. Thus, the stronger association involving KE may reflect the importance of managing emotional responses during media development rather than suggest that formal instruction is less necessary.

In PAI teacher education, these demands have distinctive characteristics. Students must simultaneously consider the accuracy of religious content, the appropriateness of pedagogical approaches, and the comprehensibility of digital presentations. Visually appealing media may be inadequate if simplification obscures conceptual meaning or fails to address learners' needs. Balancing these demands may require patience, openness to revision, and sensitivity to learners' difficulties. Observations at SDN Karangpawitan 1 illustrate the importance of patiently addressing diverse learning needs, but they do not directly establish the mechanism underlying the relationship between KE and KDM in the model.

This finding can be interpreted through Goleman's perspective on the importance of emotional abilities in supporting performance. However, the results do not constitute a comprehensive test of his theory, nor do they support the conclusion that emotional factors determine 80% of an individual's success. A more proportionate interpretation is that emotional abilities are associated with media design competence among prospective PAI teachers. This relationship also raises the possibility that self-regulation, persistence, and self-efficacy are involved. Students who can manage their emotions may be better able to organize their learning,

²¹ Muhammad 'Alimul Fikri, Umi Sumbulah, and Aunur Rafiq, 'Kompetensi Guru Dalam Perspektif Al-Qur'an Dan Integrasinya Dengan Pendekatan TPACK Dalam Pembelajaran', *Jurnal Mu'allim*, 8.2 (2026), pp. 549–65, doi:10.35891/E9DDHF43.

persist through difficulties, and maintain confidence in completing design tasks. However, because these three aspects were not tested separately in the model, their roles remain theoretical explanations requiring.

The relevance of emotional abilities in this model can also be considered alongside Sodikin et al. (2026), whose literature review emphasizes the integration of psychological perspectives into Islamic education to support balanced cognitive, affective, and spiritual development. This perspective provides a broader conceptual context for considering emotional aspects alongside technical competencies in the preparation of prospective PAI teachers. The present study contributes a more specific empirical finding: emotional intelligence is positively associated with instructional media design competence within the sample examined. However, Sodikin et al.'s discussion does not directly establish this relationship; it provides conceptual support for attending to psychological dimensions in teacher education.²²

Compared with Widjaya's study, which identifies emotional intelligence and pedagogical competence as determinants of teacher performance, the present study provides support at the level of the relationship pattern: emotional aspects remain relevant to professional capabilities in education. The extension lies in its focus on prospective teachers and media design competence as a more specific capability. However, the job satisfaction mechanism examined in Widjaya's study cannot be directly applied to university students, whose experiences, responsibilities, and learning environments differ from those of practicing teachers. Among prospective teachers, experiences of completing design tasks and receiving feedback may be more relevant to explaining competence development, although this possibility requires further testing.²³

The positive relationship between EMP and KDM is also conceptually consistent with Nguyen and colleagues' research on the contribution of education to competence development. However, differences between entrepreneurship education and PAI teacher education limit direct comparisons. The present study extends this discussion by showing that coursework experiences should be considered alongside emotional factors when explaining media design competence. This finding challenges the assumption that providing instructional content and technical exercises alone is sufficient to explain competence acquisition.²⁴

The R^2 value of 0.350 for KDM further limits the scope of this interpretation. EMP and KE explain part of the variance in media design competence, while the remaining 65.0% is not explained by the model. Previous experience with technology, access to devices, feedback quality, and opportunities for practice are additional candidate factors for investigation. Consequently, the smaller EMP coefficient should not be interpreted directly as evidence of inadequate coursework. Instead, it draws attention to the conditions that enable students to translate coursework experiences into practical skills.

²² Sodikin and others, 'The Urgency of Psychology in Islamic Education: Building Cognitive, Affective, and Spiritual Balance in Education'.

²³ Sukma Widjaya, 'Pengaruh Kecerdasan Emosional Dan Kompetensi Pedagogik Terhadap Kinerja Guru Dengan Kepuasan Kerja Sebagai Variabel Intervening Pada SD Negeri Penajam Paser Utara Kalimantan Timur', *Jurnal Manajerial Bisnis*, 7.2 (2024), p. Desember–Maret, doi:10.37504/jmb.v7i2.592.

²⁴ Daniel Goleman, *Kecerdasan Emosional*.

Media Design Competence and Teaching Readiness: Relevance and Interpretive Limits

The relationship between KDM and KM, with a path coefficient of 0.728 and an effect size of $f^2 = 1.126$, indicates that media design competence makes a substantial statistical contribution within the teaching readiness model. The R^2 value of 0.530 indicates that the model explains 53.0% of the variance in KM. This figure does not mean that media design competence determines 53.0% of each student's teaching readiness or that it is the sole basis for teaching readiness.²⁵

Theoretically, this relationship may be explained by the close connection between media design activities and teaching tasks. Designing media requires students to select content, formulate objectives, organize presentation sequences, and adapt representations to learners' needs. Media design competence may therefore reflect the ability to apply knowledge when preparing instruction. Students who can produce media aligned with learning objectives may feel that they have more concrete resources for teaching. However, this study did not separately measure reductions in anxiety or increases in confidence, so neither can be presented as an established mechanism.

This finding can be interpreted through the TPACK framework, particularly its emphasis on integrating technological, pedagogical, and content knowledge. In tajwid instruction, for example, interactive media must account for the accuracy of recitation examples, the sequence of exercises, and the form of feedback, alongside technological considerations.²⁶ Learning needs at SMPN 3 Telagasari provide a contextual illustration of the relevance of this integration. Nevertheless, the KDM–KM relationship does not demonstrate that students' media designs improve learners' understanding or engagement, because learner outcomes were not tested in this model.

This finding also provides a basis for reconsidering the assumption that mastery of religious content alone adequately prepares students to teach. However, because religious content mastery was not directly compared within the model, the study cannot conclude that media design competence is more important than content knowledge. A more appropriate conclusion is that media design competence should be considered alongside content mastery and pedagogical capabilities in PAI teacher education.

Theoretical Implications and the Development of PAI Teacher Education

This study contributes by positioning media design competence at the intersection of coursework experiences, emotional abilities, and teaching readiness. The results confirm the relevance of academic and emotional factors at the level of observed relationship patterns while

²⁵ Diego Prinanda, 'Analisis Problematika Guru Dalam Implementasi Media Pembelajaran Berbasis Teknologi', *Indonesian Journal of Administration or Management in Education (IJAM-Edu)*, 2.2 (2025), pp. 329–53 <<https://ijam-edu.ppj.unp.ac.id/index.php/ijam>>.

²⁶ Fikri, Sumbulah, and Rafiq, 'Kompetensi Guru Dalam Perspektif Al-Qur'an Dan Integrasinya Dengan Pendekatan TPACK Dalam Pembelajaran'.

extending the discussion to a specific competence within PAI teacher education. The study also questions the adequacy of educational approaches that emphasize the transmission of technical knowledge without considering how students manage their learning and the difficulties encountered during media development.

In practical terms, these results provide a basis for developing instructional media courses that combine design projects, staged feedback, opportunities for revision, and reflection on the difficulties students encounter. These activities could be directed toward developing design skills while supporting students' ability to manage their learning. However, the effectiveness of this approach still requires testing through intervention studies.

Finally, positioning KDM as a connecting variable in the model is insufficient to establish statistically significant mediation. A mediation conclusion requires tests of the indirect effects of EMP on KM through KDM and KE on KM through KDM, including bootstrap confidence intervals. Longitudinal or experimental research is also needed to assess the temporal ordering of the relationships and examine whether self-regulation, persistence, and self-efficacy explain mechanisms not captured in the present study.

Potential Mediation Mechanisms and Research Implications

The observed relationships are consistent with the proposed role of Media Design Competence (KDM) as a potential link between Course Effectiveness (EMP), Emotional Intelligence (KE), and Teaching Readiness (KM). Conceptually, coursework may provide knowledge and opportunities for practice, while emotional intelligence may help students manage difficulties encountered during media development. Media design competence may represent one way in which these academic and emotional resources are translated into preparation for teaching. However, significant individual paths alone do not establish mediation. Confirming the indirect relationships requires bootstrap confidence intervals for the EMP–KDM–KM and KE–KDM–KM pathways, while distinguishing indirect-only from partial mediation also requires examining the corresponding direct paths.

This interpretation suggests that opportunities to apply knowledge deserve attention alongside the delivery of course content. It does not imply that coursework and emotional intelligence have no relationship with teaching readiness outside media design competence. Other pathways may exist but remain unexamined in the present model. Furthermore, the cross-sectional design limits conclusions about the temporal sequence of these relationships. Based on these findings, three recommendations can be proposed for PAI curriculum development at UNSIKA:

1. Strengthening project-based coursework. Learning Media courses could integrate design projects that require students to produce, evaluate, and revise instructional media. Assessment should consider the accuracy of religious content, alignment with learning objectives, and suitability for learners, alongside technical quality. This approach would provide opportunities to translate coursework experiences into demonstrable competence, although its effectiveness requires further evaluation.
2. Supporting emotional management during design activities. Lecturers could provide staged feedback, manageable design challenges, and opportunities for reflection to help students

respond constructively to technical difficulties and revisions. These practices may support persistence and the management of frustration. However, resilience, self-regulation, and self-efficacy should not be treated as equivalent to emotional intelligence or as mechanisms established by this study; their specific roles require additional investigation.

3. Aligning design activities with school needs. Training could draw on contextual needs identified through field observations, such as interactive tajwid media for junior high schools and visual storytelling media for elementary schools. Collaboration with schoolteachers could help assess content accuracy, usability, and pedagogical relevance. Classroom implementation would then be needed to determine whether these products improve learners' understanding and engagement.

These recommendations translate the observed relationships into directions for curriculum development rather than interventions whose effectiveness has already been demonstrated. Future research should test the proposed indirect effects and use longitudinal or experimental designs to examine how coursework experiences, emotional abilities, and media design competence relate to the development of teaching readiness over time.

CONCLUSION

This study evaluated a structural model of teaching readiness among prospective Islamic Religious Education (PAI) teachers at Universitas Singaperbangsa Karawang. The findings indicate that Course Effectiveness (EMP) and Emotional Intelligence (KE) are positively and significantly associated with Media Design Competence (KDM), jointly explaining 35.0% of its variance. Emotional intelligence exhibited a larger path coefficient ($\beta = 0.411$) than course effectiveness ($\beta = 0.295$), suggesting the relevance of emotional abilities alongside instructional experiences in understanding students' media design competence. However, this numerical difference does not establish a statistically significant difference between the two relationships. Media design competence was also strongly associated with Teaching Readiness (KM; $\beta = 0.728$), with a large effect size ($f^2 = 1.126$), while the model explained 53.0% of the variance in teaching readiness. Given the cross-sectional design, these findings represent statistical relationships within the proposed model rather than definitive causal effects.

The study offers "competency conversion" as a conceptual interpretation of how academic experiences and emotional resources may be translated into practical capabilities relevant to teaching readiness. From this perspective, media design competence represents a potential connecting mechanism rather than an established exclusive pathway. The reported indirect effects support the statistical mediating role of media design competence within the specified model. However, full mediation cannot be established without examining the corresponding direct paths, and the cross-sectional design limits causal interpretation. The findings nevertheless provide a rationale for considering technical skill development and emotional support together in PAI teacher education. Project-based media design activities, accompanied by structured feedback and opportunities for reflection and revision, could help students apply their knowledge while managing the challenges of design work. Future research should evaluate this approach and

examine whether self-regulation, persistence, and self-efficacy help explain the proposed relationships, preferably through longitudinal or experimental designs.

REFERENCE

- A. Muri Yusuf, *Metode Penelitian Kuantitatif Kualitatif Dan Penelitian Gabungan* (Jakarta: Prenadamedia Group, 2015)
- Arsyad, Azhar, *Media Pembelajaran*, Edisi Revisi (Jakarta: Rajawali Pers, 2019)
- Creswell, John W., and J. David Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed. (Los Angeles, CA: Sage Publications, 2018)
- Daniel Goleman, *Kecerdasan Emosional* (Jakarta: Gramedia Pustaka Utama, 2000)
- Fauziah, 'Hubungan Kecerdasan Emosional Dengan Prestasi Belajar Mahasiswa Semester II Bimbingan Konseling UIN Ar-Raniry', *Jurnal Edukasi (Mendia Kajian Bimbingan Konseling*, 1 (2015), pp. 90–98
- Fikri, Muhammad 'Alimul, Umi Sumbulah, and Aunur Rafiq, 'Kompetensi Guru Dalam Perspektif Al-Qur'an Dan Integrasinya Dengan Pendekatan TPACK Dalam Pembelajaran', *Jurnal Mu'allim*, 8.2 (2026), pp. 549–65, doi:10.35891/E9DDHF43
- Hair, Joseph F., and others, *Multivariate Data Analysis*, 8th ed. (Cengage Learning, 2022)
- Hair, Joseph F., and others, 'When to Use and How to Report the Results of PLS-SEM', *European Business Review*, 31.1 (2019), pp. 2–24, doi:10.1108/EBR-11-2018-0203
- Jasmi, Kamarul Azmi, Rasidah Sahran, and Muhamad Amirul Amin Mohamad Nazim, 'A Student-Centered Teaching and Learning Approach Among Excellent Teachers of Islamic Education', *SYAMIL: Journal of Islamic Education*, 10.2 (2022), doi:10.21093/sy.v10i2.6156
- Joseph F. Hair, Jr., and others, *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 2nd ed. (Thousand Oaks, CA: Sage Publications, 2017)
- Nguyen, Cuong Quoc, Anh Minh Tu Nguyen, and Long Ba Le, 'Using Partial Least Squares Structural Equation Modeling (PLS-SEM) to Assess the Effects of Entrepreneurial Education on Engineering Students's Entrepreneurial Intention', *Cogent Education*, 9.1 (2022), doi:10.1080/2331186X.2022.2122330
- Prensky, Marc, 'Digital Natives, Digital Immigrants Part 1', *On the Horizon*, 9.5 (2001), pp. 1–6, doi:10.1108/10748120110424816
- Prinanda, Diego, 'Analisis Problematika Guru Dalam Implementasi Media Pembelajaran Berbasis Teknologi', *Indonesian Journal of Administration or Management in Education (IJAM-Edu)*, 2.2 (2025), pp. 329–53 <<https://ijam-edu.ppj.unp.ac.id/index.php/ijam>>
- Pujawardani, Hani Hadiati, and others, 'The Role of Digital Media in Improving Student Engagement in Islamic Religious Education', *Eduprof: Islamic Education Journal*, 8.1 (2026), pp. 103–16, doi:10.47453/EDUPROF.V8I1.432
- Qoirunnisa, Fentika Zahra, and Ikhrom Ikhrom, 'Problematika Implementasi Kurikulum Merdeka Pada Mata Pelajaran PAI Di SMK Islamic Center Baiturrahman', *JIES: Journal of Islamic Education Studies*, 3.2 (2025), p. —, doi:10.58569/jies.v3i2.1132
- Rahmi, Siska Yulia, and Febby Nurhaliza, 'Studi Kesiapan Calon Guru PAI Dalam Mengadopsi

- Media Pembelajaran Manual Dan Teknologi’, *Al-Irsyad: Journal of Education Science*, 4.2 (2025), pp. 275–85, doi:10.58917/AIJES.V4I2.245
- Sa’roni, Ahmad, and others, ‘Integration of Technology and Innovation in Islamic Religious Education Learning Models in the Digital Era: A Systematic Literature Review’, *Edusoshum : Journal of Islamic Education and Social Humanities*, 6.2 (2026), pp. 890–99, doi:10.52366/EDUSOSHUM.V6I2.368
- Sodikin, Unang, and others, ‘The Urgency of Psychology in Islamic Education: Building Cognitive, Affective, and Spiritual Balance in Education’, *Eduprof: Islamic Education Journal*, 8.1 (2026), pp. 1–16, doi:10.47453/EDUPROF.V8I1.324
- Suparjo, Muh Hanif, and S. Dimas Indianto, ‘Developing Islamic Science Based Integrated Teaching Materials for Islamic Religious Education in Islamic High Schools’, *Pegem Journal of Education and Instruction*, 11.4 (2021), pp. 282–89, doi:10.47750/PEGEGOG.11.04.27
- Widjaya, Sukma, ‘Pengaruh Kecerdasan Emosional Dan Kompetensi Pedagogik Terhadap Kinerja Guru Dengan Kepuasan Kerja Sebagai Variabel Intervening Pada SD Negeri Penajam Paser Utara Kalimantan Timur’, *Jurnal Manajerial Bisnis*, 7.2 (2024), p. Desember–Maret, doi:10.37504/jmb.v7i2.592
- Wildan, Gusti Sab’an, and Bunyamin, ‘Pemanfaatan Media Pembelajaran Interaktif Untuk Meningkatkan Pemahaman Konsep Keislaman Dalam Pendidikan Agama Islam’, *Jurnal Bilqolam Pendidikan Islam*, 6.1 (2025), doi:10.51672/jbpi.v6i1.582