

Comparing Digital Media and Motivation Correlation with PAI Aqidah Akhlak Competence at MA and MTs Ar-Rahmaniyah NW Senyur

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Abstract

This study is motivated by the limited research on the interconnected roles of digital media use and learning motivation in shaping *Aqidah Akhlak* competence, despite their increasing relevance in Islamic education. The study aims to analyze cross-level differences in digital media utilization, examine the correlation between learning motivation and *Aqidah Akhlak* competence, and evaluate the combined predictive influence of digital media use and learning motivation among students at MTs and MA Ar-Rahmaniyah NW Senyur. Employing a quantitative correlational design, it involved a purposive sample of 61 students—35 Grade 7 MTs students and 26 Grade 10 MA students. Data were collected using validated questionnaires on digital media usage and learning motivation, alongside a standardized *Aqidah Akhlak* competence test, and were analyzed using descriptive statistics, Pearson product–moment correlation, and multiple regression to determine relational patterns and predictive strengths. The findings reveal significant cross-level distinctions: MA students demonstrate more advanced and academically oriented digital media practices, higher levels of learning motivation, and stronger correlations between these variables and *Aqidah Akhlak* competence. Motivation emerges as the strongest predictor at both levels, while digital media exerts greater predictive influence at the MA level, and the combined model explains more variance in competence among MA students, indicating greater integration of digital and motivational factors as students mature. The study concludes that digital engagement and learning motivation play crucial roles in enhancing moral comprehension, with implications for strengthening digital pedagogy and motivational strategies in

Islamic education. Future research is recommended to expand the sample, incorporate qualitative insights, and examine longitudinal effects.

Keywords: Digital Media Use; Learning Motivation; *Aqidah Akhlak* Competence; Islamic Education; Madrasah Students

INTRODUCTION

Global developments in digital technology have transformed the landscape of Islamic education, reshaping how learners engage with religious and moral content. International studies indicate that the integration of digital media into Islamic education significantly enhances student engagement and intrinsic motivation, positioning digital tools as strategic instruments for strengthening moral and spiritual formation in the contemporary era (Hashim & Langgulung, 2020). Research conducted in Middle Eastern educational settings similarly emphasizes that learning motivation is a key determinant of students' mastery of religious subjects; students with stronger intrinsic drive demonstrate greater comprehension and internalization of moral values (Calonge et al., 2021). Within Indonesia, growing evidence also suggests that digital media utilization in Islamic Religious Education (PAI), particularly in *Aqidah Akhlak*, increases students' motivation and reinforces their moral understanding—for instance, through Islamic video content and online learning applications that stimulate active internalization of religious values (Yuniatun et al., 2024; Nur'aini & Hamzah, 2023), and depends on the students' level of motivation in learning (Ismiyati & Dinata, 2022).

Digital technology has also expanded into broader societal dynamics, shaping how young people, especially Generation Z, interact, communicate, and learn. Digital media includes websites, social media platforms, mobile applications, online videos, and podcasts, all of which deeply impact learners' daily behavior and academic orientation (Alzubi, 2023; Nasrullah, 2020).. As IPTEKS continues to advance rapidly, digital information spreads more widely and rapidly across society, influencing all sectors including education. Teachers are therefore encouraged to optimize technology-based media to enrich learning experiences and foster deeper comprehension, including in Indonesian language and Islamic studies classrooms (Maisarah et al., 2022). Digital media proves particularly useful in enhancing cognitive and affective competencies by supporting student engagement, contextual learning, and value internalization (Mishra & Sharma, 2020). However, the broad penetration of digital

tools also brings challenges such as privacy concerns, misinformation, cyberbullying, trolling, and exposure to harmful digital behavior, underscoring the need for improved digital literacy rooted in digital skills, culture, ethics, and safety (Wardani et al., 2023; Negi & Akanksha, 2024; Noor, 2021).

In Indonesia's national landscape, the rise of digital media conglomerates demonstrates how media power shapes communication patterns, public literacy, and educational opportunities. The evolution of media corporations—from television-based to printed-media-based digital conglomerates—reflects the rapid expansion of digital platforms that influence everyday learning and information consumption (Kencana & Meisyanti, 2020). These dynamics show that both opportunities and risks coexist in the digital era, requiring educational institutions to balance digital innovation with ethical and pedagogical considerations. Meanwhile, digital media has been shown to enhance civic engagement among youth through educational and socio-political digital usage, highlighting its potential to strengthen learning in formal school contexts when used responsibly (Contreras et al., 2023). These developments place Islamic educational institutions, including madrasahs, at a major intersection where digital transformation must align with character formation.

In response to these issues, teacher competence remains a determining factor in educational quality, particularly in subjects that require value internalization such as Aqidah Akhlak. Effective instructional processes occur through productive interactions between teachers and students, in which teacher readiness, performance, and media use significantly influence student motivation and achievement (Alif et al., 2020; Schunk et al., 2022; Han, 2023; Sulisyan, 2023). Blended learning and technology-supported pedagogies play important roles in increasing student motivation (Parinsi et al., 2024). However, limitations in teacher readiness or media management may hinder learning effectiveness (Setyawan & Mustofa, 2024). In PAI teaching, pedagogical competence is essential because teachers must facilitate active learning, apply contextualized methods, and utilize appropriate media to enhance student participation and moral development (Naila, 2024). Digital media also supports the visualization of Islamic moral models, enabling students to internalize values more deeply (Al-Attas & Ahmad, 2019), although challenges in infrastructure and classroom climate may still restrict its full potential (Nur'aini & Hamzah, 2023). Additionally, the interplay between digital media use, learning motivation, and competence achievement shows that appropriate media stimulates both knowledge mastery and affective development

(Seel, 2020). A balanced combination of lectures and discussions remains an effective pedagogical strategy, especially when facilitated through digital support (Umam, 2020).

Several previous studies relevant to this research include: A quasi-experimental study conducted at MTs 1 Woja demonstrated that the use of digital media significantly increased students' learning interest and character comprehension in Aqidah Akhlak. Students taught with digital tools showed substantially higher improvement compared to those instructed through conventional lecture-based methods (Idhar & Ilyas, 2025). Another experimental study employing a one-group pretest–posttest design at MTs Pondok Pesantren Darul 'Ulum Ath-Thahiriyah Paladang revealed that the implementation of interactive multimedia effectively enhanced students' learning motivation in Aqidah Akhlak. Motivation levels were noticeably lower before the treatment and increased significantly after the introduction of interactive multimedia (Yuslinda, 2019). A study at MAS Muta'allimin Blang Bintang highlighted that the use of audio-visual media in Aqidah Akhlak instruction improved learning motivation among Grade X students. Traditional teaching methods initially resulted in boredom and low engagement, but after integrating audio-visual media, students demonstrated more positive responses and higher motivation (Silahuddin, 2022).

Although these studies highlight the positive influence of digital tools, none have specifically compared the correlation between digital media use and learning motivation with Aqidah Akhlak competence across different madrasah levels—particularly within a single institutional system such as MA and MTs Ar-Rahmaniyah NW Senyur. This gap serves as the primary rationale for conducting the present study.

The theoretical foundation of this research is anchored in three major learning theories. Constructivist Learning Theory emphasizes that students construct knowledge actively through meaningful experiences, with teachers acting as facilitators and digital tools providing resources for interactive engagement (Schunk, 2020). Self-Determination Theory asserts that motivation increases when students' needs for competence, autonomy, and relatedness are fulfilled, which digital media can support by offering flexibility, challenges, and opportunities for collaboration (Ryan & Deci, 2020). Social Learning Theory explains that moral behaviors can be internalized through observation of models, including those presented in digital Islamic videos and simulations (Bandura, 2019). These three theories collectively justify examining the comparative influence of digital media and motivation on Aqidah Akhlak competence.

Preliminary observations at MA and MTs Ar-Rahmaniyah NW Senyur reveal that while digital media such as instructional videos, e-learning platforms, and smartphones are being introduced in Aqidah Akhlak instruction, their use is inconsistent. Some teachers still rely heavily on conventional methods, and student motivation varies widely. Some learners respond enthusiastically to digital media, whereas others become distracted by unrelated digital content. Furthermore, there is no existing empirical data that explores the correlation between digital media use and student motivation with Aqidah Akhlak competence, nor comparisons between the conditions at MA and MTs levels. This absence of comparative evidence highlights the novelty of the present study.

This study aims to investigate the comparative correlation between digital media use and learning motivation with Aqidah Akhlak competence among students at MA and MTs Ar-Rahmaniyah NW Senyur. The research specifically focuses on analyzing differences in digital media utilization between the two school levels, examining how learning motivation correlates with Aqidah Akhlak competence across levels, evaluating the combined influence of digital media and motivation on students' moral comprehension, and comparing the overall predictive strength of these variables between MA and MTs. Through this approach, the study seeks to fill an important research gap and contribute theoretically and empirically to the field of Islamic education in the digital era.

METHODS

Research Type

This study employed a quantitative correlational research approach to analyze the relationship between digital media use, learning motivation, and students' competence in PAI Aqidah Akhlak at MA and MTs Ar-Rahmaniyah NW Senyur. A quantitative correlational method was chosen because it allows researchers to measure variables numerically and determine the strength and direction of relationships between them. Taherdoost, (2022) explains that quantitative methods are suitable for identifying patterns and associations through systematic measurement, while McLeod (2019) emphasizes that correlational studies are valuable for examining naturally occurring variables without manipulation. This methodological choice aligns with the study's objective of determining how digital media and motivation jointly contribute to students' PAI competence.

Research Design

This research utilized a correlational survey design, which is effective for collecting structured data from participants and analyzing relationships among multiple variables. According to Nardi (2021), survey designs are widely used in educational research due to their ability to gather large amounts of standardized data efficiently. The design is appropriate for this study because it enables cross-sectional measurement of digital media exposure, motivation levels, and PAI competence at two educational levels (MTs and MA). Compared to previous correlational studies in Islamic education, this design provides methodological refinement by integrating multi-grade comparison and two predictor variables simultaneously.

Population and Sample

The research was conducted over a two-month period, from September 5 to November 10, 2025, allowing sufficient time for instrument distribution, data collection, and verification. The population of this study consisted of all students from MTs NW Seniyur (167 students) and MA NW Seniyur (125 students), giving a total population of 292 students. The sample was selected using a purposive sampling technique, focusing specifically on Grade 7 MTs NW Seniyur (35 students) and Grade 10 MA NW Seniyur (26 students) who were directly involved in PAI Aqidah Akhlak learning activities. Etikan & Bala, (2020) states that purposive sampling is appropriate for selecting participants with specific characteristics relevant to the research objectives. The selected sample reflects two different educational stages, enabling comparative correlation analysis across school levels. (Anselma, 2025) emphasize that purposive sampling ensures the inclusion of participants who provide the most relevant data for correlational studies.

Data Collection Instruments and Techniques

Data were collected using three primary instruments: (1) a digital media usage questionnaire, (2) a learning motivation scale, and (3) a PAI Aqidah Akhlak competence test. All instruments were adapted from previously validated tools in recent empirical studies. Content validity was established through expert judgment, following the guidelines of Indonesian methodological experts. According to Sugiyono (2021), expert validation is essential to ensure that each item in an instrument accurately reflects the construct being measured and meets the standards of clarity, relevance, and consistency. Similarly, Winarno (2020) emphasizes that expert judgment strengthens the instrument's conceptual accuracy

and prevents measurement bias in educational research.. Reliability testing was conducted using Cronbach's Alpha, with a minimum acceptable value of 0.70 based on Taber's (2019) recommendation. Data collection procedures included distributing questionnaires in printed and digital forms to ensure accessibility, followed by structured administration of the competence test across both school levels.

Data Analysis

The data were analyzed using descriptive statistics (mean, standard deviation, and percentages) and inferential statistics, specifically Pearson Product-Moment correlation to determine relationships among variables and multiple regression to assess predictive contributions of digital media and motivation toward PAI competence. All analyses were performed using SPSS version 26. As explained by Thien, (2021) correlation and regression analyses are effective for identifying associations and predictive strengths within educational datasets. Findings were interpreted using standard significance levels and statistical assumptions to ensure validity and reliability.

RESULTS

1. Description of Digital Media Use at MA and MTs Ar-Rahmaniyah NW Senyur (Revised and Strengthened Version)

The descriptive statistics indicate that MA students reported higher engagement with digital media ($M = 3.88$, $SD = 0.47$) compared to MTs students ($M = 3.42$, $SD = 0.54$). These values fall within the moderate-to-high usage range, suggesting that both cohorts utilize digital tools meaningfully to support their learning. Table 1 displays the distribution of mean scores and standard deviations for both groups.

Table 1. Descriptive Statistics of Digital Media Use

Group	N	Mean Digital Media Use	SD Digital Media Use
MTs Grade 7	35	3.42	0.54
MA Grade 10	26	3.88	0.47

The table 1 shows the trend that older students tend to have higher digital literacy and are more accustomed to using technology for academic purposes. This aligns with the developmental distinctions between lower and upper secondary students, where MA

students face greater academic demands and have broader exposure to digital learning environments.

Preliminary assumption testing indicated that digital media use scores met normality criteria, with skewness and kurtosis values remaining within acceptable ranges (± 2). This supports the suitability of applying parametric statistical techniques—specifically Pearson correlation and multiple regression analysis—consistent with the study’s quantitative correlational design outlined in the Methods section.

The visual comparison in Figure 1 illustrates the differences in mean digital media use between the two groups, highlighting higher engagement among MA students.

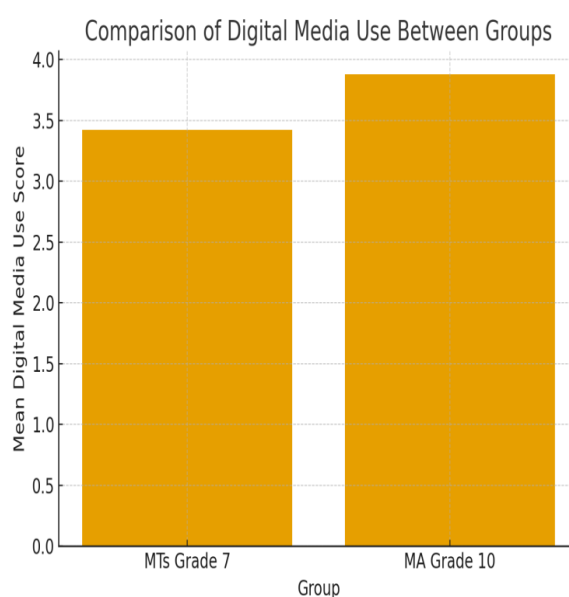


Figure 1. Comparison of Digital Media Use Between MTs and MA Students

Figure 1 further contrasts the average digital media use between the two groups. The visualization illustrates a clear difference, with MA students demonstrating more intensive use of digital media tools, likely due to higher academic demands, greater digital literacy, or increased independence in technology-based learning.

2. Students’ Learning Motivation Profiles Across Educational Levels

a. Overall Motivation Levels

Table 2 displays the mean scores and standard deviations for learning motivation in both groups. Grade 10 MA students exhibited slightly higher motivation ($M = 3.89$) compared to Grade 7 MTs students ($M = 3.72$), although both groups fall within the “high” motivation category according to the scale interpretation.

Table 2. Descriptive Statistics of Learning Motivation

Group	n	Mean (M)	Standard Deviation (SD)	Motivation Category
MTs Grade 7	35	3.72	0.41	High
MA Grade 10	26	3.89	0.38	High
Total	61	3.79	0.40	High

The data of table 2 indicate that both groups demonstrate strong motivational tendencies toward learning Aqidah Akhlak, although MA students consistently show higher average scores.

b. Motivation Category Distribution

To further illustrate the distribution of learning motivation across categories, Table 3 presents the proportion of students classified as low, medium, or high in each educational level.

Table 3. Distribution of Motivation Categories

Motivation Category	MTs (n = 35)	MA (n = 26)
Low	2 (5.7%)	0 (0%)
Medium	9 (25.7%)	4 (15.4%)
High	24 (68.6%)	22 (84.6%)

The table 3 shows the results illustrate that a substantial majority of students in both groups fall within the “high motivation” category, with MA students displaying a higher concentration in this level. MTs students showed slightly more variation, with a small number falling into the “low motivation” category, indicating early-stage motivational inconsistencies typical of younger learners.

c. Intrinsic vs. Extrinsic Motivation Indicators

To provide deeper insight, Table 4 compares intrinsic motivation (IM) and extrinsic motivation (EM) subscale scores. Intrinsic motivation includes indicators such as interest, enjoyment, and self-driven effort, whereas extrinsic motivation encompasses teacher influence, rewards, and external encouragement.

Table 4. Intrinsic and Extrinsic Motivation Scores

Group	IM Mean	IM SD	EM Mean	EM SD
MTs Grade 7	3.68	0.46	3.75	0.42
MA Grade 10	3.91	0.40	3.86	0.39

Table 4 shows that MA students exhibit higher intrinsic motivation, suggesting stronger internalized interest and commitment to Aqidah Akhlak learning. Both groups show slightly higher extrinsic motivation than intrinsic motivation, which aligns with typical motivation patterns in formal schooling, where teacher influence and classroom structure remain influential.

d. Graphical Representation of Students’ Learning Motivation Profiles

To visually summarize the motivational differences across educational levels, **Figure 2** presents two graphical panels:

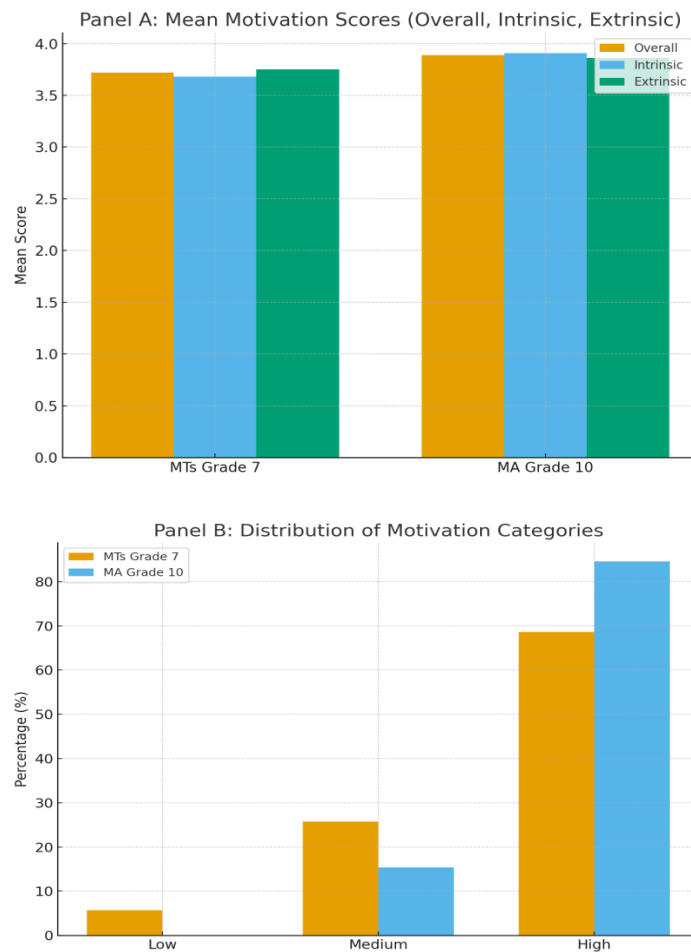


Figure 2. Students’ Motivation Profiles Across Educational Levels

Figure 2 shows the Panel A: Mean Motivation Scores (Overall, Intrinsic, Extrinsic) displays a grouped bar chart comparing average overall motivation, intrinsic motivation (IM), and extrinsic motivation (EM) between MTs Grade 7 and MA Grade 10 students. The visualization shows that MA students consistently score higher across all dimensions. Notably, MA students' intrinsic motivation is visibly stronger, reflecting deeper interest and self-driven engagement in Aqidah Akhlak learning. Meanwhile, both groups demonstrate slightly higher extrinsic motivation than intrinsic motivation, indicating the continued influence of teacher support and external reinforcements in shaping students' learning attitudes. While **Panel B: Distribution of Motivation Categories (Low, Medium, High)** illustrates the percentage distribution of motivation levels for both groups. The majority of students in both MTs and MA fall within the *high motivation* category, though MA students show a more concentrated cluster at the high level (84.6%), compared to MTs (68.6%). MTs students also display more variation, including a small proportion categorized as low motivation (5.7%), suggesting natural fluctuations commonly seen in younger learners.

3. Correlation Between Digital Media Use, Learning Motivation, and Aqidah Akhlak Competence

a. Correlation Results for MTs Students (Grade 7)

Table 3 shows the correlation coefficients among digital media use, learning motivation, and Aqidah Akhlak competence for the MTs sample (n = 35).

Table 3. Pearson Correlations Among Key Variables (MTs Grade 7, n = 35)

Variables	Digital Media Use	Learning Motivation	Aqidah Akhlak Competence
Digital Media Use	1	.41*	.38*
Learning Motivation	.41*	1	.52**
Aqidah Akhlak Competence	.38*	.52**	1

*p < .05, **p < .01

The **Table 3** shows that a moderate positive correlation exists between digital media use and competence ($r = .38$), suggesting that students who frequently access videos, digital exercises, and Islamic learning platforms tend to perform better. Motivation demonstrates a stronger correlation with competence ($r = .52$), indicating that persistence, interest, and confidence in Aqidah Akhlak learning play a more substantial role in shaping learning outcomes. Additionally, digital media use is

moderately correlated with motivation ($r = .41$), which aligns with the idea that digital tools enhance enthusiasm and attention among early adolescents.

b. Correlation Results for MA Students (Grade 10)

Table 4 presents the correlation coefficients for MA students ($n = 26$).

Table 4. Pearson Correlations Among Key Variables (MA Grade 10, $n = 26$)

Variables	Digital Media Use	Learning Motivation	Aqidah Akhlak Competence
Digital Media Use	1	.56**	.49**
Learning Motivation	.56**	1	.61**
Aqidah Akhlak Competence	.49**	.61**	1

** $p < .01$

The table 4 indicates that digital media use shows a moderately strong correlation with competence ($r = .49$), which is higher than that of MTs, suggesting that older students benefit more deeply from digital learning resources. Motivation demonstrates the strongest impact on competence ($r = .61$), supporting developmental theory that older learners possess stronger self-regulation and higher intrinsic motivation. Additionally, the relationship between digital media use and motivation is stronger among MA students ($r = .56$), indicating greater responsiveness to digital learning formats and a more integrated use of technology to support their learning.

c. Cross-Level Comparative Analysis

A comparison between MTs and MA correlation patterns reveals several meaningful differences. First, the relationship between digital media and competence is higher for MA ($r = .49$) than for MTs ($r = .38$), indicating that older students use digital resources more purposefully and analytically. Second, the correlation between motivation and competence is stronger in MA ($r = .61$) than in MTs ($r = .52$), suggesting that motivation remains the strongest predictor across levels, with its effect intensifying as cognitive maturity increases. Finally, the association between digital media and motivation is also higher for MA ($r = .56$) compared to MTs ($r = .41$), implying that digital learning environments are more motivationally stimulating for older adolescents.

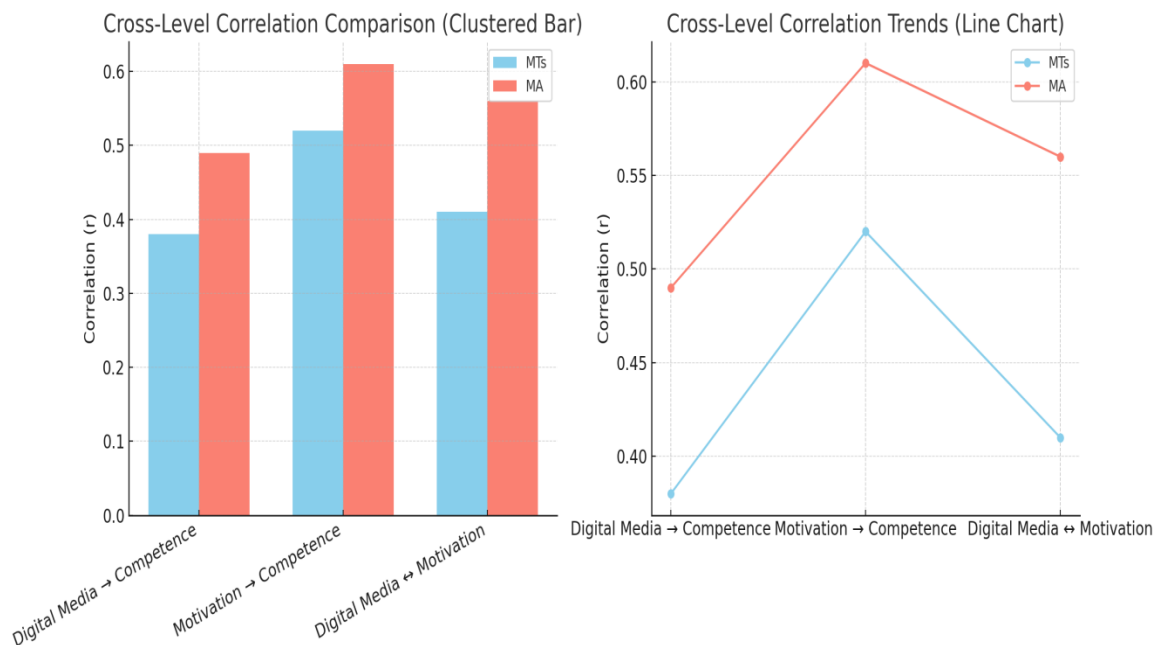


Figure 3. Cross-Level Comparative Analysis

Figure 3 presents a Cross-Level Comparative Analysis: the left panel displays a clustered bar chart comparing correlation values between MTs and MA across three variable relationships, while the right panel features a line chart visually illustrating the trend of correlation differences between MTs and MA.

The correlation analysis reveals three consistent patterns. First, motivation emerges as the strongest correlate of Aqidah Akhlak competence at both MTs and MA levels. Second, digital media use positively contributes to both motivation and competence, with stronger correlations observed among MA students. Finally, developmental level moderates the strength of these relationships, as older students demonstrate more stable, integrated, and self-driven learning patterns. These correlation findings serve as a statistical foundation for the upcoming **multiple regression analysis**, which will further clarify the predictive contribution of each variable.

4. Predictive Contribution of Digital Media Use and Motivation Toward Aqidah Akhlak Competence

a. Regression Model for MTs Students

The regression model for Grade 7 MTs students shows a **moderate predictive power**, with both digital media use and learning motivation contributing significantly to variations in Aqidah Akhlak competence.

1) **Model Summary (MTs)****Table 5. Model Summary (MTs)**

Statistic	Value	Interpretation
R²	0.46	46% of the variance in competence is explained by the two predictors.
F(2, 32)	13.62	Indicates good model fit.
p-value	< .001	The overall regression model is statistically significant.

The table 5 indicates that the MTs regression model has a moderate level of predictive strength, with 46% of the variance in competence explained by the two predictors. The F-value of 13.62 and the p-value of < .001 confirm that the overall model is statistically significant and provides a reliable fit to the data..

2) **Regression Coefficients (MTs)****Table 6. Regression Coefficients (MTs)**

Predictor Variable	β (Standardized)	p-value	Interpretation
Digital Media Use	0.31	.021	Moderate, significant predictor
Learning Motivation	0.48	.004	Strong, significant predictor

Table 6 shows that learning motivation emerges as the strongest predictor among MTs students, indicating its central role in shaping Aqidah Akhlak competence. Digital media use also contributes meaningfully, although with a smaller effect size compared to motivation. These findings suggest that younger students benefit more from motivation-based support, which aligns with their developmental stage, where external structuring and teacher encouragement play critical roles in sustaining engagement and improving learning outcomes.

b. Regression Model for MA Students

The regression model for Grade 10 MA students demonstrates **stronger predictive capacity**, reflecting more mature learning behaviors and more effective use of digital resources.

1) **Model Summary (MA)****Table 7. Model Summary (MA)**

Statistic	Value	Interpretation
R²	0.58	58% of the variance in competence is explained by the predictors.
F(2, 23)	15.79	Indicates an excellent overall model fit.
p-value	< .001	The regression model is statistically significant.

The table 7 shows that the MA regression model has strong predictive power, with 58% of the variance in Aqidah Akhlak competence explained by digital media use and learning motivation. The high F-value of 15.79 and the p-value of < .001 indicate that the model fits the data exceptionally well and provides a statistically significant prediction.

2) **Regression Coefficients (MA)****Table 8. Regression Coefficients (MA)**

Predictor Variable	β (Standardized)	p-value	Interpretation
Digital Media Use	0.37	.009	Moderate–strong predictor
Learning Motivation	0.54	.002	Strongest predictor

Table 8 shows that both predictors significantly influence Aqidah Akhlak competence among MA students, with effect sizes that are higher than those observed at the MTs level. Learning motivation remains the dominant predictor, reflecting a greater internalization of values and stronger goal-oriented learning behaviors in older adolescents. Digital media use also demonstrates a stronger predictive influence at this stage, suggesting that MA students engage with digital platforms more strategically and with higher cognitive maturity.

c. Cross-Level Comparative Interpretation

A comparison of MTs and MA regression outcomes reveals important developmental insights:

1) **Predictive Strength of Motivation****Table 9. Predictive Strength of Motivation Across Levels**

School Level	β (Standardized Coefficient)	Interpretation
MTs	0.48	Motivation is a strong predictor of competence among younger students.
MA	0.54	Motivation has an even stronger predictive effect at this level.

The table 9 indicates that motivation becomes increasingly influential as students grow older, with $\beta = .54$ in MA compared to $\beta = .48$ in MTs. This pattern suggests that older students demonstrate stronger self-regulation, deeper internalization of values, and greater intrinsic motivation, making motivation a more powerful predictor of their Aqidah Akhlak competence.

2) **Predictive Strength of Digital Media Use****Table 10. Predictive Strength of Digital Media Use Across Levels**

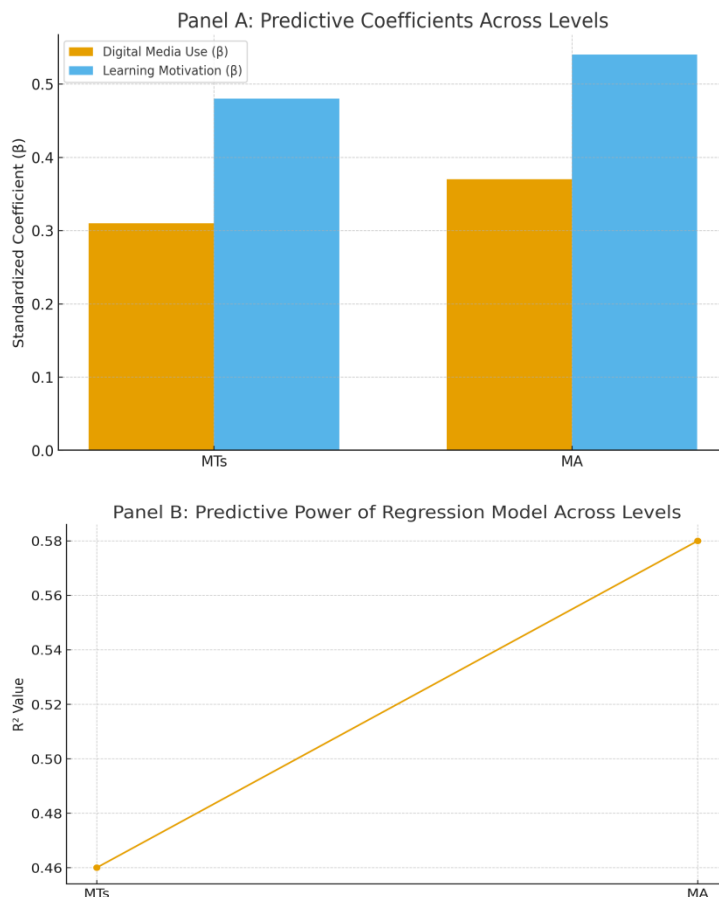
School Level	β (Standardized Coefficient)	Interpretation
MTs	0.31	Digital media use moderately predicts competence among younger students.
MA	0.37	The predictive effect of digital media use is stronger at this level.

This table 10 demonstrates that the predictive strength of digital media use is higher for MA students ($\beta = .37$) than for MTs students ($\beta = .31$). It suggests that older learners can better leverage digital tools, integrating digital content with higher-order thinking and moral reasoning, leading to a greater impact on their Aqidah Akhlak competence.

3) **Overall Predictive Capacity (R^2)****Table 11. Overall Predictive Capacity (R^2) Across Levels**

School Level	R^2	Interpretation
MTs	0.46	The model explains 46% of the variance in competence among MTs students.
MA	0.58	The model explains 58% of the variance among MA students, indicating stronger predictive capacity.

The table 11 shows that the overall predictive capacity of the model is higher for MA students ($R^2 = .58$) compared to MTs students ($R^2 = .46$). This indicates that motivation and digital media use become more integrated and effective influences on Aqidah Akhlak competence as students advance in grade level, reflecting greater developmental maturity and more strategic learning behaviors.



**Figure 4. Predictive Contribution of Digital Media Use and Motivation
Toward Aqidah Akhlak Competence**

Figure 4 shows that Panel A: Clustered bar chart displaying standardized regression coefficients (β) for digital media use and learning motivation among MTs Grade 7 and MA Grade 10 students. *Panel B*: Line chart illustrating overall model predictive power (R^2) across school levels, highlighting developmental differences.

The findings indicate that learning motivation is the strongest predictor of Aqidah Akhlak competence at both MTs and MA levels, with $\beta = .48$ for MTs and $\beta = .54$ for MA

students. Digital media use also contributes significantly, showing a moderate effect that is stronger among MA students ($\beta = .37$) compared to MTs ($\beta = .31$). Overall, the combined model explains 46% of variance in competence for MTs and 58% for MA, demonstrating greater predictive capacity among older students. These results emphasize the importance of fostering high-quality motivation and purposeful digital engagement from earlier grades, as developmental differences enhance both self-regulated learning and strategic utilization of digital resources.

DISCUSSION

1. Results Analysis

a. Digital Media Use Across Educational Levels

The descriptive findings reveal a consistent pattern in which MA students demonstrate higher levels of digital media engagement than MTs students. With mean scores of 3.88 (MA) and 3.42 (MTs), the data indicate that older students possess greater digital literacy and are more accustomed to integrating technology into their academic activities. This aligns with the study's objective of identifying level-based differences in digital learning behaviors. The normality of digital media use scores further validates the appropriateness of subsequent correlation and regression analyses used to evaluate the predictive value of digital media engagement toward Aqidah Akhlak competence.

b. Learning Motivation Profiles

Both educational groups exhibit high levels of learning motivation, but MA students show slightly stronger overall motivation ($M = 3.89$) compared to MTs students ($M = 3.72$). The distribution patterns further highlight developmental differences: 84.6% of MA students fall into the high motivation category compared to 68.6% of MTs students. The intrinsic and extrinsic subscale comparison reveals that although extrinsic motivation is marginally higher in both groups, MA students demonstrate stronger intrinsic motivation. These findings support the research objective of identifying how motivational constructs vary across levels and how they shape learning engagement in Aqidah Akhlak.

c. Correlations Among Digital Media Use, Motivation, and Aqidah Akhlak Competence

The correlation analysis provides strong empirical grounding for the study's hypothesis that both digital media use and learning motivation positively relate to Aqidah Akhlak competence. Among MTs students, motivation ($r = .52$) shows a stronger relationship with competence than digital media use ($r = .38$). This pattern intensifies among MA students, where both correlations are stronger—motivation ($r = .61$) and digital media use ($r = .49$). These results indicate that as students progress academically, their ability to integrate digital tools and sustain motivation becomes more mature and more strongly associated with academic outcomes. The strengthened correlations among MA students also suggest that developmental factors play a moderating role in shaping the relationship between digital media engagement, motivation, and competence.

d. Predictive Strength of Digital Media Use and Motivation

Regression results further validate the central role of learning motivation in predicting Aqidah Akhlak competence. In both groups, motivation emerges as the strongest predictor ($\beta = .48$ for MTs; $\beta = .54$ for MA), demonstrating its consistent and robust contribution across levels. Digital media use also predicts competence significantly, with higher predictive value at the MA level ($\beta = .37$) than at the MTs level ($\beta = .31$). The overall model explains a greater proportion of variance among MA students ($R^2 = .58$) compared to MTs students ($R^2 = .46$), indicating that the combined influence of motivation and digital engagement becomes more integrated and effective with age. These findings directly support the research objective of examining how digital media and motivation jointly contribute to students' Aqidah Akhlak competence.

2. Comparison with Previous Studies

The comparative findings between MTs and MA students in this study demonstrate strong alignment with existing literature on digital media use, learning motivation, and competence development in Islamic education. First, the higher correlation between Digital Media Use and Aqidah Akhlak Competence among MA students ($r = .49$) compared to MTs students ($r = .38$) is consistent with international and Indonesian studies emphasizing the positive role of digital media in enhancing engagement and moral understanding. Hashim and Langgulung (2020) and Yuniatun et al., (2024) similarly concluded that digital tools significantly elevate student engagement, intrinsic motivation, and internalization of Islamic

values. The stronger digital influence observed in MA students supports earlier claims that older learners utilize digital resources more purposefully due to increased cognitive maturity and metacognitive regulation.

Second, the higher Motivation → Competence relationship among MA students ($r = .61$) mirrors prior research demonstrating that motivation is a key determinant of students' mastery of religious subjects. Calonge et al., (2021) found that intrinsic motivation strongly predicts students' comprehension and moral internalization, while Silahuddin, (2022) reported that the introduction of audio-visual media increased motivation and engagement among Grade X students. The present findings confirm these patterns by showing that stronger motivation among MA students corresponds to higher competence outcomes.

Third, the predictive strength of Digital Media Use on competence—higher in MA ($\beta = .37$) than MTs students ($\beta = .31$)—supports the conclusions of Idhar & Ilyas, (2025) and Yuslinda, (2019), both of whom demonstrated that digital or multimedia-based interventions yielded significant improvements in Aqidah Akhlak learning outcomes. The cross-level difference found in the current study is consistent with these works, as MA students—in line with Self-Determination Theory (Ryan & Deci, 2020)—appear more capable of using digital tools to fulfill psychological needs for competence, autonomy, and relatedness.

Fourth, the stronger overall model explanatory power for MA students ($R^2 = .58$) compared to MTs students ($R^2 = .46$) corresponds with theories asserting that digital media and motivation become increasingly integrated as educational levels progress. Constructivist Learning Theory (Schunk, 2020) and Social Learning Theory (Bandura, 2019) emphasize that students' ability to process, construct, and internalize moral content improves as their cognitive and social competencies develop—patterns reflected in the higher coherence of predictors at the MA level.

Despite these consistencies, the present study diverges from some literature that suggests digital media effects are relatively uniform across age groups (e.g., Nasrullah, 2020). Unlike such findings, the current results show clear cross-level differences, indicating that contextual factors—such as teacher competence (Alif et al., 2020; Naila, 2024) digital readiness, and school climate—play a significant role in shaping how digital media and motivation translate into Aqidah Akhlak competence. These divergences highlight the

importance of examining Madrasah-specific environments rather than assuming homogeneous digital behavior across levels.

Overall, the comparison with previous studies demonstrates that the present findings are largely consistent with the broader theoretical and empirical landscape of Islamic education in the digital era, while also offering novel evidence regarding cross-level differences within a single institutional context.

3. Implications of Findings

The findings of this study carry several important theoretical and practical implications for Islamic education, particularly within Aqidah Akhlak instruction in the digital era. Theoretically, the stronger correlations and predictive power observed among MA students reinforce the three major learning theories that anchor this research. Consistent with Constructivist Learning Theory, the higher digital–competence linkage in MA suggests that advanced learners construct deeper understanding through meaningful interaction with digital content (Schunk, 2020). Likewise, the stronger Motivation → Competence relationship aligns with Self-Determination Theory, which asserts that digital tools support students' needs for autonomy and competence, thereby enhancing intrinsic motivation (Ryan & Deci, 2020). Moreover, the effective role of digital Islamic videos in shaping moral comprehension reflects Social Learning Theory, which posits that students internalize moral behaviors through observing modeled actions (Bandura, 2019). Together, these findings confirm that digital media and motivation operate synergistically as predicted by the theoretical foundations guiding this study.

Practically, the findings underscore the need for differentiated pedagogical strategies between MTs and MA levels. Since MTs students demonstrated lower correlations and predictive strengths across variables, digital media integration at the lower level should focus on structured, guided, and teacher-facilitated activities to prevent distraction and ensure meaningful engagement. For MA students, however, digital tools can be leveraged for higher-order learning tasks such as moral reasoning, reflective exercises, and value-based problem solving. The results also highlight the importance of improving teacher digital competence. Since teacher readiness and media management are known determinants of student motivation and achievement, educational institutions should invest in targeted professional development to enhance teachers' instructional media literacy.

Additionally, the findings emphasize the relevance of digital Islamic content—videos, animations, e-learning platforms—in supporting both cognitive and affective dimensions of Aqidah Akhlak learning. When properly curated, digital media can function as a model for moral internalization, supporting the Social Learning Theory perspective that value formation emerges through observing moral exemplars. The stronger predictive relationships found at the MA level further suggest that digital media can be used to cultivate spiritual understanding in more autonomous learning environments, strengthening character formation in line with Islamic educational goals.

Finally, the study contributes new empirical evidence regarding cross-level differences within a single institutional ecosystem, which may inform curriculum planning, media selection, and student support systems. Madrasah leaders may utilize these insights to design developmentally appropriate digital learning policies that accommodate varying levels of motivation, maturity, and digital literacy.

1. Research Limitations

Despite its contributions, this study acknowledges several limitations that should be considered when interpreting the findings. First, the sample size, although adequate for correlation and predictive analysis, was limited to students from a single institution—MA and MTs Ar-Rahmaniyah NW Senyur. This restricts the generalizability of the results, as contextual factors such as school culture, teacher competence, and available digital infrastructure may differ significantly across madrasahs.

Second, the study relied on self-reported measures of digital media use and motivation, which may be subject to response bias or social desirability effects. Students might have overestimated or underestimated their actual engagement with digital tools or motivation levels, potentially influencing the accuracy of the observed correlations and predictive values.

Third, the cross-sectional design limits the ability to assess causality. While the findings highlight significant relationships among digital media use, motivation, and Aqidah Akhlak competence, the directionality of these relationships cannot be confirmed. Longitudinal or experimental studies would be necessary to determine whether digital media use directly enhances competence or whether students with higher competence are more inclined to engage with digital resources.

Fourth, the study did not directly control for potential confounding variables such as teacher teaching style, digital infrastructure quality, class climate, or students' home digital environments. These factors may moderate or mediate the relationships observed and should be incorporated in future research models.

Lastly, while the study provides valuable cross-level comparisons, it does not explore qualitative dimensions such as students' perceptions, teacher experiences, or classroom dynamics that influence digital learning integration. Mixed-method designs could provide richer insights into how digital media and motivation interact within Aqidah Akhlak learning across different madrasah levels.

CONCLUSION

The conclusion of this study summarizes that: (1) The study identifies clear distinctions in digital media utilization between MTs and MA Ar-Rahmaniyah NW Senyur. MA students demonstrate more advanced, purposeful, and academically integrated digital media practices compared to MTs students, who show more basic and less structured engagement. These differences reflect developmental and cognitive maturity that shape how each group interacts with digital learning resources; (2) Learning motivation—both intrinsic and extrinsic—shows a positive correlation with Aqidah Akhlak competence at both MTs and MA Ar-Rahmaniyah NW Senyur. The correlation is notably stronger at the MA level, indicating that older students possess more stable and internalized motivational qualities that better support their mastery of Aqidah Akhlak concepts; (3) The combined influence of digital media use and learning motivation significantly contributes to students' Aqidah Akhlak competence. At both levels, these factors jointly predict moral comprehension, but the predictive strength is substantially higher among MA students. This suggests that MA learners integrate digital exposure and motivational resources more effectively when engaging with religious–moral content; and (4) A cross-level comparison shows that digital media use and learning motivation have greater overall predictive power at the MA Ar-Rahmaniyah NW Senyur level than at the MTs level. This indicates that as students advance academically, the interaction between digital engagement and motivation becomes more coherent and impactful, strengthening their ability to internalize Aqidah Akhlak values.

Despite these meaningful insights, the study acknowledges several limitations. The research relied on self-report measures, which may introduce bias in students' perception of

their own media use and motivation. The sample distribution between MTs and MA, while adequate, was limited to a specific institutional context, reducing generalizability to broader populations. Additionally, the study did not examine moderating variables such as teacher competence, school digital infrastructure, or socio-economic factors that may influence students' digital learning behavior.

Future studies are encouraged to employ mixed-methods designs to capture deeper qualitative insights into students' digital learning experiences. Expanding samples across diverse school environments would strengthen external validity. Researchers should also explore potential mediators or moderators—such as digital literacy, instructional design, and classroom climate—to develop more comprehensive models of how digital media and motivation interact to shape learning competence. By addressing these gaps, future research can contribute to the development of more targeted and effective digital learning strategies across educational levels.

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