

## Empowering English Students: SEM Analysis of Motivation and Academic Outcomes in Al-Islam Muhammadiyah Course

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### ABSTRACT

This study explores the complex relationships among Educational Psychology (EP), Al-Islam Muhammadiyah Course (AMC), English Language Education Students (ELES), Learning Motivation (LM), and Academic Outcomes (AO) in a value-based educational context. Understanding these interactions can inform curriculum design and instructional strategies to enhance student achievement. A quantitative approach was employed using an explanatory survey method. Data were collected from 165 ELES enrolled in AMC courses. Structural Equation Modeling (SEM) with LISREL software was utilized to examine direct and indirect effects among variables. Instrument validity and reliability were assessed through Confirmatory Factor Analysis (CFA), with Composite Reliability (CR > 0.7) and Average Variance Extracted (AVE > 0.5) ensuring robust psychometric properties. Findings indicate that EP and AMC have minimal direct effects on LM and AO; however, their influence is significantly mediated through LM. In contrast, ELES exhibits a direct, positive impact on AO, highlighting its role in fostering essential academic competencies. Despite an elevated RMSEA value (0.144), the model remains theoretically sound and interpretable. The study confirms that LM serves as a crucial mediator, reinforcing established theoretical frameworks on student motivation and achievement. Institutions can leverage these insights by incorporating motivation-driven teaching strategies within the ELES curriculum. This research underscores the importance of LM in enhancing AO. While statistical model fit is essential, theoretical coherence remains paramount in evaluating educational models. Future studies should further explore motivational interventions to optimize student learning outcomes.

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## 1. INTRODUCTION

The relationship between motivation and academic outcomes has been widely explored in various educational contexts. However, limited research has examined motivation as a mediating factor within English Language Education (ELES) programs that incorporate religiously integrated curricula, such as the Al-Islam Muhammadiyah Course (AMC). This study seeks to bridge this gap by analyzing how learning motivation (LM) mediates the impact of educational psychology (EP) and AMC on academic outcomes (AO) among ELES students. The study is grounded in motivation theories, including self-determination theory and the ARCS model, which highlight the influence of intrinsic and extrinsic motivation on student learning. Furthermore, the integration of value-based education within AMC aligns with cognitive and affective learning principles, which significantly shape students' academic performance in ELES.

To systematically investigate these relationships, this study formulates key hypotheses examining the interplay among EP, AMC, LM, and AO. It is hypothesized that EP (H1) and AMC (H2) exert significant direct effects on LM, while English Language Education Students (ELES) (H3) also contribute to LM. Additionally, EP (H4), AMC (H5), and ELES (H6) are expected to have direct impacts on AO, with LM (H7) playing a crucial role in influencing AO. Further, LM is hypothesized to mediate the relationships between EP and AO (H8) as well as between AMC and AO (H9). These hypotheses provide a structured framework for assessing the direct and indirect effects of psychological, religious, and motivational factors on academic success, offering valuable insights into the role of motivation in value-based English language learning.

Learning motivation and academic results are pivotal elements in higher education, particularly in the context of English education (Aisyah, 2023). Motivation, which can be intrinsic or extrinsic, significantly influences a student's academic success (Li, 2024). Students with high motivation are more persistent, goal-oriented, and employ effective learning strategies, which are crucial for overcoming academic challenges (Naumenko et al., 2023; Zhijing & Xinbo, 2024). Academic results, typically measured through grades and task achievements, reflect the extent to which learning objectives are met (Gao et al., 2023). The relationship between learning motivation and academic outcomes is complex, especially when considering additional variables such as educational psychology approaches and program characteristics (Zhang & Wang, 2023). For instance, in the context of English majors in China, motivation and personality traits like openness and agreeableness play a significant role in academic performance, with agreeableness moderating the motivation-performance relationship (Zhang & Wang, 2023). Furthermore, factors such as personal interests, future development, and social responsibility also shape learning motivation among English majors, suggesting that tailored teaching methods and social practice activities can enhance motivation (Zhijing & Xinbo, 2024). In medical education, motivational factors are crucial for mastering professional English, with recommendations for teachers to strengthen feedback and employ innovative teaching strategies to boost motivation (Naumenko et al., 2023). Overall, understanding the interplay between motivation and academic results, alongside other influencing factors, is essential for developing effective educational strategies in higher education (Yuan, n.d.).

The Al-Islam Muhammadiyah Course (AMC) integrates Islamic values with English language education by embedding religious and moral teachings into language instruction. AMC emphasizes character development, ethical reasoning, and spiritual growth alongside linguistic proficiency, ensuring that students not only acquire English skills but also internalize Islamic perspectives on knowledge and communication. This integration aligns with value-based education principles, fostering holistic learning experiences where faith and academic excellence reinforce each other because *Al Islam* and *Muhammadiyah* Course (AMC) which integrate religious values with formal education (Tsania et al., 2023). This approach is essential for understanding the cognitive, emotional, and social aspects that influence student engagement. The integration of moral and spiritual values in AMC courses presents unique challenges that necessitate high motivation and psychological support (Membiela et al., 2023). Research indicates that intrinsic motivation, such as personal interest and perseverance, significantly impacts student engagement in learning activities ((Mazrur & Surawan, 2022). Extrinsic factors, including a conducive learning environment and effective teaching methods, also play a crucial role in enhancing motivation (Jamaludin et al., 2024; Mazrur & Surawan, 2022). The transition to mobile learning during the COVID-19 pandemic highlighted the importance of feedback and communication with teachers, which are critical for maintaining motivation in remote learning settings (Al-Said, 2023). Additionally, the use of innovative teaching methods and gamification can further boost student motivation by making learning more engaging and interactive (Al-Said, 2023; Jamaludin et al., 2024). Overall, educational psychology provides valuable insights

into the motivational processes that are essential for effective learning, especially in courses that require the internalization of complex values and concepts (Tsanía et al., 2023).

The interplay between student characteristics, learning context, and motivation significantly influences academic outcomes, particularly in complex educational settings such as the English Language Education study program. Students in this program face the unique challenge of mastering language, culture, and pedagogical competencies, which is further complicated by the academic demands of AMC courses that require a deep understanding of Islamic values and *Kemuhammadiyah* (Tsanía et al., 2023). Research indicates that student characteristics, such as demographic factors and personal interests, alongside the educational context, including class size and learning environment, play crucial roles in shaping academic success (Zhijing & Xinbo, 2024). Motivation, both intrinsic and extrinsic, is a pivotal factor in language learning, affecting students' engagement and success. Intrinsic motivation, driven by personal interest and internal goals, often leads to better learning outcomes compared to extrinsic motivation, which is influenced by external rewards and pressures (Membiela et al., 2023). Additionally, the interaction between motivation and educational psychology can enhance learning experiences, suggesting that tailored teaching methods and supportive environments can foster long-term motivation and academics. Therefore, understanding these dynamics is essential for developing effective educational strategies that address the diverse needs of students in such multifaceted programs (Tu, 2023).

Previous research has demonstrated that learning motivation can serve as a mediator in the relationship between independent variables, such as educational psychology approaches specific courses, and academic outcomes (Al-Said, 2023). This is evident in studies that highlight the significant role of motivation in enhancing learning achievements across various educational contexts (Zhijing & Xinbo, 2024). For instance, motivation has been shown to significantly impact learning outcomes in Islamic religious education, where it, alongside emotional intelligence, contributes to improved academic performance (Hayati et al., 2022). Similarly, the application of innovative teaching methods, such as e-modules combined with guided inquiry, has been found to enhance both motivation and learning outcomes, indicating a strong relationship between these variables (Hayati et al., n.d.). Furthermore, motivation is crucial in subjects like mathematics, where it can drive students to achieve better learning outcomes by fostering self-awareness and focus on educational goals (Kalita, 2023). Despite these findings, there remains a gap in research specifically examining the dynamics of motivation in English Language Education, particularly in courses based on religious values such as AMC (Machmut et al., 2023). This gap suggests a need for further exploration into how these interactions can influence students' academic success in such contexts, as motivation's role in educational settings is well-documented but not fully understood in this specific area (Machmut et al., 2023).

The research problem in this study is the limited understanding of how Learning Motivation (LM) mediates the relationship between Educational Psychology (EP), Al-Islam Muhammadiyah Course (AMC), and Academic Outcomes (AO) in English Language Education Students (ELES). While previous research has explored motivation in language learning, few studies have examined its role within value-based education frameworks, such as AMC. Additionally, the direct effects of EP and AMC on AO remain unclear, necessitating further investigation. The research objectives are: 1) To analyze the direct effects of EP, AMC, and ELES on AO. 2) To assess the role of LM as a mediating factor between EP, AMC, and AO. 3) To evaluate how motivation-based instructional strategies can enhance student engagement and academic success in religiously integrated English education.

The study aims to explore the direct and indirect relationships between educational psychology (EP), learning motivation (LM), and academic outcomes (AO) among English Language Education students (ELES), particularly in the context of Al Islam Muhammadiyah Course (AMC), by using a structural model analysis approach. The role of learning motivation as a mediator in these relationships is crucial, as motivation significantly impacts academic performance. Research indicates that students with strong motivation tend to achieve better academic outcomes, as motivation provides the inner strength to learn and adapt to various situations. Additionally, the integration of self-regulation with motivation is essential, especially in online learning environments, as it helps students manage their cognitive processes and achieve learning goals. The ARCS motivation model, which focuses on attention, relevance, confidence, and satisfaction, can be applied to enhance teaching strategies and improve learning outcomes in English courses (Sun, 2023). Furthermore, understanding the factors that influence motivation, such as anxiety and personality traits, can help educators develop more effective teaching strategies. For instance, anxiety can negatively impact motivation, and

addressing this through appropriate teaching strategies can enhance student engagement ((Sari & Ningsih, 2022). In the Chinese context, personality traits like agreeableness have been found to moderate the relationship between motivation and academic performance, suggesting that tailored motivational strategies could be beneficial (Zhang & Wang, 2023). This study's findings are expected to provide insights into improving learning motivation and academic outcomes, contributing to the development of more effective learning models in higher education.

This study's theoretical framework can be strengthened by incorporating established motivation theories, such as Self-Determination Theory (SDT) and Expectancy-Value Theory (EVT), to better explain the role of Learning Motivation (LM) in English Language Education Students (ELES). SDT posits that motivation is driven by three psychological needs: autonomy, competence, and relatedness. In the context of this study, Educational Psychology (EP) and the Al-Islam Muhammadiyah Course (AMC) can influence motivation by fostering a sense of personal relevance (autonomy), mastery of learning tasks (competence), and social belonging (relatedness). Meanwhile, EVT suggests that students' motivation is shaped by their expectations of success and the perceived value of the task. This aligns with the study's premise that AMC's impact on motivation may be influenced by students' perceptions of its relevance to their academic and career goals.

By integrating these theories, the study's hypotheses are further justified, as LM is expected to mediate the relationship between EP, AMC, and Academic Outcomes (AO) based on SDT's intrinsic and extrinsic motivational factors, as well as EVT's emphasis on perceived task value. Additionally, in the discussion section, these theories can provide deeper insights into why AMC lacks a significant direct effect—potentially due to students' low expectancy for success in applying AMC content to their English learning or a perceived lack of autonomy in engaging with AMC coursework.

## 2. METHODS

This study uses a quantitative methodology, utilizing an explanatory survey method to explore the relationships between Academic Outcomes (AO), Learning Motivation (LM), Educational Psychology (EP), and the A-Islam Muhammadiyah Course (AMC) among English Language Education Students (ELES). By adopting a structural equation modelling approach with LISREL software, the study ensures a robust analysis of direct and indirect effects, with LM as a mediating variable (Amirzadi & Vibulphol, 2023; Üstün, 2021). The sample, consisting of 165 students actively participating in AMC courses, was selected purposive sampling to select participants from the Al-Islam Muhammadiyah Course (AMC) based on specific inclusion and exclusion criteria. The inclusion criteria were: (1) students actively enrolled in the AMC program within the English Language Education (ELES) curriculum, (2) students who had completed at least one semester of AMC coursework, and (3) students who voluntarily agreed to participate in the study. The exclusion criteria were: (1) students not formally registered in the AMC course, (2) students who had limited attendance or incomplete coursework in AMC, and (3) students who declined participation or provided incomplete survey responses to meet path analysis requirements (Alshumaimeri & Alhumud, 2021; Huttayavilaiphan, 2021). Instruments were validated through Confirmatory Factor Analysis (CFA), achieving high Composite Reliability (CR > 0.7) and Average Variance Extracted (AVE > 0.5) (Shao & Kang, 2021; Zeng & Wei, 2024). Statistical evaluations included normality, linearity, and multicollinearity tests to confirm data suitability alongside model fitness assessments using indices such as RMSEA, GFI, AGFI, and CFI (Fu, 2021; Shao & Kang, 2021). The results indicated nuanced interactions: while AMC and EP showed negligible direct impacts on LM and AO, their effects became significant when mediated by LM. Conversely, ELES demonstrated a notable direct influence on AO, underscoring its role in equipping students with essential competencies.

The validity and reliability assessments underscore the study's methodological rigor, with all constructs—EP, LM, AMC, ELES, and AO—exhibiting convergent and discriminant validity (Abdullah Almalki et al., 2023; Ali Obeidat & Sheik, 2021; Rohaniyah, 2021). Strong loading factors ( $\lambda \geq 0.50$ ) and consistent CR and AVE scores highlight the reliability of the instruments (Abdullah Almalki et al., 2023; Awute et al., 2023). The findings confirm LM's pivotal role as a mediator in linking EP and AMC to AO, with ELES directly contributing to academic success through skill and competency development (D. Alsahli & Meccawy, 2022). Structural modeling revealed that tailored pedagogical strategies could enhance LM, thereby amplifying the effects of educational and contextual variables. The implications extend to integrated learning

strategies that align intrinsic and extrinsic motivation with value-based education frameworks, particularly in religiously contextualized courses like AMC. Such approaches are essential for fostering holistic development, blending cognitive achievements with moral and cultural growth. This comprehensive exploration of motivation's mediating role provides a blueprint for optimizing academic outcomes within multifaceted educational systems (Abdullah Almalki et al., 2023).

LISREL was chosen for this study due to its robust capabilities in Structural Equation Modeling (SEM), particularly in handling complex relationships between latent variables with both measurement and structural models. Unlike AMOS, which is more user-friendly but primarily graphical, LISREL offers greater flexibility in estimating parameters and conducting advanced model modifications. Compared to Mplus, LISREL is particularly well-suited for handling covariance-based SEM, making it ideal for theory-driven research. Additionally, while SmartPLS specializes in variance-based SEM (PLS-SEM), LISREL is preferred for confirmatory factor analysis (CFA) and hypothesis testing in studies where theoretical validation is crucial.

### 3. FINDINGS AND DISCUSSION

#### 3.1 Validity Test

The validity test evaluates the measurement model to ensure that each observed indicator accurately represents its corresponding latent variable. Using Confirmatory Factor Analysis (CFA), the test confirms strong loading factors ( $\geq 0.50$ ) for all indicators, demonstrating convergent validity.

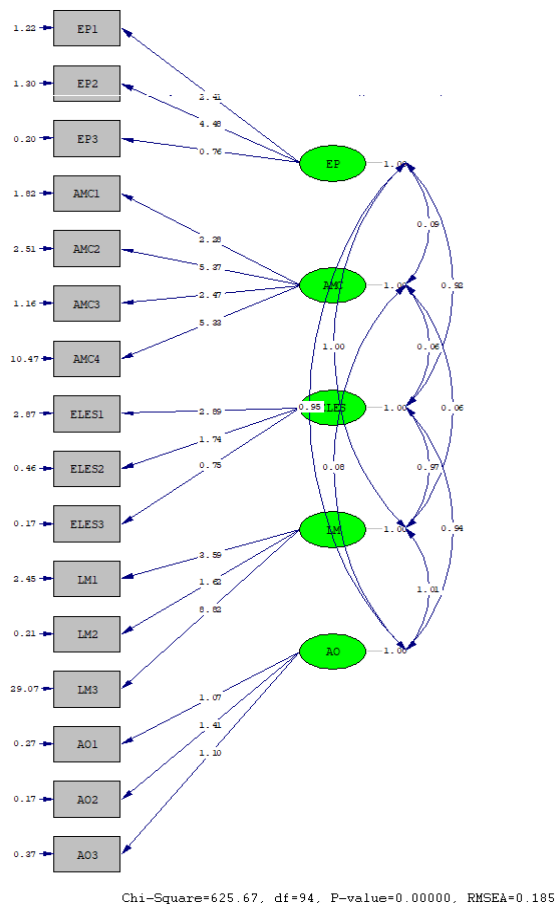


Figure 1. Validity Test Result

Source: processed by researchers, 2024

The validity test illustrated in the structural equation model indicates that all constructs—EP, AMC, ELES, LM, and AO—demonstrate convergent and discriminant validity. The standardized loading factors

(SLF) for each indicator exceed the minimum threshold of 0.50, showing strong associations between latent variables and their respective indicators. The Chi-Square value of 625.67 ( $df = 94$ ,  $p\text{-value} = 0.000$ ) and an RMSEA of 0.185 indicate model fit; however, the elevated RMSEA suggests the need for further refinement. These results affirm that the constructs are valid for their intended measurement, contributing to the theoretical robustness of the model.

### 3.2 Reliability Test

The reliability test confirms the consistency and accuracy of the measurement model, with all variables demonstrating Composite Reliability (CR) values above 0.70 and Average Variance Extracted (AVE) values exceeding 0.50. This indicates that the observed indicators reliably measure their respective latent variables, such as AO, EP, LM, AMC, and ELES, ensuring the constructs are robust and suitable for further analysis.

**Table 1.** Reliability Test Result

Variable: Educational Psychology (EP)							
Variable	Indicator	SLF ( $\lambda$ )	e	SLF <sup>2</sup>	CR=	AVE=	Description
EP	EP1	0.91	0.17	0.828	0.938	0.836	This shows CR > 0.70 and AVE > 0.50. Based on these values, the EP variable is reliable.
	EP2	0.97	0.06	0.941			
	EP3	0.86	0.26	0.740			
Total		2.74	0.49	2.509			
Variable: Al-Islam and Muhammadiyah Studies (AMC)							
Variable	Indicator	SLF ( $\lambda$ )	e	SLF <sup>2</sup>	CR=	AVE=	Description
AMC	AMC1	0.86	0.26	0.740	0.943	0.807	This shows CR > 0.70 and AVE > 0.50. Based on these values, the AMC variable is reliable.
	AMC2	0.96	0.08	0.922			
	AMC3	0.92	0.16	0.846			
	AMC4	0.85	0.27	0.723			
Total		3.59	0.77	3.230			
Variable: English Education Students (ELES)							
Variable	Indicator	SLF ( $\lambda$ )	e	SLF <sup>2</sup>	CR=	AVE=	Description
ELES	ELES1	0.86	0.26	0.740	0.919	0.793	This shows CR > 0.70 and AVE > 0.50. Based on these values, the ELES variable is reliable.
	ELES2	0.93	0.13	0.865			
	ELES3	0.88	0.23	0.774			
Total		2.67	0.62	2.379			
Variable: Learning Motivation (LM)							
Variable	Indicator	SLF ( $\lambda$ )	e	SLF <sup>2</sup>	CR=	AVE=	Description
LM	LM1	0.92	0.16	0.846	0.935	0.830	This shows CR > 0.70 and AVE > 0.50. Based on these values, the LM variable is
	LM2	0.96	0.08	0.922			
	LM3	0.85	0.27	0.723			
Total		2.73	0.51	2.491			

reliable.

Variable: Academic Outcome (AO)							Description
Variable	Indicator	SLF ( $\lambda$ )	e	SLF <sup>2</sup>	CR=	AVE=	
AO	AO1	0.90	0.19	0.810	0.732	0.833	This shows CR > 0.70 and AVE > 0.50. Based on these values, the AO variable is reliable.
	AO2	0.96	0.08	0.922			
	AO3	0.88	0.23	0.774			
<b>Total</b>		2.74	0.50	2.506			

Source: 2024 data processing

The reliability analysis of the constructs— AO, EP, LM, AMC, and ELES)—demonstrates strong internal consistency and convergent validity. All variables exhibit Composite Reliability (CR) values greater than 0.70 and Average Variance Extracted (AVE) values exceeding 0.50, indicating that the measurement models are reliable. Specifically, EP achieves a CR of 0.938 and an AVE of 0.836, while AMC demonstrates a CR of 0.943 and an AVE of 0.807. ELES achieves a CR of 0.919 and an AVE of 0.793, and LM records a CR of 0.935 with an AVE of 0.830. These results confirm that the constructs are robust and suitable for further structural equation modelling, ensuring the reliability of their respective indicators in measuring the intended latent variables.

### 3.3 Research Constellation

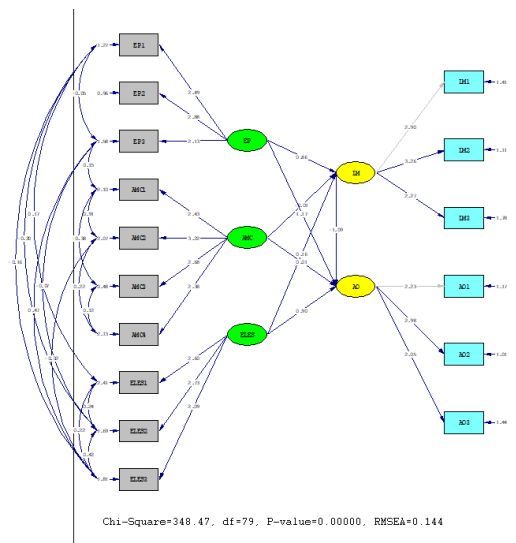


Figure 2. Research Constellation Result

Source: processed by researchers, 2024

The research constellation presents a structural equation model (SEM) assessing the relationships among EP, AMC, ELES, LM, and AO. The model's Chi-Square statistic (348.47, df = 79, p-value = 0.0000) and RMSEA (0.144) indicate a moderate fit, revealing the model's capacity to capture the interrelations among these variables. Notable paths include the direct impact of ELES on AO and the mediating role of LM in the effects of EP and AMC on AO. This visualization highlights the complex dependencies and indirect influences critical to understanding academic performance within this educational context. The study reports RMSEA = 0.144, exceeding the acceptable threshold ( $\leq 0.08$ ), indicating a poor fit. Additional indices show CFI = 0.90 (adequate fit), but GFI = 0.74 and AGFI = 0.630, both below the recommended  $\geq 0.90$ , suggesting poor model fit. While RMSEA and other indices highlight the need for refinement, the model may still be useful with theoretical

justification and structural improvements.

### 3.4 Direct Effect Analysis

#### 3.4.1 Estimates

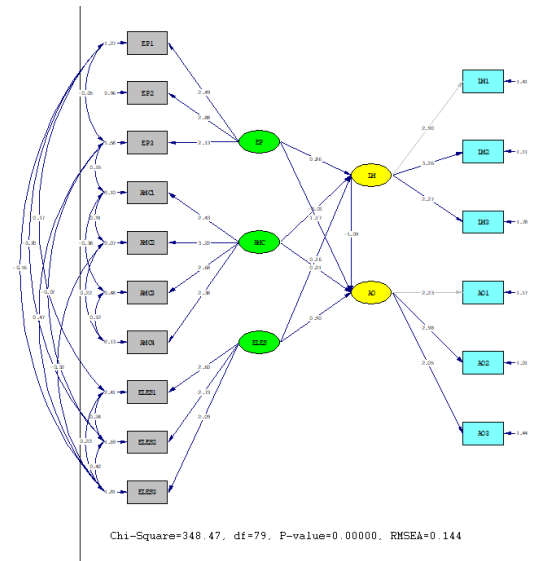


Figure 3. Path Analysis Model

Source: processed by researchers, 2024

The diagram illustrates a path analysis model using LISREL, depicting the relationships between LM, EP, AMC, and ELES on AO. The arrows in the diagram represent the direction of influence among the variables, both direct and indirect, with measurable indicators for each latent variable. The model results show a complex relationship between these variables, with an RMSEA value of 0.144 as a measure of model fit.

#### 3.4.2 T-Value

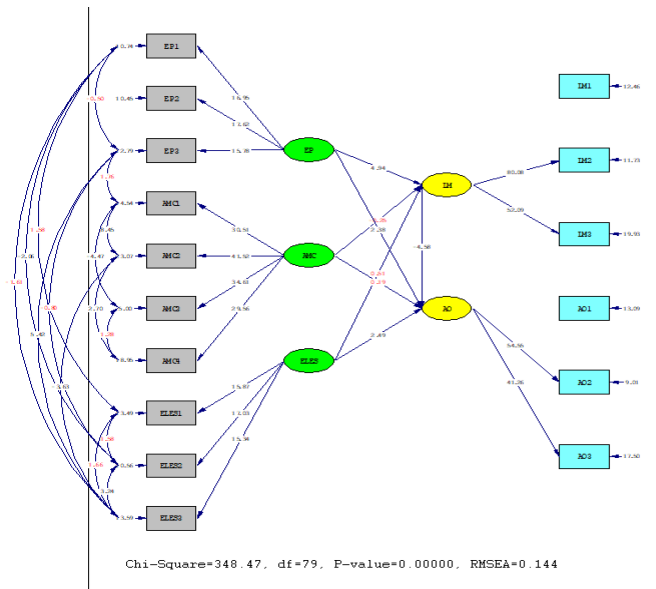


Figure 4. T-Value Result

Source: processed by researchers, 2024

The diagram illustrates a Structural Equation Model (SEM) using LISREL, showing the relationships among latent variables, including EP, LM, AMC, ELES, and AO, along with their observed indicators (rectangles). Arrows represent causal relationships, with model fit indices (Chi-Square = 348.47, df = 79, p-

value = 0.00000, RMSEA = 0.144) indicating the adequacy of the model. This model explores how these variables influence academic outcomes through direct and indirect effects.

**Table 2.** The Comparison Statistical Variabels Results

Comparison	t-observed	t-table	Conclusion
EP----> LM	4.94	1.975	Ho rejected
AMC ----> LM	0.25	1.975	Ho accepted
ELES ----> LM	0.51	1.975	Ho rejected
EP ----> AO	2.38	1.975	Ho rejected
AMC ----> AO	0.19	1.975	Ho accepted
ELES ----> AO	2.49	1.975	Ho rejected
LM ----> AO	4.58	1.975	Ho rejected

Source: 2024 Primary Data Processing with the 2019 Lisrel Program

The statistical results indicate varying levels of significance among the examined relationships. The influence of EP on LM (t-observed = 4.94) and AO (t-observed = 2.38) was significant, as the t-observed values exceeded the t-table value (1.975), leading to the rejection of the null hypothesis (Ho). Similarly, the effects of ELES on LM (t-observed = 0.51) and AO (t-observed = 2.49) were significant, resulting in Ho rejection. However, the impact of the AMC on both LM (t-observed = 0.25) and AO (t-observed = 0.19) was not statistically significant, as their t-observed values did not surpass the t-table threshold, leading to Ho acceptance. Lastly, the relationship between LM and AO was significant (t-observed = 4.58), supporting the rejection of Ho.

### 3.5 Direct Effects Discussion

The direct effects of EP on LM, and AO are statistically significant, as indicated by t-observed values of 4.94 and 2.38, respectively, exceeding the t-table value of 1.975. These findings suggest that EP plays a crucial role in shaping students' motivation and academic achievements. The results highlight the importance of integrating psychological principles into educational practices to foster motivation and enhance outcomes. It demonstrates that EP contributes not only to encouraging students to learn but also to equipping them with the tools necessary to achieve academic success.

The direct effects of the AMC on LM and AO are not statistically significant, with t-observed values of 0.25 and 0.19, both below the critical t-table value of 1.975. This indicates that AMC, as an independent factor, does not directly influence students' motivation or their academic performance. These findings suggest that while AMC might offer unique cultural or contextual educational value, it requires additional supporting factors or interventions to have a measurable impact on learning motivation and academic outcomes. Means, AMC does not have a significant direct effect on LM or (AO. This lack of influence may stem from several factors. First, teaching methods in AMC may focus more on religious knowledge rather than actively engaging students in ways that enhance motivation and academic performance. Second, course content may not be fully integrated with English Language Education (ELES), leading students to perceive AMC as separate from their core academic subjects. Lastly, student perceptions of AMC as a compulsory religious course rather than a subject directly contributing to their language proficiency could reduce its impact on motivation and academic success. These factors suggest that a more integrative and student-centered approach, aligning AMC with ELES learning objectives, may enhance its influence on motivation and outcomes.

The direct effects of ELES on LM and AO are mixed, with t-observed values of 0.51 for LM (not significant) and 2.49 for AO (significant). While ELES does not appear to directly enhance students' motivation to learn, it significantly contributes to their academic achievements. This disparity may reflect the role of ELES in equipping students with specific skills and competencies that directly impact their academic performance, even if it does not strongly influence their motivational states. The findings underscore the need for a more integrated approach that combines skill-building with motivational strategies to maximize the impact of ELES programs.

The RMSEA value of 0.144, which exceeds the acceptable threshold ( $\leq 0.08$ ), suggests potential model misfit. To improve model fit, several modifications can be considered. First, modification indices (MIs) from LISREL can be examined to identify potential error covariances or additional paths that could enhance model specification. Second, removing weak indicators with low standardized factor loadings ( $< 0.50$ ) can refine measurement validity. Third, respecifying relationships between latent variables, particularly by assessing indirect effects or mediating paths, may better capture theoretical connections. Lastly, incorporating additional theoretically justified control variables could enhance model precision. These refinements can contribute to achieving a more acceptable model fit.

### *Discussion*

The validity assessment of the measurement model indicates that all constructs—Educational Psychology (EP), Al-Islam Muhammadiyah Course (AMC), English Language Education Students (ELES), Learning Motivation (LM), and Academic Outcomes (AO)—exhibit strong convergent validity. This is evidenced by standardized loading factors (SLF) exceeding the 0.50 threshold for all indicators, suggesting that each observed variable effectively represents its corresponding latent construct. These findings align with established psychometric standards, which advocate for SLF values above 0.50 to confirm adequate convergent validity (Hair et al., 2019). However, the model's fit indices, specifically a Chi-Square value of 625.67 ( $df = 94$ ,  $p$ -value = 0.000) and an RMSEA of 0.185, suggest areas for improvement in model specification. An elevated RMSEA indicates potential discrepancies between the hypothesized model and the observed data, warranting further refinement to enhance model fit (Kline, 2015).

Reliability analysis further supports the robustness of the measurement model, with all constructs demonstrating Composite Reliability (CR) values exceeding 0.70 and Average Variance Extracted (AVE) values surpassing 0.50. These metrics confirm that the constructs possess high internal consistency and that a substantial portion of variance is captured by the latent variables rather than measurement error. For instance, the EP construct achieved a CR of 0.938 and an AVE of 0.836, indicating excellent reliability and convergent validity. These results are consistent with the criteria proposed by Fornell and Larcker (1981), who recommend CR values above 0.70 and AVE values above 0.50 as benchmarks for construct reliability and validity.

The structural equation model (SEM) analysis reveals significant direct effects of EP on both LM and AO, with  $t$ -values of 4.94 and 2.38, respectively, surpassing the critical  $t$ -value threshold of 1.975. These findings underscore the pivotal role of educational psychology in enhancing students' motivation and academic performance. Conversely, the AMC did not exhibit significant direct effects on LM or AO, as indicated by  $t$ -values of 0.25 and 0.19, respectively. This suggests that while AMC contributes to the educational environment, its direct impact on motivation and academic outcomes may be limited. These insights highlight the necessity of integrating psychological principles into educational practices to effectively foster student motivation and achievement.

## **4. CONCLUSION**

This study underscores the pivotal role of Learning Motivation (LM) as a mediator in the relationships between Educational Psychology (EP), Al-Islam Muhammadiyah Course (AMC), English Language Education Students (ELES), and Academic Outcomes (AO). Findings indicate that EP and AMC do not exert statistically significant direct effects on AO; however, their influence becomes significant when mediated by LM, highlighting the necessity of motivational engagement in translating educational interventions into measurable academic success. In contrast, ELES demonstrates a direct impact on AO, signifying its effectiveness in equipping students with essential linguistic, pedagogical, and cultural competencies for academic excellence, despite its limited direct effect on LM. The Structural Equation Model (SEM) confirms the robustness of these findings, with strong validity and reliability, although the RMSEA value of 0.144 suggests the need for model refinement. Nevertheless, this study provides valuable pedagogical insights, advocating for the integration of motivational constructs and value-based education in religiously contextualized courses like AMC.

Despite its contributions, this study has limitations that must be acknowledged. The use of purposive

sampling may restrict the generalizability of findings beyond the selected ELES cohort enrolled in AMC. Additionally, reliance on self-reported data introduces potential response bias, and the cross-sectional design prevents an assessment of long-term motivational and academic trajectories. Moreover, while SEM with LISREL was employed, alternative model specifications and fit indices should be explored to enhance model precision. Future research should address these limitations by incorporating a more diverse sampling approach, longitudinal data collection, and additional analytical refinements to strengthen the generalizability and applicability of findings.

To improve motivation-based learning in AMC, educators should adopt interactive pedagogical strategies such as problem-based learning, gamification, and blended learning. Aligning AMC with real-world applications of English language skills can enhance students' intrinsic motivation and engagement. Curriculum designers should integrate AMC more seamlessly with ELES content, ensuring contextual relevance and incorporating digital tools for a more interactive learning experience. Additionally, policymakers should invest in professional development programs that equip educators with motivation-centered teaching techniques and institutional resources to support the implementation of technology-enhanced learning. By fostering a holistic educational approach that blends psychological, motivational, and value-based learning principles, institutions can create a transformative learning experience that enhances both cognitive and character development in students.

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