The Relationship of Emotional Intelligence, Learning Facilities and Interest in Learning to Academic Achievement

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Article Info

ABSTRACT

This study aims to investigate the influence of emotional intelligence, learning facilities, and learning interest on the academic achievement of students in Sumatra Island. The Partial Least Squares-Structural Equation Modeling (PLS-SEM) method was used to analyze data from 200 respondents. The results of the analysis indicate that emotional intelligence and learning interest have a significant positive effect on academic achievement, while learning facilities have a significant negative effect. The effect size evaluation shows that emotional intelligence has the greatest influence, followed by learning interest and learning facilities. This model has strong predictive accuracy, indicated by high R^2 values for learning interest and academic achievement. Additionally, the model also has good predictive relevance, indicating the model's ability to accurately predict the values of endogenous variables. These findings provide insights for universities and lecturers to improve students' academic achievement by focusing on the development of emotional intelligence, learning interest, and enhancement of learning facilities.

INTRODUCTION

In this era of intense globalization competition, academic achievement is one of the key elements to achieving success. Various internal and external factors of students contribute to this accomplishment. Among these factors, emotional intelligence, learning facilities, and learning interest play a significant role. Emotions play a crucial role in all aspects of human life, and the importance of emotional intelligence (EI) lies in the ability to understand and manage emotions both within oneself and in others. Emotional intelligence involves self-awareness, emotion regulation, motivation, empathy, and social skills, all of which contribute to an individual's potential in various aspects of life, including work and personal relationships. In a study (Nurdiansyah, 2017), according to Goleman (2007), emotional intelligence refers to an individual's ability to manage emotions intelligently, maintain harmony in emotions and their expression, and involves skills such as self-awareness, self-control, spiritual intelligence,

empathy, and social skills. Goleman views emotional intelligence as the ability to recognize and control one's own emotions, motivate oneself, understand others' emotions (empathy), and build good relationships with others through cooperation.

Emotional intelligence is an individual's ability to successfully control their own emotions when interacting in social life with others (Ratnasari, et al., 2022). According to Karina (2012) in a study (Darmawan and Mardikaningsih, 2022), emotional intelligence is an individual's ability to successfully control their own emotions when interacting in social life with others. Emotional intelligence is not only related to understanding and responding to one's own emotions but also the ability to adapt and regulate emotional responses in various social contexts. In the last two decades, this concept has gained widespread recognition and is considered an important factor in determining an individual's success, on par with or even exceeding the importance of cognitive intelligence or IQ (Kant, 2019). Currently, there is a growing awareness that emotional intelligence plays a crucial role in various aspects of life, including job satisfaction, motivation, and the ability to make decisions in difficult situations. Recognition of emotional intelligence is also deemed important in the context of higher education, as it can help students manage academic pressure and enhance their ability to make better decisions, not only during their academic period but also after completing formal education.

Adequate learning facilities, such as comfortable study rooms, internet access, and relevant books, are also important factors in supporting academic achievement. Students who have access to good learning facilities will be more motivated to study and find it easier to understand the study material. Learning facilities are considered to play a significant role in supporting and enhancing the teaching process and quality (Febriani, Sarino, 2017). Learning facilities, such as classrooms, laboratories, libraries, and educational technology, play an important role in providing benefits and support for teaching and learning activities. These facilities are believed to help improve the learning process and teaching quality, enabling students to learn more effectively and efficiently. Learning facilities greatly influence students' academic achievement in the educational process.

Learning facilities are defined as various equipment and supplies used to support the learning process to achieve the set educational goals (Rahayu, Trisnawati, 2021). The main goal of providing these facilities is to ensure that the teaching and learning process runs smoothly and efficiently, so the targeted educational goals can be successfully achieved. The importance of having adequate educational facilities and infrastructure is not only on campus but also at home. These facilities and infrastructure include all facilities that support the learning process, such as books, computers, the internet, and conducive study spaces. One of the success factors in learning is adequate learning facilities (Muhammad, et al., 2019). It is emphasized that although schools provide some facilities, the responsibility for providing learning facilities at home lies with the parents or family (Khairunnisa, et al., 2019).

Interest in learning is the tendency of individuals to be interested and involved in the learning process. Students with a high interest in learning are generally more enthusiastic about participating in classes, completing assignments, and seeking additional information. This can motivate them to achieve higher performance. It is a continuous tendency to pay attention to certain activities (Kencanawaty, 2016). Interest can be observed from a liking or

affinity for something or an activity without being prompted (Johan, 2019).Learning with interest enhances students' ability to learn more effectively compared to learning without interest (Muslim, 2019). Interest in learning can be measured through indicators such as interest in learning, attention in learning, learning motivation, and knowledge (Vhalery, Alfilail, Robbani, and Hia, 2021).

Academic achievement is an important indicator in the world of education. Achieving optimal academic performance is the dream of every student, parent, and campus. Various internal and external factors can affect academic achievement, including emotional intelligence, learning facilities, and interest in learning (Emda, 2013). Research has shown that these three factors are interrelated and have a positive impact on academic achievement. Academic achievement is a change in skills or behavioral abilities that can increase over time, not caused by the process of growth but by the learning situation, thus seen as evidence of effort obtained by students (Sholikhah, 2018).

Therefore, it is important for educators, parents, and other stakeholders to understand and optimize the roles of emotional intelligence, learning facilities, and interest in learning in helping students achieve maximum academic performance (Mar'atur, 2019). These three factors—emotional intelligence, learning facilities, and interest in learning—interact and influence each other in shaping academic achievement. Engaging with and developing awareness of these aspects is important not only for individuals personally but also has broad implications in the educational context, as it can help lecturers and educational institutions design more effective learning strategies to improve students' academic performance.

This research is important because it helps identify and understand various determinants of academic success, such as emotional intelligence, learning facilities, and interest in learning. By knowing these factors, more effective strategies can be designed to enhance students' academic achievement. Moreover, the findings of this study can be used to improve the quality of education by providing insights into how to optimize the learning environment and support students' emotional needs. It is also crucial for developing programs that focus on enhancing students' emotional skills, such as self-awareness, self-control, and empathy, which are important not only for academic success but also for personal and professional well-being in the future. The study also highlights the importance of adequate learning facilities in supporting academic achievement, so educational institutions and related parties can ensure that students have access to the learning facilities they need to achieve optimal learning outcomes. By understanding how interest and motivation in learning affect academic achievement, this research helps in designing more effective interventions to increase students' interest and engagement in the learning process, ultimately contributing to overall academic performance improvement. Additionally, the results of this study can provide a strong empirical basis for educational policymakers to develop and implement better policies to support students' academic achievement. Thus, this research has a broad and significant impact on improving academic performance, emotional well-being, and the overall quality of education.

2. LITERATURE REVIEW
a. Emotional intelligencel (KE/EI)

Emotional Intelligence (EI) is an essential ability for managing emotions, both within oneself and in relationships with others (Qadri, 2021). Carolyn MacCann and colleagues (2011) define EI as the ability to monitor and understand feelings and emotions and use this information to guide actions and thoughts. According to Bar-On, EI involves awareness of oneself, others, and the surrounding environment. A person with a high EQ (Emotional Quotient) tends to be better at managing their own emotions, understanding others' emotions, and communicating effectively. This indicates that EI is not only important for personal development but also for interpersonal relationships and adjustment to the environment.

Goleman (1995, 1998), as cited in Halimi et al. (2021), defines emotional intelligence as a set of competencies divided into four main areas: self-awareness, self-management, social awareness, and relationship management. According to this definition, emotional intelligence is not just about recognizing and managing one's own emotions but also about how individuals interact and relate effectively with others.

According to a study conducted by Rode and colleagues (2007), there is a correlation between emotional intelligence and academic achievement, attributed to the overall relationship between the two. Academic performance often involves various challenges, particularly as students are frequently required to manage their academic work independently, which demands a high level of self-management. Individuals with higher emotional intelligence are more likely to understand the factors influencing their success in this regard. Therefore, individuals with high emotional intelligence tend to achieve better academic performance. According to Preeti (2013), achievement significantly affects overall human development, including the formation of cognitive, emotional, social, and physical abilities in children. Individuals with good emotional intelligence tend to perform better in various aspects of their lives.

b. Learning facilities (FB/LF)

Facilities in the context of school learning can be defined as all forms of tools and infrastructure that support and facilitate the teaching and learning process (Lopes, et al., 2019). According to Salary et al. (2018), facilities are essential instruments in meeting learning needs and differentiating educational programs based on competence. This includes infrastructure such as classrooms, which must be safe and support effective learning with equipment like desks, chairs, whiteboards, and other tools such as projectors. A university also requires a library to facilitate students in optimizing their learning abilities, encouraging interest in learning, and helping them choose educational paths according to their interests and talents (Acharya & Maharjan, 2018).

Adequate learning facilities have a significant impact on supporting learning activities. The presence of complete learning facilities can positively contribute to the learning process of students, thereby helping them achieve better academic performance (Wahyudi & Ratna, 2019). This is also in line with research conducted by Putro, Sunarto, & Sudarno (2017), which shows that external factors such as the completeness of learning facilities have a significant impact on students' academic achievement. The availability of complete learning facilities can assist students in the learning process, while a lack or incompleteness of learning facilities can hinder their learning progress. Overall, school facilities are important means to

facilitate and accelerate the learning process, connect teachers and students, and provide a conducive environment for the development of human resources through the enhancement of skills and knowledge.

c. Interest to learn (MB/IL)

Interest in learning is the tendency or attraction of students towards a particular subject or field of study. Interest in learning plays an important role in motivating students to learn and improving their academic performance. Students with a high interest in learning generally have high learning motivation (Idham Kholid, 2017).

According to Wina Sanjaya (2010:249), learning motivation is a crucial dynamic aspect of the learning process. It can be driven by intrinsic factors such as the desire and aspiration to succeed, the need for learning, and the pursuit of specific goals and expectations. According to Dalyono in Rahman (2022), motivation can determine the quality of goal achievement; thus, the greater the motivation, the greater the success in learning.

A number of studies have shown that interest in learning has a significant positive relationship with academic performance. Students with a high interest in learning tend to be more enthusiastic about learning, more focused, and more persistent in achieving their academic goals. They are also more likely to use effective learning strategies and overcome learning obstacles better (Paseleng et al., 2022; Nursaptini et al., 2020).

d. Academic achievement (PA/AA)

Academic achievement of students is an important indicator in assessing the success of the teaching and learning process in higher education (Arizki, 2019). Achieving optimal academic performance is not only beneficial for the students themselves but also for the advancement of the nation and the country. Academic achievement is the result of students' learning efforts reflected in their attainment of knowledge, skills, and understanding of the subject matter. Academic performance can be measured through various evaluation methods, including standardized tests, report card grades, and other academic achievements.

Students' academic performance is the result achieved or obtained in the form of knowledge, skills, and attitudes derived from the experiences and training they have undergone (Pratiwi, 2019). This will be achieved if the teaching and learning process is conducted effectively so that the educational outcomes achieved are optimal. Academic performance can be determined from the cumulative grade point average (GPA) obtained. The cumulative GPA reflects the extent to which students can grasp and understand the learning material (Madhuri, 2017).

Several studies indicate that emotional intelligence has a positive correlation with academic performance. Individuals who can manage stress, self-motivate, and maintain good interpersonal relationships tend to be more successful in academic settings. Having good intellectual intelligence alone is not enough; individuals also need to have the ability to manage themselves, find meaning in life, and maintain optimism, which is reflected in spiritual intelligence (Silen, 2014). According to Handriani & Muhammad (2020), the notion that human intelligence focuses only on the intellectual dimension is no longer valid, as human IQ also encompasses other dimensions of intelligence, namely emotional intelligence and spiritual intelligence.

Nggermanto (2015:113) states that spiritual intelligence is the intelligence that gives humans the spirit to keep growing and developing, providing meaning in life and self-control.

Research has shown that emotional intelligence can moderate the relationship between learning facilities, interest in learning, and academic performance. Individuals with high levels of emotional intelligence may be better at managing stress, maintaining motivation to learn, and effectively utilizing the learning environment. Therefore, it is important for students to develop these three types of intelligence to achieve optimal academic performance.

METHODS
3.1 instrumentation

The steps for developing the questionnaire are based on a literature review that adapts from previous research (Ingarianti & Purwono, 2019). The distributed questionnaire consists of a demographic scale that includes name, university of origin, and gender. The emotional intelligence instrument (10 items) is adapted from Halimi's (2021) research, learning facilities (9 items) and learning interest (8 items) from Sudarwono's (2018) research, and academic achievement (3 items) from Usman's (2021) research. Thus, the entire article uses a total of 30 items. The literature study on the influence of emotional intelligence, learning facilities, and learning interest on academic achievement helps researchers in defining and analyzing the concepts that form the theoretical context of the research (Hendryadi, 2017).

3.2 Data Collection

This study is a quantitative research. The target population includes male and female students from 4 universities in Sumatra. Out of 340 questionnaires distributed, 140 did not receive responses, resulting in 200 data obtained from respondents. 111 respondents are male and 89 respondents are female. University A provided 85 respondents, University B 47 respondents, University C 56 respondents, and University D provided 12 respondents. All items are designed on a 5-point Likert scale (1= strongly disagree and 5= strongly agree) (Pranatawijaya, et al, 2019).

3.3 Data Analysis

This study employs the Partial Least Squares-Structural Equation Modeling (PLS-SEM) technique, using SmartPLS software to analyze data and examine moderator effects (Musyaffi et al., 2022). PLS-SEM was chosen as the main method due to its ability to support models with complex interactions between indicator variables and paths, as this study involves 4 variables and 5 paths. This decision was based on choosing PLS-SEM because it is not affected by assumptions about data distribution and can offer causal information through prediction strategies in model estimation. PLS-SEM provides significant added value in exploratory research focusing on less common ideas.

SmartPLS 4 software is used because of its ease of use and availability of user-friendly software packages (Cheah, et al, 2023). This tool combines the latest techniques such as PLS-POS, IPMA, and advanced bootstrap processes to predict hypothesized associations, which in turn can optimize the explained variance in the dependent variable. In its implementation, PLS-SEM analysis is conducted through several stages, starting with the evaluation of convergent and discriminant validity. This evaluation includes item loadings, Cronbach's alpha, composite reliability, AVE, Fornell–Larcker criteria, heterotrait–monotrait (HTMT) values, and multicollinearity evaluation through VIF values (Marliana, 2021). These

stages provide a solid foundation for structural analysis and further hypothesis testing through bootstrapping techniques.

4. Measurement Model

Table 1 shows that all factor loadings for indicators in the measurement model are above 0.5. This indicates that each indicator makes a substantial contribution to measuring its respective construct (Hair, et al., 2006). The Average Variance Extracted (AVE) values for all constructs in the measurement model range from 0.562 to 0.646. These high AVE values indicate that the measured constructs have good internal convergence, meaning indicators within each construct are closely related (Wulandari, et al., 2024). The rho_A (Cronbach's reliability coefficient) and CR (composite reliability) values for all constructs in the measurement model are above 0.700 (Ghozali, 2014). These high rho_A and CR values indicate that the measured constructs have good reliability, meaning their measurement is consistent and reliable. Variance Inflation Factor (VIF) values are used to detect multicollinearity in the data. High VIF values (above 10) indicate multicollinearity, which can affect model accuracy. In this study, the VIF values for all indicators in the measurement model are below 3.682, indicating no multicollinearity in the data (Ganar, 2018). Heterotrait-Monotrait Ratio (HTMT) values are used to measure discriminant validity of the measurement model. High HTMT values (above 0.9) indicate that the measured constructs are not sufficiently different from each other. In this study, the HTMT values for all pairs of constructs are below 0.900, indicating good discriminant validity of the measurement model (juliandi, 2018). Standardized Root Mean Squared Residual (SRMR), dG, and dULS values are used to measure the fit of the measurement model. Low SRMR values indicate good model fit. In this study, the SRMR value is 0.085, indicating good model fit. The dG and dULS values also indicate good model fit (Judijanto, 2024).
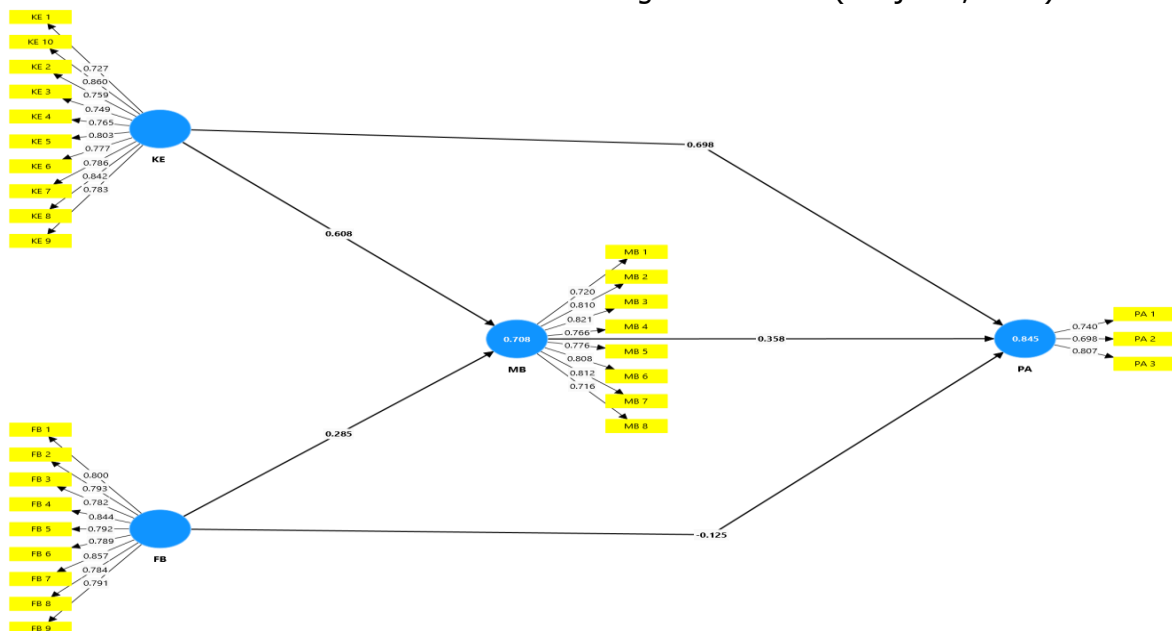

Figure 1. measurement model showing the substantial loading of the scale of the contruct.

Tabel 1. Factor Loading, Reliability, and Validity Of Measurent Model

CONSTRUCT	ITEMS	LOADING	Rho_A	CR	AVE	VIF
EI	EI 1	0.727	0.932	0.942	0.618	2.777
	EI 10	0.860				3.502
	EI 2	0.759				3.024
	EI 3	0.749				2.640
	EI 4	0.765				2.949
	EI 5	0.803				2.713
	EI 6	0.777				3.121
	EI 7	0.786				3.041
	EI 8	0.842				3.540
	EI 9	0.783				2.785
LF	LF 1	0.800	0.933	0.943	0.646	2.642
	LF 2	0.793				2.470
	LF 3	0.782				2.510
	LF 4	0.844				3.101
	LF 5	0.792				2.485
	LF 6	0.789				2.647
	LF 7	0.857				3.682
	LF 8	0.784				2.723
	LF 9	0.791				2.714
IL	IL 1	0.720	0.910	0.925	0.608	1.830
	IL 2	0.810				2.532
	IL 3	0.821				2.682
	IL 4	0.766				2.246
	IL 5	0.776				2.145
	IL 6	0.808				2.469
	IL 7	0.812				2.535
	IL 8	0.716				1.763
AA	AA 1	0.740	0.617	0.793	0.562	1.209
	AA 2	0.698				1.177
	AA 3	0.807				1.295

Tabel 2. HTMT < 0.900 and model fit

	LF	EI	IL	AA	Saturated	Model
LF					SRMR	0.085
EI	0.796				d_ULS	3.369
IL	0.791	0.882			_d_G	3.871
AA	0.870	0. 889	0.896			

5. Struktur Model

Based on the bootstrap results with 5000 sub-samples, this study investigates the relationship between exogenous and endogenous factors, confirming significant hypotheses at a significance threshold of 5%. The aim of this research is to investigate the relationship between exogenous and endogenous factors (Rijal & Bachtiar, 2015). H1: LF is a significant predictor for IL, Coefficient (β)= 0.285, t-Value =3.198. H2: LF has a significant negative relationship with AA, Coefficient (β) = -0.125, t-Value=2.278. H3: EI is a significant

predictor for IL, Coefficient (β) = 0.608, t-Value = 7.248. H4: EI also significantly predicts AA, Coefficient (β)= 0.698, t-Value = 0.511. H5: IL has a significant relationship with AA, Coefficient (β) = 0.358, t-Value = 5.264.

When certain exogenous variables are removed from the model, the effect size f^2 is used to investigate changes in the R^2 value. According to Sholihin & Ratmono (2021), in regression models or analyses of the relationship between exogenous (independent) variables and endogenous (dependent) variables, the effect size f^2 is used to evaluate the extent of influence or contribution of one or more exogenous variables to the R^2 value (coefficient of determination). According to the PLS-SEM guidelines, an f2 value of 0.02 indicates a small effect, 0.15 indicates a moderate effect, and 0.35 indicates a large effect according to Marina (2017). PLS-SEM is a statistical analysis method used to test structural models with latent variables (not directly observed).The effect sizes of all exogenous factors on endogenous factors are discussed (Table 5). The largest influence appears in the relationship between EI and PA (0.698), while the smallest influence appears in the relationship between LF and AA (-0.125).

The coefficient of determination (R^2) is a statistic indicating how accurately predictions are made, calculated as the squared value of the correlation between two dependent variables. Ranging from 0 to 1, R^2 values are calculated. A larger R^2 value indicates a better level of predictability. An R^2 value of 0.25 is considered weak, 0.50 is considered moderate, and 0.75 is considered strong according to Anuraga & Otok (2013). R^2 is a statistical measure indicating how well a regression model or other model can explain the variation in the dependent or endogenous variable. From the data calculations, all endogenous variables within the model achieve an accurate prediction level. The R2 value for MB is 0.708 (strong) and for PA is 0.845 (strong) (Figure 2).

A Q^2 value greater than zero for a model's predictive relevance typically suggests that the model is providing useful information for making predictions has been achieved according to Paila et al. (2023). Q² value is used to measure the predictive relevance of the structural model. The level of predictive relevance is 0.02 (low), 0.15 (moderate), and 0.35 (high). In SmartPLS, blindfolding computation is used to address predictive relevance. All Q^2 values are greater than 0, indicating predictive relevance according to Meha (2019). Blindfolding computation in SmartPLS is used to evaluate the predictive relevance or prediction ability of the constructed model. The Q2 results in Figure 2 support the predictive relevance of the model for all endogenous variables as follows: MB (0.701, high), and PA (0.805, high). Here are the hypotheses :

1. H1: Learning Facilities (LF) influence Learning Interest (IL).

This hypothesis states that good quality and availability of learning facilities can enhance students' interest in learning according to Yasintha et al. (2022). A comfortable and conducive learning environment can improve students' concentration and comfort during the learning process. Adequate learning facilities, including comfortable classrooms, complete educational equipment, and access to digital learning resources and libraries, are considered to make students more interested and motivated to participate in learning activities.

2. H2: Learning Facilities (LF) influence Academic Achievement (AA).

This hypothesis suggests that adequate learning facilities not only enhance students' learning interests, but also directly impact their academic achievement. According to Abdulla (2012), access to learning resources such as libraries, laboratories, computer rooms, and internet access can provide students with broader access to learning resources. Diverse learning resources can help students deepen their understanding of subjects and broaden their knowledge, which in turn can improve academic performance. Good facilities provide a conducive learning environment and can help students achieve better academic results. According to Supriatna (2021), such an environment can enhance students' concentration and focus during the learning process, making it easier for them to absorb and understand course materials better, ultimately positively impacting their academic performance.

3. H3: Emotional Intelligence (EI) influences Learning Interest (IL).

This hypothesis states that emotional intelligence, which includes the ability to manage emotions, empathy, and social skills, can enhance students' interest in learning according to Suciati, W. (2016). Students with high emotional intelligence tend to have strong self-motivation. They can control negative emotions such as laziness or frustration and remain motivated to achieve their academic goals. This strong motivation can increase their interest and perseverance in learning. Students with good emotional intelligence are more likely to cope with stress, collaborate with peers, and be motivated to learn, thereby increasing their interest in academic activities according to Subroto et al. (2023).

4. H4: Emotional Intelligence (EI) influences Academic Achievement (AA).

This hypothesis argues that high emotional intelligence can have a positive impact on students' academic achievement according to Riza & Yoto (2023). Students who possess high emotional intelligence have the ability to effectively regulate and manage their emotion, such as controlling anxiety, stress, or other negative emotions that may disrupt the learning process. This ability allows them to stay focused and concentrated during academic activities, which can ultimately improve their academic performance. Students who can manage their emotions well tend to be more focused, have good time management skills, and be able to overcome academic challenges more effectively, ultimately enhancing their academic performance according to Pratama et al. (2023).

5. H5: Learning Interest (IL) influences Academic Achievement (AA).

This hypothesis suggests that high learning interest will have a positive impact on academic achievement according to Supriatna (2021). Students with a strong interest in learning tend to be more focused and pay attention to course materials carefully. Better concentration and attention help them absorb information more effectively, which can ultimately enhance their understanding and academic performance. Students with a great interest in learning tend to be more diligent, hardworking, and enthusiastic in attending lessons, contributing to better academic achievements according to Yuliana (2022). Perseverance in facing challenges, students with a strong interest in learning tend to be more perseverant and resilient in facing academic challenges. They are more willing to work hard and not easily give up when facing difficulties in learning, which can contribute to better academic achievements.

Tabel 3. Struktur model

H	Coefficient	β	t- Value	p- Value	f^2
H1	LF -> IL	0.285	3.198	$p < 0.001$	0.125
H2	LF -> AA	-0.125	2.278	$p < 0.023$	0.040
H3	EI -> IL	0.608	7.248	$p < 0.000$	0.567
H4	EI -> AA	0.698	10.511	$p < 0.000$	0.899
H5	IL > AA	0,358	5.264	$p < 0.000$	0.241

R^2 (IL)= 0.708
Q^2 (IL)= 0.701

R^2(AA)= 0.845
Q^2(AA)= 0.805
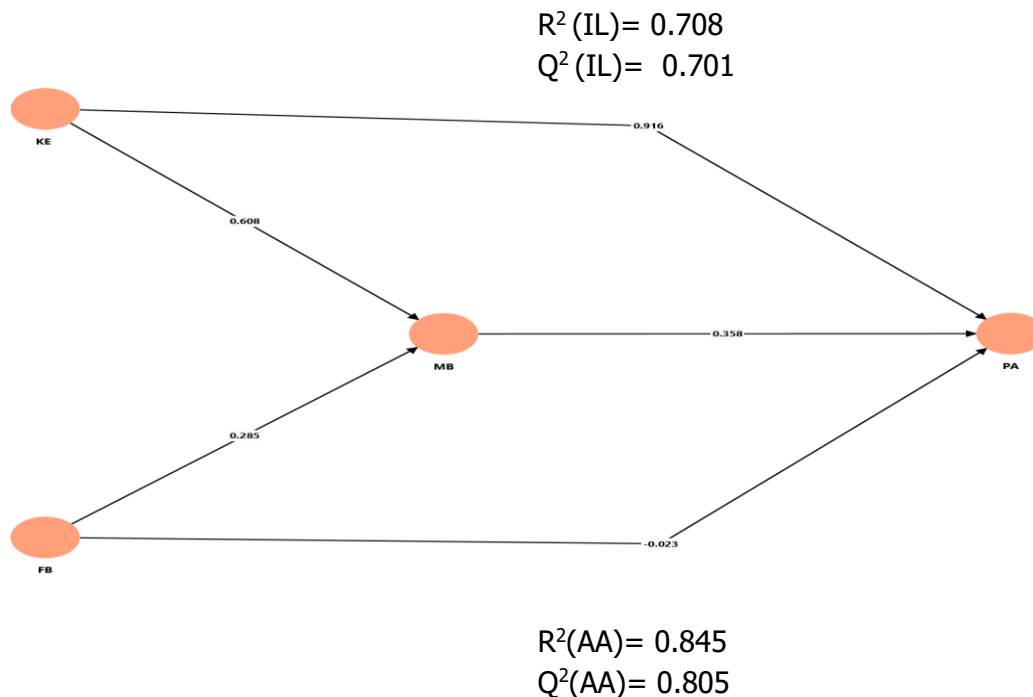
Figure 2. t-value, coefficient of determination (R^2),and additive relevance (Q^2) from the final model

6. Discussion

The instrument was distributed to 200 students spread across four universities on the island of Sumatra. The results of the measurement model evaluation indicate that all indicators have high loading values (>0.5), good AVE values (>0.5), and good reliability values (Cronbach's alpha and composite reliability >0.7) according to Irwan & Adam (2015). Good Composite Reliability values (>0.7) also indicate good reliability of the indicators in measuring their latent variables. Composite Reliability is often considered a better reliability measure than Cronbach's Alpha. This indicates that the indicators used in this study are valid and reliable in measuring the intended constructs. Additionally, the low HTMT values (<0.9) indicate good discriminant validity among the constructs in the model, meaning each construct is sufficiently different from one another according to Sholihin & Ratmono (2021).

Model fit evaluation also showed good results with SRMR, dG, and dULS values meeting the criteria. According to Narimawati & Sarwono (2022), The SRMR (Standardized Root Mean Square Residual) is a measure of absolute fit that assesses the variance between observed sample correlations or covariances and those predicted by the model.The path

analysis results confirmed that all hypotheses in this study were accepted at a significance level of 5% according to Sari (2016). Path Analysis is a statistical technique employed to assess path models or structural equation models. Its goal is to test the relationships between variables in the model, both direct and indirect. Learning Facilities (LF) proved to be a significant predictor of Learning Interest (IL) with a positive path coefficient (H1), but it had a significant negative relationship with Academic Achievement (AA) (H2). Emotional Intelligence (EI) also proved to be a significant predictor of Learning Interest (H3) and Academic Achievement (H4) with positive path coefficients. Lastly, Learning Interest (IL) had a significant positive relationship with Academic Achievement (AA) (H5).

Evaluation of effect size (f^2) showed that The most significant influence was observed in the connection between Emotional Intelligence (EI) and Academic Achievement (AA), while the smallest influence was the relationship between Learning Facilities (LF) and Academic Achievement (AA). High R^2 values for Learning Interest (0.708) and Academic Achievement (0.845) indicate that this model has strong predictive accuracy. Additionally, positive Q^2 values for both endogenous variables indicate that the model has good predictive relevance according to Sijabat (2020). Predictive Relevance refers to the model's ability to accurately predict the values of endogenous variables or dependent variables. The better the predictive relevance of a model, the better its ability to predict the values of endogenous variables.

Overall, the findings of this study confirm that emotional intelligence, learning facilities, and learning interest have significant effects on students' academic achievement. Emotional intelligence and learning interest have positive effects, while learning facilities have a negative effect on academic achievement. These findings can provide input for universities and lecturers to improve students' academic achievement through efforts to enhance emotional intelligence, learning interest, and provide adequate learning facilities.

CONCLUSION

This research utilized a valid and reliable measurement model based on the evaluation of convergent validity, discriminant validity, and good model fit. The path analysis results confirmed that all hypotheses in this study were accepted at a significance level of 5%. Learning facilities proved to be significant predictors of learning interest but had a negative relationship with academic achievement. Meanwhile, emotional intelligence was a significant predictor of both learning interest and academic achievement with a positive influence.

The research findings indicated that learning interest has a significant positive relationship with academic achievement. The strongest impact was found in the correlation between emotional intelligence and academic achievement, while the smallest influence was the relationship between learning facilities and academic achievement. This research model exhibited strong predictive accuracy for learning interest and academic achievement, as well as good predictive relevance. Overall, the research findings affirm the importance of emotional intelligence, learning interest, and the provision of adequate learning facilities in enhancing students' academic achievement. This study provides empirical evidence on the factors influencing students' academic achievement and can serve as input for universities in their efforts to improve educational quality.

REFERENCES

Abdullah, R. (2012). Pembelajaran berbasis pemanfaatan sumber belajar. *Jurnal Ilmiah Didaktika*, *12*(2).

AL-Qadri, A. H., & Zhao, W. (2021). Emotional intelligence and students' academic achievement. *Problems of Education in the 21st Century*, 79(3), 360.

Anuraga, G., & Otok, B. W. (2013). Pemodelan Kemiskinan di Jawa Timur Dengan Structural Equation Modeling-Partial Least Square. *Jurnal Statistika Universitas Muhammadiyah Semarang*, *1*(2).

Arizki, N. F. (2019). Hubungan Mekanisme Koping Dengan Prestasi AkademikPada Mahasiswa Malaysia Tahap Akademik Program Studi Profesi Dokter Fakultas Kedokteran Universitas Andalas (Doctoral dissertation, Universitas Andalas).

Aseleng, M. C., Kusuma, D., & Sanoto, H. (2022). Analisis Kemandirian Belajar Mahasiswa Dalam Pembelajaran Berbasis Moodle Pada Flearn Uksw. *Scholaria: Jurnal Pendidikan Dan Kebudayaan,* 12(3), 267–273. Https://Doi.Org/10.24246/J.Js.2022.V12.I3.P267-273

Cheah, J. H., Magno, F., & Cassia, F. (2023). Reviewing the SmartPLS 4 software: the latest features and enhancements.

Darmawan, D., & Mardikaningsih, R. (2022). Hubungan Kecerdasan Emosional Dan Hasil Belajar Dengan Kualitas Komunikasi Mahasiswa Fakultas Ekonomi. *ARBITRASE: Journal of Economics and Accounting*, 3(1), 45-49.

Emda A. Kedudukan Motivasi Belajar Siswa Dalam Pembelajaran. *Lantanida Journal.* 2018;5(2):172.

Febriani, P. S., & Sarino, A. (2017). Dampak cara belajar dan fasilitas belajar dalam meningkatan prestasi belajar siswa sekolah menengah kejuruan. *Jurnal manajerial,* 16(1), 163-172.

Ganar, Y. B. (2018). Pengaruh kebijakan dividen dan profitabilitas terhadap nilai perusahaan pada perusahaan yang terdaftar Di Bursa Efek Indonesia Periode 2013-2017. *Jurnal Sekuritas,* 2(1), 32-44.

Ghozali, I. (2014). Structural Equation Modeling (Edisi 4). *Universitas Diponegoro.*

Hair, J., Blak, W.C., Babin, B.J., Andersen, R.E., & Ratham, R.L. (2006). *Multi-variate data analysis. Sixth edition*. New Jersey: Pearson Prentice Hall.

Halimi, F., AlShammari, I., & Navarro, C. (2021). Emotional intelligence and academic achievement in higher education. *Journal of Applied Research in Higher Education,* *13*(2), 485-503.

Handriani, A. & Muhammad, S. (2020). Hubungan Kecerdasan Intelektual Kecerdasan Emosional dan Kecerdasan Spiritual Terhadap Prestasi Belajar Fisika. *Gravity Edu: Jurnal Fisika, dan Pendidikan Fisika.* 3 (1): 1 – 4.

Hendryadi, H. (2017). Validitas isi: tahap awal pengembangan kuesioner. *Jurnal Riset Manajemen dan Bisnis,* 2(2), 259334.

Hidayatullaily, S., Buairi, H., Andriani, P., & Mushollin, R. (2023). Pengaruh Kecerdasan Emosional dan Prestasi Belajar Terhadap Disposisi Matematis pada Mahasiswa Calon Guru Matematika. *Jurnal Ilmiah Matematika Realistik*, 4(1), 112-119.

Idham Kholid, "Motivasi dalam Pembelajaran Bahasa Asing", *Jurnal Tadris*, vol 10 No. 1

(2017).

Irwan, I., & Adam, K. (2015). Metode partial least square (PLS) dan terapannya (Studi kasus: analisis kepuasan pelanggan terhadap layanan PDAM unit camming kab. Bone). *Teknosains: Media Informasi Sains dan Teknologi*, *9*(1), 53-68.

Johan, R. (2019). Pengaruh Game Online Terhadap Minat Untuk Belajar Peserta Didik Kelas X di MA Al Hidayah Depok. *Research and Development Journal of Education*, 5(2), 12-25.

Judijanto, L. (2024). Pengaruh Kepatuhan Pajak, Perlindungan Hukum, Akses Perizinan terhadap Keberlanjutan UMKM di Kota Semarang. *Jurnal Ekonomi dan Kewirausahaan West Science*, 2(02), 178-189.

Juliandi, A. (2018). Structural equation model based partial least square SEM- PLS Menggunakan SmartPLS. *Jurnal Pelatihan SEM-PLS Program Pascasarjana Universitas Batam*, 16–17.

Kant, R. (2019). Emotional intelligence: A study on university students. *Journal of Education and Learning (EduLearn)*, 13(4), 441-446.

Kasiram, Moh, (2008). *Metodologi Penelitian*. Malang: UIN-Malang Pers,

Khairunisa, R. (2019). Pengaruh Fasilitas Belajar Terhadap Motivasi Belajar Siswa Kelas V Di SDN 001 Samarinda Utara. *PENDAS MAHAKAM: Jurnal Pendidikan dan Pembelajaran Sekolah Dasar*, 4(2), 146-151.

Lopes, D., Moreira, I. X., da Costa Ribeiro, M., Dos Santos, A. G., & da Costa, A. (2019). Impacts of environment and school facilities on student learning achievement in secondary school. *ISCE: Journal of Innovative Studies on Character and Education*, 3(2), 256-269.

MacCann, C., Jiang, Y., Brown, L. E. R., Double, K. S., Bucich, M., & Minbashian, A. (2020). Emotional intelligence predicts academic performance: A meta-analysis. *Psychological Bulletin*, 146(2), 150–186. https://doi.org/10.1037/bul0000219

Marina, T. (2017). Pengaruh Langsung dan Tidak Langsung dalam Model Persamaan Struktural dengan metode Partial Least Square (PLS).

Marliana, R. R. (2021). Pelatihan Pls-Sem menggunakan smartpls 3.0 dosen mata kuliah statistika fisip uin sunan gunung djati bandung. *Jurnal Abdimas Sang Buana*, 2(2), 43-50.

Meha, R. H. (2019). *Analisis kepuasan pengguna sistem informasi akademik di UIN Syarif Hidayatullah Jakarta*. (Bachelor's thesis, Fakultas Sains dan Teknologi UIN Syarif Hidayatullah Jakarta).

Muhamad, H., Efendi, A., & Basori, B. (2019). Pengaruh Fasilitas Belajar Berbasis Teknologi Terhadap Prestasi Belajar Siswa. *JIPTEK: Jurnal Ilmiah Pendidikan Teknik dan Kejuruan*, 12(1), 56-64.

Muslim, I. F. (2019). Pengaruh Minat Dan Motivasi Belajar Terhadap Prestasi Belajar Ilmu Pengetahuan Sosial (Survei pada siswa kelas VIII MTs Swasta di Jakarta Timur). *Research and Development Journal of Education*, 5(2), 76-90.

Musyaffi, A. M., Khairunnisa, H., & Respati, D. K. (2022). *Konsep dasar structural equation model-partial least square (sem-pls) menggunakan smartpls*. Pascal Books.

Narimawati, U., & Sarwono, J. (2022). Kajian Tentang Indeks Kecocokan Model Dalam

Pemodelan Persamaan Struktural Berbasis Kovarian D Alam Lisrel Dan Amos Serta Berbasis Partial Least Square Dalam Pls Sem. *Majalah Ilmiah Unikom*, *20*(2), 85-94.

Nggermanto, A. (2015). *Kecerdasan Quantum, Melejitkan IQ EQ dan SQ*. Bandung: Penerbit Nuansa Cendekia.

Nurrokhim, M. (2018). Peningkatan Motivasi Belajar Mahasiswa Universitas Indraprasta PGRI Melalui Quantum Teaching. *Research and Development Journal of Education,* 5(1), 73-83.

Nursaptini, N., Syazali, M., Sobri, M., Sutisna, D., & Widodo, A. (2020). Profil Kemandirian Belajar Mahasiswa Dan Analisis Faktor Yang Mempengaruhinya: Komunikasi Orang Tua Dan Kepercayaan Diri*. Jurnal Pendidikan Edutama*, 7(1), 85. Https://Doi.Org/10.30734/Jpe.V7i1.711.

Paila, F. E., Lengkong, V. P., & Sendow, G. M. (2023). Pengaruh Keselamatan dan Kesehatan Kerja dan Lingkungan Kerja Terhadap Produktivitas Kerja Karyawan pada PT. Manado Korin Paradise dimasa Pandemi Covid 19. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, *11*(1), 973-982.

Pranatawijaya, V. H., Widiatry, W., Priskila, R., & Putra, P. B. A. A. (2019). Penerapan skala Likert dan skala dikotomi pada kuesioner online. *Jurnal Sains Dan Informatika,* 5(2), 128-137.

Pratama, H. Y., Zahrani, M. A., Alfina, H. Q., Pertiwi, N., Nirwasita, F., Pramesti, S. C., & Janah, L. U. (2023). Hubungan Prestasi Akademik dan Social Support terhadap Adaptabilitas Karier Mahasiswa Baru Universitas Negeri Semarang. *Journal of Education and Technology*, *3*(2), 205-213.

Preeti, B. (2013). Role of emotional intelligence for academic achievement for students. *Research Journal of Educational Sciences,* 1(2), 8-12.

Putro, S. A., Sunarto, & Sudarno. (2017). Pengaruh Kecerdasan Emosional (EQ) Dan Fasilitas Pembelajaran Terhadap Prestasi Akademik Mahasiswa Pendidikan Ekonomi UNS. *Jurnal Pendidikan Bisnis Dan Ekonomi*, 3(2), 1–12.

Rafiqah Mar'atur. Pengaruh Motivasi Belajar Terhadap Prestasi Belajar. 2019;1:9.

Rahayu, D. S., & Trisnawati, N. (2021). Pengaruh Lingkungan Keluarga Dan Fasilitas Belajar Terhadap Hasil Belajar Melalui Motivasi Belajar. *Prima Magistra: Jurnal Ilmiah Kependidikan,* 2(2), 212-224.

Rahman, S. (2022, January). *Pentingnya motivasi belajar dalam meningkatkan hasil belajar.* In Prosiding Seminar Nasional Pendidikan Dasar.

Ratnasari, S. L., Sari, W. N., Siregar, Y., Susanti, E. N., & Sutjahjo, G. (2022). Pengaruh kecerdasan intelektual, kecerdasan emosional, dan kecerdasan spiritual terhadap tingkat pemahaman akuntansi pada mahasiswa di Kota Batam. *In Proceeding of National Conference on Accounting & Finance* (pp. 440-448).

Rijal, S., & Bachtiar, S. (2015). Hubungan antara sikap, kemandirian belajar, dan gaya belajar dengan hasil belajar kognitif siswa*. Jurnal Bioedukatika,* 3(2), 15-20.

Riza, F., & Yoto, Y. (2023). Membangun Kecerdasan Emosional Siswa SMK untuk Menjawab Tantangan Industri Modern. *Briliant: Jurnal Riset dan Konseptual*, *8*(4), 940-947.

Robbins, Stephen P, (2008). *Perilaku Organisasi. Ed.2 Alih bahasa Dianan Angelica.* Jakarta: Salemba Empat.

Rode, J. C., Mooney, C. H., Arthaud-Day, M. L., Near, J. P., Baldwin, T. T., Rubin, R. S., &

Bommer, W. H. (2007). Emotional intelligence and individual performance: Evidence of direct and moderated effects. *Journal of Organizational Behavior*, 28(4), 399-421. https://doi.org/10.1002/job.429

Salary, S., Holliday,L., Keesee, M., & Wachter H, P.. (2018). Building Features in Schools That Influence Academic Performance. *Journal of Civil Engineering and Architecture*, 12(3), 163–197. https://doi.org/10.17265/1934-7359/2018.03.001

Sanjaya, Wina. (2010). *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*. Jakarta : Prenada Media Group.

Sari, A. N. (2016). Analisis Jalur Faktor-faktor yang Mempengaruhi Angka Kematian Ibu di Jawa Timur. *JMPM: Jurnal Matematika dan Pendidikan Matematika*, *1*(2), 119-132.

Sholihin, M., & Ratmono, D. (2021). *Analisis SEM-PLS dengan WarpPLS 7.0 untuk hubungan nonlinier dalam penelitian sosial dan bisnis*. Penerbit Andi.

Sholihin, M., & Ratmono, D. (2021). *Analisis SEM-PLS dengan WarpPLS 7.0 untuk hubungan nonlinier dalam penelitian sosial dan bisnis*. Penerbit Andi.

Sholikhah, A. (2018). Pengaruh keaktifan mahasiswa dalam organisasi terhadap prestasi belajar mahasiswa jurusan pendidikan ekonomi FE Unesa angkatan 2015. *Jurnal Pendidikan Ekonomi (JUPE)*, 6(2).

Sijabat, R. (2020). Analisis Peran Mediasi Harga Terhadap Asosiasi Country Of Origin, Perceived Quality, dan Brand Image Terhadap Keputusan Pembelian. *Jurnal Manajemen*, *17*(1), 57-80.

Silen, A. P. (2014). Pengaruh Kecerdasan Intelektual, Kecerdasan Emosional Dan Kecerdasan Spiritual Terhadap Prestasi Akademik. *Jurnal Bisnis dan Ekonomi (JBE)*. 21(2): 116 – 133.

Subroto, U., Valencia, A., & Ramadhan, M. D. A. J. (2023). Hubungan antara Tipe Kepribadian dengan Penyesuaian Diri pada Mahasiswa di Jakarta. *Innovative: Journal Of Social Science Research*, *3*(3), 502-510.

Suciati, W. (2016). *Kiat sukses melalui kecerdasan emosional dan kemandirian belajar*. Rasibook.

Supriatna, A., & Quthbi, A. A. (2021). Penerapan Metode Pembelajaran Cooperative Script Dalam Meningkatkan Konsentrasi Belajar Siswa Pada Materi Keragaman Kenampakan Dan Pembagian Wilayah Waktu Di Indonesia. *Jurnal Tahsinia*, *2*(2), 158-172.

Supriatna, A., & Quthbi, A. A. (2021). Penerapan Metode Pembelajaran Cooperative Script Dalam Meningkatkan Konsentrasi Belajar Siswa Pada Materi Keragaman Kenampakan Dan Pembagian Wilayah Waktu Di Indonesia. *Jurnal Tahsinia*, *2*(2), 158-172.

Vhalery, R., Alfilail, S. N., Robbani, H., & Hia, L. N. (2021). Persepsi Mahasiswa tentang Pembelajaran Online Google Classroom pada Minat dan Motivasi Belajar. *Intelektium*, 2(1), 28-36.

Wahyudi, P. H. P., & Ratna Sari, M. M. (2019). Pengaruh Kecerdasan Emosional, Fasilitas Belajar dan Kompetensi Dosen Terhadap Persepsi Prestasi Akademik Mahasiswa Akuntansi. *E-Jurnal Akuntansi*, 29(3), 1083.

Wulandari, A. P., Setianingsih, E., Jaelani, W. R., Yolandha, W., & Mulyana, A. (2023). Optimalisasi Perencanaan Kegiatan Ekstrakurikuler di Sekolah Dasar Negeri dan Swasta. *Seroja: Jurnal Pendidikan*, *2*(4), 365-375.

Wulandari, R. D., Sabrina, R., & Rambe, M. F. (2024). Peran Motivasi Dalam Memediasi Pengaruh Gaya Kepemimpinan Otokratis Dan Komunikasi Terhadap Kinerja Karyawan Era Pandemi Covid-19. Maneggio: *Jurnal Ilmiah Magister Manajemen,* 7(1), 59-72.

Yasintha, P., Darmawang, D., & Nur Risnawati, K. (2022). Peran Lingkungan Belajar terhadap Konsentrasi Belajar Peserta Didik di SMK Katolik Muktyaca. *Jurnal, 2*(1), 12-20.

Yuliana, Y. (2022). *Analisis Grit dan Motivasi Belajar Siswa Berprestasi Pada Masa Pandemi Covid-19 di Madrasah Aliyah Negeri 4 Kebumen* (Doctoral dissertation, UIN Prof. KH Saifuddin Zuhri).