

# Analysis of the Role of Parenting and School in Forming Character and Enhancing Student Academic Achievement

Syauri Palupi<sup>1</sup>, Murnaria Manalu<sup>2</sup>, Rhini Fatmasari<sup>3</sup>

<sup>1,2,3</sup>Universitas Terbuka, Indonesia

Corresponding Author: Syauri Palupi

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## ABSTRACT

**Background.** This research investigates the impact of parenting styles and school environmental factors in shaping students' character and learning outcomes. Its primary goal is to determine the contributions of parenting styles and school environmental elements to student development in character and academic success.

**Method.** This study employs a quantitative descriptive approach, using surveys with questionnaires as the primary data collection tool. Primary data were directly gathered from students through SDN Ujung Menteng and SDN Pulo Gebang observations, involving Grade IV-VI students as the sample. The total number of respondents was 92 students, selected through a proportional stratified random sampling technique.

**Results.** The analysis revealed that parenting styles do not have a direct significant impact on student learning outcomes. However, parenting styles have a positive and significant effect on character formation, significantly influencing learning outcomes. Meanwhile, the school environment was found to have a positive and significant impact on the formation of students' character. This character formation is a primary mediator between parenting styles and student learning outcomes.

**Conclusion.** This study confirms that parenting styles and the school environment are crucial in developing students' character, directly affecting their learning outcomes. These results suggest the importance of a holistic approach involving family and school environments in enhancing students' character formation and academic success.

**Keywords:** Parenting Styles, School Environment, Student Character Formation, Academic Achievement

## INTRODUCTION

The quality of its human resources often marks the progress of a country. This quality criterion generally includes a population that is educated, skilled, and capable of adapting to technological and economic changes. Developed countries tend to implement a comprehensive education system, integrating vocational training and focusing on research and innovation. Meanwhile, Indonesia needs help with the quality of its human resources. Although access to education has increased, there are disparities in the quality and relevance of education to the job market's needs. The issue of poverty also makes it difficult for people experiencing poverty to obtain adequate education. High-quality education is critical to strengthening the human resources of a country, providing a solid foundation for individual and societal development (Brow, 2021). In 2020, the Human Capital Index, a metric used by the World Bank to evaluate the potential productivity of a country's human resources, placed Indonesia at the sixth rank in Southeast Asia. This index measures the extent to which a country has invested in education, health, and nutrition and the impact of these investments on economic potential (Pusparisa, 2020). Indonesia, ranked 6th in the Southeast Asia Human Capital Index in 2020, has shown significant

progress in the education and health sectors. However, considerable room remains for improvement in optimizing human resource potential for more effective economic contribution. The key to enhancing human resources in Indonesia lies in the level of educational completion, indicating how far individuals or populations have completed education at various levels. According to data from the Central Bureau of Statistics (BPS), despite improvements in primary and secondary education levels, there still needs to be a shortfall in completing Senior High School (SMA), with only 63.95% of students achieving this level in 2020. This contrasts with the completion rates of Junior High School (SMP) and Elementary School (SD), which were recorded at 87.89% and 96% respectively (Rizaty, 2021). Indonesia, positioned 6th in the Southeast Asia Human Capital Index in 2020, demonstrates critical developments in education and health.

Yet, there is significant scope for enhancement in maximizing human resource potential for more effective economic contribution. The key to improving human resources in Indonesia lies in the level of educational completion, which indicates how far individuals or populations have progressed in their education across various levels. According to data from the Central Bureau of Statistics (BPS), although there has been an improvement in primary and secondary education levels, there is still a deficiency in completing Senior High School (SMA), with only 63.95% of students achieving this level in 2020. This contrasts with the completion rates for Junior High School (SMP) and Elementary School (SD), which were recorded at 87.89% and 96% respectively (Rizaty, 2021).

The analysis results regarding School Completion Rates show that the completion levels of primary and secondary education in Indonesia, especially for elementary (SD) and junior high schools (SMP), have received a significant boost from the nine-year compulsory education program. This initiative, regulated in Government Regulation No. 47 of 2008, establishes that

education up to the junior high school level is responsible for every Indonesian citizen, supported by the central and local governments (Sofyan & Sanusi, 2023).

Despite progress in educational completion, Indonesian students' academic achievements still need to catch up internationally. According to the 2018 PISA report by the OECD, the abilities of 15-year-old Indonesian students in reading, mathematics, and science are below average. With a cumulative score of only 1,146 points, Indonesia experienced a decline compared to the 2015 PISA results. It ranked second lowest in Asia after the Philippines, while neighboring countries like Malaysia and Thailand performed better (Jayani, 2019).

Students' abilities and academic achievements are closely related to various interacting factors, including physical, psychological, social, and environmental conditions. Multiple studies have explored aspects that influence learning achievements, ranging from self-confidence and motivation (Mulya & Lengkana, 2020), parenting styles (Pratini et al., 2021), interest in learning (Charli et al., 2019), to the school environment (Barokah & Yulianto, 2019).

A preliminary study conducted in the Gugus 3 area of Cakung District found that factors such as parenting styles, school environment, and student character development are critical determinants of learning achievement. Observations have shown a transformation in students' attitudes and discipline, including implementing the 5S principles (smile, greeting, speaking, courtesy, politeness) and increased diligence in completing tasks following the COVID-19 pandemic period. Communication between parents and teachers has also been an essential factor in supporting children's learning processes, especially in the pandemic situation that has brought significant changes in student interactions and behavior in the school environment (Mulya & Lengkana, 2020; Pratini et al., 2021; Charli et al., 2019; Barokah & Yulianto, 2019).

The impact of parenting styles, school environment, and character formation on student achievement has been an intriguing research topic, but consistent results are needed. In this study, various research studies have shown differences in findings. For example, studies by Pratini et al., (2021) and Rezeki et al., (2022) found a positive influence of parenting on achievement, while research by Bahri (2022) and Ramadhan et al., (2022) yielded different results. In terms of school environment, findings by Barokah & Yulianto (2019) and Santoso et al., (2023) differ from research by Lawrence & Vimala (2012) and Anggraini & Marwan (2020). Furthermore, the role of student character formation in academic achievement also appears to vary, with research by Angga et al., (2020) showing positive results and Rudisa et al., (2021) showing different outcomes. These findings suggest the possibility that character formation may act as a mediator in the relationship between parenting, school environment, and academic achievement, necessitating further research for more comprehensive understanding (Pratini et al., 2021; Rezeki et al., 2022; Nasir & Widiyono, 2022; Arrasyid & Mashari, 2022; Bahri, 2022; Ramadhan et al., 2022; Barokah & Yulianto, 2019; Santoso et al., 2023; Lawrence & Vimala, 2012; Anggraini & Marwan, 2020; Angga et al., 2020; Rudisa et al., 2021).

This research evaluates how parenting and school environment influence students' learning outcomes and character formation. This study also seeks to understand the role of character formation as a potential mediator in the relationship between parental parenting, school environment, and student academic achievement.

## **LITERATURE REVIEW**

### **Academic Achievement**

Student academic achievement is a multifaceted concept that encompasses not only academic accomplishments such as grades in subjects but also non-academic achievements in sports, arts, extracurricular activities, and national or school

examinations. This concept also includes the development of student's character and positive behavior, achievements in research projects and competitions, the development of specific skills, and participation in social projects or community service (Karyati, 2023). According to Malik & Simatupang (2020), academic achievement can be defined as the final formulation of a student's learning progress assessed by teachers.

This includes an assessment of the student's ability to understand, master, and apply the taught subject matter. Haryono et al., (2022), define academic achievement as an evaluation manifested in the form of symbols, numbers, letters, or statements indicating a student's achievement over a specific period. Therefore, academic achievement encompasses not only scores from exams or tests but also reflects the student's overall growth, including social, emotional, and moral aspects.

### **Character Formation**

According to various researchers, character education in students is a comprehensive and multifaceted process. Yolanda et al., (2020) define character as distinct and evident traits reflected in an individual's everyday behavior. Faidah & Dewi (2021) see it as the manifestation of behavior that reflects values. As cited by Apriani & Fitriawati (2020), Maxwell emphasizes character as choices that determine a person's success. Meanwhile, Sajadi (2019) and (Sundari et al., 2022) view character as unique psychological traits formed through experiences, education, and the environment. Character education encompasses moral and ethical aspects and the formation of responsible and ethical personalities. Mumtahana & Aslamiyah (2021) emphasize the importance of character education in Islam to shape accountable and honest behavior. Ningsih et al., (2023) state that character education should be intentional in teaching and learning, while Nopandri (2022) suggests integrating intracurricular and extracurricular learning activities to support it. Khofifah (2022) adds that good

habits at school influence a child's character. Zuliani et al., (2023) highlight the role of character education in shaping responsible citizens.

As explained by Alauddin et al., (2022), character education is not just a process of memorization but rather the formation of personality through moral education. Subaker et al., (2022) and Santika (2020) associate character education with morals and ethics. Rohman (2019) develops the concept that character formation is a function of all human potential within social and cultural interactions.

### **Parenting style**

Parenting style is critical in developing a child's character and behavior. According to Rinalia (2020), parenting style is a comprehensive interaction between parents and children to change the child's behavior, knowledge, and values to support independence and healthy growth. Nurlaela et al., (2020) categorize parenting styles into three main types: authoritarian, permissive, and democratic, each of which has different impacts on a child's development. They emphasize that parents play a crucial role in setting defined rules, providing emotional support, and serving as positive role models for their children, as highlighted by (Yolanda et al., 2020). Faidah & Dewi (2021) state that emotional support, including love, affection, and attention, is crucial for a child's emotional and social growth.

Additionally, Apriani & Fitriawati (2020) emphasize that character is a choice that determines a person's success. Character education is essential to formal education to shape an honest, kind, and responsible personality (Mumtahana & Aslamiyah, 2021). The approach to character education should be intentionally designed to ensure the development of positive attitudes and behaviors (Ningsih et al., 2023). According to Suteja & Yusriah (2017), parenting style includes parents' attitudes toward their children, including setting rules, giving rewards and punishments, authority, and attention to children's desires.

### **School environment**

The school environment, consisting of various physical and social factors and conditions, is crucial in students' learning experiences and development. According to Nopandri (2022), the school environment is where education, learning, and training occur. This includes physical aspects such as facilities, classroom conditions, and the teacher-student relationships that support a conducive learning environment. Manullang et al., (2023) add that the school atmosphere significantly impacts students' character. Musa et al., (2022) highlight that a conducive school atmosphere motivates students to participate actively and enjoy the learning process, which significantly impacts educational progress in the country.

Fadhilaturrehmi (2018) and Hikmawati et al., (2023) state that the school environment significantly influences students' morals and personalities. Irhamna & Purnama (2022) emphasize that schools are effective environments for shaping children's character, including honesty, religiosity, and nationalism, which are crucial for children's mental well-being. In a broader perspective, Nurjali & Rosadi (2021) describe the environment as all aspects that develop in life, including humans, human-made objects, and nature, contributing to students' experiences.

### **HYPOTHESIS AND RESEARCH MODEL**

Based on the research by Ulfah & Arifudin (2021) and Arrasyid & Mashari (2022), it is estimated that parental parenting styles significantly influence student learning outcomes. Shinta & Ain (2021) and Barokah & Yulianto (2019) indicate that the school environment affects students' intelligence and development. Shinta & Ain (2021) and Barokah & Yulianto (2019) indicate that the school environment affects students' intelligence and development. Nurlaela et al., (2020) and various other studies show that parental parenting styles influence the formation of a child's character. According to Manullang et al., (2023) and Nurdin (2020),

the school environment shapes students' character. Najib (2015) and Rudisa et al., (2021) suggest that effective character education enhances academic performance. Based on the research by Asbari et al., (2020) and Rudisa et al., (2021), the formation of students' character is expected to mediate the relationship between parental parenting styles and learning outcomes. The study by Nurdin (2020) and Rudisa et al., (2021) supports the idea that character formation mediates the relationship between the school environment and learning outcomes.

To understand the dynamics of education and student development, this research develops a set of hypotheses based on the literature review conducted. These hypotheses aim to explain the relationships between parental parenting styles, the school environment, character formation, and student learning outcomes. The hypotheses are as follows:

- H1: The school environment positively and significantly impacts student learning outcomes.
- H2: Parental parenting styles positively and significantly impact student learning outcomes.
- H3: Parental parenting styles have a positive and significant impact on the formation of students' character.
- H4: The school environment has a positive and significant impact on the formation of students' character.
- H5: The formation of students' character positively and significantly impacts learning outcomes.
- H6: The formation of students' character mediates the relationship between parental parenting styles and learning outcomes.
- H7: The formation of students' character mediates the relationship between the school environment and learning outcomes.

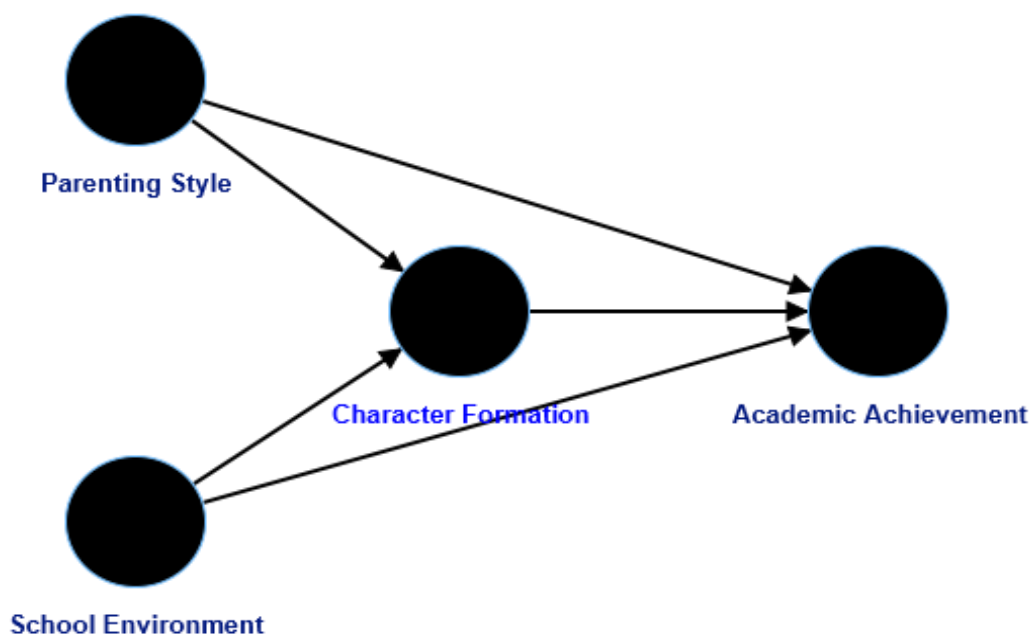


Figure 1. Conceptual Framework

## MATERIALS & METHODS

This quantitative study aims to examine the impact of parenting styles and school environment conditions on shaping character and improving the academic performance of elementary school students. The primary method used is a survey, with a population

consisting of 1,140 students from upper classes in five State Elementary Schools in Cluster 5 of Region III, Cakung District. These schools include SDN Ujung Menteng 01 Pagi, SDN Ujung Menteng 04 Pagi, SDN Ujung Menteng 07 Pagi, SDN Pulogebang 24 Pagi, and SDN Pulogebang 13 Pagi. A

sample of 92 students was randomly selected from this population, specifically from grades IV-VI, which undergo significant physical and emotional changes. This sample selection is based on considerations of location accessibility and research efficiency while also considering the need for a fair and accurate representation of each grade level involved. The Proportionate Stratified Random Sampling technique was used to ensure an even sample distribution. Data collection was conducted through surveys, utilizing the accessibility and location suitability in line with the researcher's duties as a teacher in that area. For data analysis, the Partial Least Square (PLS) 4.0 technique was used, following the recommendations of Avkiran & Ringle (2018) and adapted to the specific needs of this research. The PLS method was chosen for its ability to handle models with latent constructs and complex direct relationships and its effectiveness in multivariate analysis.

## RESULTS

Out of the 92 respondents involved in this study through structured questionnaire completion, the majority were male, accounting for 53 respondents (57.6%). Regarding age, the dominant age group was 11 to 12 years old, with 61 respondents (66.3%). Regarding education, most respondents were in the sixth grade, totaling

33 respondents (35.9%). Concerning the occupations of the respondents' parents, the majority were private sector employees, with 31 respondents (33.7%). Looking at the distance between the respondents' homes and the school, the dominant group consisted of respondents whose homes were more than 1 km away from the school, totaling 49 respondents (53.3%). The most frequent frequency of parental visits to the school was more than three times in one semester, with 67 respondents (72.8%).

## SEM-PLS Analysis

**Outer Model Evaluation** In the context of PLS-SEM, Hair et al., (2016) explained that the measurement model used to evaluate validity and reliability is the outer model. This model focuses on analyzing the relationships between indicators and latent variables. Hair et al., (2016) suggested that the outer loading values for each indicator should be greater than 0.70 to assess convergent validity. Meanwhile, Henseler et al., (2015) considered that reflective indicator loadings above 0.60 are adequate and indicate suitable measures for latent variables. In this study, after making modifications to the model, all items were found to have loading values above 0.60, indicating that the indicators in this model can be considered valid.

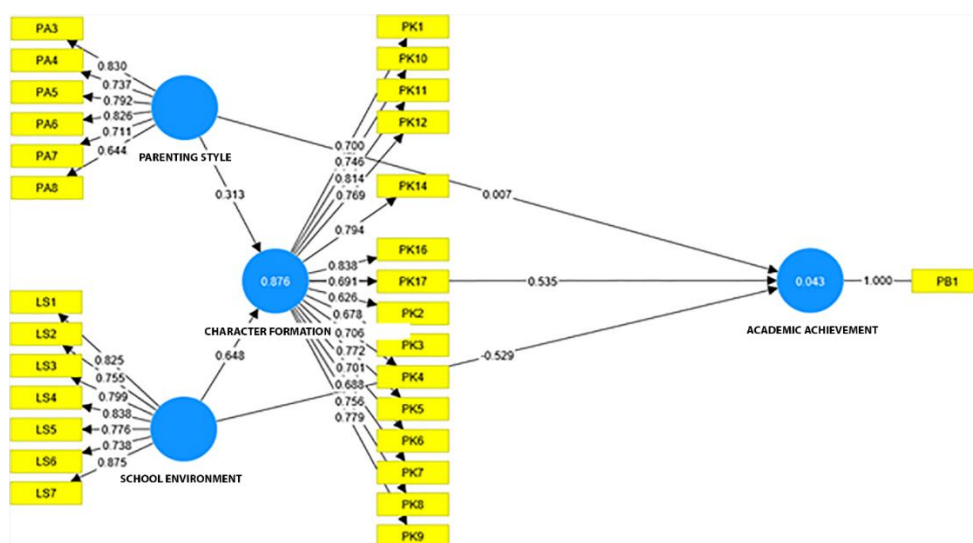


Figure 2. Diagram Structural Equation Path

In evaluating the convergent validity of the reflective measurement model, one important method is the examination of the Average Variance Extracted (AVE) values. The testing results in this research show that

all variables meet the criteria, with loading factor values and AVE above 0.50, confirming their validity in measuring their respective latent variables.

**Table 1. Average Variance Extracted (AVE)**

Variable	Average Variance Extracted (AVE)
School Environment	0.644
Character Formation	0.547
Parenting Style	0.577

This research proceeds with discriminant validity evaluation after meeting the convergent validity criteria with loading factor values and Average Variance Extracted (AVE) above 0.50. According to

Kwong & Wong (2019), discriminant validity is tested by ensuring that the correlations between constructs in the model are not too high, indicating that each construct differs.

**Table 2. Fornell Larcker Criterion**

Variable	School Environment	Character Formation	Parenting Style
School Environment	0.902		
Character Formation	0.824	0.839	
Parenting Style	0.882	0.785	0.760

The findings of this study indicate that the square root of Average Variance Extracted (AVE) (Fornell Larcker Criterion) for each latent variable is more significant than its correlation with other latent variables, thus meeting the criteria for discriminant validity. This suggests that each latent variable has well-defined characteristics. Furthermore, an examination was conducted through cross-loadings between the indicators and their

related constructs to assess the discriminant validity of reflective indicators. Indicators are considered valid when they have higher factor loadings on their constructs than others. As Ghozali & Latan (2015), explain, this phenomenon indicates that latent constructs are more efficient in predicting indicators within their block than other blocks.

**Table 3. Cross Loadings Value**

Code	School Environment	Character Formation	Parenting Style	Academic Achievement
LS1	<b>0.825</b>	0.734	0.812	-0.012
LS2	<b>0.755</b>	0.707	0.676	0.139
LS3	<b>0.799</b>	0.756	0.684	0.066
LS4	<b>0.838</b>	0.751	0.724	-0.157
LS5	<b>0.776</b>	0.756	0.683	-0.008
LS6	<b>0.738</b>	0.702	0.665	-0.157
LS7	<b>0.875</b>	0.779	0.705	-0.021
PA3	0.768	0.773	<b>0.830</b>	-0.041
PA4	0.657	0.613	<b>0.737</b>	-0.103
PA5	0.719	0.731	<b>0.792</b>	0.017
PA6	0.794	0.769	<b>0.826</b>	-0.022
PA7	0.539	0.575	<b>0.711</b>	0.177
PA8	0.479	0.521	<b>0.644</b>	0.081
PB1	-0.027	0.053	0.015	<b>1.000</b>
PK1	0.705	<b>0.700</b>	0.730	0.105
PK10	0.677	<b>0.746</b>	0.617	-0.038
PK11	0.742	<b>0.814</b>	0.734	0.063
PK12	0.739	<b>0.769</b>	0.704	-0.005
PK14	0.733	<b>0.794</b>	0.662	0.045
PK16	0.831	<b>0.838</b>	0.723	-0.029
PK17	0.673	<b>0.691</b>	0.601	-0.175
PK2	0.475	<b>0.626</b>	0.594	0.133
PK3	0.623	<b>0.678</b>	0.555	0.215
PK4	0.657	<b>0.706</b>	0.647	0.086

Code	School Environment	Character Formation	Parenting Style	Academic Achievement
PK5	0.676	0.772	0.724	0.029
PK6	0.605	0.701	0.651	0.062
PK7	0.602	0.688	0.562	0.055
PK8	0.730	0.756	0.584	0.126
PK9	0.712	0.779	0.693	-0.042

The analysis found that the loading values for each specific construct were higher than the loadings on other constructs, confirming the validity of all indicators and no discriminant validity issues. Furthermore, the reliability of each latent construct was assessed using Cronbach's Alpha and Composite Reliability. According to the standards provided by

(Dijkstra & Henseler, 2015), to ensure the reliability of constructs in the PLS model, Cronbach's Alpha should not be less than 0.6, and Composite Reliability should not be less than 0.7. This step ensures that each construct in this study meets the required level of reliability.

Table 4. Cross Loadings

Variable	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
School Environment	0.907	0.908	0.926
Character Formation	0.940	0.943	0.947
Parenting Style	0.852	0.866	0.890

The table presented indicates that the reliability testing yielded satisfactory results: all latent variables in this study have Cronbach's Alpha values greater than or equal to 0.60, and Composite Reliability values greater than or equal to 0.70. Therefore, based on the criteria set for reliability, all constructs in this research can be accepted as reliable.

### Inner Model Evaluation

After ensuring that the estimated model meets the criteria for measurement model testing (outer model), the next step is evaluating the structural model (inner model). As explained by Hair et al. (2017), in the research by Ramayah et al. (2017), the main objective of evaluating the structural model is to test the relationships between latent variables. In this process, several important factors to consider include the

coefficient of determination (R<sup>2</sup>), predictive relevance (Q<sup>2</sup>), and the model's overall fit.

### Coefficient of Determination Test (R-Square)

In the use of the Partial Least Squares (PLS) method for model evaluation, the coefficient of determination known as R-Square (R<sup>2</sup>) for each endogenous latent variable becomes a critical aspect. R<sup>2</sup> indicates how much variation in the endogenous variable can be explained by the exogenous variables. Its value ranges from zero to one, with values closer to one showing the effectiveness of the independent variables in predicting the endogenous variable. Conversely, a low R<sup>2</sup> suggests that the independent variables are less effective in explaining the variation in the endogenous variable. It is important to note that adding exogenous variables can increase R<sup>2</sup>, even though the additional variables may not significantly impact the endogenous variable.

Table 5. The Coefficient of Determination (R-Square) Value

Variable	R-square	R-square adjusted
Character Formation	0.876	0.874
Academic Achievement	0.043	0.010

The Coefficient of Determination (R-squared) for the student character formation construct (Y1) reaches 0.876, indicating that 87.6% of the variation in the endogenous

variable Y1 can be explained by the exogenous variables in the model. Meanwhile, the Coefficient of Determination (R-Square) for the academic achievement



construct (Y2) is recorded at 0.043, suggesting that only 4.3% of the variation in the endogenous variable Y2 can be explained by the exogenous variables included in this study, with the remaining variation explained by other factors outside the scope of this research.

### The PLS Predict (Q-Square) Test

The Q-Square value, calculated through the blindfolding procedure, measures predictive

relevance in the structural model. This value indicates how accurately the model can produce observed values based on parameter estimates. A Q-Square greater than 0 means the model has good predictive relevance and can accurately estimate observed values. On the other hand, a Q-Square less than or equal to 0 indicates that the model is less relevant in terms of prediction, reflecting the model's inadequacy in predicting observed values accurately.

Table 6. The value of PLSPredict (Q-Square)

Variable	Q <sup>2</sup> predict	RMSE	MAE
Character Formation	0.865	0.373	0.267
Academic Achievement	-0.064	1.051	0.883

Based on the results presented, the predictive relevance value (Q<sup>2</sup> predict) is more significant than zero. This indicates that the model used in this study has substantial predictive relevance, confirming that the model can effectively predict observed values.

### Model Fit

Model fit is evaluated using two indices: Standardized Root Mean Square Residual (SRMR) and Normed Fit Index (NFI).

According to Hu & Bentler (1998) and Ramayah et al. (2017), a model is considered to have a good fit if the SRMR value is less than 0.10, as explained by Hair et al. (2014). In addition to SRMR, another fit index used is NFI, with the Chi-square value as its reference. According to Bentler & Bonett (1980), the NFI value is considered adequate if it is more significant than 0.9 (Chi<sup>2</sup> > 0.9), indicating that the model has a good goodness of fit.

Table 7. The value of PLSPredict (Q-Square)

Value	Saturated model	Estimated model
SRMR	0.081	0.081
d_ ULS	2.848	2.848
d_ G	2.793	2.793
Chi-square	1040.218	1040.218
NFI	0.605	0.605

The model used has a good fit, as evidenced by the Standardized Root Mean Square Residual (SRMR) value below 0.10. Furthermore, this model's Normed Fit Index (NFI) value reaches 60.5%, indicating that the model performs 60.5% better than the null model. This conclusion suggests that the model in this study is effective and suitable for the analysis conducted.

### Hypothesis Testing

In this study, hypothesis testing determines whether the proposed hypotheses are accepted or rejected. This process involves

analyzing the path coefficients, the T-statistic values obtained through bootstrapping procedures, and the p-values. According to path coefficients can range from -1 to +1, where values approaching +1 indicate a significant positive relationship, while values approaching -1 signify a significant negative relationship. Ramayah et al., (2017), recommend using bootstrapping procedures with 5,000 resamples. The criteria for accepting or rejecting hypotheses are determined by the values of ±1.96 on the T-Statistic; values outside this range indicate the rejection of the hypothesis.

**Table 8. Hypothesis Testing For Direct Effect**

Direct Effect	Path Coefficients	T statistics	P values	Hypothesis	Conclusion
PAOT -> PB	0.007	0.026	0.979	H1	Rejected
LS -> PB	-0.529	1.894	0.058	H2	Rejected
PAOT -> PKPD	0.313	3.830	0.000	H3	Accepted
LS -> PKPD	0.648	8.761	0.000	H4	Accepted
PKPD -> PB	0.535	2.525	0.012	H5	Accepted

### Parenting Style On Academic Achievement

Parenting style does not directly impact academic achievement, with a path coefficient of 0.007 (+), a T-Statistic of 0.026 < 1.96, and a p-value of 0.979 > 0.05. This indicates that changes in parenting style do not directly influence students' academic performance.

### School Environment On Academic Achievement

The school environment also does not significantly influence academic achievement, with a path coefficient of -0.529 (-), a T-Statistic of 1.894 < 1.96, and a p-value of 0.058 > 0.05. This indicates that factors other than the school environment may influence academic achievement more.

### Parenting Style On Character Formation

There is a direct and significant influence of parental parenting style on the formation of students' character, with a path coefficient of 0.313 (+), a T-Statistic of 3.830 > 1.96, and a p-value of 0.000 > 0.05. This indicates that improvements in parenting style can enhance the formation of students' character.

### School Environment On Character Formation

The influence of the school environment on the formation of a student's character is significant, with a path coefficient of 0.648 (+), a T-Statistic of 8.761 > 1.96, and a p-value of 0.000 < 0.05. This indicates the importance of a positive school environment in shaping students' character.

### Character Formation On Academic Achievement

The formation of students' character has a positive and significant impact on academic achievement, with a path coefficient of 0.535 (+), a T-Statistic of 2.525 > 1.96, and a p-value of 0.012 < 0.05. This confirms that good character formation directly contributes to improved academic achievement.

In the mediation analysis, the focus was on shifting the influence from direct relationships to indirect relationships, including five categories of mediation as classified by Hair et al. (2017), direct-only non-mediation, no-effect non-mediation, complementary mediation, competitive mediation, and indirect-only mediation.

**Table 9. Hypothesis Testing For Indirect Effect**

Indirect Effect	Path Coefficients	T statistics	P values	Hypothesis	Conclusion
PAOT -> PKPD -> PB	0.168	2.190	0.029	H6	Full Mediation
LS -> PKPD -> PB	0.347	2.308	0.021	H7	Full Mediation

### Parenting Styles and Academic Achievement through Character Formation

The formation of students' character fully mediates the relationship between parental parenting styles and academic achievement. With a path coefficient of 0.168, T-Statistic of 2.190, and p-value of 0.029, hypothesis six (H6) is accepted. Analysis using the Variance Accounted For (VAF) method shows that student character formation

mediates this relationship by 96%, indicating a full mediating role. This suggests that although parental parenting styles do not directly influence academic achievement, good character development in students significantly supports academic improvement.

### School Environment and Academic Achievement through Character Formation

Forming students' character acts as a full mediator in the relationship between the school environment and academic achievement. The research results show a path coefficient of 0.347, a T-Statistic of 2.308, and a p-value of 0.021, leading to the acceptance of hypothesis seven (H7). With a VAF calculation of 189%, student character formation fully mediates this relationship. This underscores that a supportive school environment indirectly enhances academic achievement by developing positive character in students. Good character formation in schools can improve the quality of the learning process and students' learning outcomes.

## CONCLUSIONS

In this study, using the SmartPLS 4.0 application, it was found that although the influence of parental parenting on academic achievement is indirect, school activities such as recitation and Dhuha prayer play a key role in shaping students' character, affecting their academic performance. Other school activities, such as reading Yasin's letters and implementing the 5S principles, also contribute to character formation in students. However, they do not have a direct impact on their academic performance. This study confirms that efficient character formation, supported by school activities and parental upbringing, mediates the school environment, parenting, and academic achievement. Good character, nurtured through school activities and parental support, directly affects students' academic achievement. Therefore, it is recommended that schools and parents enhance their collaboration in promoting students' character, including adopting effective communication programs and joint activities. It is also suggested that schools design character development programs emphasizing positive values and ethics and evaluating the learning environment. Furthermore, it is essential for parents to attend workshops on effective parenting and for teachers to receive training on teaching methods that support character formation.

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## REFERENCES

1. Alauddin, Mulyadi, Amiruddin, & Marsal, T. M. H. (2022). Pelatihan Pendidikan Karakter Melalui Gotong Royong di Dayah MUDI Mesra Samalanga. *Jurnal Khadem*, 1, 46–57. <https://ejournal.iaialaziziyah.ac.id/index.php/jkdm/article/view/419%0Ahttps://ejournal.iaialaziziyah.ac.id/index.php/jkdm/article/download/419/365>
2. Angga, P. M. W., Sudarma, I. K., & Suartama, I. K. (2020). E-Komik Pendidikan Untuk Membentuk Karakter Dan Meningkatkan Hasil Belajar Siswa Kelas V Pada Mata Pelajaran Bahasa Indonesia. *Jurnal Edutech Undiksha*, 8(2), 93. <https://doi.org/10.23887/jeu.v8i2.28920>
3. Anggraini, N., & Marwan. (2020). Influence Internal Locus of Control, School Environment and Discipline on Student Achievement. *Advances in Economics, Business and Management Research*, 152, 328–333. <https://doi.org/10.2991/aebmr.k.201126.036>
4. Arrasyid, A. K., & Mashari, A. (2022). Pengaruh Pola Asuh Orang Tua Pada Pembelajaran Daring Terhadap Hasil Belajar Peserta Didik Sekolah Dasar. *Jurnal Basicedu*, 6(2), 3218–3224. <https://doi.org/10.31004/basicedu.v6i2.2933>
5. Asbari, M., Nurhayati, W., Purwanto, A., & Putra, F. (2020). Pengaruh Genetic Personality dan Authoritative Parenting Style terhadap Pendidikan Karakter di Aya Sophia Islamic School. *Edumas pul: Jurnal Pendidikan*, 4(1), 142–155. <https://doi.org/10.33487/edumas pul.v4i1.341>
6. Bahri, S. (2022). Pengaruh Pembelajaran Daring dan Pola Asuh Orang Tua Terhadap Hasil Belajar IPS Siswa Sekolah Dasar. *Jurnal Basicedu*, 6(4), 7196–7208. <https://doi.org/10.31004/basicedu.v6i4.3454>
7. Barokah, N., & Yulianto, A. (2019). Pengaruh Lingkungan Sekolah, Self Efficacy, Dan Status Sosial Ekonomi Orang Tua Terhadap Minat Melanjutkan Pendidikan Tinggi Dengan Prestasi Belajar Sebagai Variabel Mediasi. *Economic*

- Education Analysis Journal*, 8(2), 434–452. <https://doi.org/10.15294/eeaj.v8i2.31498>
8. Brow, A. (2021). *Problematika Sumber Daya Manusia (SDM) di Indonesia*. Rangkuman Makalah. [https://www.rangkumanmakalah.com/problematika-sumber-daya-manusia-sdm-di-indonesia/#\\_ftn1](https://www.rangkumanmakalah.com/problematika-sumber-daya-manusia-sdm-di-indonesia/#_ftn1)
  9. Charli, L., Ariani, T., & Asmara, L. (2019). Hubungan Minat Belajar terhadap Prestasi Belajar Fisika. *Science and Physics Education Journal (SPEJ)*, 2(2), 52–60. <https://doi.org/10.31539/spej.v2i2.727>
  10. Dijkstra, T. K., & Henseler, J. (2015). Consistent partial least squares path modeling. *MIS Quarterly: Management Information Systems*, 39(2), 297–316. <https://doi.org/10.25300/MISQ/2015/39.2.02>
  11. Dini Apriani, & Fitriawati, D. (2020). Pola Komunikasi Orang Tua Dalam Membentuk Perilaku Anak. *Intelektiva: Jurnal Ekonomi, Sosial & Humaniora*, 3(1), 161–167. <https://doi.org/10.32734/lwsa.v3i1.813>
  12. Dwiyun Evi Yolanda, Mulyani, I., & Adham, M. J. I. (2020). Pengaruh Generasi Muda Millennial Terhadap Karakter Interaksi Sosial Di Masyarakat. *Angewandte Chemie International Edition*, 6(11), Pengaruh Generasi Muda Millennial Terhadap Karakter.
  13. *Fadhilaturrahmi, F. (2018)*. (n.d.).
  14. Faidah, Y. N., & Dewi, D. A. (2021). Pengamalan Pancasila Sebagai Pembentukan Nation Character di Era Revolusi Industri 4.0. *ASANKA: Journal of Social Science And Education*, 2(2), 221–231. <https://doi.org/10.21154/asanka.v2i2.3186>
  15. Ghozali, I., & Latan, H. (2015). Partial least squares: Konsep, teknik, dan aplikasi menggunakan program smart PLS. *Universitas Diponegoro Semarang*, 3(2).
  16. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2016). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). *International Journal of Research & Method in Education*, 38(2), 220–221. <https://doi.org/10.1080/1743727x.2015.1005806>
  17. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Thousand Oaks. Sage, 165.
  18. Hair, J. F., Hult, G. T., Ringle, C. M., & Sarstedt, M. (2014). *A primer partial least squares structural equation modeling (PLS-SEM)*. SAGE Publications.
  19. Haryono, A., Pramono, D., & Wibowo, W. A. (2022). Upaya Meningkatkan Prestasi Belajar Matematika Melalui Pendekatan Contextual Teaching and Learning (CTL) pada Siswa Kelas III SDN Kemejing. *Jurnal Pendidikan Dan Konseling*, 4, 1349–1358.
  20. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
  21. Hikmawati, Yahya, Muh., Elpisah, & Fahreza, Muh. (2023). Pengaruh Lingkungan Sekolah Terhadap Pembentukan Karakter Anak Di Sekolah Dasar. *Jurnal Ilmiah Pendidikan Citra Bakti*, 10(2), 443–457. <https://doi.org/10.38048/jipcb.v10i2.1333>
  22. Irhamna, I., & Purnama, S. (2022). Peran Lingkungan Sekolah dalam Pembentukan Karakter Anak Usia Dini di PAUD Nurul Ikhlas. *Jurnal Pendidikan Anak*, 11(1), 68–77. <https://doi.org/10.21831/jpa.v11i1.46688>
  23. Jayani, D. H. (2019). *Kemampuan Siswa Indonesia di Bawah Rata-rata OECD*. Katadata.Co.Id. <https://katadata.co.id/ariayudhistira/infografi/k/5e9a4c4952b78/kemampuan-siswa-indonesia-di-bawah-rata-rata-oecd>
  24. Karyati. (2023). Strategi Guru Pendidikan Agama Islam Dalam Peserta Didik. *Jurnal Ilmu Pendidikan (ILPEN)*, 2(2), 11–18. <https://jurnal.umpar.ac.id/index.php/istiqlra/article/view/1527>
  25. Khofifah, S. (2022). Pengaruh Lingkungan Sekolah Terhadap Pembentukan Karakter Anak Di Sekolah Dasar. *Jurnal Ilmiah Pendidikan Citra Bakti*, 10(2), 443–457. <https://doi.org/10.38048/jipcb.v10i2.1333>
  26. Khoirun Nasir, A. H., & Widiyono, A. (2022). Pengaruh Pola Asuh Orang Tua Terhadap hasil Belajar Matematika di Sekolah Dasar. *Journal On Teacher Education*, 3(3), 365–373. <https://doi.org/10.31004/jote.v3i3.4825>
  27. Kwong, & Wong. (2019). *Mastering Partial Least Squares Structural Equation Modelling (PLS-SEM) with SmartPLS in 38 Hours*. March, 1–172.
  28. Lawrence, a S. A., & Vimala, A. (2012). School environment and academic achievement of standard IX students.

- Journal of Educational and Instructional Studies in the World*, 2(3), 210–215. <http://files.eric.ed.gov/fulltext/ED542331.pdf>
29. Malik, I., & Simatupang, A. (2020). Nilai Perusahaan Akibat Pelaksanaan Enterprise Risk Management (ERM). *Economics and Digital Business Review*, 1(2), 90–101. <https://doi.org/10.37531/ecotal.v1i2.14>
30. Manullang, E., Sijabat, O. P., & Pasaribu, E. (2023). Pengaruh Lingkungan Sekolah Terhadap Pembentukan Karakter Siswa Pada Mata Pelajaran IPS Kelas IV. *Jurnal Keguruan Sekolah Dasar*, 04(01), 1–8.
31. Mulya, G., & Lengkana, A. S. (2020). Pengaruh Kepercayaan Diri, Motivasi Belajar Terhadap Prestasi Belajar Pendidikan Jasmani. *COMPETITOR: Jurnal Pendidikan Kepelatihan Olahraga*, 12(2), 83. <https://doi.org/10.26858/cjeko.v12i2.13781>
32. Mumtahana, L., & Aslamiyah, S. S. (2021). Internalisasi Nilai-Nilai Karakter Melalui Aktivitas Akademik di Pesantren Daruttaqwa Kabupaten Gresik. *Akademika*, 15(1), 6.
33. Musa, S., Nurhayati, S., Jabar, R., Sulaimawan, D., & Fauziddin, M. (2022). Upaya dan Tantangan Kepala Sekolah PAUD dalam Mengembangkan Lembaga dan Memotivasi Guru untuk Mengikuti Program Sekolah Penggerak. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 6(5), 4239–4254. <https://doi.org/10.31004/obsesi.v6i5.2624>
34. Najib, M. (2015). *Manajemen masjid sekolah sebagai laboratorium pendidikan karakter konsep dan implementasinya*. Gava Media.
35. Ningsih, P. O., Darsinah, & Ernawati. (2023). Pembentukan Karakter Pada Lingkungan Sekolah Dasar. *Jurnal Ilmiah Pendidikan Citra Bakti*, 10(2), 75–86.
36. Nopandri, Y. (2022). Pengaruh Lingkungan Sekolah Yang Baik Terhadap Kualitas Prestasi Siswa Di SDIT Al-Husna Kecamatan Lebong Selatan Kabupaten Lebong. *Jurnal Pendidikan Profesi Guru Agama Islam*, 2 (9), 75–88. <http://studentjournal.iaincurup.ac.id/index.php/guau>
37. Nurdin, A. (2020). The Influence of the Learning Environment in Student Character Building. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 6(02), 175. <https://doi.org/10.32678/tarbawi.v6i02.3042>
38. Nurjali, N., & Imron Rosadi, K. (2021). Faktor Yang Mempengaruhi Konsep Al-Qur'an Dan Hadits Dalam Meningkatkan Mutu Pendidikan Islam: Manajemen, Guru, Lingkungan. *Jurnal Ilmu Manajemen Terapan*, 3(1), 20–37. <https://doi.org/10.31933/jimt.v3i1.667>
39. Nurlaela, L. S., Pratomo, H. W., & Araniri, N. (2020). Pengaruh Pola Asuh Orang tua terhadap Pembentukan Karakter Anak pada Siswa Kelas III Mandrasah Ibtidaiyah Tahfizhul Qur'an Asasul Huda Ranjikulon Kecamatan Kasokandel Kabupaten Majalengka. *Eduprof: Islamic Education Journal*, 2(2), 226–241. <https://doi.org/10.47453/eduprof.v2i2.35>
40. Pratini T, S., Sripatmi, S., Azmi, S., & Sarjana, K. (2021). Pengaruh Pola Asuh Orang Tua Terhadap Hasil Belajar Matematika Siswa. *Griya Journal of Mathematics Education and Application*, 1(4), 570–577. <https://doi.org/10.29303/griya.v1i4.116>
41. Pusparisa, Y. (2020). *Indeks Modal Manusia Indonesia Peringkat Keenam di Asia Tenggara*. Databoks.Katadata.Co.Id. <https://databoks.katadata.co.id/datapublish/2020/09/18/indeks-modal-manusia-indonesia-peringkat-keenam-di-asia-tenggara>
42. Ramadhan, M. R., Lubis, P. H. M., & Dedy, A. (2022). Hubungan Pola Asuh Orang Tua terhadap Prestasi Siswa Bidang Matematika Kelas 5 di Sekolah Dasar. *Edukatif: Jurnal Ilmu Pendidikan*, 4(2), 2722–2734. <https://doi.org/10.31004/edukatif.v4i2.2450>
43. Ramayah, T., Cheah, J., Ting, F. C. H., & Memon, M. A. (2017). Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 3.0: An Updated and Practical Guide to Statistical Analysis. *Practical Assessment, Research and Evaluation*, 4(October), 291.
44. Rezeki, U. S., Cornelia, T. S., & Togatorop, Y. (2022). Hubungan antara Pola Asuh Orang Tua dengan Hasil Belajar Siswa SD Kelas V. *Journal on Education*, 5(3), 9410–9418. <https://doi.org/10.31004/joe.v5i3.1749>
45. Rinalia VM Noor. (2020). *Gambaran Pola Asuh Orang Tua Pada Remaja Perokok Ditinjau Dari Teori Diana Baumrind*. 105(3), 129–133. <https://webcache.googleusercontent.com/sea>

- rch?q=cache:BDsuQOHoCi4J:https://media.neliti.com/media/publications/9138-ID-perlindungan-hukum-terhadap-anak-dari-konten-berbahaya-dalam-media-cetak-dan-ele.pdf+&cd=3&hl=id&ct=clnk&gl=id
46. Rizaty, M. A. (2021). *Hanya 64% Siswa yang Berhasil Selesaikan SMA pada 2020*. Databoks.Katadata.Co.Id/. <https://databoks.katadata.co.id/datapublish/2021/07/02/hanya-64-siswa-yang-berhasil-selesaikan-sma-pada-2020>
47. Rohman, M. A. A. (2019). Pendidikan karakter di Sekolah menengah pertama (smp): teori, metodologi dan implementasi. *Qalamuna*, 11, 125. <https://ejournal.insuriponorogo.ac.id/index.php/qalamuna/article/view/96>
48. Rudisa, Elpisah, Fahreza, Muh., & Yahya, M. (2021). Pengaruh Pendidikan Karakter dan Kondisi Ekonomi Orang Tua terhadap Prestasi Belajar Siswa. *Jurnal Albasicedu*, 5(6), 6227–6235.
49. Sajadi, D. (2019). Pendidikan Karakter Dalam Perspektif Islam. *Tahdzib Al-Akhlaq: Jurnal Pendidikan Islam*, 2(2), 16–34. <https://doi.org/10.34005/tahdzib.v2i2.510>
50. Santika, N. W. R. (2020). Manajemen Sumber Daya Manusia Dalam Pendidikan Karakter. *Manajemen Sumber Daya Manusia Dalam Pendidikan Karakter*, 04(01), 9.
51. Santoso, G., Rahmawati, P., Murod, M., & Setiyaningsih, D. (2023). Hubungan Lingkungan Sekolah dengan Karakter Sopan Santun Siswa. *Jurnal Pendidikan Transformatif (Jupetra)*, 02(01), 91–99. <https://jupetra.org/index.php/jpt/article/view/131/36>
52. Shinta, M., & Ain, S. Q. (2021). Strategi Sekolah Dalam Membentuk Karakter Siswa di Sekolah Dasar. *Jurnal Basicedu*, 5(5), 4045–4052. <https://doi.org/10.31004/basicedu.v5i5.1507>
53. Sofyan, F. S., & Sanusi, A. R. (2023). Pentingnya Wajar Dikdas 12 Tahun Untuk Menyongsong Indonesia Emas Tahun 2022. *Jurnal UBP Karawang*, 2411–2420.
54. Subaker, I. W., Sudiarthi, D. N. A., & Dewi, N. P. A. K. S. (2022). Nilai-Nilai Pendidikan Karakter dalam Cerita Rakyat Bali I. *Jurnal Pendidikan Dan Konseling*, 4, 1349–1358.
55. Sundari, L., Sunaryo, U., Hidayah, N., & An Andari, A. (2022). Peran Guru Pendidikan Agama Islam Dalam Membentuk Karakter Peserta Didik Di Kelas X Sekolah Menengah Kejuruan Negeri 2 Kayu Agung Ogan Komering Ilir. *00(00)*, 1–12. <https://journal.an-nur.ac.id/index.php/unisanjournal>
56. Suteja, J., & Yusriah. (2017). Dampak Pola Asuh Orang Tua Terhadap Perkembangan Sosial-Emosional Anak. *AWLADY: Jurnal Pendidikan Anak*, 3(1). <https://doi.org/10.24235/awlad.v3i1.1331>
57. Ulfah, & Arifudin, O. (2021). Pengaruh aspek kognitif, afektif, dan psikomotor terhadap hasil belajar peserta didik. *Jurnal Al-Amar (JAA)*, 2(1), 1–9.
58. Zuliani, R., Apriliyani, D., Kurnia, L., & Tangerang, U. M. (2023). Implementasi Pendidikan Karakter Dalam Mengatasi Krisis Moral Di Sekolah Dasar. *Anwarul: Jurnal Pendidikan Dan Dakwah*, 3(5), 915–924.

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