

Analysis of Learning Behavior and Academic Achievement of Junior High School Students in the Province of Banten



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ABSTRACT: The academic achievement of students is influenced by various factors encompassing learning attitudes, motivation, strategies, memory, and metacognition. This study specifically delves into learning attitudes, motivation, and strategies, which were acquired through respondent-completed instruments. The subsequent analysis aims to evaluate the factors that impact students' academic success. The primary objective of this research is to establish the correlation between students' learning attitudes, motivation, strategies, and their academic achievement. The findings from this study can guide schools in enhancing students' academic performance by tailoring interventions to address learning attitudes, motivation, and strategies. Employing a quantitative research approach, data collection involves survey instruments pertaining to learning attitudes, motivation, strategies, and academic achievement, with statistical techniques applied for data analysis. The results indicate that there is no statistically significant correlation between learning attitudes (X1) and academic achievement (Y), a statistically significant negative correlation between learning motivation (X2) and academic achievement (Y) at the 0.01 significance level, and no statistically significant correlation between learning strategies (X3) and academic achievement (Y).

KEYWORDS: Academic achievement, learning attitudes, motivation, learning strategies.

INTRODUCTION

Education in the province of Banten plays an integral role within the continually evolving national education system. With a specific focus on the Junior High School (SMP) level, assessing students' learning behavior stands out as a pivotal aspect in the ongoing efforts to enhance educational quality within this region. The province of Banten exhibits distinctive cultural and social characteristics that demand careful consideration when undertaking such assessments. This necessitates an approach that aligns with the diverse backgrounds of the students.

The assessment of learning behavior extends beyond measuring students' comprehension of academic content; it involves a thorough evaluation of their individual learning approaches. Given the cultural and social diversity inherent in the province of Banten, conducting such assessments poses unique and complex challenges that warrant targeted solutions. Thus, the primary objective of this article is to delve into the methodologies employed for assessing the learning behavior of Junior High School students in the province of Banten. The focus is on exploring innovative approaches, identifying challenges, and proposing effective solutions to address the intricacies of this assessment process.

The province of Banten, characterized by its cultural and social diversity, introduces specific challenges in gauging the learning behavior of students. This diversity encompasses variations in economic status, cultural backgrounds, and family environments. Acknowledging and addressing these diverse aspects becomes paramount in the development of inclusive and equitable assessment methods tailored to meet the needs of all students.

THEORETICAL FRAMEWORK

Attitude in Learning

Within the constructivist paradigm, as expounded by Jayendra (2022), learners are positioned as dynamic agents engaged in the active construction of their knowledge through enjoyable and experiential learning. This pedagogical approach places a distinctive emphasis on learners' capacity to construct their own reality or interpret it based on personal experiences, constituting the foundational principles of this paradigm. Examining the domain of Indonesian language instruction, Nasir (2023) illustrates

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that the incorporation of music and play activities indirectly contributes to heightened student self-confidence and fosters peer interactions, thereby indicating the positive repercussions of instructional methods entailing elements of creativity and social interaction.

Ramadhan (2020) expounds upon the notion that this educational model serves as a stimulant for students to identify problems, estimate solutions, and establish connections between theoretical concepts and their everyday lives. This underscores the imperative of providing stimuli to students, enabling them to cultivate critical thinking skills and gain a nuanced comprehension of conceptual applications in real-life scenarios. Within the domain of intercultural relations, Nurhalisa (2022) underscores the paramount significance of tolerance, construed as the capacity to comprehend and embrace differences. Cultural and religious disparities, she contends, should be acknowledged and embraced as integral components of diversity. The cognizance and acceptance of these differences emerge as pivotal factors in fostering harmony within heterogeneous societies.

In contrast, Musnidar (2022) articulates that concise learning processes and independent exploration bereft of teacher guidance may pose challenges for students. Hence, a judicious balance must be struck between students' autonomy in exploration and the provision of guidance and oversight by teachers to underpin an efficacious learning process. Amanaturrahmah (2023) substantiates that the cooperative learning model of the talking stick variant significantly contributes to the enhancement of students' cognitive learning outcomes and cultivates cooperative attitudes. The active involvement of students in interaction and communication has demonstrated a positive correlation with academic achievement and social development.

The predilection of students for face-to-face learning, underscored by Alamsyah (2020), can be construed as an endeavor to grapple with more intricate subject matter. This preference accentuates the significance of direct engagement with educators and peers to foster a profound understanding of the educational material. Wijayanto (2020) accentuates the necessity of discerning students' attitudes to empower educators in crafting cutting-edge innovations in pedagogy. An understanding of students' attitudes lays the groundwork for the formulation of more efficacious learning strategies aligned with the diverse needs of students.

Conclusively, Pambayun (2023) communicates that the Science, Technology, Engineering, and Mathematics (STEM) approach manifests a discernible correlation between students' attitudes towards STEM and their cognitive learning outcomes. The creation of an environment conducive to and inspiring students' interest in STEM is underscored for its affirmative impact on academic accomplishments. Thus, this inquiry accentuates the exigency of an educational approach buttressed by active interaction, the freedom of exploration, and profound comprehension, thereby engendering meaningful and impactful learning experiences for students in the scientific milieu.

Academic Motivation

Exploration into the multifaceted determinants influencing students' academic achievement consistently reveals a nuanced interplay between pedagogical dynamics, intrinsic motivational drivers, and the contextual ambiance within the educational institution (Arisandi, 2021). Delving into this intricate nexus, Umami's comprehensive investigation (2023) meticulously delineates the discrete and collective impact exerted by learning motivation and self-directed learning proclivities on students' mastery of mathematical concepts, intricately intertwining to configure the broader landscape of mathematical academic achievement. The research undertaken by Murniatin and Hadziq (2022) accentuates the criticality of cultivating a classroom milieu characterized by both conducive and comfortable elements, establishing a discernible correlation between these environmental attributes and heightened student motivation, along with a concomitant commitment to disciplined scholarly pursuits. A corollary revelation stemming from Sukma's empirical inquiry (2022) delineates a substantial correlation between learning motivation and the manifestation of advanced cognitive capacities.

Within this paradigm, educators are impelled to meticulously attend to the individualized requisites of students, as underscored by Riadin's scholarship (2022). Shuen's scholarly investigation (2022) further elucidates the intricate interconnections among learning motivation, students' interest, and disciplinary concerns. The definitive stance articulated by Warsadi (2020) solidifies the assertion that learning interest and motivation constitute positive determinants of the overarching academic accomplishments of students. This synthesized compendium of research underscores the imperative of nuanced considerations pertaining to motivational elements, self-directed learning methodologies, and the scholastic environment for the efficacious elevation of students' academic prowess.

Learning Strategies in the Education

In the current epoch marked by transformative shifts in educational paradigms, the research undertaken by Wati and Nyoman (2022) meticulously explores the intricate relationship between academic outcomes and the strategic implementation of the "trading place" methodology. This study not only provides novel perspectives but also unveils the manifold factors influencing

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students' academic achievements within the realm of innovative learning strategies. Simultaneously, Jaini's exhaustive examination (2021) intricately delineates the imperativeness of deploying the 7E Learning Cycle Model, tailored to the unique characteristics of instructional material. Furthermore, it emphasizes the nuanced consideration required for affective and psychomotor dimensions, crucial for optimizing students' learning outcomes.

Within the domain of learning motivation, the empirical investigation conducted by Alsa et al. (2021) discerns the pivotal role played by intrinsic learning motivation in augmenting statistical learning achievements. This study emphasizes the intricate functioning of cognitive learning strategies as a mediating force, underscoring the paramount importance of comprehending the intricacies of students' motivational dynamics. In concordance with this perspective, Herningsih (2022) introduces a pioneering viewpoint by scrutinizing the ramifications of digital learning strategies on students' motivational dynamics. The findings unequivocally illustrate the positive impetus these methods offer, effectively motivating students, alleviating monotony, and consequently propelling an elevated trajectory for their academic accomplishments.

Within the purview of active learning, Wijayanto's comprehensive inquiry (2022) illuminates the effectiveness of the Learning Start With Questions (LSQ) strategy synergized with group discussion methodologies. This insightful research not only underlines the enthusiastic response it elicits from students but also accentuates their heightened proclivity for inquiry and active participation in the pursuit of knowledge. Collectively, these findings serve as a robust underpinning for advocating the widespread adoption of pedagogical strategies that foreground and prioritize student engagement, thereby delineating a trajectory acutely aligned with the exigencies of contemporary educational landscapes.

RESEARCH METHODS

The methodological framework employed in this investigation utilizes the Partial Correlation Analysis technique, specifically chosen due to its appropriateness for handling scenarios involving more than two dependent and independent variables. The data collection process involved the distribution of a meticulously designed questionnaire to respondents, namely, junior high school students situated in three distinct regions: Serang (SMPN 1 Kibin), Tangerang (SMPN 2 Pasar Kemis), and Pandeglang (SMPN 1 Karang Tanjung), all falling within the provincial confines of Banten. The primary objective of this study is to discern and explicate the nuanced relationships existing among attitude, motivation, and learning strategies, with a collective focus on their impact on the academic performance of junior high school students in the province of Banten. The overarching research design is rooted in the methodology of a correlational study.

The research population consists of 8th-grade junior high school students within the provincial boundaries of Banten, and the purposive random sampling technique is deployed for sample selection. The research instrument takes the form of a questionnaire comprising carefully constructed statements tailored to gauge attitudes, motivation, and learning strategies. Additionally, academic performance data, extracted from report card grades upon students' progression to the 8th grade, are incorporated into the study. The analytical phase involves the application of descriptive statistics, intending to provide a comprehensive portrayal of population characteristics. Furthermore, a simple correlation analysis utilizing the Pearson product-moment correlation coefficient is applied to ascertain and quantify the degree of relationships between the specified variables.

RESEARCH OF RESULTS

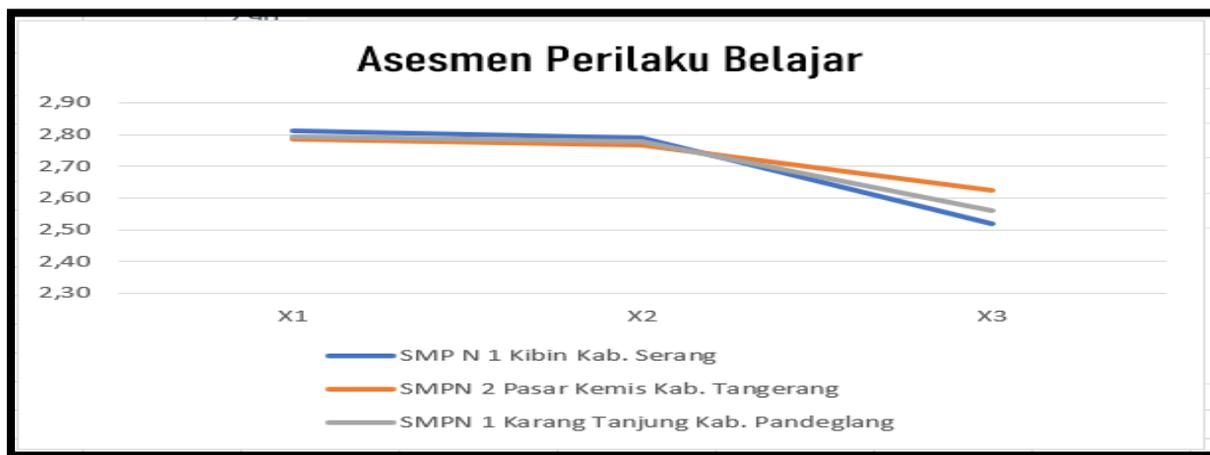
Based on the observation results, the data obtained are as follows:

Table 1: Summary of research data:

No.	Nama Sekolah	X1	X2	X3	Y
1	SMP N 1 Kibin Kab. Serang	2,81	2,79	2,52	83,59
2	SMPN 2 Pasar Kemis Kab. Tangerang	2,79	2,77	2,62	83,59
3	SMPN 1 Karang Tanjung Kab. Pandeglang	2,79	2,78	2,56	83,45

Information: X1: Attitude, X2: Learning Motivation, X3: learning Strategy, Y1: Value Range 1, Y: Student Learning Achievement.

In summary, the research results can be seen in the following graph:



Graph 1: Summary of Research Data

Based on the graph, the information obtained is that:

1. The data on attitude, learning motivation, and study strategies at each school are consistently high on average.
2. Student Learning Achievement with an average score above 80.

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Based on the statistical analysis, the following data were obtained:

Table 2: Homogeneity of X1-Y

	2,8	82,5
Mean	2,79625	83,55833
Variance	0,031505	2,206821
Observations	80	80
df	79	79
F	0,014276	
P(F<=f) one-tail	0	
F Critical one-tail	0,689108	

Criterion: if $F < F \text{ Critical}$, then the data is homogeneous. Based on the table, the obtained result is F-value (0.014276) < F-table (0.689108), indicating that the data is homogeneous.

Table 3: Homogeneity of X2-Y

	2,8	82,5
Mean	2,7775	83,55833
Variance	0,026323	2,206821
Observations	80	80
df	79	79
F	0,011928	
P(F<=f) one-tail	0	
F Critical one-tail	0,689108	

Criterion: if $F < F \text{ Critical}$, then the data is homogeneous. Based on the table, the obtained result is F-value (0.011928) < F-table (0.689108), indicating that the data is homogeneous.

Table 4: Homogeneity of X3-Y

	2,7	82,5
Mean	2,565	83,55833
Variance	0,062051	2,206821
Observations	80	80
df	79	79
F	0,028118	
P(F<=f) one-tail	0	
F Critical one-tail	0,689108	

Criterion: if $F < F_{Critical}$, then the data is homogeneous. Based on the table, the obtained result is F-value (0.028118) < F-table (0.689108), indicating that the data is homogeneous.

Interrelationship between variables, calculated using SPSS.

Table 5: Correlations

		X1	X2	X3	Y
X1	Pearson Correlation	1	,226*	,334**	,061
	Sig. (2-tailed)		,043	,002	,591
	N	81	81	81	81
X2	Pearson Correlation	,226*	1	,588**	-,315**
	Sig. (2-tailed)	,043		,000	,004
	N	81	81	81	81
X3	Pearson Correlation	,334**	,588**	1	-,054
	Sig. (2-tailed)	,002	,000		,635
	N	81	81	81	81
Y	Pearson Correlation	,061	-,315**	-,054	1
	Sig. (2-tailed)	,591	,004	,635	
	N	81	81	81	81

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The outcomes presented encompass correlation coefficients among variables X1, X2, X3, and Y. A thorough interpretation of the correlation matrix is delineated below:

- 1) X1 and X2: Pearson correlation coefficient: 0.226, Significance level (2-tailed): 0.043. Interpretation: A statistically significant positive correlation is evident between X1 and X2 at the 0.05 significance level.
- 2) X1 and X3: Pearson correlation coefficient: 0.334, Significance level (2-tailed): 0.002. Interpretation: A statistically significant positive correlation exists between X1 and X3 at the 0.01 significance level.
- 3) X1 and Y: Pearson correlation coefficient: 0.061, Significance level (2-tailed): 0.591. Interpretation: No statistically significant correlation is observed between X1 and Y (p-value > 0.05).
- 4) X2 and X3: Pearson correlation coefficient: 0.588, Significance level (2-tailed): 0.000. Interpretation: A highly significant positive correlation is discernible between X2 and X3 at the 0.01 significance level.
- 5) X2 and Y: Pearson correlation coefficient: -0.315, Significance level (2-tailed): 0.004. Interpretation: A statistically significant negative correlation is identified between X2 and Y at the 0.01 significance level.
- 6) X3 and Y: Pearson correlation coefficient: -0.054, Significance level (2-tailed): 0.635. Interpretation: No statistically significant correlation is present between X3 and Y (p-value > 0.05).
- 7) Y and Y (autocorrelation): Pearson correlation coefficient: 1.000, Significance level (2-tailed): Not applicable (correlation of Y with itself). Interpretation: Perfect correlation between Y and Y (as expected), yet this doesn't provide additional information.

In summary, statistically significant correlations are established between X1 and X2, X1 and X3, X2 and X3, as well as X2 and Y. Conversely, correlations involving X1 and Y, as well as X3 and Y, do not exhibit statistical significance. Furthermore, the negative correlation between X2 and Y is statistically significant.

CONCLUSION

- 1) X1 (Learning Attitude) and Y (Learning Achievement): Pearson correlation coefficient: 0.061, Significance level (2-tailed): 0.591, Interpretation: There is no statistically significant correlation between X1 and Y (p -value > 0.05).
- 2) X2 (Learning Motivation) and Y (Learning Achievement): Pearson correlation coefficient: -0.315, Significance level (2-tailed): 0.004, Interpretation: A statistically significant negative correlation exists between X2 and Y at the 0.01 significance level.
- 3) X3 (Learning Strategy) and Y (Learning Achievement): Pearson correlation coefficient: -0.054, Significance level (2-tailed): 0.635, Interpretation: There is no statistically significant correlation between X3 and Y (p -value > 0.05).

Thus, to enhance students' learning achievement, it is essential to elevate students' learning motivation, considering various factors associated with both intrinsic and extrinsic motivation.

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