STUDENTS' HONEST ATTITUDES IN SCIENCE LEARNING AT SMPN 15 TANJUNGPINANG: A MIXED METHOD STUDY

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ABSTRACT

In the digital era, character education-particularly the value of honesty-is essential to prevent the misuse of knowledge for unethical purposes. This study examines students' honesty in Integrated Science learning at SMP Negeri 15 Tanjungpinang, focusing on how honest behavior manifests in the learning process and the factors that influence students' honesty or dishonesty. Employing a mixed-methods approach with a sequential explanatory design; the study collected quantitative data through questionnaires from 105 students selected via stratified random sampling and qualitative data through interviews with selected students based on their honesty levels. The results showed that students' overall honesty was categorized as good, with an average percentage score of 75.40%. The highest-rated indicator was "dislike lying," while the lowest was "reporting things truthfully." However, 42% of students fell into the "fairly honest" or "dishonest" categories, indicating a need for ongoing character development. Qualitative findings revealed three main reasons for dishonest behavior: peer influence, lack of fear of sanctions, and pressure to achieve good grades. These findings suggest that students' dishonest actions are shaped by social, psychological, and academic factors. The study concludes that promoting honesty requires a holistic strategy involving curriculum integration, teacher role modeling, consistent disciplinary measures, and support from families. This research implies that effective character education must engage all stakeholders in creating an ethical school culture and supportive learning environment.

INTRODUCTION

Education does not only focus on mastering knowledge and skills but also has the responsibility of shaping the character of students to be able to use knowledge responsibly. In the current context, technological advances are often misused to commit fraud and harm others. Digital criminals generally have adequate knowledge but are not accompanied by moral responsibility (Sani, 2014). Therefore, character education is an urgent need and must be instilled early because it will affect a person's attitude and behavior in the future (Ananda et al., 2022).

A strong character, such as honesty, will form an individual who is not easily affected by negative influences from outside. Individuals who have honest character tend to help others, uphold morality, and have a

tolerant attitude in social life (Sadiyah et al., 2023). In this case, education becomes the main foundation in shaping human resources who are not only intellectually intelligent but also have character. This is in accordance with the mandate of Law No. 20/2003 on the National Education System article 3, which emphasizes that the purpose of national education is to develop the potential of students to become humans who are faithful, pious, noble, healthy, capable, and responsible. Thus, attitude development and character building are the main aspects of the education process (Munir et al., 2023).

As one of the main subjects in the education system, Natural Sciences (IPA) plays an important role in shaping scientific thinking skills in students. Science learning encourages students to develop the process of reasoning and understanding natural phenomena through a scientific approach (Asna, 2019). In this process, students are required not only to understand science concepts but also to have scientific attitudes such as being curious, open, and honest (ASTAWA et al., 2015). The importance of scientific attitudes lies in their ability to prevent the emergence of negative behaviors, such as dishonesty, low self-esteem, and manipulative actions when carrying out tasks and experiments.

Honesty is a fundamental moral value that is the foundation of shaping student character. Honesty is defined as being sincere and not committing fraud. Honesty reflects conformity between speech and reality and is the opposite of lying. Honest people tend to live more calmly and are trusted by others, while those who like to lie tend to live in anxiety and lose trust (Azis, 2018). The value of honesty is also closely related to benefit, which is a common interest that transcends personal interests.

However, practice in the field shows that students' honesty is often tested in the science learning process, especially during tests, assignments, or practicums. The results of interviews with science subject teachers at SMP Negeri 15 Tanjungpinang

conducted on September 21, 2023, showed that many students tend to be dishonest when facing difficulties in science learning. For example, they cheat on tests, open books without permission, or equate practicum results with the theory in the book, even though the results they get are different. This situation shows that learning science is a challenge in shaping students' honest attitudes.

This situation confirms the need for a study of students' honest behavior in the context of science learning. This study aims to examine the process of forming students' honesty attitudes and how these attitudes appear during science learning activities at SMP Negeri 15 Tanjungpinang, as well as to reveal various factors that influence students in being honest or dishonest.

METHODS

This research applies a Mixed Methods approach with a Sequential Explanatory design, where the process of data collection and analysis is carried out in stages, starting with quantitative data, which is then followed by qualitative data collection (Creswell & Clark, 2018), as shown in Figure 1. This approach was chosen in order to describe students' honest behavior in science learning comprehensively, both in terms of quantitative (through questionnaires) and qualitative (through interviews).
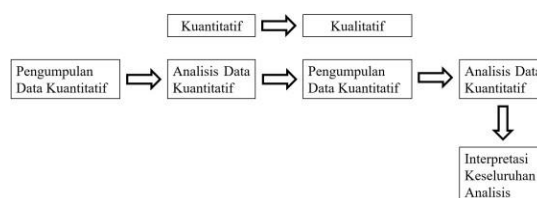

Image . 1Sequential Explanatory Design

The research was conducted at SMP Negeri 15 Tanjungpinang, Riau Islands, on June 10 and 19, 2024. This study involved a total of 123 students as a population, with details of the number that can be seen in Table 1.

Table 1. Research Population.

No.	Class	Number of students
1	VII	39
2	VIII	84
	Total	123

By using the stratified random sampling method and using the Slovin formula (with a margin of error of 5%), the sample used in this study amounted to 105 students, with details presented in Table 2.

Table 2: Research sample.

No.	Class	Number of students
1	VII	36
2	VIII	69
	Total	105

The 105 students are samples for quantitative data whose data collection is done by questionnaire technique. The sample for qualitative data, whose data collection technique was interviews, was taken from several students in each category of honesty level after the quantitative data was processed. There is no universal rule that determines the maximum and minimum number of interviews for one qualitative research (Bekele & Ago, 2022) . Some books and research results show that the number of qualitative samples is determined based on data needs (Creswell & Clark, 2007; Ivankova & Stick, 2007) .

Quantitative data were collected using a questionnaire whose questions were developed based on indicators of student honesty (Mustari & Rahman, 2014) . The questionnaire grids used in this study are presented in Table 3.

Table 3. Questionnaire Grid

No.	Indicator	Favorable (+)	Unfavorable (-)
1	Conveying something in accordance with the actual	1, 2, 3, 4	5, 6,

No.	Indicator	Favorable (+)	Unfavorable (-)
	situation		
2	Willing to admit mistakes, shortcomings, or limitations	7, 10	8, 9
3	Don't like cheating	11, 12, 13, 15	14, 16
4	Don't like to lie	18	17, 19, 20, 21
5	Do not manipulate facts/information	22, 24,26,27	23, 25
6	Dare to admit mistakes	28,29	30

Qualitative data was collected through semi-structured interviews based on interview guidelines, whose grid is shown in Table 4.

Table 4. Interview grid

No.	Indicator	No question
1	Committing dishonest acts during learning	1
2	Observe a friend committing a dishonest act	2
3	Feeling more satisfied when you get a good grade by using dishonest actions during the learning process	3

Quantitative data were analyzed using Likert scale-based descriptive statistics, with student honesty categories divided into five levels (Susila & Gustina, 2023), as shown in Table 5.

Table 5. Scoring of questionnaire questions

Alternative answer	Favorable (+)	Unfavorable (-)
Always (SL)	4	1
Often (S)	3	2
Sometimes (HH)	2	3
Never (TP)	1	4

The score of the honest attitude assessment results measured using a questionnaire is determined by the following formula.

$$p = \frac{F}{N} \times 100\%$$

Description:
P   = Average percentage
F   = Number of scores obtained
N   = Total number of scores

The level of students' honest attitude is determined by the categories in Table 6 below.

Table 6. Category honest attitude

No.	Category	Percentage (%)
1	Very good/very honest	90-100
2	Good/Honest	75-89
3	Simply	65-74
4	Not good / Dishonest	55-64
5	Very unfavorable/very dishonest	0-54

Qualitative data analysis was carried out using techniques proposed by Miles (1994) and Miles et al. (2014), which includes the process of data reduction, data presentation, and conclusion drawing. The findings from this qualitative analysis are used to support and clarify the results obtained from quantitative data.

RESULTS AND DISCUSSION
a. Description of Students' Honest Attitude

Students' honest attitude in Integrated Science learning is analyzed based on the results of a questionnaire that has been validated and shows high reliability (α = 0.85). The instrument consists of 30 statement items that represent six indicators of honesty. The results of quantitative data analysis show that, in general, students have an honest attitude.

Honesty is classified as good, with an average percentage score of 75.40%, as shown in Table 7.

Table 7. Percentage of students' honest attitude for each indicator

Indicator	Honest Attitude Percentage (%)	Category
1	67,86	Good
2	77,80	Good
3	78,61	Good
4	82,48	Very good
5	72,42	Good
6	74,88	Good
Average	75,40	Good

The data presented in the table shows that the indicator 'does not like to lie' recorded the highest percentage of 82.48%, which is in the very good category. Meanwhile, the indicator 'conveying something according to the actual situation' obtained the lowest score of 67.86%, although it is still in the good category. This indicates that students generally have a strong attitude of honesty in terms of avoiding lies but still need to be strengthened in terms of courage to clearly express the truth.

Based on the total questionnaire score, students are categorized into four levels of honesty, namely very honest, honest, fairly honest, and dishonest. The distribution of students in each category can be seen in Figure 1 below.
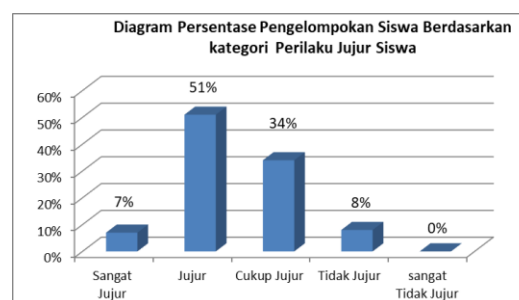
Grouping of students in each category of honest attitude

This distribution shows that the majority of students (51%) are in the honest category, or 7% are very honest, which reflects a positive trend towards internalizing the value of honesty in the learning context. However, the presence of students in the moderately honest and

dishonest categories (42% in total) indicates the need for further character-building strategies that are sustainable and contextualized.

The results showed that the honest attitude of students at SMP Negeri 15 Tanjungpinang was in a good category. The indicator with the highest score is "not like lying," while the lowest indicator is "saying something according to the actual situation." This finding is in line with research by Lubis et al. (2025), which found that concrete experience-based learning can improve students' honesty and character. This approach provides opportunities for students to directly experience situations that demand honesty so that it can strengthen the internalization of honesty values in themselves. In addition, research by Harahap et al. (2023) shows that the role of teachers as role models and effective communicators is very important in fostering students' honesty and character. In this context, teachers not only teach the material but also become examples of honest behavior that students are expected to imitate.

However, although most students showed a good, honest attitude, there were still a small number of students who were in the moderately honest and dishonest categories. This shows that the implementation of honesty character education needs to be strengthened. According to Azzarima et al. (2023), the implementation of honesty and character values in students can be done by integrating these values into the curriculum and daily learning activities. In addition, Marlina et al. (2024) emphasize the importance of the family's role in instilling the value of honesty in children because the family environment is the first and main place in the formation of children's character. Therefore, the synergy between school and family is needed to form a young generation that has a strong character of honesty.

b. Reasons for Students' Dishonest Behavior

The results of interviews with seven students revealed three main factors causing dishonest behavior during Integrated Science learning at SMP Negeri 15 Tanjungpinang, namely the influence of the friendship environment, lack of fear of punishment, and the desire to get good grades.

First, the influence of the friendship environment is a significant factor that motivates students to cheat or skip class in order to maintain their social relationships. Some students admitted that they were "forced" to be dishonest in order not to be shunned by their peers. This phenomenon is supported by research by McCabe et al. (2012), which shows that peer pressure is a major risk factor in plagiarism and academic cheating behavior. In addition, social influence determines the ethical behavior of students in the school environment (Berek et al., 2025).

Second, the lack of fear of sanctions also influences dishonest behavior. One student stated that teacher reprimands and parental calls were considered "normal," so they did not have a deterrent effect. This is in line with the findings of several studies that show that the effectiveness of academic punishment depends on the consistency and perceived fairness of the application of sanctions (Kim et al., 2020; Peguero et al., 2018). If the punishment is not taken seriously, then the deterrent to cheating decreases.

Third, the drive to achieve good grades motivates students to cheat when facing difficult questions. Some students admit to choosing cheating as a way out when they have tried but still cannot answer the questions. Research by Whitley (1998) confirms that academic pressure and a sense of inability to cope with tasks are the main psychological factors that trigger cheating. Therefore, it is important to build a supportive learning environment and provide effective guidance to improve student readiness (Mardiah, 2024).

Overall, these findings confirm that students' dishonest behavior is influenced by

a combination of social, psychological, and academic factors. Effective responses should be holistic and integrate character building, increased awareness of consequences, and improved learning and psychological support for students (Hodgkinson et al., 2016; Janinovic et al., 2024; Ljubin-Golub et al., 2020).

CONCLUSIONS AND SUGGESTIONS

Based on the results of the study, it is known that the honest attitude of students in learning Natural Sciences (IPA) at SMP Negeri 15 Tanjungpinang is generally in the good category, with an average percentage of 75.40%. The most prominent indicator is the dislike of lying, while the indicator with the lowest score is the courage to convey something according to the actual situation. Although the majority of students are classified as honest, there are still a number of students who fall into the moderately honest to dishonest category, indicating the need for more intensive character development. Qualitative findings show that students' dishonest behavior is influenced by three main factors, namely the influence of the friendship environment, the lack of a deterrent effect from the sanctions given, and the pressure to obtain good academic grades. Therefore, honesty character building must be done holistically by involving all elements of education, including schools, teachers, and families, as well as through the integration of honesty values in learning activities and students' daily lives.

AUTHOR'S CONTRIBUTION

JE designed and conducted the research, developed the instruments, collected and analyzed the data, and wrote the first draft of the manuscript. DS provided intensive guidance in problem formulation, methodological design, and data analysis, and critically reviewed the entire manuscript. EO provided direction in strengthening the theoretical basis and discussion and conducted scientific editing of the final version of the manuscript. All authors have read and approved the final manuscript for publication.

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