

Honesty and Motivational Character Analysis of Science Learning Achievement

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ABSTRACT

The purpose of this study is to ascertain the effect of student motivation and honesty on science learning achievement. This study used quantitative in nature and employs a survey method. Three variables will be analyzed in this study: honesty, motivation, and science learning achievement. The subject in this research is 53 undergraduated students. Respondents completed questionnaires distributed by the researchers. After collecting data from respondents, the data must be tested. At the time of learning, the most critical characteristic that students must instill in each individual is the character of honesty and student motivation to participate in ongoing learning. This is done so that when students are actively engaged in learning, they can be completely honest in their actions and demonstrate a strong desire to learn. As a result, if it is instilled in students, it will affect their learning achievement. The findings of this study indicate that there is a significant effect of both honesty and motivation on student science learning achievement

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Introduction

Indonesia is undergoing a pandemic outbreak as a result of covid-19. The educational process is conducted entirely online. Similarly, with Esa Unggul University's PGSD students. Online learning is used by both students and lecturers. Lecturers have difficulty monitoring students to the maximum extent possible during this online learning. Although it is relatively easy for students to obtain information or knowledge that is pertinent to this learning, with the development of this era (Syofyan & Halim, 2017). However, lecturers and students continue to struggle to carry out the learning activity to the fullest extent possible during this online learning (Ratih & Syofyan, 2021). Implementing online learning can be done well if there is good cooperation between students and lecturers, where lecturers can provide interesting teaching materials and help students better understand the material presented. Apart from this, learning has more flexibility learning which can encourage independent learning and motivation to be more active learning (Sadikin and Hamidah, 2020), but with this online learning, also found that there are students who feel bored because they only stare at cheap computer monitors without anyone, close friends and teachers (Yunitasari and Hanifah, 2020).

When online learning is implemented, lecturers can only use a learning application. Do not rule out the possibility that lecturers and students will experience difficulties as a result of these circumstances. With the current problems, lecturers and students must be able to overcome them. One of the issues that arises as a result of online education is students' lack of integrity. The low level of student honesty is evident in the assignments completed and collected by students. In addition, the emergence of boredom and feeling lonely in learning is also another effect of online learning. Then in online learning the lack of supervision, the high cost of quotas and the weak internet signal in some areas (Sadikin and Hamidah, 2020).

During this online learning, lecturers are unable to monitor how students complete assigned tasks. Certain students engage in dishonest behavior, such as cheating on friends' answers or plagiarizing from the internet. Thus, it can be seen that online education has a detrimental effect on the character of students' honesty (Syofyan, 2022).

The student's character of honesty is critical to instilling in students in order to overcome future obstacles (Wahono, 2018). Additionally, character education is critical, particularly at the university level, in order to produce graduates with strong moral character. Thus, character education is necessary for students in the hope that it will produce people of character consistent with the educational objective (Darma, Susiaty, & Fitriawan, 2018).

The quality of honesty is the act of never lying in what you say or do, of always telling the truth and also of admitting mistakes (Julia & Ati, 2019); (Syofyan, 2017). A person's attitude toward actions must be true to the circumstances surrounding them; there must be no concealment of what is and is not true. Sincerity is a quality of sincerity (Mulyati, Hidayati, & Hariyanto, 2020). Along with the integrity that students must possess, they must also be motivated to participate in educational activities. If a student is motivated to engage in learning activities, this can have an effect on the students' success. That is why it is critical for students to be motivated.

Motivation is an impulse that arises within you to effect change in order to accomplish a learning goal (Hakim & Syofyan, 2018). If students are not motivated during the implementation of student learning activities, this results in laziness in completing tasks, laziness in attending lectures, laziness in collecting assignments, and can even result in students failing to complete or collect tasks provided by lecturers. This way, it will have an effect on the learning outcomes of students.

Along with providing instructional materials and tasks, a lecturer must be able to extinguish students' honesty and increase their motivation to participate in educational activities. However, in pandemic times such as the present, learning activities are conducted online, creating a barrier for lecturers. Due to the fact that lecturers are unable to monitor students directly. Lecturers may only conduct face-to-face learning activities via video conferences. As a result, lecturers have a difficult time monitoring students to the fullest extent possible. Thus, students and lecturers must collaborate to resolve the issue.

Additionally, there are courses within lecture activities that require a more detailed explanation from lecturers or require practice. Among them is a science education course. During the course of science education, there are discussions or tasks that must be performed directly by lecturers as an example to students, as well as tasks that must be performed directly by students. However, at this point, it becomes an impediment that lecturers and students must overcome. If these barriers are not addressed, they will have an effect on students' science learning outcomes.

In the implementation of science learning, it is critical to apply the values of honesty and motivation to the learning process. As a student, you must possess integrity. The value

of honesty that a student must possess is exemplified in completing the tasks associated with science learning courses provided by lecturers. Students must complete the task independently, without consulting their friends' answers or copying answers from the internet.

The value of honesty must also be backed up by each student's motivation. Because when students have a high level of motivation for learning, they are more likely to engage in science learning and avoid negative behaviors such as cheating on tasks or plagiarizing.

However, if students are not motivated to follow through on this learning, it will have a negative impact on their success in following through on learning and will also have an effect on the results of science learning that students receive.

The outcome of science education is determined by an individual's capacity to comprehend, comprehend, apply, and analyze scientific discussions (Syofyan, 2018). The results of learning science are a method of applying one's abilities, both behavioral and non-behavioral, that are derived primarily from learning activities and quantified through learning results tests (Syofyan & Yuliati, 2017). Additionally, the outcome of science education is a result in the form of values or numbers that someone obtains as a result of learning (Windasari & Sofyan, 2018). To maximize science learning outcomes, science learning activities must be conducted with integrity and motivation. In addition, there are many things that cause honesty and responsibility factors to be formed due to habituation and encouragement from oneself to continue with the active intelligence of each individual. (Wolf, 2015).

Research results from (Rochmawati Nikmah, 2018), found that to educate honest character, children are not only given cognitive knowledge about honesty, but also must touch the realm of affection and be implemented in real behavior. The formation of honest character cannot be magic in a short time, but there must be habituation that must be done continuously so that the character can develop because of conditioning (Batubara, 2015). For this development, character education is important for human life, so the role played by the world of education must not only show moral knowledge, but also love and be willing to take moral action. (Sudrajat, 2011)

Thus, based on the description provided above, researchers are interested in conducting research titled "Honesty and Motivation Character Analysis of Student Science Learning Outcomes."

Method

In this study, the researchers employed quantitative methods. The study gathered data through survey methods. The instrument of measurement used in this study is a questionnaire or questionnaires. This research was conducted in Esa Unggul University's PGSD science learning class. Respondents were active ESA Unggul University PGSD students who participated in science learning in elementary school, classes, with a total of 53 students in July 2021. The researchers distributed questionnaires to all Esa Unggul University PGSD students who took science learning classes.

At the beginning of the lecture, students have been given the terms and conditions that apply in the lecture, and a questionnaire is given at the end of the semester. From the results of the validity test carried out, the results of the honesty questionnaire which initially amounted to 25 items, after the validity test were carried out, obtained 24 valid items and one invalid item. Meanwhile, for the motivational questionnaire, which initially consisted of 30 items, after the validity test, 27 valid items were obtained and 3 items were invalid. While

the reliability testing carried out by researchers in this study used the help of the SPSS version 22.0 application program. After conducting this reliability test, the reliability value of the honesty questionnaire was 0.818 with a high interpretation. Thus, it can be stated that the data is reliable. While the reliability test of the motivation questionnaire was 0.855 with a high interpretation. Thus, it can be stated that the data is reliable.

Throughout this pandemic, education took place online. Students and lecturers collaborate online to facilitate learning. In filling out the questionnaire, students were given a google form link, then they were notified that to fill out their willingness to fill in for research data was needed in internal research, and the data provided did not affect the value given in the course. For that purpose, researchers use the Google Forms application to distribute questionnaires or questionnaires during the data collection process. Students respond to each statement contained in the questionnaire or questionnaire provided by the researcher using the available options. Researchers employ questionnaires as instruments of honesty and motivation. While researchers use data from the value of students who pursue science learning to determine the variables of science learning outcomes, they also use data from the value of students who pursue science learning. This instrument is used to gather data in order to arrive at a conclusion or answer.

Results and Discussion

This study contains three variables: two unbound variables and one bound variable. There are free variables such as honesty and motivation, and bound variables such as science learning outcome variables. The researchers collected data for this study via a questionnaire. Angket is distributed to a research sample consisting of all Pgsd students enrolled in science learning classes.

The characteristics of honesty and motivation were determined in this study through questionnaires distributed to the sample, whereas the results of science learning were determined through the value of pgsd students who participated in science learning classes. Following the collection of data from the distributed questionnaire, the researchers conduct a validity test. The test was conducted with the assistance of the SPSS application program version 22.0. According to the validity test, the initial honesty questionnaire contained 25 items; however, after the validity test, the questionnaire contained 24 items, with one item being invalid. Concerning the motivational questionnaire, which initially contained 30 items, it was reduced to 27 items and three invalid items following the validity test.

Once the data has been declared valid, it is subjected to a reliability test. This test is used to determine whether or not the data is reliable. Reliability tests on variable data on honesty and motivation revealed that both variables were associated with high achievement. Following that, the researchers ran a linear regression test. The researchers conducted this test to ascertain the influence of free variables on bound variables. The linear regression test table contains the following information.

Table 1. Multiple Linear Regression Test

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	43,164	9,647		4,474	,000
1 Honesty	,256	,105	,312	2,441	,018
Motivation	,196	,083	,303	2,364	,022

According to the results of the multiple regression test in Table 1, constant equals 43,164, the coefficient of honesty equals 0.256, and the coefficient of motivation equals 0.196, resulting in the regression equation $Y = 43.164 + 0.256X_1 + 0.196X_2$.

The following test is a data normality check. This data normality test is used to determine whether or not the data is normal. To determine this normality, data is considered to be normally distributed if the significance level is greater than 0.05. If 0.05 is significant, the data obtained are not normally distributed. The following table illustrates the data normality test.

Table 2. Data Normality Test
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		53
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	4,93442937
Most Extreme Differences	Absolute	,096
	Positive	,096
	Negative	-,085
Test Statistic		,096
Asymp. Sig. (2-tailed)		,200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

According to the results of the normality test in Table 2, it received a significant 0.200. This means that a value of 0.200 greater than 0.05 indicates that the data is normally distributed. The normality test results can also be viewed in the form of a histogram chart, as shown below:

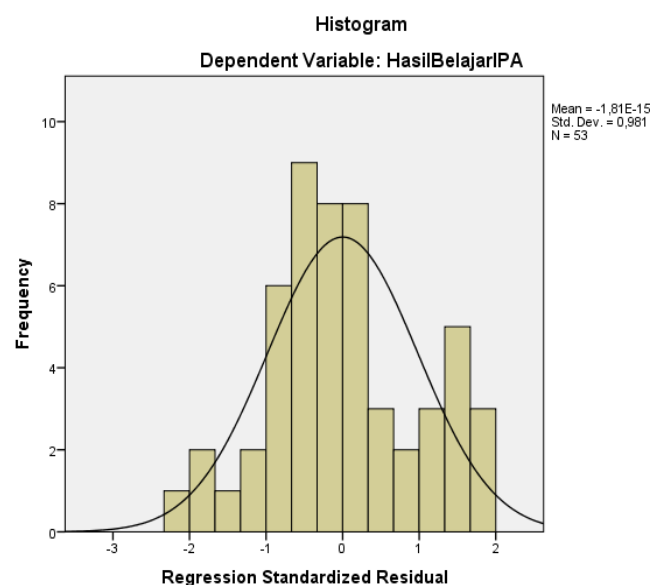


Figure 1. Histogram Graph Tests the Normality of Data

As can be seen from the histogram chart of the normality test above, the majority of the rods are below the curve, indicating that the histogram chart is normal.

After performing a normality test on the data, the researchers performed a correlation test. Correlation tests were used in this study to determine whether there was a relationship between these free and bound variables and to determine the degree of relationship intensity. The correlation test's results are as follows.

Table 3. Correlation Tests X1, X2 and Y

		Honesty	Motivation	Science Learning Outcomes
Honesty	Pearson Correlation	1	,267	,393**
	Sig. (2-tailed)		,053	,004
	N	53	53	53
Motivation	Pearson Correlation	,267	1	,386**
	Sig. (2-tailed)	,053		,004
	N	53	53	53
Science Learning Outcomes	Pearson Correlation	,393**	,386**	1
	Sig. (2-tailed)	,004	,004	
	N	53	53	53

As shown in Table 3, the cholera coefficient between X1 and Y is 0.393 with a significance level of 0.004 0.05, indicating that cholera exists between X1 and Y. While cholera X1 and X2 receive 0.267 with a significance level of 0.053 > 0.05, this indicates that cholera X1 and X2 do not exist. And the cholera values for X2 and Y were 0.386 with a 0.004 0.05 significance level, indicating that cholera exists between X2 and Y.

Additionally, the researchers examined the relationship between honesty and motivation and the outcomes of science learning. This correlation test is used to determine the degree of relationship between students' honesty and motivation and their science learning outcomes. The following table summarizes the correlation test results.

Table 4. X1 and X2 Correlation Test Against Y

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,490 ^a	,240	,209	5,032

According to the correlation test results in Table 4, the correlation coefficient value between X1 and X2 against Y is 0.490 with a significance level of 0.001 0.05, indicating that there is cholera X1 with X2 to Y.

Following that, the researchers performed a determination test. This determination test is used to determine the amount of influence variable X has on variable Y both persianically and concurrently (Sunarsi, 2020). Additionally, this determination test is used to determine the extent to which the influence of unbound variables is limited by the influence of bound variables. The following table summarizes the results of this determination test.

Table 5. Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,490	,240	,209	5,032	,240	7,879	2	50	,001

According to table 5 of the above-mentioned determination test results, the value of R Square is 0.240, which, when expressed as a percentage, equals 24 percent. Thus, 24 percent of the influence of honesty and motivation variables on science learning outcomes can be explained, while the remaining 76 percent is explained by factors other than the variables examined in this study.

The following is a portion of a test (test t). Researchers use partial tests to ascertain the effect of unbound and bound variables. If, $t_{\text{count}} > t_{\text{table}}$, and significant at 0.05, the decision to perform this partial test is an accepted hypothesis. The results of the calculations obtained a t_{table} of 2,008. The following are the results of the test t calculation.

Table 6. Partial Test (test t)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	43,164	9,647		4,474	,000
	Honesty	,256	,105	,312	2,441	,018
	Motivation	,196	,083	,303	2,364	,022

Based on table 6 partial tests above show honesty (X1) obtained t_{hitung} of 2,441 that can be written $t_{\text{hitung}} > t_{\text{table}}$ can be written $2,441 > 2,008$ with a significant $0.018 < 0.05$. Thus, these results showed that there was a positive influence between honesty on the results of science learning. Then H_0 was rejected and H_1 was accepted. The t test conducted on motivation (x2) obtained $t_{\text{hitung}} = 2,364$ can be written $2,364 > 2,008$ got a significant $0.022 < 0.05$. Thus, these results show a positive influence between motivation and student science learning outcomes. H_0 was rejected and H_1 accepted. After partial tests X1 and Y and X2 and Y, the next is to do a test between the honesty to motivation variables. The partial test results table between honesty to motivation variables can be seen as follows.

Table 7. Partial Test X1 against X2

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	63,853	13,637		4,682	,000
	Honesty	,339	,171	,267	1,980	,053

According to Table 6, the partial tests above demonstrate that honesty (X1) obtained a t_{hitung} of 2,441 that can be written $t_{\text{hitung}} > t_{\text{table}}$ with a significant $0.018 < 0.05$. Thus, these findings indicated that honesty had a beneficial effect on science learning outcomes. H_0 was then rejected, while H_1 was approved. The t test on motivation (x2) yielded $t_{\text{hitung}} = 2,364$ (or $2,364 > 2,008$), which is statistically significant at $0.022 < 0.05$. As a result of these findings, it is clear that motivation has a positive effect on students' science learning outcomes. H_0 was turned down, while H_1 was approved. Following the partial tests X1 and Y and X2 and Y, the next step is to conduct a comparison of the variables relating to honesty and motivation. The following table summarizes the test results for variables relating to honesty and motivation.

According to the above-mentioned calculation, F_{table} equaled 3.18. The following table summarizes the results of the f test.

Table 8. Simultaneous Test (Test f)

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	399,043	2	199,521	7,879	,001 ^b
	Residual	1266,127	50	25,323		
	Total	1665,170	52			

According to the table of simultaneous test results above, $F_{hitung} = 7.879 > F_{tabel} = 3.18$ by a significant margin of 0.001 0.05. Thus, H_0 is rejected and H_1 is accepted, indicating that both honesty and motivation have a positive effect on students' science learning outcomes simultaneously and significantly.

The purpose of this study is to examine the relationship between the variables of honesty and motivation and the outcomes of science learning for PGSD students who take science learning courses. The purpose of this study was to determine whether or not honesty and motivation have an effect on the outcomes of student science learning. Students must instill the character of honesty throughout their science education. Honesty is a behavior that is based on the individual attempting to establish himself as a person who is always confident in his or her own statements, actions, and work, both to himself and to others (Syofyan, 2017). The research conducted by (Fitri, Safei, & Marjuni, 2016) is consistent with this study titled "The Influence of Learners' Discipline and Honesty on Biological Learning Outcomes." As a result of the study's conclusion that discipline and honesty have a 90.5 percent effect on students' biology learning outcomes with $F_{hitung} > F_{tabel}$ ($26.09 > 3.99$), H_0 was rejected and H_a was accepted.

Along with having and maintaining an honest character, students must be motivated to learn. Students must be motivated to learn in order to complete the learning process. One way to motivate students is to use a learning medium that lecturers enjoy when providing instruction.

The findings of this study corroborate research (Winata & Yuliani, 2017) that learning media has an effect on student learning motivation, which means that when a teacher or lecturer uses learning media, student learning motivation increases; conversely, when a teacher or lecturer does not use learning media, student learning motivation decreases. This way, increased use of these learning media will be accompanied by increased student motivation to learn.

The coefficient of determination obtained by Winata and Yuliana was 39.13 percent, with the hypothesis test indicating that the value of F_{hitung} is greater than the value of F_{tabel} ($35.3594 > 4.0162$), with $db_1 = 1$, $db_2 = 2 = n - 2$, and $\alpha = 0.05$.

Conclusion

The following conclusions can be drawn from the research on the relationship between honesty and motivation and the results of PGSD science learning Honesty has an effect on the outcomes of student science learning. This t test produced positive and statistically significant results. The results of this experiment indicated that honesty had no effect on motivation. The test's findings indicated that motivation had an effect on students' science learning outcomes. The results of the f test indicated that both honesty and motivation had a significant effect on students' science learning outcomes.

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