



## Comparison of Student Learning Outcomes in Class VIII SMP Negeri 2 Muaro Jambi

Neny Juharti<sup>1</sup>, Lia Kartina<sup>2</sup>

<sup>1</sup>Senior High School 6 Batanghari, Jambi, Indonesia

<sup>2</sup>Physics Education, Universitas Jambi, Jambi, Indonesia

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### ABSTRAK

**Purpose of the study:** Knowing the comparison of student learning outcomes in grade 8 at SMP Negeri 2 Muaro Jambi based on the level of work character of the students.

**Methodology:** This study is a quantitative study, the study was conducted at SMP Negeri 2 Muaro Jambi Regency, the sample of the study was students of class VIII, data collection used a hard work questionnaire while the learning outcomes used question instruments.

**Main Findings:** Character education has a positive influence on student learning outcomes. One of the important characters is the character of hard work. Hard work character is a character to use all abilities to achieve maximum results. Based on research conducted on 58 students at State Middle School 2 Muaro Jambi, to determine the relationship between the character of hard work and student learning outcomes. Obtained character hard work has a positive impact on student learning outcomes. So the teacher can help students to be able to foster the character of hard work in each student. Moreover, the current curriculum puts forward character education. The teacher can give the character growth of hard work by providing examples of successful people who have a great will and work hard even though they do not have more ability to realize their dreams. Likewise, in Islam, good character education can have an impact on all aspects of activities not only in the academic field but also in the non-academic field.

**Novelty/Originality of this study:** This study is the first to be conducted at a public junior high school in Muaro Jambi district to determine the comparison of student learning outcomes based on student learning outcomes.

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#### Corresponding Author:

Lia Kartina,

Physics Education, Universitas Jambi, Jambi, Indonesia

Jl. Jambi-Ma. Bulia KM 15, Muaro Jambi, 36361, Jambi, Indonesia.

Email: [liakartina98@gmail.com](mailto:liakartina98@gmail.com)

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### 1. INTRODUCTION

Education is the most important part of a nation's progress. Especially in the moral development of the nation. Because humans who have noble character, who have high morality, are highly demanded to be formed and developed [1]. The figure of the young generation today is a reflection of the quality of the nation and state in the future. The current situation of Indonesian adolescents is still apprehensive in both the

academic and non-academic fields. Character as the most visible. The entry of the industrial revolution era 4.0 or the technological development of the 21st century is a supporting factor in the character of the nation's children. Because whether we realize it or not, the quality and capacity of a person is formed from the education he receives. Education becomes the spirit to build the nation [2]. The Father of National Education Ki Hajar Dewantara said that education is the power to advance the character of the nation's children. One of the lessons that cannot be separated in teaching character is Natural Science education (IPA). Science is knowledge that is obtained through a series of scientific processes that play a role in shaping personality values or character [3]. Many people think that science lessons are only about concepts and formulas. In fact, the wider scope of IPA is not limited to the concept alone. Science learning does not only teach concepts, theories and understanding by rote [4].

Science learning includes three main subjects, namely Biology, Physics, and Chemistry. These three subjects are closely related to man and the universe. Science is the study of everything that exists in nature and has a very broad relationship with human life [5]. Physics as a part of science lessons that students consider difficult. Physics is a subject that is not liked by most students [6]. This is also indicated by the lack of student interest in taking physics lessons. As one of the important subjects, it is necessary to evaluate the factors that make students dislike physics subjects. If we dig deeper into physics, there are lessons to answer human questions about unseen natural events. Physics has its own characteristics in science lessons. The imperfect results of physics lessons do not mean that the student is not smart. But student character can affect student learning outcomes.

Physics is a means of logical thinking, abstract thinking, generalization, analytic and systematic thinking so that anything is used in physics. Physics provides familiarity with the daily activities of students with physics. Physics provides an overview of what happens when humans carry out activities ranging from waking up to going back to sleep. Physics can help educators in developing conceptual knowledge. Physics learning has objectives, including developing students' knowledge of the environment and its surroundings [7]. Where physics learning is able to form students who are expected by global challenges related to surrounding problems. However, many students admit that physics is one of the most disliked subjects. This is because physics is more related to formulas and calculations and the educators are not friendly. There are still many students who think that physics is one of the subjects that is difficult to understand and boring, so that there are still many students who experience difficulties in Physics subjects can be categorized as subjects that are less liked by students. Many students are less interested in taking physics lessons [8]. For example, they prefer to take the back seat so that they are not seen by the teacher and prefer to play games. This shows the character of the nation's children who are starting to decline. Even though education functions to foster good character in students. Education is a process of forming human character that never stops [9]. The development of national character is important in improving, fostering, and inheriting citizens from the concept of nobility [10]. Education will create students who are civilized and have noble character. In order to form a non-fragile nation foundation. It can start with small things. For example, the embedding character values in each line. In every lesson, it should be realized that it gives the inculcation of character values to students [11].

Answering this, there are many current learning models that prioritize aspects of character education. The importance of a character education with a learning model can certainly build character [12]. Every student who has good character will have a good personality. The personality that is reflected in the attitudes of students will have a positive impact on student learning activities. The relationship between learning motivation and attitudes has the importance of concentration in learning activities [13]. The character will always be in line with what happens with student learning activities. Students who have good character certainly have a good intensity of study time, including learning physics. Learning at Keas can foster student character to be even better.

The current education curriculum emphasizes character education through the 2013 curriculum or abbreviated as K13. Character building through the 2013 curriculum is the government's effort to advance human resources in the field of education. Character education regulates human behavior in special rules, laws, norms, customs in the field of human social life [14]. The must-have character for each individual is eighteen items. Of the eighteen points there is a character of hard work. Hard work is a behavior that shows a serious effort in overcoming a problem [15]. Hard work character values are behaviors that show genuine efforts to overcome various learning barriers and complete tasks as well as possible [16]. Cultivating the character of hard work is important. Being able to help students delve deeper into the subject matter and overcome obstacles for difficult lessons. When having difficulty in a subject will have an impact on the learning outcomes of students. Students who do not understand are likely to have poor learning outcomes as well. Learning outcomes are researching or assigning specific grades to students for the efforts made in following the learning process [17]. Student learning outcomes are those that occur in individuals who learn, not only changes in knowledge, but are followed by changes in shaping skills, habits, attitudes, in the

learning individual. Where the attitudes expected from this learning process create a generation that has character in accordance with the expectations of the 2013 curriculum. Good habits in the learning process can increase student enthusiasm for learning. This will reduce students' assumptions that physics learning is always teacher-centered [18].

The function of the character of hard work with students can be an internal driver of enthusiasm for learning. Because material support is not enough to improve learning outcomes. So it is important for teachers to be able to determine the right strategy in delivering subject matter [19]. The better the teacher proves that the teacher also works hard in providing knowledge. Even though in fact, no matter how hard the teacher tries, students who don't care will still not understand the lesson being delivered. The effectiveness of the learning process cannot be separated from the importance of respect, from students to teachers [20]. Hard work can have the best effect on the lives of students. For example, students who are unable to complete their assignments because they do not understand, but because they have a hard working character, they can do this task by studying with their friends. Student academic performance can be improved by character education that is done right. So that hard work which is included in the eighteen characters that students must have is indeed very important in increasing student achievement, especially achievement in the academic field.

As mentioned above, character education has an important influence on the success of learning and learning activities. The character of hard work is one of the important characters that students have [21]. As well as teachers as those who are inspired and imitated are certainly responsible for shaping the character of hard work in their students. Hard work will give students their own spirit to be able to bring out all their abilities in doing activities. Especially in learning activities [22]. As the saying goes, a dull knife will be sharp if you feel it continuously. Likewise, the academic ability of a student will be able to form properly and satisfactory results if students always carry out their activities to the best of their ability [23].

Muaro Jambi is a regency located in Jambi Province. Almost all junior high schools in Muaro Jambi Regency have implemented character education. No exception to SMP N 2 Muaro Jambi, which is located in Mestong District. SMP N 2 Muaro Jambi has been accredited A, which means SMP N 2 has a good standard as a junior high school. This school has also implemented the 2013 Curriculum which is centered on character education. Therefore, a study was conducted on SMP N 2 Muaro Jambi regarding the relationship between hard work character and student learning outcomes of SMP N 2 Muaro Jambi.

## 2. RESEARCH METHOD

Research on the relationship between hard work characteristics and student learning outcomes of SMP N 2 Muaro Jambi was carried out by direct observation with quantitative methods [24]. Quantitative methodology bases on positive or neopositive philosophy [25]. Where it is hypothesized that the character of hard work and student learning outcomes is related or interrelated. Which is also done in a quantitative descriptive form. Where the data are obtained by distributing questionnaires and related questions. Where the information to be conveyed can be general in nature, so that it is easy to understand. It can be said that quantitative descriptive research will provide broad information about an event or state of the variables as they are [26].

This research was conducted with a variety of processes ranging from preparation starting from the process of taking a questionnaire whose validity and reliability had been tested [27]. Not only that, it takes quite a long time to do the research, as well as multiple choice questions that must also be validated. In terms of validity and reliability, of course, this is influenced by the instrument, the measured subject, and the officer who takes the measurement [28]. For the questionnaire instrument, 25 items were given related to the character of students' hard work in learning. Meanwhile, to determine the effect of hard work character, 30 multiple choice questions were given. The questionnaire that the researcher gave was a choice type questionnaire where there were four choices given to the questionnaire.

In this research, there are two variables, namely the independent variable and the dependent variable [29]. In the research conducted by researchers, the relationship between hard work character and student learning outcomes is considered as X the dependent variable which is the character of hard work and Y as the independent variable, namely student learning outcomes. So that at the end it will be found whether or not there is a relationship between the character of hard work and student learning outcomes. The population of this study was eighth grade students of SMP N 2 Muaro Jambi in the 2018/2019 academic year who were selected randomly. Namely, it was found that the total population for the study was 58 students consisting of boys and girls. The total population is below 100 students, so all students are used as research subjects.

The questionnaire instrument was the adoption of Triwati's thesis questionnaire [30], with aspects assessed as being the suitability of the measured concept, operational level, writing rules, and scale appearance. In this study, data collection techniques were carried out by giving every student who was the

subject of the study the opportunity to respond to the statements contained in the questionnaire. Each statement is always given a choice of often, sometimes, rarely and never. Each option or choice has each score, namely 4 for the score that gives frequent choices, a score of 3 for those who give choices sometimes, a score of 2 for those who choose a rare option, and a score of 1 for those who give choices never at all. This study will provide benefits to educators and prospective educators regarding the description of student learning outcomes who have a hard work character with mediocre students.

### 3. RESULTS AND DISCUSSION

This research is presented in the form of a quantitative research. After the data are collected and the normality and homogeneity tests are carried out, it can be seen whether there is a relationship between the character of hard work and student learning outcomes. The correlation or relationship test can be done if the assumption test can be done, namely the normality and homogeneity test.

The first stage that the researchers did was to test the normality assumption of the questionnaire results from the 58 people with the following results.

Table 1. Results of Normality Test

	Kolmogorov-Smirnov <sup>a</sup>		Shapiro-Wilk		
	Statistic	df	Statistic	df	Sig.
Learning Outcome_C1	,114	31	,976	58	,689
ass_VII					

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Table 1 illustrates that the learning outcome data from research subjects are normal, this is known from the Kolmogorov\_Smirnov data, this data is used to see normal data where many research subjects are more than 20 people. And it can be seen that the sig value > 0.05 so that the learning outcome data is normal. After the normality test is carried out, the next step is carried out again, namely the homogeneity test. The homogeneity test serves to provide information on whether the data obtained is homogeneous or interrelated. After being tested with SPSS, the following homogeneity test results were obtained.

Table 2. Test of Homogeneity of Character Hard Work

Levene Statistic	df1	df2	Sig.
,403	27	31	,868

Table 2 is the result of the homogeneity test of the questionnaire given to the research subjects. Where a data if the homogeneity test can be seen based on it. sig if the sig value. > 0.05, the data are homogeneous, which means that there is no variation in the questionnaire given. While the ANOVA table also provides the same data with no variants in the questionnaire. The following are the results of the ANOVA test.

Table 3. ANOVA Test

Character Hard Work					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	752,608	28	75,261	1,618	,172
Within Groups	930,167	30	46,508		
Total	1682,774	58			

After the normality test and the homogeneity test can be carried out, then the comparison test or T test can be carried out to find out the difference between the learning outcomes of class VIII B students and class VIII D students as a form of the difference in the intensity of the hard work of the two classes. After grouping the data, it was tested with SPSS and the results of the comparison test were obtained. The comparative test will illustrate whether it is true that there is a difference between the character of hard work and the learning outcomes of class VIII B students and the learning outcomes of class VIII D students at SMP 2 Muaro Jambi. The following is a table of comparison test results of learning.

Table. 4 Group Statistics

Instrument	N	Mean	Std. Deviation	Std. Error Mean
TEST_VIII B_VIIID	31	78,06	8,935	1,605
Test VIIID	27	83,58	5,768	1,110

Group statistics are the results of a comparison test between the learning outcomes of class VIII B and class VIII D. It can be seen above that class VIII B, which has 31 students, has a lower average when compared to class VIII D. The results of the average cannot be directly describes class VIII D as having the better academic ability when compared to class VIII B because of the higher average learning outcomes. When viewed from the standard deviation of class VIII B is higher when compared to class VIII D. Therefore, more accurate data are needed to find out which class has the better learning outcomes.

Table 5. Independent sample test

		Levene's Test for Equality of Variances				t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								e	Lower	Upper
TEST	Equal variances assumed	4,415	,040	-2,746	56	,004	-5,516	2,008	-9,539	-1,492
	Equal variances not assumed			-2,827	51,874	,038	-5,516	1,951	-9,431	-1,600

Table 5 is a table of comparison test results between the learning outcomes of class VIII B and VIII D students in public junior high school 2 Muaro Jambi. A study will produce a conclusion drawn from the research hypothesis that has been formulated in advance. But the hypothesis are not biased directly to a conclusion, but must go through various procedures first. This study aims to retrieve quantitative data to be calculated procedurally in order to make a hypothetical decision.

Students must have the character of hard work that can provide progress in student academic results, although not too large. The willingness to exert all energy in order to achieve maximum results is a student who applies the character of hard work in his life. Where the 2013 curriculum that has been implemented by SMP N 2 Batanghari has had a positive impact on student learning outcomes based on what has been done by researchers. It was also proven that when making direct observations of this research activity almost all

students tried their best to answer the questions correctly even though the time given by the researchers was only approximately 15 minutes.

The differences in student learning outcomes taught through hard work character education are more obvious and supportive media. This is possible because the development of hard work character is actually able to have a positive impact on student learning outcomes. Students can provide motivation both directly and indirectly on students' willingness to learn. This is different if the teacher does not provide learning, motivation which is only given in words by the teacher. Students only listen without paying attention to the words of the teacher. So, between the time conditions in the research of class VIII D, it turned out to have a more hard work character in learning activities.

Based on the comparison table above the sig value.  $<0.05$ ,  $H_0$  can be accepted, which means that there is a significant difference between the learning outcomes of class VIII B and class VIII D. This research is in line with the results of Tarma's research (2017: 123), which is how the ability of the spirit to release all abilities for maximum results.

#### 4. CONCLUSION

Based on the explanation of the data above with the activities of the students when making direct observations of class VIII students of SMPN 2 Muaro Jambi, Character education has a positive influence on student learning outcomes. One of the important characters is the character of hard work. Hard work character is a character to use all abilities to achieve maximum results. Based on research conducted on 58 students at State Middle School 2 Muaro Jambi, to determine the relationship between the character of hard work and student learning outcomes. Obtained character hard work has a positive impact on student learning outcomes. So the teacher can help students to be able to foster the character of hard work in each student. Moreover, the current curriculum puts forward character education. The teacher can give the character growth of hard work by providing examples of successful people who have a great will and work hard even though they do not have more ability to realize their dreams. Likewise, in Islam, good character education can have an impact on all aspects of activities not only in the academic field but also in the non-academic field.

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