Identify the Disciplinary Attitude of Learning Physics in High School Students

Roro Hoyi¹, Liza²
¹Pendidikan Fisika, Universitas Jambi, Jambi, Indonesia
²Sekolah Menengah Atas 8 Muaro Jambi, Jambi, Indonesia

ABSTRACT

Purpose of Study: The purpose of this study was to determine the disciplinary attitude of students in learning physics.

Methodology: The sample used in this study were 31 students, taken from 1 class, namely XI MIPA 3. This type of research is survey research and the instrument used is an attitude questionnaire. The data analysis in this study used descriptive statistics.

Finding: The results obtained showed that the discipline attitude of learning physics students was dominant good, namely 74.2% 23 students from 31 students. From the disciplinary attitude itself, the fact is that the quality of student learning is better and also students who have a high disciplinary attitude in learning physics must have different behavior and patterns of thought.

Novelty this Research: The general attitude towards reading is an indicator that shows how positive students think about various things about reading in general. This indicator will be measured by researchers to determine whether or not reading is good for students.

Keywords: Discipline, Physics Learning, Students

Corresponding Author:
Roro Hoyi,
Faculty of Teaching and Education, Universitas Jambi, Jambi, Indonesia
Email: rorohoyi3@gmail.com

1. INTRODUCTION

Education is basically an effort to be able to develop a potential human resource, especially for students by guiding and facilitating the learning activities of students [5]. Education is defined as a conscious and planned effort to create an atmosphere of learning and the learning process so that students actively develop their potential [13]. The world of education in Indonesia continues to develop to improve the quality and quantity of a person [7]. Education is an activity that has an important meaning for all human beings, the existence of education allows humans to change behavior and knowledge to be much better [8]. A good education will bring someone to become a competent and innovative person and vice versa [27]. The quality of human resources is largely determined by the quality of education [21].

Education is a learning process that helps students/learners to develop their intellectual potential, so that the main objective of learning is the effort made by the intellect of each student to develop [14] . [22] the learning process is an activity designed to help students learn a new ability or value. P rises from a learning, the quality of the learning process can be observed how the activity of the student, teacher-student interaction and student motivation. While the quality of learning outcomes can be observed from student achievement and learning completeness [11] . In this learning process, improving the quality of this mindset needs to be supported by a proper teaching process so that students’ abilities can develop properly [30] .
Student achievement is also related to the subjects they like, for example in science lessons. Science is one of the subjects that must be studied in junior high schools [26]. Natural Sciences (IPA) is part of science [15]. One of the subjects included in the science category, namely physics, physics is a branch of science that has its own uniqueness and characteristics [24]. Problems that often arise in the learning process in class include the inability of students to relate one concept to another, many misconceptions, and the low ability of students to solve problems and understand physics concepts [25]. According to [20], “Physics is a branch of science that has its uniqueness and characteristics. The uniqueness of physics lies in the existence of concepts that are abstract and require idealization through mathematical modeling.”

[17], physics subjects are seen as important to be taught as a subject because physics is a vehicle for fostering thinking skills that are useful for solving problems in everyday life and equipping students with knowledge, understanding, and a number of abilities that are prerequisites for entering a higher level of education. Higher. Learning Physics is very important to learn because physics learning is the most basic learning [10]. [22]. Learning physics is learning that is very racing on concepts and requires a high level of understanding. Physics will be easily understood by students if students are disciplined in the physics learning process.

Discipline is a very important element for every individual in forming a good way of thinking and thinking. Judging from humans who become social creatures and individual beings. Individuals who have a sense of discipline can carry out their duties in an orderly and orderly manner and in accordance with the order which becomes their life more regularly [28]. Discipline can also help students in understanding physics subjects. In education it is very important to emphasize the attitude of disciplinary character for students because according to [9], this is based on the facts and perceptions of the whole community about the level of decline in quality towards the attitudes and morals of society, or the younger generation. Currently what is needed is a curriculum education with a character “in the sense that the curriculum itself has character, and is at the same time oriented towards the formation of the character of students”. Students' attitudes have to be improved from a long time ago. Attitude is also defined as a feeling of one's belief in an object.” Attitude can be seen as a state towards a person's mental state by an object and the problem at hand, so that it can change an individual's mental state. Positive attitudes that arise, for example enthusiasm during teaching and learning activities, pleasure and curiosity about physics subject matter [18]. [19]. “The breadth and depth of students' understanding of physical concepts can illustrate the conceptual knowledge that the student has”.

Attitude is a very important part of educated people, either at the level of primary education or in higher education. Attitude will also affect one's success in achieving the desired learning achievement [16]. Student attitudes will affect student learning outcomes. Attitudes in learning are very important [6]. To improve the quality of student learning, by increasing the attitude of discipline in learning physics because in physics subjects there are formulas that must be solved, as well as materials and concepts that must be understood in order to change students' thought patterns and behavior. From the attitude of discipline itself, the fact is that the quality of student learning is getting better. Attitude is a way of thinking and feeling that helps us become like or dislike something. Then the attitude contains three components, namely “cognitive, emotional and behavioral and can be consistent or not”. Attitude is obtained from the activity "accept, carry out, appreciate, appreciate, and practice". That way the learning process is complete to give birth to students' personal qualities with good attitudes [12]. A positive attitude can make students behave well and complete the academic system well. Likewise, vice versa, if students have a negative attitude, it will result in students "away from, hating and avoiding something" [4]. Values that have an important element of goodness are instilled in a child from an early age so that they can be used as guidelines for thinking, as well as saying good things and behaving in a life. However, the value to be focused on is the value of discipline [2].

Discipline when schools can not be separated from the issue of the negative behavior of students. Negative behavior in students is very worrying, this behavior is not only detrimental to themselves but also others. Examples of student behavior who are considered to be less disciplined in learning physics are: not doing physics assignments, not understanding concepts because of the many conversations with friends while studying and lack of seriousness in learning. This study aims to determine the disciplinary attitude of learning physics students. Research conducted on high school students with an instrument in the form of a questionnaire. The questionnaire was used to analyze the students 'thinking, the results showed that the students' disciplinary attitude in learning physics had a high mindset so that it could be concluded that the students had good discipline in learning physics. Discipline is also an attitude to foster the value of understanding physics subjects.
2. METHODOLOGY

The research method used in this paper is quantitative method, quantitative method is a scientific approach to managerial and economic decision making, however, the use of a quantitative approach is not only used in the economic sector, but also in all sectors that use quantitative analysis and analysis. [23] by using this quantitative research method using numbers with descriptive format also aims to explain the various variables that occur in society and then become the object of research.

[29], "The sampling technique is often called a sampling technique is a way to determine a sample whose number corresponds to the actual sample size that will be used as the actual data source, by paying attention to the characteristics and distribution of the population in order to obtain a representative sample". To obtain accurate data, correct sampling methods are required. Sampling for research can be done with various techniques. The sampling technique used is total sampling, the sampling in this study is in class XI SMAN 8 Muaro Jambi. The total sampling taken is only 1 class which amounts to.

The data collection techniques used in this study were questionnaires, observation and data collection techniques were carried out to determine the attitude of the disciplinary character of students at SMAN 8 Muaro Jambi.

3. RESULTS AND DISCUSSION

The general attitude towards reading is an indicator that shows how positive students think about various things about reading in general. This indicator will be measured by researchers to determine whether or not reading is good for students. After the data are collected, the researcher processes the data using the SPSS application and then inputs the results into the table below:

| Classification | Category         | Total |
|----------------|------------------|-------|
| 24.0 – 45.0    | Very Not Good    | 0     |
| 45.1 – 65.0    | Not Good         | 0     |
| 65.1 – 85.0    | Enough           | 4     |
| 85.1 – 105.0   | Good             | 23    |
| 105.1 – 125.0  | Very Good        | 4     |
|                | Total            | 31    |

From the data above, it is stated that the total taken at SMAN 8 Muaro Jambi is students. Based on the results of statistical data, it is obtained that students have a very bad attitude 0%, 0% not good, students who have a sufficient attitude, namely 12.9% (4 students out of 31 students), good 74.2% (23 of 31), and students who have a very good attitude, namely 12.9% (4 students out of 31 students). So that from these results the students' attitudes towards the disciplinary character of learning physics are in the good category. Because during the lesson students are very disciplined in doing physics assignments and following the learning well and students' understanding of physics subjects is also good.

Education is the root of an ideal to be achieved, the importance of education for all individuals in order to have better goals. In education, students are able to be good students if the patterns of thought and behavior and attitudes towards themselves are supportive, attitudes greatly affect students' thinking patterns, ways to have a good mindset by increasing self-discipline, by increasing student discipline, the bias increases enthusiasm for learning. In this study, namely to determine the disciplinary attitude of learning physics students in high school, in this study it can be seen in the table above that the disciplinary attitude of the dominant students is good 7.42% (23 of 31 students) with a median of 4 and a mean of 4.0.

Students' discipline in learning physics will increase with encouragement from the environment, for example, parents and teachers. From the attitude of discipline itself, the fact is that the quality of student learning is better and also students who have a high disciplinary attitude in learning physics must have different behavior and patterns of thought, these students tend to do assignments on time, enter class on time, obey the rules in their school and do not violating school rules. The learning value will also have an effect, some students do not obey school rules because of the sense of discipline they have in themselves. The disorderly students at school should make the existing rules tighter so that students can be more disciplined with the rules that have been made. Basically, every student has discipline, but some of them lack discipline due to environmental factors that influence it. In the results of the observation of this study, namely the discipline of students in class XI was dominant well, students had also obeyed the prevailing rules and regulations.

Identify the Disciplinary Attitude of Learning Physics in High School Students (Roro Hoyi)
4. CONCLUSION

Based on the results of the data that have been analyzed above, it can be seen that the disciplinary attitude of learning physics students is good, the factor that greatly influences this attitude is the teacher in the school. This study aims to determine the disciplinary attitude of learning physics students. Research conducted on high school students with an instrument in the form of a questionnaire. The questionnaire was used to analyze the students' thinking, the results showed that the disciplinary attitude of the students had a high mindset so that it could be concluded that the students had good discipline in learning physics. To improve student learning outcomes must improve disciplinary attitudes, with this attitude students have a good mindset and improve cognitive and affective aspects of students.

ACKNOWLEDGEMENTS

Thank you to the supervisor of this research, and to the teacher of SMAN 8 Muaro Jambi who has helped expedite data collection during the observation.

REFERENSI

[1] Adburahman, Gradjiito, & Budianto, R. S. “Pengembangan Lembar Kegiatan Siswa Berbasis Penemuan Terbimbing Pada Materi Struktur Dan Fungsi Jaringan Tumbuhan Kelas XI SMA”. vol. 1, no 1. pp. 1-8, 2015.

[2] Apriani dan Wangid, 2015. Pengaruh SSP tematik integrative terhadap karakter disiplin dan tanggung jawab siswa kelas III SD. Jurnal Prima Edukasia, Volume 3 NO 1.

[3] Asfadi, B., Yeliati, U., & Budianti, R. S. “Pengaruh Model Pembelajaran Berbasis Masalah (Problem Based Learning) Terhadap Hasil Belajar Biologi Siswa Kelas X SMA N 3 Kota Jambi”. Pendidikan Biologi. pp. 1-8, 2014.

[4] Astalini, dkk. 2019. Identify student’s attitude towards the subject of natural science. Journal of Education and Learning (Edulern). Vol.13, NO.3. ISSN: 2089-9823

[5] Astalini, Kurniawan, D. A & Sumaryanti. (2018). Sikap siswa terhadap pelajaran fisika di sman kabupaten batanghari. jurnal Ilmu Pendidikan Fisika, Vol 3No 2-p-ISSN: 2477-5959 e-ISSN: 2477-8451

[6] Astalini, Maison, Ikbas, M. & Kurniawan, D.A. (2018). Pengembangan instrumen sikap mahasiswa terhadap mata kuliah fisika matematika. Journal Edusains

[7] Astalini, dkk. 2018. Sikap terhadap mata pelajaran IPA di SMP se-kabupaten muaro jambi. Lentera Pendidikan, VOL. 21 NO. 2 DESEMBER 2018: 214-227 220

[8] Astalini, dkk. 2019. Identifikasi sikap peserta didik terhadap mata pelajaran fisika disekolah Menengah Atas Negeri 5 Kota Jambi. Unnes Physics Education Journal 8 (1)

[9] Chusnani,Diana 2013. Pendidikan Karakter Melalui Sains. Jurnal Kebijakan dan Pengembangan Pendidikan. Volume 1, Nomor 1 ISSN: 2337-7623; EISSN: 2337-7615

[10] Hardiyanti,dkk, 2018. Sikap terhadap mata pelajaran fisika di SMA NEGERI 5 Muaro Jambi. Jurnal Edufisika, P-ISSN:2477-7935 E-ISSN: 2548-6225

[11] Haryanto, Anisah. 2016. Pengaruh penerapan model pembelajaran kooperatif numbered head together (nht) dan pengaruhnya terhadap hasil belajar siswa pada materi struktur atom di kelas X SMKN 3 KOTA JAMBI. J. Indo. Soc. Integ. Chem. Vol 9(1). Hal 48

[12] Hardiyanti, dkk. 2018. Sikap terhadap mata pelajaran fisika di SMA NEGERI 5 Muaro Jambi. Jurnal Edufisika, P-ISSN:2477-7935 E-ISSN: 2548-6225

[13] Harizont, Haryanto & Anisah. 2016. Pengaruh penerapan model pembelajaran kooperatif tipe make-a match terhadap hasil belajar siswa pada materi larutan elektrolit dan nonelektrolit di SMA PGRI 2 KOTA JAMBI. J. Indo. Soc. Integ. Chem. Vol 8(2). Hal 48

[14] Haryanto, Bakar.,A & Nur Ilahi.,M.A. 2015. Studi perbandinganhasil belajar pada materi tata nama senyawa kimia antara model kooperatif tipe stad dengan jigsaw kelas X SMA NEGERI 3 KUALA TUNGKAL. J. Indo. Soc. Integ. Chem. Vol 7(2). Hal 55

[15] Haryanto, Harizont & Randih.,N.K. 2015. Pengembangan instrumen penilaian keterampilan proses dan sikap ilmiah pada materi termokimia kelas XI MIA SMA NEGERI 10 KOTA JAMBI. J. Indo. Soc. Integ. Chem. Vol 8(1). Hal 23

[16] Jufrida, dkk.2019. Students’ attitude and motivation in mathematical physics. International Journal of Evaluation and Research in Education (IJERE) Vol. 8, No. 3, September 2019, pp. 401-408 ISSN: 2252-8822, DOI: 10.11591/ijere.v8i3.20253

[17] Kurniawan, D. A., Perdana, R., & Kurniawan, W. (2019). Identification attitudes of learners on physics subjects. Journal of Educational Science and Technology (EST), 5(1), 56-63.
Maison, Astalini, Kurniawan, D.A & Sholihah, L.R. (2018). Deskripsi sikap siswa sma negeri pada mata pelajaran fisika. EDUSAINS, 10(1), 161-167.

Maison, Safitri, I.C. & Wardana, R.W. (2019). Identification of misconception of high school students on temperature and calor topic using four-tier diagnostic instrument. EDUSAINS, 11(2), 195-202.

Maison, Syahrial, Syamsurizal, Tanti. (2019). Learning environment, students’ beliefs, and self-regulation in learning physics: structural equation modeling. Journal of Baltic Science Education, Vol.18(3) https://doi.org/10.33225/jbse/19.18.389

Maison, Haryanto, Ferawati. 2016. Analisis keterlaksanaan model pembelajaran inkuiri terbimbing untuk materi sifat kolidatif larutan dan pengaruhnya terhadap kemampuan berpikir kreatif siswa kelas XII IPA SMA ISLAM AL-FALAH KOTA JAMBI. J. Indo. Soc. Integ. Chem. Vol 9(2), Hal 45

Putri, A.R., Maison & Darmaji. (2018). Kerjasama dan kekompakan siswa dalam pembelajaran fisika di kelas xii mipa sman 3 kota jambi. Jurnal Edufisika Volume 3(2), hal 34

Sinambela, lijan p. 2014. Metodologi penelitian kuantitatif. Yogyakarta: graha ilmu

Tanti, Isnandi., H & Maison. 2020. Konstruksi dan validasi bahan ajar fisika berbasis masalah (problem-based learning) untuk meningkatkan keterampilan generik siswa. JoTaLP: Journal of Teaching and Learning Physics (5)1. Hal 28-43

Tanti, Jamaluddin, Syefrinando., B. 2017. Pengaruh pembelajaran berbasis masalah terhadap beliefs siswa tentang fisika dan pembelajaran fisika. Jurnal Ilmiah Pendidikan Fisika Al-BiRuNi, 06 (1), Hal 24

Tanti, Kurniawan., D.A, Perdana,R & Wiza., O.H. 2020. Comparison of Students’ Attitudes toward Natural Sciences in Rural Middle Schools in Jambi Province. JURNAL TA&DIB. Vol 23 (1). Hal 63

Tanti, Rahim., U & Semparadja., H. 2020. Pengaruh model problem based learning terhadap kemampuan pemecahan masalah matematik siswa kelas VII SMP NEGERI 14 KENDARI. Jurnal Penelitian Pendidikan Matematika. Vol 8(2). Hal 170 DOI: http://dx.doi.org/10.36709/jppm.v8i2.13659

Trisnawati, Destya Dewi. 2013. Membangun disiplin dan tanggung jawab siswa SMK Khadijah Surabaya melalui implementasi tata tertib sekolah. Jurnal kajian moral dan kewarganegaraan, No 1 volume 2.

Umar, Husein. 2014. Metode Penelitian untuk Skripsi dan Tesis Bisnis. Jakarta: RajaGrafindo Persada.

Utama, Z., P, Maison & Syarkowi, A. (2018). Analisis Kemampuan Bernalar Siswa SMA Kota Jambi. Jurnal Penelitian Pembelajaran Fisika, 9 (1), 1-5.