Description of Student Discipline Attitudes at SMP Negeri 16 Jambi City

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How to cite this article? Simamora, N., N., Putri, W., A., Iqbal, M., Ramadhanti, A., & Rini, E., F., S. (2020). Description of Student Discipline Attitudes at SMP Negeri 16 Jambi City. Lensa: Jurnal Kependidikan Fisika, 8(2), 76-84. doi:https://doi.org/10.33394/j-lkf.v8i2.3175

INTRODUCTION

Education is an activity that is very important for all individuals, because education is able to change individual behavior and knowledge for the better (Kurniawan et al., 2019). Education is a measure of national progress (Pratiwi & Fasha, 2015). According to Puspita and Santosa (2019) improving the quality of human resources is determined by the quality of education which is getting better. So that education is very important for every individual because it relates to the life of a nation. The role of education is very important to create a smart, peaceful, open and democratic society (Susiyanto, 2014). According to Arinanda, Hasan and Rakhman (2014) Quality of education can be seen from any individual or student discipline both within the school and community environment. In the school environment, the discipline of each individual can be seen from the obedience (compliance) to the rules (rules) of the school.

At the junior high school level, there are several lessons that come from the integration of the disciplines of the natural and social sciences (Anggraini & Pedana, 2019). One of the branches of science at the junior high school level is the subject of Natural Sciences (IPA). According to Pamungkas, Subali and Lanuwih (2017) Natural science education (IPA) is an effort or process to teach students to understand the nature of science. As for the nature of science that science as a process, product, and attitude (Hooked, Taufik & Anjani, 2018). In general, science or science lessons in junior high
schools are taught by a science teacher, who regulates teaching and learning activities and measures student attitudes. Through student participation, science teachers are ready to improve the teaching of science and learning in the classroom and as Science Teachers Leaders (STLs) facilitates professional learning in secondary schools (Pringle, Mesa & Hayes, 2017). The field of science study is a compulsory subject and it is very important to be taught from elementary to high school (Sukroyanti, 2016).

Evaluation of the teaching and learning process of science in the classroom for each student can be measured students' attitudes towards science. This is important because the teacher can know every student respond with an indication of students' science learning reject or accept the science lesson on himself. Acceptance or positive attitudes and rejection or negative attitudes can be expressed by agreeing or disagreeing with the statement of an object (Darmawangsa, Astalini & Kurniawan, 2014). So that attitudes towards science can mean an attitude tendency which can take the form of acceptance or rejection of science itself. According to Ali, Iqbal and Saeed Akhtar (2013) in school the word "attitude" is often used in student's academic life. Attitude is an ability to assess something that is reflected in the attitude of accepting, rejecting, or ignoring (Dimyati & Mudjiono, 2006). The attitude of students towards science is one of the actions of students in learning science (Astalini, Kurniawan & Putri, 2018). The increase in positive or negative attitudes of students towards Natural Science is formed from basic education, so that it can be seen that the impact of the attitudes obtained greatly affects the educational background of students (Kena, 2016). Positive or negative attitude of students can be seen through the pleasure of students in learning science, this is in line with Novelyya (2019) which states that the enjoyment of students while studying science can be seen from the way students respond to learning, in general indicators of pleasure embodied in the form of expression happy or not happy.

Discipline attitude is accuracy or accuracy in following the agreed rules or rules of the game (Endriani, 2017). Discipline will help children to develop self-control, and help children recognize wrong behavior and then correct it (Rahmat, Sepriadi & Daliana, 2017). Syamsul (2010) explains that self-control is an individual's ability to control impulses, both from within and from outside the individual. Discipline is one aspect that supports success in the learning process to achieve educational goals (Muthahharah, 2016). According to Hudaya (2018) Discipline of learning is defined as a person's self-control of the rules in the learning process where the rules are applied by oneself or rules that come from outside. Student discipline in learning comes from within oneself (Fachrurrozi, Firman & Ibrahim, 2018).

Discipline can be manifested in time (at school, family, and community), activities, and regulations (Suhartatik, 2020). The behavior, rules and regulations that apply in the school can be grouped into two, namely: 1) Student compliance and obedience to the various rules and regulations that apply in his school, this is commonly referred to as student discipline. 2) Rules, regulations and various other provisions that attempt to regulate student behavior are called school discipline (Fiana, Dahardis & Ridha, 2013). If the discipline of student learning in schools is applied and developed properly, consistently, and consequently, it will have a positive impact on the life and behavior of students (Kusuma & Subkhan, 2015). In terms of learning, students will succeed in learning if there is a willingness to learn and discipline to learn. Without discipline, it is difficult for someone to achieve the desired goals. Because discipline is the first step in achieving an educational goal.

Based on the results of Witri and Fitriani's research (2020) the disciplinary attitude of science lessons at SMP Negeri 19 Jambi City is in the good category with the results of
the research showing that 18.5% or 12 students are in the very good category and 72.2% or 40 students are in the good category. These disciplinary attitudes include obeying school regulations, working on assignments on time, and not violating school rules.

Based on the description above, it can be said that one way to achieve an educational goal is to encourage students to be able to apply a disciplined attitude towards science lessons. Because with a disciplined activity each student becomes more qualified because they are more sensitive to the effects of something that is negative, and the activities they carry out can run effectively and efficiently. So that the focus of this study aims to describe the attitude of student learning discipline at SMP Negeri 16 Jambi City based on 4 indicators of student discipline, namely (1) Obeying school rules, (2) Good attention when learning in class, (3) Adjusting study time at home, (4) Diligent and regular when doing assignments. The benefit of this research is as a basis for further research to be able to improve the discipline attitude of students in SMP Negeri 16 Jambi City.

**METHOD**

This research uses descriptive research. The research was conducted at SMP Negeri 16 Jambi City which is located on Jalan Sermak Ishak Ahmad RT. 08 Kelurahan Beliung, Kecamatan Kota Baru. The population in this study were all students of class IX in SMP 16 Jambi City. Researchers used a sampling technique, namely total sampling. Researchers used total sampling because researchers wanted the results of the study to apply to the population, namely students of class IX. Where the total number of junior high school students studied was 69 students and the criteria in this study were students of class IX at the school.

The data was collected through the provision of instruments, namely questionnaires. This disciplinary attitude questionnaire was adopted from Kurniadewi (2015) with 24 valid statements and 4 indicators. The dimensions of students' disciplinary attitudes towards science subjects studied were 4 indicators, namely disciplinary attitude in obeying and obeying school rules, attention which is good when studying in class, arranging time for studying at home, and being diligent and regularly studying and doing assignments. The disciplinary attitude of students in this study used a Likert scale. Likert scale with the type of scale is always (SL), often (SR), rarely (JR), and never (TP). Each positive item in the instrument has a value: SL = 4, SR = 3, JR = 2, and TP = 1. The score is reversed for negative items. The questionnaire data was given to class IX students at SMP Negeri 16 Jambi City.

This research data is in the form of quantitative data and analyzed using descriptive statistics. Descriptive statistics are descriptions or presentations of large amounts of data, in this case in the form of summary frequencies, for example, mode, average, median, minimum, maximum and standard deviation (Cohen, Manion & Morrison, 2007). The results of the questionnaire data were processed using the SPSS 21 application software. This processing aims to see the discipline attitudes of students in SMP Negeri 16 based on predetermined disciplinary attitude indicators.

**RESULTS AND DISCUSSION**

The attitude scale is used to see students' attitudes towards certain objects, the results of attitude categories, among others; reject (negative), support (positive), and neutral (Sudjana, 2012). The results of the data obtained from the distribution of research questionnaires on student disciplinary attitudes towards science that have been carried out on grade IX students of SMP 16 Jambi City as many as 69 students. The results of the disciplinary attitude questionnaire data were displayed in the 2-part assessment data.
analysis. First, the assessment based on the interval which has the following categories of
disciplinary attitudes: always, often, rarely, and never. Assessment of the discipline
attitude category is based on the frequency and percentage of all students who choose each
category of disciplinary attitude. Second, based on the scale of disciplinary attitudes, the
attitude scale used is the Likert scale which consists of 4 different ratings. This discipline
attitude scale consists of 4 ratings (1 = never, 2 = rarely, 3 = often, 4 = always). This
assessment is based on the total number of students who choose each attitude scale and
produce the mean, maximum value, and minimum value. Both assessments of disciplinary
attitudes were obtained using descriptive statistical analysis of the SPSS 21 data processing
software. The results of the research data shown below are based on 4 indicators of
disciplinary attitudes. Following are the results of questionnaire data based on indicators.

### Obeying School Rules

The results of descriptive data analysis of students' learning discipline attitudes based
on indicators of obeying the school rules using SPSS 21, can be seen from Table 1 below.

| Classification | Range  | Attitude | Total | %     | Mean | Min | Max |
|----------------|--------|----------|-------|-------|------|-----|-----|
|                | 6 – 10.5 | Never  | 0     | 0     |      |     |     |
|                | 10.6 – 15.0 | Rarely | 0     | 0     | 21.4 | 16.0| 24.0|
|                | 15.1 – 19.5 | Often | 10    | 14.4  |      |     |     |
|                | 19.5 – 24.0 | Always | 59    | 85.5  |      |     |     |
| **Total**      |         |          | 69    | 100.0 |      |     |     |

From the Table 1 above, the disciplinary attitude of students in obeying and obeying
the school regulations in SMP shows that: the disciplinary attitude of students is in the
never category 0% (no voters), 0% of students are in the rare category (no voters), students
are in the category often as much as 14.4% (10 of 69 students), and students with the
category are always as much as 85.5% (59 of 69 students). Meanwhile, based on the
attitude scale, it shows that the data obtained has an average value of 21.4, a minimum of
16 and a maximum of 24. These results indicate that the attitude of discipline in obeying
school regulations has a positive attitude and is always positive. in the category. This is
supported by the results of the data above which show that 85.5% of students or 59 students
of a total of 69 students are always in the range and are supported by the mean value of
21.4 in the category range always.

On the indicators of student discipline in obeying school rules based on the results
of the study, 85.5% (59 of 69 students) are in the always category. This means that as many
as 59 students out of 69 students in junior high schools comply with school regulations.
However, there are still students who are not good at complying with school regulations
as seen in the results of the study of 14.4% (10 of 69 students). Discipline in compiling
school rules has the meaning of habit as and student behavior which is shown by
responsibility in following the rules made in school. Indicator indicators for school
regulations are very important. The disciplinary attitude carried out by students is very
influential in the learning process at school, especially in science learning. If students come
late to school, students have missed the learning process that is taking place in class, it is
difficult for students to follow the next lesson because these students have not previously
understood the mistakes they made themselves. By complying with school rules, students
can exercise good control over the rules. Student learning discipline that is good or said to
be high will be able to encourage students to excel (Mulyany, 2014).
Good Attention when Studying in Classroom

The results of descriptive data analysis of students’ learning discipline attitudes based on indicators of good attention while learning in class using SPSS 21, can be seen from Table 2 below.

**Table 2.** The results of students' disciplinary attitudes in good attention while learning in class

| Classification | %   | Mean | Min | Max |
|----------------|-----|------|-----|-----|
| Attitude       |     |      |     |     |
| 6 – 10.5       | 0   | 0    | 0   | 0   |
| 10.6 – 15.0    | 6   | 8.7  | 14.0| 24.0|
| 15.1 – 19.5    | 22  | 31.9 |     |     |
| 19.5 – 24.0    | 41  | 59.4 |     |     |
| Total          | 69  | 100.0|     |     |

From the Table 2 above, the attitude of learning discipline in good attention when learning in class in junior high school shows that the disciplinary attitude of students is never categorized as 0% (no voters), students in the rare category are 8.7% (6 of 69 students), category often as much as 31.9% (22 of 69 students), and students with always category as much as 59.4% (41 of 69 students). Meanwhile, based on the attitude scale, it shows that the data obtained is a mean value of 19.9, a minimum of 14 and a maximum of 24. These results indicate that the attitude of discipline in good attention while studying in class has a positive attitude and is always in the category. This is supported by the results of the data above which show that 59.4% of students or 41 students of the total 69 students are in the always range and are supported by the mean value of 19.9 in the always category.

On indicators of student discipline attitudes in good attention while learning in class based on the results of the study showed that 59.4% (41 of 69 students) in the category always. This means that as many as 41 students from a total of 69 students have good attention when studying in class. When students have good attention when learning in class, students can follow the lessons well too. In science lessons, high attention is needed considering science or IPA is a science that attempts or processes student learning in order to understand the nature of science. It can be seen that not all students have good attention when learning in class which is shown in the results of the study that as many as 28 out of 69 students have poor attention when learning in class. In line with differences in student discipline Mulyany (2014) states that the level of student learning discipline in schools varies from one student to another. With different student discipline levels in good attention when learning in class, it is hoped that the teacher can use learning methods that can attract students' attention while studying in class so that students can understand the material presented by the teacher well.

Organizing Study Time at Home

The results of descriptive data analysis of students' learning discipline attitudes based on indicators of managing study time at home using SPSS 21 can be seen in Table 3 below.

**Table 3.** Results of students' disciplinary attitudes in managing study time at home

| Range    | Attitude | Total | %   | Mean | Min | Max |
|----------|----------|-------|-----|------|-----|-----|
| 6 – 10.5 | Never    | 2     | 2.9 |      |     |     |
| 10.6 – 15.0 | Rarely   | 15    | 21.7|      |     |     |
| 15.1 – 19.5 | Often    | 30    | 43.5|      |     |     |
| 19.5 – 24.0 | Always   | 22    | 31.9|      |     |     |
| Total    |          | 69    | 100.0|     |     |     |
From the Table 3 above, the attitude of learning discipline in managing study time at home in junior high school shows that the disciplinary attitude of students is categorized as never as much as 2.9% (2 of 69 students), students in the rare category are 21.7% (15 of 69 students), students categorized as often as much as 43.5% (30 of 69 students), and students with the category always as much as 31.9% (22 of 69 students). Meanwhile, based on the attitude scale, it shows that the data obtained is a mean value of 17.8 minimum of 9 and a maximum of 24. These results indicate that the attitude of discipline in managing study time at home has a positive attitude and is in the often category. This is supported by the results of the data above which shows 43.5% of students or 30 students of the total 69 students are in the often range and are supported by a mean value of 17.8 in the range of often categories.

The indicators of student’s disciplinary attitudes in managing study time at home based on the results of the study showed that 43.5% (30 of 69 students) were in the often category. This shows that students are good at managing their study time at home. However, as many as 22 students were very good at managing study time at home besides that there were still 17 students who were still not good at managing study time at home. By managing good study time at home, students can help in understanding the lessons given at school. When at school students still have difficulty understanding the science subject matter provided by the teacher, students can repeat the lesson at home so that students can understand and understand the lesson. Study time at home requires good organization. So it requires awareness in students to want to manage time studying at home as additional lessons that will benefit themselves. Because according to Arigiyati (2011) discipline is needed in the smooth teaching and learning process. Discipline attitude brought from home will greatly determine student discipline in school (Arikunto, 1990).

**Diligent and regular when doing assignments**

The results of descriptive data analysis of students' learning discipline attitudes based on indicators of diligent and regular learning and doing assignments using SPSS 21, can be seen in Table 4 below.

| Range   | Attitude | Total | %     | Mean | Min | Max |
|---------|----------|-------|-------|------|-----|-----|
| 6 – 10.5| Never    | 0     | 0     |      |     | 13  |
| 10.6 – 15.0 | Rarely  | 9     | 13.0  |      | 13.0| 24.0|
| 15.1 – 19.5 | Often  | 29    | 42.0  |      |     |     |
| 19.5 – 24.0 | Always | 31    | 44.9  |      |     |     |
| **Total** | **69**  | **100.0** |      |      |     |     |

From the Table 4 above the discipline attitude in studying diligently and regularly and doing assignments in junior high school shows that the disciplinary attitude of students is never in the category of 0% (no voters), 13% of students are in the rare category (9 of 69 students) 42% (29 of 69 students), and students with the always category were 44.9% (31 of 69 students). Meanwhile, based on the attitude scale, it shows that the data obtained is a mean value of 18.7 minimum of 13 and a maximum of 24. These results indicate that the attitude of discipline in being diligent and regularly studying and doing assignments has a positive attitude and is in the often category. This is supported by the results of the data above which show that 42% of students or 29 students of the total 69 students are in the often range and are supported by a mean value of 18.7 in the often category range.
The indicators of disciplinary attitude in studying diligently and regularly and doing assignments based on the results of the study showed 42% (29 of 69 students) in the often category. This means that students are included in the good category in being diligent and regularly studying and doing assignments. However, as many as 31 students were categorized as very good on this indicator, besides that 9 students were still not good at this indicator of student discipline attitudes. Diligent and regular studies and doing assignments must be owned by every student as a student. When students are disciplined in learning and doing assignments given, it can help students to improve their understanding of the material given. In doing the assignments given by the teacher is one form of student discipline training. A student needs to have a disciplined attitude by doing exercises that strengthen himself to always be accustomed to being obedient and enhancing self-control (Mulyany, 2014).

Based on the results of the study, it was found that the students' learning discipline attitude of class IX in SMP Negeri 16 Jambi City in 4 indicators had a positive attitude in the always and often category. Indicators of disciplinary attitudes which have the category of always obeying school rules and attention when studying in class. Meanwhile, indicators of disciplinary attitude have frequent categories, namely managing study time at home, being diligent and regularly studying and doing assignments. The facts show that student attitude is one of the key factors in science learning.

CONCLUSION

Attitude has an important role in life, especially in education. Discipline is one of the attitudes that students must have. Discipline will help students to develop self-control, and help students recognize wrong behavior and then correct it, by having a positive attitude it will make students better at learning. Based on the results of research at SMP Negeri 16 Jambi City, the disciplinary attitude of students in obeying and obeying the school rules was always categorized with a percentage of the category of 85.5% (59 of 69 students). The disciplinary attitude of students in good attention when learning in class is always categorized with a percentage of 59.4% (41 of 69 students). The disciplinary attitude of students in managing study time at home was often categorized with a category percentage of 43.5% (30 of 69 students). And the disciplinary attitude of students in studying diligently and regularly and doing assignments categorized often with a percentage of 42% (29 of 69 students).

RECOMMENDATION

Based on the results of research on student learning discipline attitudes at SMP Negeri 16 Jambi City, researchers: 1) For students, it is expected that students at SMP Negeri 16 Jambi City can improve their learning discipline attitude in obeying and obeying school rules, good attention when learning in class, when studying at home, as well as being diligent and regularly doing assignments. By increasing these behaviors can assist students in obtaining high learning outcomes. 2) Teachers, especially science teachers, are expected to pay attention to the attitude of student learning discipline and guide students to improve and improve student learning discipline so that students can learn optimally and obtain maximum learning outcomes and statistics. 3) For further researchers, research that is expected to be carried out further can add to the research indicators of student learning attitudes in order to see how the attitude of student learning discipline on other indicators presented by the researcher.
ACKNOWLEDGMENTS
Researchers thank the Jambi University Physics Education study program for supporting and providing facilities for researchers to complete research. And to the SMP Negeri 16 Jambi City schools which has provided the opportunity for researchers to conduct research so that it is carried out well as well as other parties who have contributed to this research.

REFERENCES
Anggraini, L., Pedana, R. (2019). Deskripsi Sikap Siswa Pada Mata Pelajaran Fisika di Sekolah Menengah Pertama. Pancasakti Science Education Journal, 4(2), 83-96.
Arinanda, E., S., Hasan, S., & Rakhman, M. (2014). Pengaruh Kedisiplinan Siswa di Sekolah Terhadap Prestasi Belajar Siswa Teknik Pendingin. Journal of Mechanical Engineering Education, 1(2), 233-238.
Arigiyati, T., A. (2011). Pengaruh Kedisiplinan, Motivasi Belajar, dan Dukungan Orangtua terhadap Prestasi Belajar Mata Kuliah Metode Statistika Matematisa Program Studi Pendidikan Matematika Angkatan 2009. Jurnal Akademik, 3(9), 1-11.
Arikunto, S. (1990). Manajemen Pengajaran secara Manusawi. Jakarta : Rineka Cipta.
Astillini., Kurniawan, D., A., & Putri, A., D. (2018). Identifikasi Sikap Implikasi Sosial dari IPA, Ketertarikan Menambah Waktu Belajar IPA, dan Ketertarikan Berkarir Dibidang IPA Siswa SMP Sekabupaten Muaro Jambi. Jurnal Tarbiyah: Jurnal Ilmiah Kependidikan, 7(2), 93-108.
Cohen, L., Manion, L., & Morrison, K. (2007). Research Methods In Education : Routledge.
Darmawangsa, R., Astalini., & Kurniawan, D., A. (2014). Pengembangan Instrumen Sikap Siswa Sekolah Menengah Atas terhadap Mata Pelajaran Fisika. Jurnal Pendidikan Fisika, 6(1), 107-114.
Dimyati., Mudjiono. (2006). Belajar dan Pembelajaran. Jakarta: Rineka Cipta.
Doyan, A., Taufik, M., & Anjani, R. (2018). Pengaruh Pendekatan Multi Representasi Terhadap Hasil Belajar Fisika ditinjau dari Motivasi. Jurnal Penelitian Pendidikan IPA (JPPIPA), 4(1). 35-45.
Endriani, A. (2017). Hubungan antara Keharmonisan Keluarga dengan Sikap Disiplin Siswa. Jurnal Paedagogy, 4(2), 42-49.
Fachrurrozi., Firman., & Ibrahim, I. (2018). Hubungan Kontrol Diri dengan Disiplin Siswa Dalam Belajar. Jurnal Neo Konseling, 1(1), 1-6.
Fiana, F., J., Dahardis., & Ridha, M. (2013). Disiplin Siswa di Sekolah dan Implikasinya dalam Pelayanan Bimbingan dan Konseling. Jurnal Ilmiah Konseling, 2(23), 26-33.
Hudaya, A. (2018). Pengaruh Gadget terhadap Sikap Disiplin dan Minat Belajar Peserta Didik. Research and Development Journal Of Education, 4(2), 86-97.
Kena Ismail. (2016). Determination of Motivation of 5th Grade Students Living in Rural and Urban Environments towards Science Learning and their Attitudes towards Science-technology Course. Journal of Education and Training Studies, 4(7), 155-167.
Kurniadewi, J., R. (2015). Korelasi antara Disiplin dan Motivasi Belajar dengan Prestasi Belajar Fisika Siswa Kelas XI MIA SMA Negeri 2 Klaten. Skripsi. Universitas Sanata Dharma.
Kurniawan, D., A., Astalini., Kurniawan, N., & Pathoni, H. (2019). Analisis Korelasi Sikap Siswa dan Disiplin Siswa terhadap IPA pada Siswa SMP di Propinsi Jambi. Jurnal Pendidikan Fisika dan Keilmuan (JFFK), 5(2), 59-71.
Kusuma, Z., L., Subkhan. (2015). Pengaruh Motivasi Belajar dan Kedisiplinan Belajar Terhadap Prestasi Belajar Mata Pelajaran Akuntansi Siswa Kelas XI IPS SMA N
3 Pati Tahun Pelajaran 2013/2014. Economic Education Analysis Journal, 4(1), 164-171.

Mulyany, P. (2014). Pengaruh Keterampilan Mengajar Guru, Disiplin Belajar dan Sikap Siswa Terhadap Motivasi Belajar Mata Diklat Bekerjasama dengan Kolega dan Pelanggannya pada Siswa Kelas X Program Keahlian Administrasi Perkantoran di SMK PL Tarcisius I Semarang. Economic Education Analysis Journal, 2(3), 116-123.

Muthahirah, St. (2016). Kondisi Psikologis Keluarga dan Pengaruhnya Terhadap Tingkat Disiplin Siswa. Jurnal Tarbawi, 1(1), 45-51.

Novelyya, S. (2019). Pengaruh Karakter Rasa Ingin Tahu Siswa Terhadap Hasil Belajar Mata Pelajaran IPA Fisika di SMP Negeri 08 Muaro Jambi. BRILLIANT: Jurnal Riset dan Konseptual, 4(2), 172-181.

Pamungkas, A., Subali, B., & Lanuwih, S. (2017). Implementasi Model Pembelajaran IPA Berbasis Kesarafan Lokal untuk Meningkatkan Kreativitas dan Hasil Belajar Siswa. Jurnal Inovasi Pendidikan IPA, 3(2), 118-127.

Pratiwi, U., Fasha, E., F. (2015). Pengembangan Instrumen Penilaian Hots Berbasis Kurikulum 2013 Terhadap Sikap Disiplin. Jurnal Penelitian dan Pembelajaran IPA, 1(1), 123-142.

Pringle, P. M., Mesa, J., & Hayes, L. (2017). Professional Development for Middle School? Journal of Science Teacher Education, 5(2), 57-72.

Rahmat, N., Sepriadi., & Daliana, R. (2017). Pembentukan Karakter Disiplin Siswa Melalui Guru Kelas di SD Negeri 3 Rejosari Kabupaten Oku Timur. Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan, 2(2), 229-244.

Suhartatik, E. (2020). Peningkatan Sikap Disiplin Dan Hasil Belajar IPA Materi Sistem Gerak Melalui Metode Discovery Learning Bagi Siswa Kelas VIII. Inopendas Jurnal Ilmiah Kependidikan, 3(1), 18-21.

Sukroyanti, B., A. (2016). Pengaruh Penggunaan Pocket Book Siswa dengan Teknik Evaluasi Media Puzzle Ceria Terhadap Sikap Ilmiah Siswa. Jurnal Ilmiah Pendidikan Fisika “Lensa”, 4(2), 46-50.

Susiyanto, M., W. (2014). Analisis Implementasi Pendidikan Karakter Disekolah Dalam Rangka Pembentukan Sikap Disiplin Siswa. Jurnal Pendidikan Ekonomi IKIP Veteran Semarang, 2(1), 62-69.

Syamsul, B., T. 2010. Psikologi Pendidikan Berbasis Analisis Empiris Aplikatif. Jakarta: Kencana.

Witri, A., Fitriani, R., S. (2020). Deskripsi Sikap Kedisiplinan Peserta Didik pada Mata Pelajaran IPA di SMPN 19 Kota Jambi. Integrated Science Education Journal (ISEJ), 1(3), 89-93.