Students' discipline in learning physics lesson: A Study in San Roque national high school, Gapan City

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ABSTRAK

Purpose of the study: This research aims to explore the discipline of students in learning science, especially physics lesson in grade 7, San Roque National High School.

Methodology: This research is a mixed research, which combines quantitative and qualitative approaches. The quantitative is shown by descriptive statistical data, while the qualitative is shown by the results of the interview. The sample of this study was 7th grade students at San Roque National High School.

Main Findings: The results in this study indicate that the majority of students have a fairly good discipline attitude in learning science, as indicated by the results of descriptive statistics, which shows as many as 38.1% of students have fair independence. The remaining 4.1% of students are categorized as very low, 21.6% of students are categorized as low, 26.8% are categorized as high, and 9.3 students are categorized as very high.

Applications of this study: This research is very useful for science teachers, especially physics teacher in identifying and knowing the descriptive of students' discipline attitude in learning physics lesson, especially in the Philippines.

Novelty/Originality of this study: This research only focuses on looking at the students' discipline attitude in learning physics lesson, at San Roque National High School, especially grade 7.

Keywords: Discipline in Learning Science Student Physics Lesson

INTRODUCTION

Discipline is compliance with regulations or subject to supervision or control. Discipline aims to develop character so that they can control themselves, so that they behave in an orderly and efficient manner [1]. Discipline is an order that can regulate the order of personal and group life. Discipline has an important role in achieving educational goals. Whether or not the quality of student learning is greatly influenced by the most important factor, namely disability, in addition to environmental factors, whether family, school, discipline or the students' own talent.

Discipline is a feeling of being obedient and obedient in doing certain jobs that are his responsibility or in other words an action taken by someone in carrying out the responsibilities should be done [2]. For example, for a student having responsibilities that must be done at school such as every day students arrive on time and always collect assignments on time. This is one example that the discipline of a student has an important role in the learning process carried out by these students, because student discipline has an impact on the educational process that is followed by students in class [3]. Student discipline can be seen from students' obedience (adherence) to the rules (codes of conduct) relating to school hours including school

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hours of entering and leaving school, student compliance in dressing, student compliance in attending school activities, and so forth. All student activities whose compliance is seen are related to educational activities at school, which are also linked to life in the environment outside the school.

It is known that the discipline carried out by students in the learning process that is followed is very beneficial not only for the individual students themselves but also for the surrounding environment. It is said so because if a student who is accustomed to being a disciplined student will certainly be easy in doing everything both in school activities and outside of school [4]. For example, activities in the School participate in an organization such as scouts, students who have a disciplined attitude will carry out their obligations as a member of the scout and also carry out their responsibilities in learning.

The character of discipline can also affect the environment around students. Students who have the character of discipline and can carry out their responsibilities easily and can finish it on time then other students will also cause jealousy in the learning process that takes place in class [5]. So, students who are highly disciplined can influence other students whose discipline is still lacking and many have obstacles in carrying out their responsibilities as a student. But sometimes there are also some students who are ignorant of the activities carried out by students. Their assumption is that if there are already students who have high discipline and are able to carry out the responsibilities as specified then the other students are ignored. Thus the discipline carried out has many benefits, among others, making students become more orderly and organized in running their lives, can understand that discipline is very important for the future, can also build a strong student personality and is expected to be useful for everyone and discipline is the first key to success [6]. Discipline of students owned by someone can be seen from the actions that show everything in carrying out their responsibilities.

Learning is a call of life because without learning will result in a decline in one's quality of self [7]. The explanation, through learning someone will become aware of himself and better in living a colorful life. It's just to learn consistently is not as easy as it takes because it requires self-awareness, where self-awareness can be manifested in the discipline of learning. The definition of learning discipline is very much from learning experts, but in this paper will use the understanding of learning discipline according to the author himself. Precisely, the discipline of learning is self-awareness to control or control itself to really learn.

Based on this, it is known that the discipline of learning is actually a form of self-awareness to control itself [8]. In this case, the discipline of learning functions as a self-controller in the person so that learning will be full of awareness, without coercion and full of joy / gratitude. Specifically, people who are disciplined in learning will learn without coercion and be aware of learning and learning. Indeed, to apply this understanding of learning discipline is not easy but does not mean it is impossible to succeed. Because to be able to discipline in learning requires a contemplation to keep asking myself why I have to learn until the person gets a deep reason and contains spirituality, emotions and cognitive why should learn.

So is the discipline in learning physics. Discipline is one of the behaviors of students, and the behavior is related to learning physics [9],[10]. Physics is an inseparable part of natural science [11]. Every human being unwittingly has known and practiced natural science since birth, sophisticated technological equipment that humans use to carry out their life processes is largely an application of natural science. Natural science is a part of science that is closely related to living things (life science) and physical sciences, and it is necessary to conduct an experiment to strengthen conceptually [12]. Natural Science in the narrow sense is a scientific discipline that consists of physical sciences and life science, and physics is one of the disciplines included in the physical sciences group. Based on this, discipline is very important to apply in physics. In this study, researchers conducted research relating to the analysis of the character of student discipline in studying physics lesson in San Roque National High School, Gapan City.

2. RESEARCH METHOD

This research is a mixed study. Mixed research is research that involves the use of two methods, namely qualitative and quantitative research methods in a single study or one study [13]. Quantitative methods in this study are evident from quantitative data in the form of descriptive statistics. Furthermore, the qualitative method can be seen from the results of in-depth interviews conducted by researchers of several students.

The sample of this study consisted of students who went to San Roque National High School, Gapan City. The sampling technique in this study uses random sampling [14]. Random sampling is a sampling technique from members of the population that is done randomly without regard to strata that exist in that population [15]. In this study random sampling was done by taking students in grade 7 San Roque National High School. Based on this, 3 classes were obtained, with 97 students.

Furthermore, this study uses a questionnaire instrument and an interview guide. Interviews were conducted to strengthen quantitative data findings [16], while questionnaires related to student independence
adopted the Brief Self-Control Scale (BSCS) by Tangney, Baumeister, and Boone [17], which consisted of 13 statements with a reliability value of 0.77 and validity of 0.85. Each questionnaire uses 5 Likert scales. A positive statement is given on a scale of 5 to strongly agree, 4 to agree, 3 to neutral, 2 to disagree and 1 to strongly disagree. Conversely, negative statements are given on a scale of 1 to strongly agree, 2 to agree, 3 to neutral, 4 to disagree and 5 to strongly disagree.

In this study using SPSS to analyze descriptive statistics. In this study the descriptive statistics used are frequency, mean, min, max and percentage. The categories of students’ independence questionnaire in learning science consisted of very low, low, medium, high and very high, as shown by table 1.

Table 1. Categories on student discipline questionnaires in learning physics.

<table>
<thead>
<tr>
<th>Category</th>
<th>Student discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low</td>
<td>13.0 – 23.4</td>
</tr>
<tr>
<td>Low</td>
<td>23.5 – 33.8</td>
</tr>
<tr>
<td>Fair</td>
<td>33.9 – 44.2</td>
</tr>
<tr>
<td>High</td>
<td>44.3 – 54.6</td>
</tr>
<tr>
<td>Very high</td>
<td>54.7 – 65.0</td>
</tr>
</tbody>
</table>

During data collection, the first activity undertaken is to select students who fit the category in this study. Next, a questionnaire related to students’ disciplinary attitudes was given to students, along with interviews with several students.

3. RESULTS AND ANALYSIS

This research focuses to look at the discipline of San Roque National High School students in learning physics lesson. Some of the research results described in this session, namely the results of quantitative data are indicated by frequency, percentage, average, standard deviation, minimum, and maximum, while the results of qualitative data are indicated by transcripts. The results of students' discipline in studying physics are shown in table 2 below.

Table 2. Results of student discipline in studying physics

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Range</th>
<th>f</th>
<th>%</th>
<th>SD</th>
<th>Mean</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low</td>
<td>13.0 – 23.4</td>
<td>4</td>
<td>4.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>23.5 – 33.8</td>
<td>21</td>
<td>21.6</td>
<td></td>
<td></td>
<td>13</td>
<td>65</td>
</tr>
<tr>
<td>Fair</td>
<td>33.9 – 44.2</td>
<td>37</td>
<td>38.1</td>
<td>1.68</td>
<td>39.7</td>
<td>13</td>
<td>65</td>
</tr>
<tr>
<td>High</td>
<td>44.3 – 54.6</td>
<td>26</td>
<td>26.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very high</td>
<td>54.7 – 65.0</td>
<td>9</td>
<td>9.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>97</td>
<td>100</td>
<td></td>
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</tr>
</tbody>
</table>

Based on table 2, the quantitative results obtained from the description of student discipline in studying physics. Of the total 97 respondents, it was dominated by the moderate category of 37 students or 38.1%. Table 2 also shows other categories, such as there are 4 students (4.1%) categorized as very low, then 21.6% categorized as low, 26.8% categorized as high, and only 9.3% are categorized as very high. The overall mean results show the number 39.7 (SD = 1.68), which indicates that the results of student discipline in learning physics are not too good, but also not too bad, but rather mediocre, are in the fair category. The min result shows the number 13, which if interpreted that one respondent answered strongly disagrees all on each questionnaire statement, conversely the max result shows the number 65, which if interpreted that one respondent answers strongly agrees to all student discipline questionnaire statements.

Next there are the results of interviews by researchers with several students, as shown by the following transcript

Q: In your opinion, what is physics learning? Can physics study produce discipline character?
A: "In my opinion physics is one of the branches of Natural science that underlies the development of technology and the concept of living in harmony with nature. When asked about whether science studies produce disciplines, in my opinion yes, considering physics is a branch of science, where science is a science that deals with certainty yes, besides that some scientific scientists, famous for their personality, one of which is discipline and persevering in doing something."

Q: "Do you try to apply the character of discipline in studying physics? What is the importance for you to apply the character?"
A: "Yes, I try to do it, hmmm, for example when the teacher gives an assignment, I try to do it on time, when I come to class I try not to be late, when the test I also try to follow the rules such as not opening answers and so on. In my opinion the character of the discipline is very guiding me in acting, especially with everything I do, for example, the teacher believes me, and also what I do."

From the transcript, it is clear that students admit that the character of the discipline is related to physics, and physics teaches the character. Furthermore, the respondent also explained that physics is identical with the character of discipline, it is seen in the scientists, where scientists always teach discipline and tenacity in doing something. Respondents also explained that with discipline in a person, the teacher became confident in that person [18].

It is known that a good learning process is a learning process that can facilitate students in understanding the subject matter being taught [19]. Discipline in learning is very necessary for the realization of a good learning process [20]; [21]. Discipline in learning will hone students’ skills and recall of the material that has been given, because students learn according to their own awareness, so that in the end students will be easier to work on the problems of the material provided.

One of the most important affective aspects to consider is the discipline of learning [22]; [23]. Learning discipline has a close relationship with the attitude to carry out an activity. Ignoring student learning discipline in learning means making students reluctant to carry out learning activities so that the learning outcomes at school are not good. Learning discipline is one of the supporting factors to improve student learning outcomes [27]. Discipline is an order that can regulate human life. Discipline can arise with self-awareness and encouragement to obey the existing order.

Student learning discipline is influenced by several factors both from within and from outside the individual, influence from within the individual [24] for example: nature of laziness, reluctance to focus on learning, daydreaming habits and so forth. While influences from outside the individual for example: the atmosphere at home, the atmosphere at school, the time available, and so forth. To realize the discipline of learning it is necessary to hold a student’s personal coaching at school.

Students who have the discipline of learning will show their readiness to take class lessons, do homework assignments and have complete learning such as books and other learning tools [25]; [26]. On the other hand, students who lack discipline in learning do not show readiness to take lessons, do not do assignments, like playing truant, do not do homework, and do not have complete learning. In teaching and learning activities the core is students, while teachers do learning activities that can activate students as optimal as possible, so that students are able to change their behavior for the better and students really play a role and actively participate in conducting learning activities, as well as learning physics.

4. CONCLUSION

Every person in carrying out any activity requires a discipline, as well as students in school, especially discipline in learning. If a student can discipline himself, he can live orderly and can do assignments on time. Discipline is a condition that is created and is formed from a series of behaviors that demonstrate the value of obedience, obedience, loyalty or attachment to an order of rules. Discipline is very important to be applied in learning, as is the case with natural science learning, especially learning physics lesson. Based on this, the researchers conducted research related to the analysis of students’ independent attitudes in learning physics, especially at San Roque National High School. From the results that have been obtained that most students get discipline that is categorized as fair, which indicates that students’ discipline in learning physics lesson is not too good, but not too bad. Based on this, it is very important to do ways to improve students' discipline in learning science, and this can be used as future research.

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REFERENSI
