

CHAPTER I

INTRODUCTION

1.1. Background

Along with the times, countries are required to be able to compete and make adjustments in order to transform into reliable and quality human resources, one of which is through the field of education. Education is one of the tools in an effort to improve the standard of living of all levels of citizens, and build the dignity of a nation, so the Indonesian government is trying as much as possible to develop education in Indonesia. Education in Indonesia also has its own problems, one of which is that there are children who do not go to school or drop out of school due to economic factors. Based on data obtained from the Badan Pusat Statistik on March 2022, the highest level of education completed by the population aged 15 years and over in 2022 is as follows.

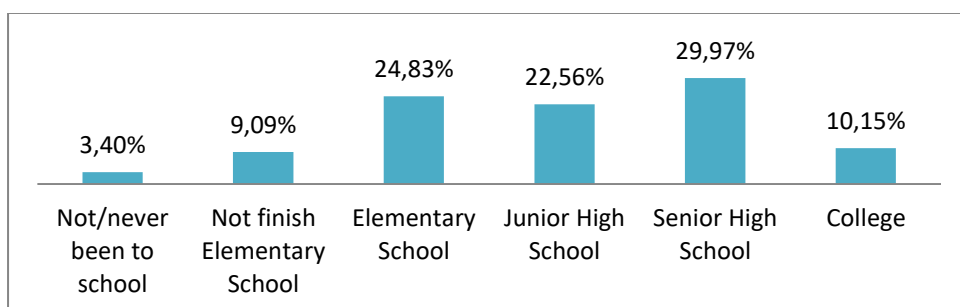


Figure 1. 1. The Highest Level of Education Completed by the Population Aged 15 Years and Over in 2022

Based on the data above, the smallest percentage of the population who have never been to school is 3.40%, while the largest percentage is the population whose highest level of education is senior high school at 29.97%. The percentage of people who did not graduate from primary school is 9.09%, the percentage of people whose highest level of education is primary school is 24.38%, the percentage of people whose highest level of education is junior high school is 22.56%, and the last is the percentage of people whose highest level of education is university is 10.15%.

Education is all knowledge from learning that has a positive impact on the growth of every living being (Pristiwanti et al., 2022). According to the Big Indonesian Dictionary, education is the process of changing one's behavior through learning. Meanwhile, according to Law Number 20 of 2003,

Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, society, nation and state.

Based on the definition above, it shows that education is a learning process that can develop the potential in a person so that it can change behavior and have a positive impact on life. In the world of education, there are mathematics subjects. Mathematics is a universal science that underlies the development of modern technology, mathematics has an important role in various disciplines and the development of human thinking (Pratiwi et al., 2022). This subject is very important for human life in various fields so that mathematics needs to be taught to students. Mathematics subjects need to be given to all students starting from elementary school to equip students with the ability to think logically, analytically, systematically, critically, and creatively, as well as the ability to work together (Sukada et al., 2013). Therefore, students must learn and master mathematics in order to achieve better learning outcomes so that the knowledge gained can be useful for life.

According to Gagne & Briggs (in Nurrita, 2018), learning outcomes are a person's ability after following the learning process that can be seen from student performance. Student learning outcomes are used as a benchmark to assess the level of student mastery of the material that has been taught (Suciarsy, 2018). Learning outcomes are also an accumulation of internal factors (contained within students) and external factors (which come from outside students) that affect students (Egok, 2016). Based on this definition, it can be concluded that mathematics learning outcomes are

the gains obtained from students' abilities after participating in the mathematics learning process which are influenced by internal factors and external factors.

The results of preliminary observations conducted at SMA Swasta Dharma Pancasila Medan, precisely in grade tenth and eleventh, show that the midterm examination scores for mathematics subjects are as follows :

Table 1. 1 Midterm Examination Results of Students in Grade Tenth and Eleventh at SMA Swasta Dharma Pancasila Medan

No.	Class	Students	MCC	Complete	%	Incomplete	%
1.	X	91	75	17	18,68%	74	81,32%
2.	XI	79	75	56	70,89%	23	29,11%

Source: Data processed by the author, 2023

From the data above, the percentage of students in tenth grade that complete the midterm examination is 18,68%, while the percentage of students in tenth grade that incomplete on the midterm examination is 81,32%. In eleventh grade, the percentage of students that complete on the midterm examination is 70,89%, while the percentage of students that incomplete on the midterm examination is 29,11%. In twelfth grade, the percentage of students that complete on the midterm examination is 82,29%, while the percentage of students that incomplete on the midterm examination is 17,71%.

Low student learning outcomes can be caused by several factors, namely internal factors and external factors. Internal factors are causal factors that come from within students in the process of achieving learning outcomes such as: motivation, interest in learning, time management, learning discipline and so on. While external factors are everything that comes from outside the individual student either directly or indirectly that can affect individuals to be able to improve their learning outcomes including the family environment, peers and society. Professional teachers also play an important role in influencing student well-being so as to create

quality learning that will have an impact on students' learning outcomes in mathematics (Nugraha, 2023).

Another factor is that students must be good at managing time, such as time to study, time to relax, and time to do homework (Haruna & Fajar, 2021). The following are the results of observations regarding student time management in grade tenth and eleventh at SMA Swasta Dharma Pancasila Medan.

Table 1. 2 Results of Time Management Observation Questionnaire

No.	Question	Yes	No
1.	I always plan what I do and make a schedule of daily activities	66,67%	33,33%
2.	I always do my homework before the assigne deadline	47,62%	52,38%
3.	I like to sleep late for unimportant things	28,57%	71,43%
4.	I have various ways to minimize disruption to my activities.	85,71%	14,29%

Source: Primary data processing by the author, 2023

Based on the table above, it is known that time management in students is still not as expected. This is shown that in statements 1, 2, and 4 (positive statements), 33.33% of students have not been able to manage their time to plan and schedule daily activities, 52.38% of students who do not do assignments in advance, and 14.29% of students who have not been able to minimize interference with their activities. In statement 3 (negative statement), 28.57% of students like to sleep late at night to do things that are not important.

In addition, there is also learning discipline which is one of the conditions for determining student success in achieving their goals (Bali & Hasanah, 2022). Learning discipline is an attitude of obeying the rules and regulations in learning activities to obtain new behavioral changes as a result of their own experiences in interaction with the environment (Lomu & Widodo, 2018). All students must obey the rules of learning at school and at home. Learning discipline at home, among others, includes:

studying every day, doing homework, studying in groups and so on. Meanwhile, learning discipline at school includes: punctuality in coming to school, active participation in class lessons, obedience to class and school rules, using free time and so on. If students have high learning discipline, their learning perseverance will increase so that it affects learning outcomes. To improve student learning discipline, schools can provide guidance to students and parents also play a role in supervising student learning activities at home (Lase, 2016).

Table 1. 3 Results of Learning Discipline Observation Questionnaire

No.	Question	Yes	No
1.	I always go to class on time	85,71%	14,28%
2.	I always submit assignments given by the teacher on time	95,24%	4,76%
3.	I often go in and out of class while learning is taking place.	23,81%	76,19%
4.	I always repeat lessons at home to strengthen understanding of the material	52,38%	47,61%

Source: Primary data processing by the author, 2023

Based on the table above, it is known that learning discipline in students is still not as expected. This is shown that in statements 1, 2, and 4 (positive statements), 14.28% of students have not been able to discipline themselves to enter class on time, 4.76% of students do not submit assignments on time, and 47.61% of students do not repeat learning at home. In statement 3 (negative statement), 23.81% of students often leave the class when the learning is taking place.

One of the external factors that can affect learning outcomes is the physical environment in which there are learning facilities (Arrixavier & Wulanyani, 2020). Facilities are all the tools needed to facilitate the learning process (Sudiartini et al., 2021). The existence of these facilities will support students' academic and non-academic activities and support the realization of a conducive teaching and learning process that produces optimal learning outcomes (Cynthia et al., 2015). The availability of adequate learning facilities is expected to make students more helpful in

learning activities so that they will achieve good learning outcomes as well.

Table 1. 4 Results of Learning Facilities Observation Questionnaire

No.	Question	Yes	No
1.	I feel comfortable with my class because it is clean and tidy.	61,90%	38,10%
2.	The learning equipment at school is complete and adequate so I feel comfortable.	85,71%	14,29%
3.	When learning, I find it helpful to use learning aids such as computers and mathematics teaching aid.	81%	19%
4.	I feel happy to work on mathematics problems because the learning resources are adequate.	81%	19%

Source: Primary data processing by the author, 2023

Based on the table above, it is known that learning discipline in students is still not as expected. This is shown in statements 1, 2, 3 and 4 (positive statements), 38.10% of students feel uncomfortable studying in class, 14.29% of students feel that learning equipment at school is incomplete, 19% of students do not feel helped when using learning aids, and 19% of students feel less happy discussing problems because of inadequate learning resources.

Based on the explanation above, it shows that time management, learning discipline, learning facilities, and student learning outcomes are not optimal. Therefore, the authors try to conduct research related to the above problems with the title: "**The Influence of Time Management, Learning Discipline, and Learning Facilities on Students' Mathematics Learning Outcomes**".

1.2. Problem Identification

Based on the background described above, the problems that can be identified in this study are:

1. There are some students in grade tenth and eleventh who do not complete the midterm examination in mathematics.

2. The same subject matter and the same teacher cannot guarantee that students' scores meet the minimum completion criteria.
3. Time management, learning discipline, and learning facilities are not optimal.

1.3. Scope of Study

The scope of the problem in this study is related to student management and discipline as internal factors and facilities as external factors that can affect student learning outcomes.

1.4. Problem Limitation

Based on the identification of existing problems, this study is limited to problems regarding three independent variables, namely time management, learning discipline, and learning facilities. The object in this study is limited to students' mathematics learning outcomes.

1.5. Research Question

Based on the background and identification of the problems described above, the problem formulations in this study are:

1. Is there influence of time management on students' mathematics learning outcomes?
2. Is there influence of learning discipline on student mathematics learning outcomes?
3. Is there influence of learning facilities on students' mathematics learning outcomes?
4. Is there influence of time management, learning discipline, and learning facilities on students' mathematics learning outcomes?

1.6. Purpose of the Research

Based on the problem formulation described above, the objectives in this study are:

1. To determine the influence of time management on students' mathematics learning outcomes.

2. To determine the influence of learning discipline on students' mathematics learning outcomes.
3. To determine the influence of learning facilities on students' mathematics learning outcomes.
4. To determine the influence of time management, learning discipline, and learning facilities on students' mathematics learning outcomes.

1.7. Benefits of the Research

1.7.1. For Researchers

The results of this study can increase the knowledge of researchers regarding time management, learning discipline, and learning facilities on students' mathematics learning outcomes.

1.7.2. For School

The results of this study are expected to help schools to improve learning facilities at school to support learning that can improve students' mathematics learning outcomes.

1.7.3. For Students

The results of this study are expected to help students to improve time management and learning discipline so as to improve students' mathematics learning outcomes.

1.7.4. For the University

The results of this study are expected to be an additional reference and comparison for further research.