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PRIVATE LESSONS IN IMPROVING MATHEMATICS LEARNING OUTCOMES

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ABSTRACT:

The main problem in learning mathematics in schools is still the low absorption of students; some influences that cause problems in the learning process such as students' lack of knowledge at the beginning of learning, students quickly forgetting the lessons that have been learned, students responses are lacking, and this illustrates the unpreparedness of students in following learning. Mathematics is a cursive subject; regulation of the Minister of National Education No. 22 of 2006 concerning content standards that mathematics subjects need to be given to all students starting from elementary school to stimulate logical, analytical, systematic, critical, and creative thinking, as well as the ability to work together. Mathematics lessons at the junior high level based on the 2013 curriculum are presented with more material than before. This makes students lazier to learn, and the learning outcomes are low.

The method in this study uses experimental research. The type of research uses tests and questionnaires. Moreover, the variables it uses are the results of learning and private tutoring. This research instrument uses questions in the form of Multiple Choice (PG) with 5 number questions. This study used an online survey activity by filling out a questionnaire on Google form about comparing mathematics learning outcomes of students who took private lessons and those who did not take private lessons at the junior high school level in Serang City. The development carried out is identity. To find out students' learning difficulties, the author conducts questionnaires (questionnaires) to test questions on students to find out their level of ability to take private lessons and those who do not. In a small-scale result trial using questionnaire questionnaires to determine the improvement of learning outcomes involving 30 junior high school students in Serang City, the second is a trial of the test method, which is to convince data and find out the level of ability of students from the results of learning mathematics in private lessons involving 11 students into large groups.

Keywords: *Test Method, Questionnaire, Mathematics, SMP Kota Serang and Private Tutoring.*

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INTRODUCTION

The main problem in learning mathematics in schools is still the low absorption of students. This can be seen in students' average mathematics learning outcomes, which are always very concerning(Yuliana & Fajriah, 2013). However, several problems in the learning process are influenced by: 1) students lack initial knowledge about what will be learned, 2) students easily forget what has been learned in previous meetings, and 3) student responses to learning are still lacking. This means that only a few students follow the lesson well because students lack initial knowledge about what will be learned. It illustrates student participants' unpreparedness to participate in class learning.

Learning outcomes are the abilities obtained by an individual after the ongoing learning process, which can provide changes in good behavior, knowledge, understanding, attitudes, and skills of students so that they become better than before(Santoso et al., 2021). In addition, learning outcomes can be explained by the abilities possessed by students after they receive their learning experience.

Mathematics is a field of science that means a tool of thought and communication, a tool to solve an easy problem, whose elements are intuitive reason, Analysis and construction, generality and individuality and has branches among others; arithmetic, algebra, geometry, and analysis(Yuliana & Fajriah, 2013). Mathematics is one of the most cursive subjects taught at all levels of education, from elementary school to college. This is by the Regulation of the Minister of National Education No. 22 of 2006 concerning Content Standards, that mathematics subjects need to be given to all students starting from elementary school to equip students with logical, analytical, systematic, critical, and creative thinking skills, as well as the ability to cooperate(Sidi et al., 2018).

Mathematics lessons at the junior high level based on the 2013 curriculum are presented with more material than before. The material presented is more complicated than usual because learning emphasizes more on problem-solving efforts(Usman, 2020). Seeing some students think that mathematics is difficult to learn and understand. This results in students becoming lazier, and learning outcomes in mathematics learning are low(Kasma, n.d.).

METHODS

This research is an experimental study to compare the results of learning mathematics using asynchronous learning methods, such as students who do not take private lessons with those who take private lessons in mathematics learning at the junior high school level. Therefore we use the Questionnaire (Questionnaire) research method and the Test method. This research was conducted online by junior high school students in Serang City, with a sample of 30 people taken using questionnaires and diagram data which was first done through Google from.

Filling out responses in this study was carried out after the implementation of the final evaluation of students attending private lessons because it was an experiment that was subjected to learning using the Test Method. The response that wants to be known after the final evaluation of students taking private lessons in filling out this questionnaire is to find out the respondents' responses to the test method that has been implemented.

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RESULTS AND DISCUSSION

This research began using online survey activities to identify problems in the learning process and became an effort to find solutions(Sidi et al., 2018). Based on the results of questionnaires (questionnaires) and tests conducted by researchers to private tutors and looking at the results of test evaluations of grade VII students in Serang City to find out the problems that cause low student learning outcomes.

Illustration of comparing mathematics learning outcomes using asynchronous learning methods, such as students who do not take private lessons with those who take private lessons in mathematics learning at the junior high school level in Serang City through questionnaires and tests(Kasma, n.d.).

Research and development, according to Sugiyono, was carried out from stage 1 to stage 3. Data on the results of each stage of the research and development mechanism carried out are as follows:

1. Identity (learning obstacle)

   Identification (learning obstacle) is the identification of learning difficulties in mathematics. To determine students' learning difficulties, the author conducted a questionnaire (questionnaire) on Junior High School grade VII students in Serang City. Furthermore, conduct a question test on students to determine their ability level to take private lessons and not private lessons. From the results of the question test, the difficulties of students in learning mathematics can be known.

2. Data Collection and Processing

   After identifying (learning obstacles) and knowing the results, the next step in this development is to collect and process data on the level of ability of students' learning outcomes in private lessons.

3. Results Trial

   1. Small Scale Trials

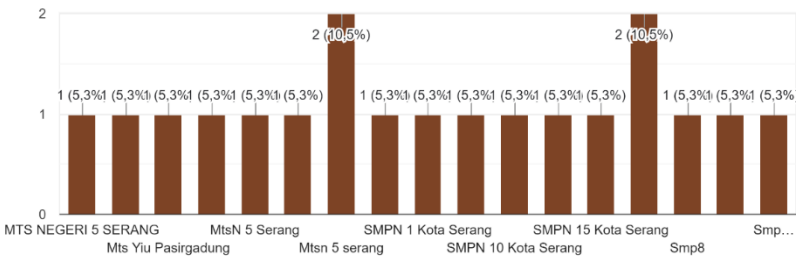
      The small group trial was intended to test the improvement of student learning outcomes in this small group test. See the test results and questionnaires (questionnaires) given and at the end of the trial results involving ten students.

   2. Field Trials

      After conducting small group trials, these results were tested again for field trials. This field trial was conducted to convince the data and determine the ability level of mathematics learning outcomes. Respondents in this extensive group test amounted to 30 learners. From the results of these trials, it can be seen that the average test results decreased where in small-scale trials, the average was 1.0 with the criterion "very low" and in large-scale trials was 3.0 with the criterion "excellent"(Putra et al., 2017).

Presented in the form of "Pie Chart and Bar Chart."

School Name



Have you ever taken private lessons?

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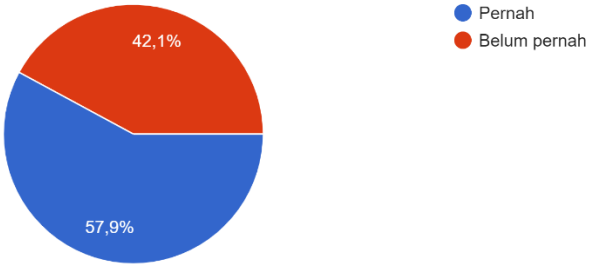
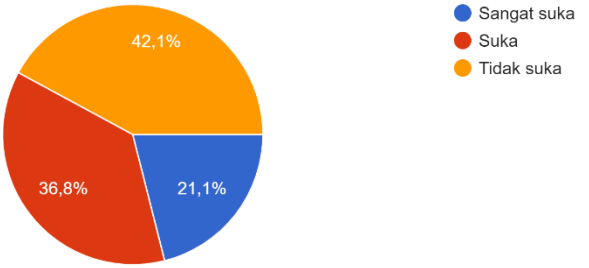
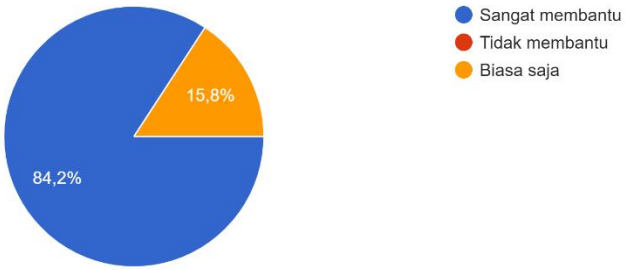


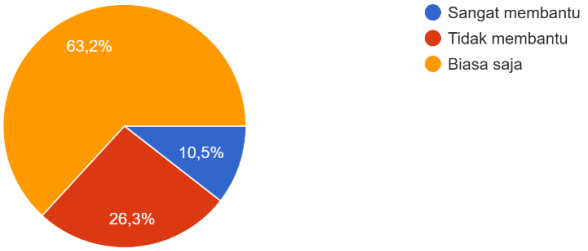
Do you like maths?



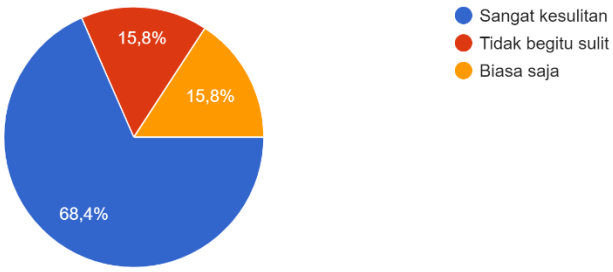
What do you think about private lessons? Will it help the learning process?



Do you think the results of studying alone at home can help without additional learning, such as taking private lessons?



Are you tough if you have to teach yourself at home about maths?



Do you like math teachers at school?

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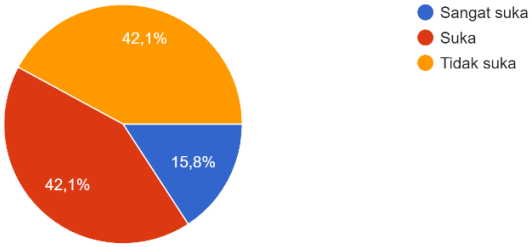
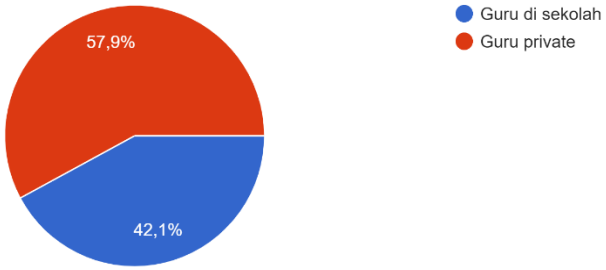
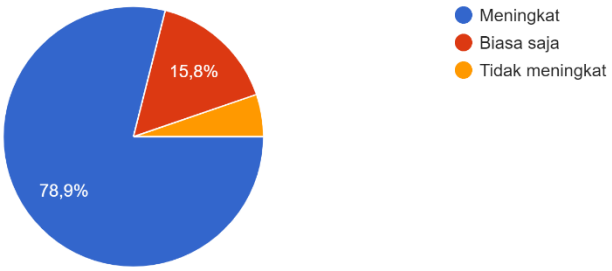


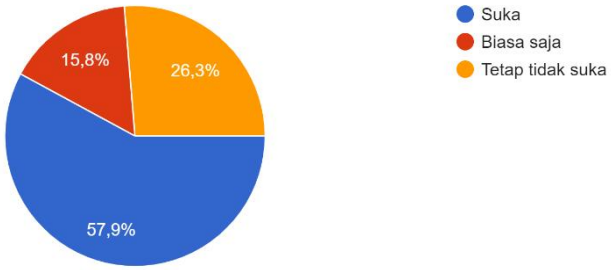
Which do you prefer, the way of teaching between teachers in schools and private teachers?



How are you doing after taking private lessons?



After you take private lessons, do you become fond of maths lessons?



Based on the recapitulation of the study results above using questionnaires (questionnaires) and tests conducted by researchers on private tutors and looking at the test assessment results of grade VII students in Serang City. Shows that there is an impact of tutoring on student learning outcomes in mathematics learning in grade VII Junior High School in Serang City which was taken from 30 samples for filling out questionnaires and tests obtained recapitulation using a pie chart which resulted in students who took private lessons being superior to students who did not take private lessons. That is, private tutoring has a significant effect on the mathematics learning outcomes of grade VII junior high school students in Serang City, which were taken from 30 samples.

This is also supported by the average difference between the learning outcomes of students who take private lessons higher than those who do not take private lessons. This means that private tutoring is one factor that can improve students'

learning outcomes at school. In addition, it turns out that from the questionnaire results, learning outcomes are also determined by variables other than private tutoring. This is in accordance with the statement that several factors can affect the learning outcomes of mathematics learning consisting of internal and external factors. So, private tutoring is not the only factor that can affect the learning outcomes of mathematics learners.

However, private tutoring is beneficial for students in improving learning outcomes at school. Private tutoring plays a role in helping students overcome learning difficulties, find effective ways to learn and achieve success in learning. So, by taking private lessons, students' mathematics learning outcomes tend to increase. This increase in learning outcomes is undoubtedly caused by changes in the students themselves(Usman, 2020).

CONCLUSION

Mathematics is one of the most cursive subjects taught at all levels of education, from elementary school to college. Private tutoring is learning outside of school carried out by service providers outside teaching and learning hours at school, which uses the school curriculum as a reference, with one student and limited by learning time(Usman, 2020). The method in this research uses experimental research. The type of research uses tests and questionnaires. Moreover, the variables it uses are the results of learning and private tutoring.

This study used an online survey activity by filling out a questionnaire on Google form about comparing mathematics learning outcomes of students who took private lessons and those who did not take private lessons at the junior high school level in Serang City. A small-scale result trial using a questionnaire to determine the improvement of learning outcomes involving 30 junior high school students in Serang City; the second is a test method trial, which is to convince the data and find out the level of ability possessed by students from the results of learning mathematics in private lessons involving 11 students into large groups.

REFERENCES

HUBUNGAN ANTARA LES PRIVAT MATEMATIKA DENGAN PRESTASI BELAJAR MATEMATIKA SISWA KELAS VI SEMESTER GASAL TAHUN PELAJARAN 2018/2019 DI MI MIFTAHUL AKHLAQIYAH TAMBAKAJI NGALIYAN SEMARANG. (n.d.).

Kasma, R. (n.d.). *Pengaruh Model Pembelajaran terhadap Hasil Belajar Matematika Siswa SMP Swasta PAB Helvetia Kota Medan*. *1*, 60–67.

Putra, R. W. Y., Nurwani, N., Putra, F. G., & Putra, N. W. (2017). Pengembangan Desain Didaktis Bahan Ajar Materi Pemfaktoran Bentuk Aljabar pada Pembelajaran Matematika SMP. *NUMERICAL: Jurnal Matematika Dan Pendidikan Matematika*, *1*(2), 97–102. https://doi.org/10.25217/numerical.v1i2.133

Santoso, J., Khikmiyah, F., & Huda, S. (2021). Meningkatkan Hasil Belajar Matematika Pokok Bahasan Pengoperasian Bentuk Aljabar Melalui Model Pemberian Tugas. *Postulat : Jurnal Inovasi Pendidikan Matematika*, *2*(1), 23. https://doi.org/10.30587/postulat.v2i1.2931

Sidi, R. R., Tri,), & Yunianta, N. H. (2018). MENINGKATKAN HASIL BELAJAR MATEMATIKA SISWA SMP KELAS VII PADA MATERI ALJABAR DENGAN MENGGUNAKAN STRATEGI JOYFUL LEARNING. In *Maret* (Vol. 5, Issue 1).

Usman, A. P. (2020). *Representasi Hasil Belajar Matematika Siswa yang Ikut*

e-ISSN: 2986-8076
DOI: 10.57254/tess.v1i2.13

Bimbingan Belajar dan Les Privat di SMP Negeri 1 Palopo.

Yuliana, I., & Fajriah, N. (2013). *PENERAPAN METODE PQ4R DALAM PEMBELAJARAN MATEMATIKA DI KELAS VII SMP* (Vol. 1, Issue 1).