
ANALYSIS OF JUNIOR HIGH SCHOOL STUDENTS' LEARNING INTEREST ON SOCIAL ARITHMETIC USING LIVEWORKSHEETS

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ABSTRACT

The aim of this research was to find out about the learning interests of junior high school students in learning social arithmetic after learning using liveworksheets. In this study using a qualitative descriptive research method, the research subjects were 7th grade junior high school students at SMPN 14 Cimahi. The sample used in this study was 30 students. The research instrument used was an interest in learning mathematics scale questionnaire referring to 4 indicators containing 20 statements according to the indicators of interest in learning with a large number of statements totaling 12 positive statements and 8 negative statements. The implementation of distributing questionnaires is a data collection techniques in this study. Data processing techniques with reference to the results of student answers are described using the criteria for the percentage of interest in learning. The indicators of interest in learning are as follows (1) feeling happy, (2) student interest, (3) student engagement, and (4) indicate attention while studying. The findings obtained from analyzing this study indicate that the average student interest in learning is 80,5% with very good criteria, so the use of liveworksheets is proven to be very helpful for students in building their interest in learning in social arithmetic learning.

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INTRODUCTION

Mathematics is a basic science field of all educational sciences such as chemistry, physics and others. Mathematics is not only taught at the junior high school level but starts from elementary to high school. Mathematics is a science that supports other educational sciences and is a science that helps life (Nugraha & Hakim, 2022). Mathematics is the basis of education and plays an active role in intelligence, personality and attitude (Iffi & Kadarisma, 2020). In the process of learning mathematics there are several causes that result in the process of learning mathematics being low. The causes that can result in a low mathematics learning process are

due to several causes, one of which is the low interest in students' learning in the mathematics learning process.

Based on the results of research by Sucipto & Firmansyah (2021) that almost half of students have a percentage of student interest in mathematics of 46.02% with low criteria. Meanwhile, it was obtained from the results of an interview with one of the class VII math teachers at SMPN 14 Cimahi that the low interest in learning students in mathematics was due to the use of monotonous worksheets so that students were not interested and bored. In this regard, students' interest in the process of learning mathematics must be developed, because interest in learning is created in oneself. In line with Imami (2021) that success in the learning process requires an interest in learning and one of the causes in the learning process is oneself. Interest in learning is something that is very crucial in the process of learning mathematics so it is hoped that teachers in the field of mathematics can instill a sense of interest in students (Hali, 2022). This is often associated with the cause of optimization in knowledge transfer activities. However, it is not that easy for teachers to attract students' interest in learning.

Using a worksheet in the form of *website* is one solution to attract student learning interest. Although not a few teachers are left behind in utilizing technology for learning in accordance with the times. However, teachers must be technologically literate so that students can compete globally. In addition, the use of technology can create a meaningful learning process and students are not bored in participating in the learning process.

Website which can be used in learning is more interesting, namely one of them liveworksheets. Liveworksheets is one of the interactive worksheets in the form of website free ones for free online by replacing traditional worksheets as worksheets online (Andriyani, 2020). Pros of using liveworksheets it is paper-saving and for students it is an interactive activity and encourages interest in learning. In use liveworksheets this student does not have to have an account liveworksheets and students can work on these questions directly through smartphone or laptops. There are various kinds of work on questions in liveworksheets, namely by matching, choosing answers, short entries, and being able to insert videos and audio. With this thing use liveworksheets teachers can create interesting worksheets to minimize student boredom in learning mathematics, especially social arithmetic.

Social arithmetic is the subject matter of mathematics in class VII semester 2 which studies activities in everyday life such as sales, purchases, profits, losses, deductions, taxes, single interest, gross, net and tare. Social arithmetic material is one of the existing materials which is very essential because it is related to social life, especially in transaction activities. In line with Wahyuni (2020) said that mathematics material which is very essential for students as a basis for social life is social arithmetic.

Referring to Lestari & Yudhanegara (2015) indicators of interest in learning are (1) feelings of pleasure; (2) interest in learning; (3) indicating attention while studying; and (4) involvement in learning. While referring to (Apriyanto & Herlina, 2020) indicators of interest in learning are (1) pleasure; (2) students' interest in learning; (3) students' attention in studying; and (4) students are involved in learning. Referring to the several indicators that have been described, the indicators of interest in learning used in this study are (1) feeling happy; (2) student interest; (3) student engagement; and (4) indicate attention while studying.

Referring to this explanation, the researcher is interested in studying students' learning interest in social arithmetic material in use liveworksheets as student worksheets. After using the worksheet in the learning process, it is hoped that this can be one of the solutions in optimizing student learning interest. There are the results of previous studies that have conducted research

on students' learning interest in social arithmetic with the help of learning media MIT App Inventor as done by Nindayanti & Bernard (2022) but there is no research available that analyzes students' interest in learning using liveworksheets.

METHOD

SMPN 14 Cimahi became the location for the research. In this case, the researcher applied a qualitative descriptive research method. In the following, the research subjects were 30 in 7th grade junior high school students. The aim of this research is to analyze the learning interest of seventh grade junior high school students after using the liveworksheets on social arithmetic material which is then adjusted according to indicators of interest in learning. indicators of interest in learning used in this study are (1) feelings of pleasure; (2) student relatedness; (3) student involvement; and (4) indicating attention when studying.

The research instrument used was a likert scale questionnaire based on indicators of interest in learning mathematics which contained 20 statements according to indicators of interest in learning with many statements totaling 12 positive statements and 8 negative statements. Each positive and negative statement has a different score. The following is the scoring for each answer, including:

Table 1. Learning Interest Questionnaire Scoring

Positive Statement	Score	Negative Statement	Score
Strongly agree	4	Strongly agree	1
Agree	3	Agree	2
Don't agree	2	Don't agree	3
Strongly Disagree	1	Strongly Disagree	4

A questionnaire containing 20 statements according to indicators of student learning interest was given to students via Google Forms. After the results of the questionnaire answers collected were processed using Microsoft Excel, with the formula below (Ariyawati et al., 2017):

$$Percentage = \frac{Total\ score}{Total\ Maximum\ Score} \times 100\%$$

Data processing techniques with reference to the results of the percentage of student answers are then described using the criteria for the percentage of interest in learning according to BatuBara (2021) presented in table 2 below:

Table 2. Criteria for the Percentage of Interest in Learning Middle School Students

No	Score Achievement Rate	Category
1	0 – 20%	Very Less Good
2	21 – 40%	Not good
3	41 – 60%	Pretty good

4	61 – 80%	Good
5	81 – 100%	Very good

RESULTS AND DISCUSSION

Results

From the findings of the questionnaire data processing that has been carried out regarding the learning interests of class VII junior high school students in social arithmetic material after using the liveworksheets at SMPN 14 Cimahi, the data is made in the form of a percentage description table. From the questionnaire data consisting of 20 statement items which were distributed to 30 class VII students at SMPN 14 Cimahi, the average percentage of student responses for each indicator was as follows:

Table 3. Percentage Results of Middle School Students' Learning Interest Scale

No	Indicator	Multiple Statements	Total			Information
			Score	Mean	Percentage	
1	Feeling happy	5	484	16,1	81%	Very good
2	Student Interest	5	496	16,5	83%	Very good
3	Student Engagement	5	468	15,6	78%	Good
4	Indicate Attention While Studying	5	480	16	80%	Good
Mean					80,5%	Very good

Based on table 3 it shows the percentage for the 1st indicator is 81% with very good criteria, this shows that students feeling happy because they use liveworksheets in learning social arithmetic. The percentage is 83% for the 2nd indicator with very good criteria, in this case students show an interest in participating in social arithmetic learning because they use liveworksheets. The percentage is 78% for the 3rd indicator with good criteria, in the case students show involvement or contribute well in participating in social arithmetic learning because they use liveworksheets. The percentage is 80% on the 4th indicator with good criteria, in this shows that students indicate good attention while studying social arithmetic because they use liveworksheets. So that the average of the 4 percentage indicators of student learning interest is 80.5% with very good criteria. This shows that the students' responses were very good towards learning interest in social arithmetic material after learning using liveworksheets.

Discussions

Referring to the results of the questionnaire contained in table 3, that the percentage results with indicators of feelings of pleasure in social arithmetic material after learning using

liveworksheets is a very good criterion. The learning process with pleasure so that they will follow it is a reflection of a student having an interest in something (Simbolon, 2013). It can be concluded that students feel happy working on liveworksheets on social arithmetic material. Not only that, the use of liveworksheets students also understand social arithmetic material.

Indicators of student interest in social arithmetic material using liveworksheets get student responses with very good criteria. This is in accordance with Nurhasanah & Sobandi (2016) that students have an allure to learn. In addition, according to Hanipa (2019) the highest results were obtained on the interest indicator. Student behavior towards something that reflects that the student has an interest in the lesson is interest (Charli, 2019). With students' interest in learning mathematics will generate curiosity on an ongoing basis, and if there are students who do not understand the material explained by the teacher, these students dare to ask questions. Sembiring & Muhtar (in Sholehah, 2018) say that students will be interested in participating in all processes related to mathematics if students have an interest in the field of mathematics. Regarding this, it can be concluded that students are interested in working worksheets on liveworksheets on social arithmetic material.

Indicators of student involvement in social arithmetic material with assistance liveworksheets have good criteria. Contributing well to the learning they participate in is reflecting that students have an interest in learning (Charli et al., 2019). It can be concluded that students are good at being involved in completing liveworksheets on social arithmetic material unencumbered.

The indicators indicate attention when studying social arithmetic using liveworksheets get a good response. In line with Sholehah (2018) that the student's criteria indicate good attention while studying. It can be concluded that students are good at caring about completing worksheets using liveworksheets on social arithmetic material and focus on learning.

Thus, the results of this study indicate that students' interest in learning if the learning uses liveworksheets on social arithmetic material has a very good influence and can be implemented in the learning process. Students showed good responses such as showing their enthusiasm during the learning process towards the use of liveworksheets.

CONCLUSION

From the results of the data analysis that has been presented in the results and answers, it can be concluded that class VII students at SMPN 14 Cimahi have very good criteria in learning interest in social arithmetic material after learning using liveworksheets. Therefore, teachers can use liveworksheets on social arithmetic material. However, it does not rule out the possibility of liveworksheets This can be implemented in other mathematics materials to create interest in learning junior high school students in learning mathematics. There are several suggestions for further researchers including: (1) Can use liveworksheets on other math material; (2) Carry out strict supervision when students fill out questionnaires honestly and candidly; (3) Using more samples for further research.

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