Critical Thinking Ability of Junior High School Students Who Have Self-Confidence

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ABSTRACT
Students often have difficulty in solving problems, this is due to lack of confidence and students' critical thinking skills are still low. Critical thinking skills are needed to make decisions in solving problems on problems. In order for students to make decisions, students must have confidence in practicing critical thinking skills. This study aims to describe students' critical thinking skills in solving story problems in junior high school students who have confidence. This research method is descriptive research with a qualitative approach, in the form of the results of the work of non-test students, written tests and in-depth interviews. This study included 2 subjects who had the ability to think critically with confidence. The results of this study show that students can meet all criteria such as (1) students are able to understand problems, write down problem information from known, namely Tini bought 2 pens and bought 1 writing book, while Aisyah bought more pens than Tini equivalent to the price of books, then what was asked was the price of 2 pens and 3 writing books, respectively, (2) students are able to analyze and create mathematical models, able to consider assumptions and determine the results of completion, namely solving mathematical models on the material of a system of two-variable linear equations (SPLDV). And (3) students are able to draw conclusions from the problem, namely being able to conclude from the results of the final solution correctly. So that students are able to understand, model and solve problems appropriately.
Keywords: Critical Thinking Ability and Self-Confidence.

INTRODUCTION

Mathematics is a discipline that plays an important role in learning mathematics so that students can practice in using their minds logically, systematically, critically and creatively (Kurniawan, Nindiasari, & Setiani, 2020: 151). So that in solving math problems, it is necessary to think critically in solving to get answers.

According to Solikhin & Fauziah, (2021: 189) that critical thinking is the ability to solve life problems by thinking actively, carefully and seriously, by analyzing all the information to draw a valid conclusion. The ability to think critically is the ability to think rationally, collecting as much information as possible by using methods of examination or reasoning to solve story problems (Sulistiani & Masrukan, 2016: 608). Facts in the field state that the current condition is that there are still many students who have difficulty achieving critical thinking ability competence in mathematics learning (Melyana & Pujiastuti, 2020: 240). Students often have difficulty in solving story questions that require students to think critically, so students need to practice solving problems with critical thinking skills.

Students who have good self-confidence are also good at solving story problems because students can think critically (Agustyaningrum, Nina Suryantini, 2016: 159). So to achieve mathematical critical thinking skills, it requires self-confidence in students so that feelings of anxiety and doubt do not come their way.

Self-confidence is a confident attitude possessed by students because with the student's sense of self-confidence in their abilities, it becomes an aspect of their advantages (Pangestu & Sutirna, 2021: 199). Self-confidence can strengthen motivation in achieving success because the higher the self-confidence, the better in critical thinking (Safitri & Maryati, 2021: 25).

Critical thinking skills are important in the process of solving story problems to increase students' self-confidence (Anggraeni, Supriana, & Hidayat, 2019: 759). Critical thinking skills are very important for students because critical thinking can be used as a consideration in making decisions to solve story problems (Dores, Wibowo, & Susanti, 2020: 243). Therefore, this

research will discuss students' critical thinking skills in solving story problems with confidence.

LITERATURE REVIEW

1. Critical Thinking Ability

   Critical thinking ability is a mathematical ability that needs to be developed, critical thinking can make existing problems, students can filter information and are given the opportunity to apply their skills in thinking based on students' experience and knowledge in understanding mathematical concepts (Hajar & Minarti, 2019: 2). Meanwhile, according to Lubis, Moliq, & Fauzi (2020: 3) shows that critical thinking ability is the ability to think students can evaluate, take and strengthen a decision or conclusion. So that the ability to think critically is a ability that needs to be developed in evaluating, filtering information, understanding concepts, and making decisions.

   A person's critical thinking ability can be seen from how to give opinions confidently and how to act by giving reasons, students' critical thinking skills need to be developed so that students use their thinking critically to solve a problem given, so that with it critical thinking can be strengthened by indicators to find out students' critical thinking skills.

   According to Ennis (in Fatmawati, Mardiyana, & Triyanto, 2014: 913) indicators in critical thinking ability are (1) formulating the subject matter, (2) revealing facts, (3) having logical arguments, (4) identifying assumptions, and (5) drawing conclusions. So that from the indicators of critical thinking ability, this study uses 3 indicators, namely (1) formulating the subject matter, (2) analyzing arguments, and (3) drawing conclusions.

2. Self-Confidence

   Self-confidence is a state of a person who makes himself feel confident to take an action against his abilities (Melyana & Pujiastuti, 2020: 240). This is in line with the intention of self-confidence is a self-confidence in the potential possessed, in viewing oneself by referring to self-concept, and providing motivation for the achievement of one's success in solving problems (Septiani, Hudanagara, Hendriana, & Anita, 2018: 186). So that self-confidence is an attitude of confidence in his abilities so that he does not need to be anxious in acting, feel free to do what he likes, and have motivation for his achievements.

   Self-confidence in mathematics is a student's confidence in his mathematical abilities, with a high sense of self-confidence students can have confidence in the ability in himself to solve math story problems. According to Hendirana (2017) indicators of self-confidence are (1) believing in one's own abilities, (2) acting independently in making decisions, (3) respecting oneself and one's own efforts, and (4) daring to face challenges (Khoirunnisa & Malasari 2021: 51).

RESEARCH METHODS

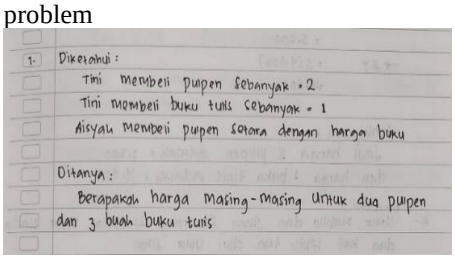
This research uses a qualitative approach, namely describing the picture of the problem under study. The researcher explained that 3 subjects out of 6 subjects selected by students had critical thinking skills and high self-confidence. The subject of this study was a class VIII student at SMP Negeri 2 Sampit in the odd semester of the 2021-2022 school year. Some of the research instruments used are non-questionnaire tests, critical thinking ability tests and interviews, this research was conducted face-to-face.

RESULTS AND DISCUSSION

The subjects in the study consisted of 2 subjects, namely subject 1 (S1) and subject 2 (S2). The description of the critical thinking ability of students who have confidence is as follows:

1. Description of Students' Critical Thinking Ability by Having Self-Confidence By S1

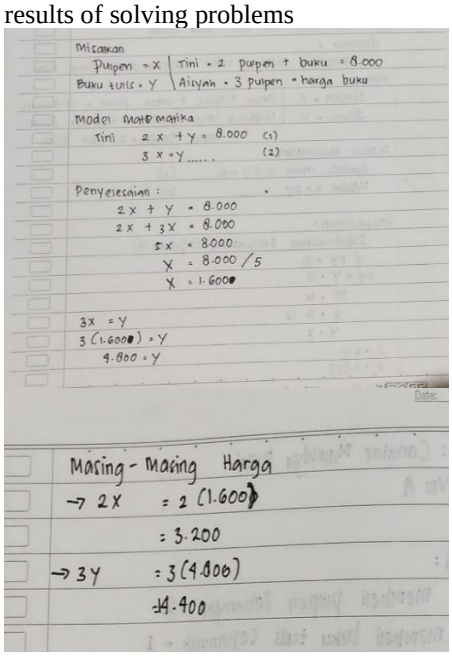
a. Understand the problem and write down information from the known and asked problem



Subject S1 is able to understand the problem by writing down the known and asked questions. This is also in accordance with the statement of the subject S1 "first I wrote down the known and asked on the question that is known to *Tini: bought as many as 2 pens and 1 writing book, Aisyah bought a pen equivalent to the price of the book.* And what is asked about *how much each is for 2 pens and 3 writing books".* Based on the results of the question work and

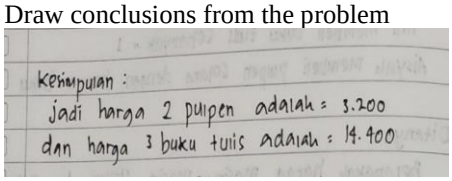
interviews, it shows that the S1 subject is able to understand the problem by writing down and mentioning information about the problem.

b. Analyze and create mathematical models, consider assumptions and determine the results of solving problems



Subject S1 is able to analyze and create mathematical models, consider assumptions and determine the results of solving problems on problems. This is also in accordance with the statement of the subject S1 "I solved the mathematical model on equation 1 so that the value of x was obtained, then the value of *x was substituted on equation 2 so that the value of y was obtained. After finding the results of each of them, then calculate the price according to the question question"*. Based on the results of the work on the questions and interviews, it shows that the subject of S1 is able to solve the problem and obtain the results correctly.

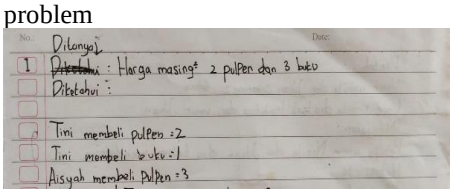
c. Draw conclusions from the problem



Subject S1 is able to draw conclusions from the problem on the question. This is in accordance with the statement of the subject S1 "*that for the price of 2 pens is 3,200 and the price of 3 notebooks is 14,400*". Based on the results of the work on the questions and interviews, it shows that the subject of S1 is able to draw conclusions correctly.

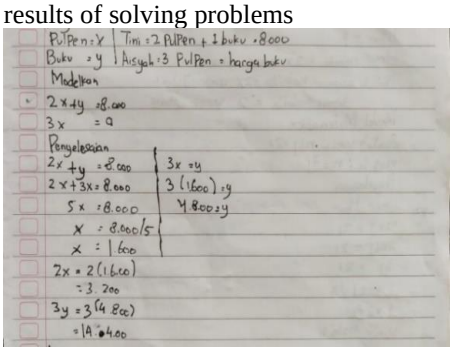
2. Description of Students' Critical Thinking Ability by Having Self-Confidence By S2

a. Understand the problem and write down information from the known and asked problem



The subject of S2 is able to understand the problem by writing down the known and asked questions. This is also in accordance with the statement of the subject of S2 "I wrote down the known and asked *on the question that is asked the price of 2 pens each, then what is known is that Tini bought 2 pens and Tini bought 1 book and Aisyah bought 3 pens*". Based on the results of the question work and interviews, it shows that the S1 subject is able to understand the problem by writing down and mentioning information about the problem.

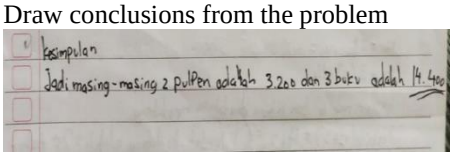
b. Analyze and create mathematical models, consider assumptions and determine the results of solving problems



Subject S2 is able to analyze and create mathematical models, consider assumptions and determine the results of solving problems in problems. This is also in accordance with the statement of the subject S2 "I solved the mathematical model on equation 1 so that the value of x was obtained, then the value of *x was substituted in equation 2 so that the value of y was obtained. After finding the results of each of them, then calculate the price according to the question question"*. Based on the results of the work on the questions and interviews, it shows that the subject of S1 is able to

solve the problem and obtain the results correctly.

c. Draw conclusions from the problem



The subject of S2 is able to draw conclusions from the problem on the question. This is in accordance with the subject statement S2 "*so the price of 2 pens is 3,200 and 3 notebooks are 14,400* respectively". Based on the results of the work on the questions and interviews, it shows that the subject of S2 is able to draw conclusions correctly.

CONCLUSION

Based on the results of the study, it can be concluded that students' critical thinking ability by having confidence is that students are able to understand problems, write down problem information from being known, namely Tini bought 2 pens and bought 1 writing book, while Aisyah bought more pens than Tini equivalent to the price of books, then what was asked was the price of 2 pens and 3 writing books, respectively. Students are able to analyze and create mathematical models, able to consider assumptions and determine the results of completion, namely solving mathematical models on the material of a system of two-variable linear equations (SPLDV). And students are able to draw conclusions from the problem, namely being able to conclude from the results of the final solution correctly.

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