Syekh Nurjati International Conference on Elementary Education (SICEE)
Volume 1, 2023
Doi: https://dx.doi.org/10.24235/sicee.v1i0.14631
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Students' Learning Difficulties in Learning Mathematics in View of Mathematical Resilience

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Abstract: In the learning process can not be separated from the difficulties experienced by students. The difficulty is in the form of students' lack of success in understanding concepts, principles, and story problems, even though students have tried to learn them. To overcome these difficulties requires a positive attitude, resilience and not easily give up from students in facing these difficulties. The purpose of this research is to describe the forms of learning difficulties in students who have high mathematical resilience. The approach in this study is qualitative with a case study type. Data collection instruments used test sheets, questionnaire sheets and interview sheets. Test sheets and interviews are prepared based on indicators of learning difficulties while questionnaire sheets are prepared based on indicators of mathematical resilience that are used to classify students' mathematical resilience categories. Data analysis techniques through data reduction, data presentation, and draw a conclusions. The results showed that students in the high and midle mathematical resilience category were able to use mathematical concepts, principles, and word problems well and used the right steps, but students in the high mathematical resilience category had difficulties in the process of determining the results of addition and subtraction. The causes of learning difficulties experienced by students are due to the lack of supervision of learning from parents, the physical and psychological conditions of students, and also the learning environment.
Keyword: Learning Difficulties, Mathematical Resilience, Learning Mathematics

INTRODUCTION

A good and fun learning process is important in producing learning objectives both from cognitive, affective, and psychomotor aspects (Muhamad & Novan, 2013). In the learning process can not be separated from the difficulties or obstacles experienced by students. Learning difficulties are disturbances for students related to internal and external factors of students which cause difficulties for students in terms of receiving, processing, and analyzing information obtained during learning. Learning difficulties are situations where students cannot learn properly, which is caused by threats, obstacles or distractions in learning that come from students' internal factors (Bahri, 2011). Learning difficulties are indicated by the existence of certain obstacles to achieving learning outcomes and are psychological, sociological, and physiological, so that in the end it can cause learning achievements to be achieved to be below what they should be. Students who cannot develop their understanding of a particular subject because the acquisition of knowledge and the process are not well integrated and do not allow students to capture meaning flexibly, one of which is learning mathematics (Bahri, 2011). Because the purpose of learning mathematics is for students to have the ability to understand mathematical concepts, explain the interrelationships between concepts and apply concepts or algorithms, in a flexible, accurate, efficient, and precise way in solving problems (Depdiknas, n.d.).

Learning mathematics can be interpreted as an effort made to learn mathematics, so that after learning students have new abilities and skills as a result of their efforts. However,

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mathematics tends to be a subject that is less desirable because it is abstract and there are too many formulas that must be memorized, this makes students have a negative attitude during the process of learning mathematics. On the other hand, the demands of students in facing the 21st century, namely having hard skills and soft skills. Hard skills are defined as mastery of science, technology, and technical abilities related to their field of knowledge. Hard skills in learning mathematics include mathematical understanding abilities, mathematical reasoning abilities, mathematical communication skills, mathematical representation skills, creative thinking skills, and critical thinking skills. While soft skills are defined as a person's ability to relate to other people, the ability to regulate oneself which is able to develop maximum performance. Soft skills in learning mathematics include abilities related to self-concept such as self-confidence, mathematical resilience, self-regulation, self-efficacy.

In fact, the students' soft skills and hard skills are not maximized. The results of interviews with students of class V MIN 4 Ponorogo showed that students had learning difficulties in learning mathematics on decimal addition and subtraction material, had difficulty understanding concepts, some were not careful in multilevel addition and subtraction, and also found it difficult to solve problems because there are many mathematical formulas so they are less interested in learning mathematics, this is in accordance with the statement (Iman & Firmansyah, 2020) that mathematics is not an easy subject to learn, so there are some difficulties and obstacles in the learning process, which can reduce students' enthusiasm for learning. This difficulty is caused because learning mathematics is full of challenges, so that it makes students feel anxious and try to avoid mathematics. This can be overcome by being serious, tenacious, and confident which is called resilience (Maharani & Bernard, 2018)

In addition, mathematical resilience or resilience in dealing with difficulties is still lacking, this is indicated by the discussion process in class, students have not been able to construct their knowledge and always want to be assisted by students who understand more or are assisted by their teacher. Mathematical resilience is the ability to solve problems by applying concept information to other concepts, situations, problems by associating mathematical ideas matematis (Donni, 2016). Many consider that the many formulas and assignments make mathematics an unpleasant subject so they are less interested in learning mathematics, and the lack of student interest results in low student mathematical resilience. So to overcome these learning difficulties, affection is needed, one of which is mathematical resilience.

Mathematical resilience is important for students to have. Students who have mathematical resilience are able to grow confidence in being able to answer questions well, have the necessary mathematical skills and are willing to apply them in everyday life (Lestari & Yudhanegara, 2015). According to Masten resilience as a process in the capacity or result of efforts to adapt to challenging or frightening conditions (Maharani & Bernard, 2018). In addition, mathematical resilience is an important mathematical soft skill possessed by students as a quality attitude in learning mathematics such as being confident in success through hard work, showing perseverance in facing difficulties, and being willing to discuss, reflect, and research (Rahmatiya & Miatun, 2020). Resilience is important in learning mathematics because many students experience difficulties, obstacles, and anxiety in learning mathematics, causing students to dislike mathematic (Sari et al., 2017) and resilience is one of the internal factors that influence students' success in learning mathematics (Hidayat, 2017) This is in line with research results which state that resilience can help students overcome difficulties in solving mathematical problem (Maharani & Bernard, 2018). Selain itu hasil penelitian lain menunjukkan bahwa siswa yang memiliki resiliensi tinggi mampu menyelesaikan permasalahan matematis lebih baik dari pada siswa yang memiliki resiliensi

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sedang maupun rendah (Kurnia et al., 2018). Seeing the importance of mathematical resilience in overcoming learning difficulties in mathematics, this study aims to describe how the learning difficulties of fifth grade students at MIN 4 Ponorogo are seen from their resilience.

METHOD

This study uses a qualitative approach to the type of phenomenological research. The research was conducted on fifth grade students at MIN 4 Ponorogo. Before the research was carried out, the researcher distributed a mathematical resilience questionnaire to all students of class V MIN 4 Ponorogo, totaling 24 students to determine the research subject. The research subjects consisted of 2 students, namely 1 student with high mathematical resilience category and 1 student with moderate mathematical resilience category who were selected by purposive sampling.

The instrument in this study was a mathematical resilience questionnaire sheet which totaled 40 items and was arranged based on indicators of mathematical resilience according to Sumarno, namely 1) attitude of perseverance, confidence/ self-confidence, hard work, not easily giving up in the face of problems, failures and uncertainties, 2) the desire to socialize, easily provide assistance, discuss with peers, and adapt to their environment, 3) bring up new ideas or ways and seek creative solutions to challenges, 4) use the experience of failure to build self-motivation, 5) showing curiosity, reflecting, researching, and utilizing various sources, 6) have the ability to speak, control yourself and be aware of his feelings (Ansori, 2020).

This questionnaire sheet is given with the aim of categorizing students' mathematical resilience. While the learning difficulty test sheet consists of 5 description questions and the interview sheet is arranged based on indicators of learning difficulties according to Cooney (Sholekah & Waluyo, 2017) which is presented in the following table:

Table 1. Learning Difficulty Indicators

Learning Difficulty Indicator	Descriptor
Difficulty in using the concept	Inability to explain in terms of a particular concept
	Cannot group objects as instances of a concept
	Inability to infer information from a given concept
Difficulty in using principles	Inability to perform algebraic calculations or operations
	Inability to state a principle
	Inability to establish a principle
Difficulty in solving story problems	Inability to use concepts
	Inability to apply principles

As for measuring mathematical resilience using a Likert scale. After all student questionnaire scores were calculated, the researcher then grouped the scores from the questionnaire results based on the high, medium and low resilience criteria presented in the following table (Kurnia et al., 2018).

Table 2. Grouping of Mathematical Resilience

Mathematical Resilience Category	Score

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Tall	$S \geq (\bar{x} + DS)$
Currently	$(\bar{x} - DS) < s < (\bar{x} + DS)$
Low	$S \leq (\bar{x} - DS)$

The results of the learning difficulties test for students who have a high resilience category will be analyzed according to the indicators of learning difficulties using data analysis techniques carried out in 3 stages, namely, 1) data reduction, namely in this process the selection of data that is in accordance with what is being studied and removing unnecessary ones, 2) data presentation, in this process reduced data is presented according to the needs in analyzing learning difficulties and, 3) drawing conclusions, at this stage comparing the data that has been presented and analyzing the data based on indicators of learning difficulties according to their level of resilience, namely in students who are in the high mathematical resilience category (Rijali, 2018).

RESULT AND DISCUSSION

a. Result

After the questionnaire was tested on …. students and categorized the results of the student resilience questionnaire, then 2 students with high mathematical resilience were selected to be given tests and interviews related to learning difficulties. The results of tests and interviews with high resilience subjects (RT) and moderate resilience subjects (RS) are presented as follows:

1) Description of High Resilience Subject Data Results

Problem Number 1: Indicator Difficulty in using mathematical concepts

The following presents the results of the answers to the RT subject's learning difficulties test on question number 1. The results of the answers are presented in the following figure:

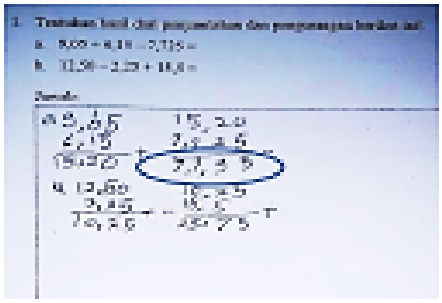

Figure 1. Results of RT Subjects' Answers

Based on the subject's answer sheet on question number 1 that the RT was able to complete the first question correctly but there were still errors. It can be seen from the picture that the RT solves the problem in accordance with a predetermined formula, namely by adding and subtracting it in layers down. However, when working on the questions in section a, the RT subject in the subtraction section had difficulty determining the borrowing and borrowing system. As shown in Figure 4.1, the subtraction result from 15.20 – 7.725, which should have resulted in a reduction of 7.475, but subject RT wrote down the result of 7.795 so that it was known that the subject was still experiencing difficulties and was not careful when

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working on the problem. This is reinforced by interviews with researchers with RTsubjects, namely as follows:

> "I understand the problem by understanding the questions and the instructions from the problem, but I still experience confusion when determining the value of the reduction by saving and borrowing and sometimes I forget how to operate it. The concept that I used when solving point a was first operating the form of adding decimal fractions first in a downward manner, after finding the result then subtracting it with the second decimal fraction so that the results of the addition and subtraction were found in the problem. Whereas in point b the concept used in solving the problem is the same as in solving point a, but the first thing to do is to determine the result of the subtraction value, if the solution to the problem cannot produce a value, then the method used is by saving and borrowing the numbers in front of it so that the final amount can be known, then adding the addition problem so that the final result of the addition and subtraction is resolved."

Based on the results of these interviews, it can be used as data reinforcement for the learning difficulty test in solving difficulties in using mathematical concepts in question number 1 that the RT has not been able to answer completely correctly. The RT subject experienced difficulties when working on the problem due to several factors, including the subject being less thorough and experiencing confusion when determining the value of the reduction with the savings and loan operating system.

Problem Number 2: Indicator Difficulty in using mathematical concepts

The following presents the results of the answers to the RT subject's learning difficulties test at number 2. The results of the answers are presented in the following figure:

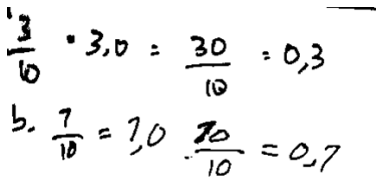

Figure 2. Results of RT Subjects' Answers

From the answer sheets of students with the RT subject above, it shows that the subject is able to answer question number 2 correctly and accurately. Subject RTcompleted the question on point a by means of 3/10 = 0.3. It can be seen that if there is one number after the decimal point, then the number is included in the 10th, so 0.3 is obtained by pulling one number forward. Thus point b also uses the same solution as point a because the denominator includes 10. In order to provide a more complete and analyzable data presentation on the learning difficulties faced by students who are subject to RT, an interview related to question number 2 was conducted. This can be strengthened by interviews with researchers with subject RT as follows:

> "I understand the problem by understanding the problem and the instructions from the problem to write down decimal numbers so I don't experience any problems in solving the problem. The first concept used is to carry out the division operation by determining the denominator that is closest to the number, then dividing the gun, after determining the value, convert it to a decimal fraction. And to remember how to solve the problem with a decimal fraction with a comma (,). There is also another concept for solving this problem by determining the denominator if there is one number after the decimal point including 10 so that 0.3 is obtained by dragging one of the numbers to the front of the comma."

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Based on the results of the interview above, it can be used as a data amplifier for the learning difficulty test in the difficulty of using mathematical concepts in question number 2, the RT subject does not experience difficulty, and was able to solve the problem correctly and correctly because it was caused by the subject RT having worked on similar questions before independently and still remembering the material taught by the teacher how to solve decimal fraction questions first determine the denominator and mark it with a comma (,).

Problem Number 3: Indicator Difficulty in using principles

The following presents the results of the answers to the RT subject's learning difficulties test at number 3. The following are the results of the answers presented in the following figure:

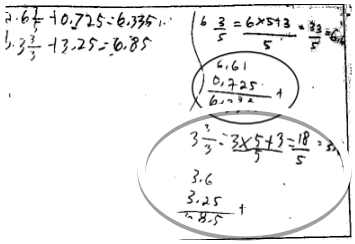

Figure 3. Results of RT Subjects' Answers

Based on the results of the subject's answers in figure 3 on the learning difficulties test item in number 3, it can be concluded that RT was able to solve the questions well but there were still errors. It can be seen in point a that the RT subject has not been able to solve the problem correctly in terms of adding mixed fractions. From the results of these answers it can be seen that the RT subject in the addition section experienced an error in determining the sum value and also experienced an error. Whereas in point b the RT subject was able to solve the questions correctly. However, the RT subject was wrong in writing down the results of the first decimal fraction value so that in determining the result of the addition of decimal fractions there was an error. The result should be 6,6+ 0,725 = 7,325 but subject RT wrote 6,61+ 0,725 = 6,335. This can be strengthened by conducting interviews with RT subjects as follows:

> "Actually, I have studied and understood the material for adding mixed fractions to this question. I did not feel confused when I was given a problem with fractions with different denominators, but in question number 3 I was not careful in determining the result of the mixed fractions so I had an error writing down the answer."

Based on the results of interviews with the RT subjects above, it can be used as reinforcement for the learning difficulty test data which refers to difficulties in using the principle in question number 3, it can be concluded that in fact the RT subjects were able to understand the questions and commands given but experienced errors in writing the results of operating ordinary fractions into decimal fractions so that in adding two decimal fractions they also experienced errors, this was caused by the factor of being too hasty and not careful when writing down the results obtained from adding decimal fractions.

Problem Number 4: Indicator of difficulty in understanding story problems

The following presents the results of the answers to the learning difficulties test on the RT subject in question number 4. The results of the answer sheets are presented as follows:

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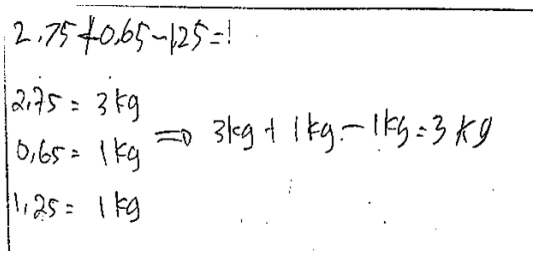

Figure 4. Results of RT Subject's Answers

Based on the results of the RT subject's answers to question number 4, it shows that the RT subject is able to understand the question and provide answers correctly and correctly without experiencing difficulties. The problem is presented about addition and subtraction with two different fractions. From figure 4 the RT subject can operate the addition and subtraction of two different fractions by interpreting them to the nearest tens according to the problem given 2.75 kg is estimated to be the nearest tenth to 3kg, 0.65kg to 1kg, and 1.25kg to 1kg. This can be strengthened by interviewing the RT subjects as follows:

> "I understand the meaning of the question by understanding the instructions in story number 4. Then I solve the problem first which is done by estimating the nearest tens. 2.75kg is estimated to be 3 kg, 0.65kg to 1kg, and 1.25kg to 1kg after each getting the value to the nearest tens estimate then solving to the form of addition and subtraction according to the problem, so the result is 3kg+1kg-1kg=3kg. No ma'am, I have no difficulty in solving the problem because I understand the meaning of the question and the instructions on the problem."

Based on the results of interviews with RT subjects, it can be concluded that RT subjects are able to understand the intent and instructions contained in question number 4 and are able to solve the problem correctly and accurately without experiencing difficulties caused by several factors including the RT subject being enthusiastic about working on the problem, still remembering material that has been studied previously and how to determine the number to the closest estimate so that it is easy to solve problems on these questions.

Number 5: Difficulty in understanding story problems

The following presents the results of the answers to the RT subject's learning difficulties test at number 5. The results of the answers are presented in the following figure:

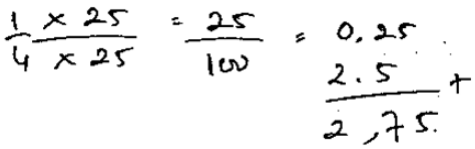

Figure 5. Results of RT Subjects' Answers

From Figure 5 the results of the RT subject's answers to the learning difficulty test item in number 5 show that the RT subject was able to solve the problem correctly and accurately without experiencing difficulty. From figure 5 subject RT solves the problem by operating ordinary fractions (1)/4 into decimal fractions first by determining the value of the numerator and denominator must be the same in order to obtain a denominator with a value of 100, from these results obtain results for the numerator and denominator multiplied by 25, so 1/4 = 1x25/4x25 = 25/100 = 0.25. After getting the results of operating ordinary fractions into

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decimal fractions, the next step is to determine the sum of the two decimal fractions 0.25 + 2.5 = 2.75. This can be strengthened by conducting interviews with RT5 subjects as follows:

> "I can understand the intent of the question by understanding the question instructions contained in number 5. The method I did in solving this problem was by operating common fractions into decimal fractions so that the numerator and denominator equate to 100, therefore the multiplier and denominator are multiplied by 25 to get a result of 0.25. The next step is to add the decimal fraction 0.25 + 2.5 to get a result of 2.75 kg.

Based on the results of interviews with RT subjects, it can be concluded that RT subjects are able to understand the intent and instructions in question number 5 and are able to solve the problem correctly and accurately without experiencing difficulties caused by several factors, including RT subjects who understand the material taught by the teacher making it easier for RT subjects to solve the story problems.

2) Description of Moderate Resilience Subject Data Results
Problem Number 1: Indicator Difficulty in using mathematical concepts

The following presents the results of the answers to the RS subject's learning difficulties test at number 1. The results of the answers are presented in the following figure:

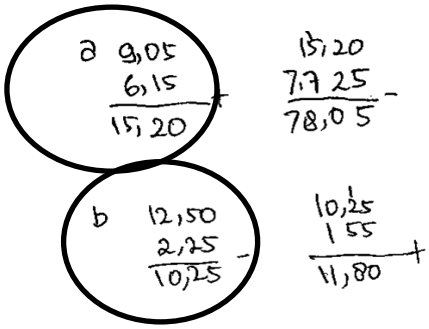

Figure 6. Results of RS Subjects' Answers

From Figure 6 the results of the RS subject's answers in solving the learning difficulty test questions in question number 1. RS subjects experienced difficulties in which concept to solve subtraction and addition questions in points a and b. The RS subject completed the problem by adding and subtracting it in layers down. It can be seen in point a in the addition question, the RS subject had no difficulty being able to give answers correctly and correctly, but when completing the subtraction, they had difficulty determining the final result, 15.20-7.725 = 78.05. From these answers it can be seen that the RS subject was also wrong in writing the numbers where the comma must be aligned with the comma so that in determining the final result also experienced an error in adding up, from this question the correct answer is 15.20-7.725 = 7.475.

Whereas in point b the RS subject also experienced an error in determining the final result of the addition of 10.25 + 1.55 = 11.80, the answer was because the subject was wrong in ordering the comma where the number should be 15.5 but the RS subject wrote the number 1.55 so that it had an effect on determining the final result of the summation, from question point b on the question determining the sum of the answers that should be 10.25 + 15.5 = 25.75. This can be corroborated by interviews with RS subjects as follows:

> "I experienced problems when calculating the value of addition and subtraction in the problem because I was not careful in understanding the problem and in writing the place value of the comma, I also still experienced errors. The concept that I used to solve this problem is to determine the value of addition and subtraction by stacking it down and if one of these

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numbers cannot be reduced, then the solution is by borrowing one number in front of it and the comma must line up with the other comma."

Based on the results of interviews with the RS subject, it can be concluded that the RS subject was able to solve the problem at number 1 point a correctly, but at point b it was difficult to determine the final result of subtraction and addition due to confusion in operating subtraction by saving and borrowing and errors in determining the value of the place of the comma, due to the factor of a lack of understanding in operating subtraction by saving and borrowing and still confused in determining the location of the comma.

Problem Number 2: Indicator of Difficulty in using the concept

The following presents the results of the RS-1 subject's answers to the learning difficulty test questions in number 2 as follows:

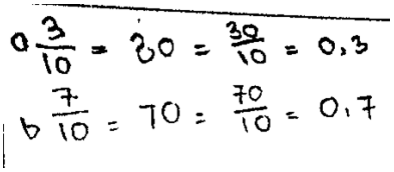

Figure 7. Results of RS Subjects' Answers

From Figure 7. the results of the RS subject's answers in solving the learning difficulty test questions in number 2 were able to solve the questions correctly and correctly. Subject RS stated that 3/10 is a number with tenths because there is one digit after the comma if converted to a decimal fraction, the result is 0.3 as well as by solving in point b. This can be strengthened by conducting interviews with RS subjects as follows:

"I had no difficulty solving problems to write common fractions into decimal fractions. The concept that I use in solving the problem is by determining the nearest tenth, then pulling one number forward because there is one number after the comma."

Based on the results of interviews with the RS subject, it can be used as a data amplifier for the learning difficulties test referring to difficulties in using mathematical concepts, it can be concluded that the RT-2 subject was able to solve the questions correctly and correctly in accordance with the question instructions given.

Problem Number 3: Indicator Difficulty in using principles

The following presents the results of the RS subject's answers to the learning difficulty test questions in number 3 as follows:

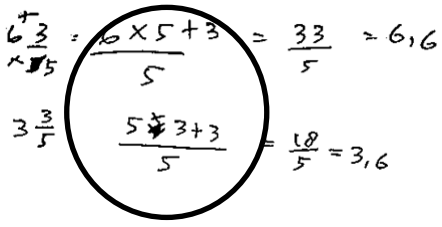

Figure 8. Results of RS Subjects' Answers

From Figure 8. the results of the RS subject's answers in solving the learning difficulty test questions on question number 3, the RS subject was able to complete the questions in points a and b but did not complete the question order until the end. It can be seen from the results of the RSsubject's answers that they only solved the problem up to simplifying

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ordinary fractions to decimal fractions only, $\mathbf{6\frac{3}{5} = \frac{6x5+3}{5} = \frac{33x2}{5x2} = \frac{66}{10} = 6,6}$. Likewise with point b subject RS also solves the problem only by simplifying ordinary fractions to decimal fractions, namely$\mathbf{3\ \frac{3}{5} = \frac{3x5+3}{5} = \frac{18}{5} = 3,6}$. The way to solve the problem in number 3 points a and b is as follows $\mathbf{6\frac{3}{5} = \frac{6x5+3}{5} = \frac{33x2}{5x2} = \frac{66}{10} = 6,6 + 0,725 = 7,325}$For point b by way of ie $\mathbf{3\frac{3}{5} = \frac{3x5+3}{5} = \frac{18}{5} = 3,6 + 3,25 = 6,85}$. This can be strengthened by interviews with RS subjects as follows:

> "Actually, I have learned and understand about the material for adding mixed fractions to this problem. I don't feel confused when I am given a problem with fractions that have different denominators, but I was not careful in understanding the problem, so that in solving problem number 3 it has not been resolved properly."

Based on the results of interviews with the subject of the RS, it can be used as reinforcement that the subject of the RS is able to solve questions and understand the material previously studied, but does not complete the order of the questions as a whole, this is due to factors including class conditions that are not conduc, too hasty when solving questions and not careful in working so that the RS subject does not complete the next problem to the fullest.

Problem Number 4: Indicator Difficulty in understanding story problems

In the following, the results of the RS subject's answers to the learning difficulties test in number 4 are presented as follows:

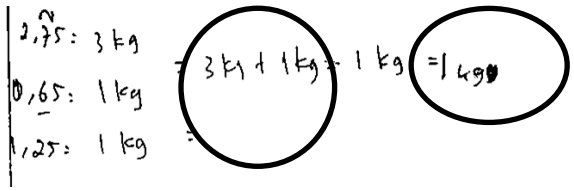

Figure 9. Results of RS Subjects' Answers

From Figure 9, the results of the RS subject's answers to the learning difficulties test in number 4, the RS subject were able to complete the intent of the question and the instructions on the question but had difficulty determining the final result of the addition and subtraction operations on the question. From the results of the RS subject's answers, the nearest tenths were estimated from 2.75 kg to 3 kg, 0.65 kg to 1 kg, and 1.25 kg to 1 kg. but experiencing difficulties when writing down the solution method and the final result of addition and subtraction, it can be seen from the results of the RS subject's answers adding up 3kg+1kg-1kg = 1kg, which the final result should be 3kg+1kg-1kg = 3kg. From these data it can be strengthened by conducting interviews with the subject of the hospital as follows:

> "I understand the meaning of the question by understanding the instructions in story number 4. Then I solve the problem first which is done by estimating the nearest tens. 2.75kg is estimated to be 3 kg, 0.65kg to 1kg, and 1.25kg to 1kg after each getting the value to the nearest tens estimate then solving the form of addition and subtraction according to the problem, so the result should be 3kg+1kg-1kg= but I was not careful when solving the problem so that in writing the final result of addition and subtraction of 3kg+1kg-1kg=1kg so that from these results an error occurred when writing the result of the nearest tens estimate."

Syekh Nurjati International Conference on Elementary Education (SICEE)
Volume 1, 2023
Doi: https://dx.doi.org/10.24235/sicee.v1i0.14631
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Based on the results of these interviews, it can be concluded that the RS subject was able to solve questions with the closest tens estimate correctly and accurately, but when writing the final results of addition and subtraction an error occurred due to inaccurate factors when writing the final results of the addition and subtraction arithmetic operations.

Problem Number 5: Indicator Difficulty in understanding story problems

In the following, the results of the RS subject's answers to the learning difficulties test in number 5 are presented as follows:

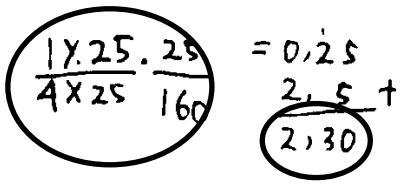

Figure 10. Results of RS Subjects' Answers

From Figure 10, the results of the RS subject's answers to the learning difficulty test item in number 5 show that the RS subject had difficulty solving the problem in number 5. From picture 10, subject RS solves the problem by operating ordinary fractions $\frac{1}{4}$ form a decimal fraction first by determining the value of the numerator and denominator must be the same in order to get the denominator with a value of 100, from these results get the results for the numerator and denominator multiplied by 25, so $\frac{1}{4} = \frac{1X25}{4x25} = \frac{25}{100}$ = 0,25. After getting the result of operating ordinary fractions into decimal fractions, the next step is to determine the sum of the two decimal fractions 0,25 +0,5 = 2,30. From these answers RS experienced an error in adding up the final result of the addition of the two decimal fractions, from the image of the results of these answers it can be seen that the RS subject was mistaken in writing the addition problem which the solution should be 0,25kg+2,5kg=2,75kg. Thus the RS subject experienced difficulties in operating on the final results because they were not thorough and the comma was not aligned with the other commas. This can be strengthened by conducting interviews with RS subjects as follows:

> "I can understand the intent of the question by understanding the question instructions contained in number 5. The method I did in solving this problem was by operating common fractions into decimal fractions so that the numerator and denominator equate to 100, therefore the multiplier and denominator are multiplied by 25 to get a result of 0.25. The next step is to add decimal fractions 0,25 + 2,5 get results 2,75kg but I had difficulty determining the final result where the final result should be 2.75 kg but I wrote it 2.30 and the comma is not aligned with the other commas."

Based on the results of interviews with the RS subjects, it can be concluded that the RS subjects were able to understand the intent and instructions contained in question number 5 and had not been able to solve the problem correctly so that the difficulty was caused by several factors including the RS subject understanding the material taught by the teacher but still confused in determining the value of the comma position and not being careful when writing down the numbers, so the final result in the preparation of the sums experienced an error.

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b. Discussion

In questions number 1a and 1b, in terms of understanding the concept of the subject, RT was able to write down the answers correctly and correctly but still experienced difficulties, namely determining the results of addition and subtraction. The results of interviews with the subject also showed that in determining the results of addition and subtraction the subject completed by laying down and determining the location of the comma parallel to the other commas to make it easier to operate to determine the results, the subject showed that he was able to answer questions but had not answered correctly, the subject wrote down the steps for completion, namely first the subject calculated the results of addition and subtraction one by one. In question number 2, in terms of understanding the concept, the subject is able to answer questions correctly and correctly. The subject was able to understand the purpose of the question, namely to write down decimal numbers, was able to give answers according to the steps involved and the answers were also complete and clear, namely by carrying out the division operation by determining the denominator closest to that number, then dividing the gun after determining the value and then converting it to decimal fractions.

In working on this problem, it can also be solved by determining the denominator, if there is one digit after the decimal point, then the number includes a fraction with the denominator tenths, besides that the subject is sure of the answer. So that subjects who have a high mathematical resilience category in solving problems of addition and subtraction of decimal fractions are able to understand concept questions but still need help in remembering how to solve them. This is in accordance with Bryannt, Hartman and Kim's statement that not all students' difficulties in mathematics are related to children's knowledge of mathematics, some reflect other problems such as memory, difficulties in remembering math problems, weak calculation skills, number of reversals, and difficulty understanding signs of operation. Meanwhile, based on USEO students with learning difficulties may have problems with mathematical calculations and mathematical reasoning (Yeni, 2015).

In question number 3 the subject can also answer questions in terms of principles correctly and correctly. It can be seen from the results of the subject's answers that he was able to operate correctly according to the category, was able to answer the question in accordance with the steps that had been taught by the teacher, the subject completed the addition of mixed fractions by first operating ordinary fractions into decimal fractions followed by adding the second decimal fraction. Likewise in solving problem number 3 point b the steps taken in solving the problem are the same as those carried out in point a.

Whereas in questions number 4 and 5 in solving story problems the subject can complete them correctly. It can be seen from the results of the answers, students answer according to the steps that have been studied with the teacher, this shows that what is conveyed by the teacher in learning can be understood and remembered by students. This was reinforced from the results of the interviews that the students had understood the questions and provided answers correctly. Solso, et.al that memory is the most important element in cognitive processes so that even in learning especially mathematics is the highest element (Heryani et al., 2021). As Pacuela said in learning, learning difficulties are one of the triggers that influence the learning process, and the teacher has a role to be able to understand and guide students who have difficulty (Heryani et al., 2021)

From the results of the answers to questions number 1 to 5 students who are in the high mathematical resilience category are able to work on and understand questions which include 3 indicators of learning difficulties, namely understanding concepts, principles and story questions, well and confidently, but the subject has a little difficulty in making calculations. This is in line with the statement of Wibowo which states that students with high

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mathematical resilience have the mathematical abilities needed to answer exam questions even when needed outside of school and are always happy when using them (Azizah & Abadi, 2022) and students who have high mathematical resilience even though they are in unfavorable conditions will still be successful in learning mathematics at school, because they will try their best to carry out mathematics learning (Asih et al., 2019).

Factors that cause the subject to experience difficulties in solving these problems due to the use of gadgets that exceed the time so that they are negligent about school assignments. Cellphones greatly affect the student learning process, because students who often use cell phones tend to be lazy to study. With the various negative effects of cellphones, it is hoped that parents can supervise and limit their children's use of cellphones. The solution to the problems above should be the teacher giving encouragement and is expected to be able to provide the right media in learning. This is in line with the classification of student learning difficulties according to Cooney, namely difficulties in using children's concepts no longer depend on real objects or other teaching aids, but in this phase children are able to think abstractly to solve mathematical problems (Atiaturrhahmaniah et al., 2017). Because when studying mathematics, of course, you need a real picture, not just lectures. With the existence of interesting supporting facilities for learning mathematics, it will make it easier for teachers to convey material so that students will more easily understand and attract students' attention to take mathematics lessons.

Meanwhile, for subjects in the moderate resilience category, in terms of understanding the concept in question number 1 point a and b, they are able to provide correct answers, the subject is able to provide correct answer results from summation, but they still experience difficulties. This is indicated by the subject's answer in solving addition and subtraction questions, namely by stacking down and determining where the comma is parallel to the other commas and if the subtraction does not get results then the method is done by borrowing one number in front of it. Whereas in question number 2 the subject was able to understand the intent of the question and give the correct answer even though he only wrote down the answer. his can be strengthened by the results of interviews with subjects who say that students understand how to solve the problem. In problem number 3 in terms of using principles, the subject was able to solve the problem but did not finish the problem until the end by operating ordinary fractions into decimal fractions. The subject actually understands the material for adding mixed fractions, when given fractions with different denominators and the subject does not feel confused. However, the subject experienced difficulty in counting and in solving student questions it took a long time.

Whereas there are questions number 4 and 5 in understanding story questions students are able to solve questions and understand the meaning of the questions but are not correct and precise. Subjects in the resilience category were experiencing difficulties when writing the sum results because they were not thorough and in a hurry and lacked confidence when solving questions so that errors occurred. Overall, based on the test results of question number 5, the subject in the moderate resilience category was able to solve the problem with the correct steps, but still experienced errors in determining the final result.

So that subjects in the moderate resilience category were able to solve questions number 1 to 5 namely in using concepts, principles and solving word problems well, indicated by students being able to write down what was known and asked about the problem, but in solving it it was still not right. In solving math problems related to principles, students must first master the concepts. Understanding concepts refers to students' basic understanding of mathematical concepts, but the subject of resilience is still experiencing difficulties in counting and determining formulas from questions. This is also in line with the statement (Nurfitri & Jusra, 2021) that students who have moderate resilience in their mathematical

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problem solving abilities have not been able to achieve systematic steps in mathematical problem solving abilities, are less thorough, and tend to give up when faced with difficult questions.

able to solve problems in learning difficulties both in concepts, principles, and word problems but still experience difficulties. Students with high resilience are able to determine the results of adding and subtracting decimal fractions by stacking it down but still have difficulty determining the final result. Students can also solve problems by writing decimal fractions correctly, and also solve addition problems with mixed fractions correctly and correctly. In solving word problems, they also have no difficulty, students are very confident and confident when faced with problems. Meanwhile, students with resilience are experiencing difficulties in understanding the principles and word problems because they feel confused when solving problems by determining additions with different denominators. do not remember the formula used to solve the problem.

THANK-YOU NOTE

My gratitude goes to Allah SWT, because of His blessings and mercy, this scientific article can be completed. The writing of scientific papers is carried out in order to fulfill the tridharma duties of lecturers as well as in order to increase scientific competence in the field of scientific papers. The author realizes that in writing this scientific article there are still shortcomings, for this reason, constructive criticism and suggestions are expected to improve this scientific writing. the author thanks and hopefully this scientific article can be useful for all parties who need it

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