The Relationship Between Learning Anxiety And Students' Mathematics Learning Difficulties During The Covid-19 Pandemic

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Article Info

Abstract

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This quantitative study aims to determine the relationship between anxiety in learning mathematics and learning difficulties in mathematics for class XI students at SMAN 5 Kendari during the covid-19 pandemic using correlational research methods. Data was collected through online questionnaires using google forms. This study uses a gradual sampling technique. The first stage uses stratified random sampling by considering classes XI MIPA, XI IPS, and XI BB as strata. Then each stratum is calculated using the proportional stratified random sampling formula. Furthermore, in class XI MIPA, cluster random sampling was conducted to select four classes from the six available classes. Again, each selected class will be selected at simple random sampling. This study indicates a significant relationship between students' mathematics learning anxiety and students' mathematics learning difficulties in Class XI SMA Negeri 5 Kendari during the Covid-19 pandemic. The relationship between students' mathematics learning anxiety variables and mathematics learning difficulties is low, and the magnitude of the relationship between mathematics learning anxiety and mathematics learning difficulties in class XI SMAN 5 Kendari using Spearman-rank correlation analysis is 0.329.

1. INTRODUCTION

Educational institutions are one of the platforms for the generation of a nation. The better the education system in a country, the better the quality and quantity of the country. For this reason, the role of the government is very much needed to prepare a generation that can become the nation's successor. From education, agents of change are born. One receives education, even though the community will create an imbalance. The current education system requires students and educators to understand technology. Most learning is conducted using various online applications, such as WhatsApp, Google Classroom, Zoom, Google meet, etc. Online learning is an educational innovation involving information technology elements in learning (Fitriyani et al., 2020). This is a solution offered by the government during the Covid-19 pandemic as one of the efforts made to break the spread of the Covid-19 chain, namely by doing social distancing. Since March 2020, distance learning in Indonesia has been carried out, but it still raises a lot of polemics and concerns. Among them are related to learning anxiety and students' learning difficulties during the pandemic, especially in learning mathematics.

Until now, mathematics has often been a scourge in students' minds, one of the subjects is considered scary, so it affects students' mathematical literacy, especially in Indonesia, which is relatively low. The Organization for Economic Cooperation and Development (OECD) assessed students' abilities related to mathematical, scientific, and reading literacy for 15-year-old students in the Program for International Student Assessment (PISA) 2015, placing Indonesia in position 63 of 70 countries in the field of mathematical literacy (Susanti & Syam, 2017). In addition, SMPN/MTs students in Kendari are still dominated by mathematical literacy skills with a low category of 99.8% (Patih et al., 2019). Students must at least learn in a comfortable position without any distractions in understanding mathematical concepts, so they are expected to have good mathematical problem-solving skills. However, the spectre of mathematics that is scary or difficult for students sometimes makes students frustrated and traumatized continuously, which will cause anxiety in students if not handled. This anxiety will interfere with the psychology and emotions of students when studying or interacting with mathematics subjects.

Anxiety when getting math lessons can be overcome in various ways. One way to overcome anxiety when getting math lessons is to increase students' self-efficacy. Meanwhile, self-efficacy is the belief in one's ability to organize a task to achieve specific results. Self-efficacy will affect one's behaviour. The higher one's self-efficacy, the more likely the expected results will be achieved. A student with low self-efficacy may lack the effort to learn and therefore does not believe that learning will help him to work on the problems or tasks that must be completed. Several previous research results show that self-efficacy impacts students' learning motivation. The higher the self-efficacy, the greater the student's learning motivation. Self-efficacy will determine a person's effort and persistence when taking action to pursue his goals. Students who have high self-confidence generally feel competent so that they have the will to be involved in an activity or action (Imro'ah et al., 2019).

To have the skills to solve math problems, students need to learn in a relaxed state without any distractions. In behavioural theory, continuous and unaddressed panic and phobia will cause anxiety in students. This anxiety will interfere with students' psychology and emotions when studying or interacting with subjects. Students' anxiety experienced in mathematics is often referred to as mathematics anxiety (Anita, 2014). According to Nurmila (2016), mathematics anxiety is tension and anxiety in students that affects solving mathematical problems in real life and academics. Student anxiety cannot be taken as a matter of course. This math anxiety results in self-control, the drive to act, perseverance, enthusiasm and motivation to learn and the tendency to avoid learning mathematics, affecting students' achievement in learning mathematics. Erdogan et al. in Dzulfikar (2013) state that mathematics anxiety is the most significant factor that can hinder students' mathematics learning achievement. Mathematics is often considered to be the most difficult. This happens because the material from the mathematics lesson itself is already complex.

Moreover, learning is conducted online, the results of research conducted by Fauzy & Nurfauziah (2021), one of the difficulties is the many formulas used in mathematics, and the objects studied in mathematics have abstract patterns. However, everyone should learn it because it is essential to solve everyday life's problems. So, students are required to learn. The ability of students to develop their potential is very diverse. Likewise the difficulties he faces will be different too. Students always find problems in the learning process at school. After the learning process is switched to online, students' challenges also increase, especially in the online learning process in mathematics lessons (Yulia et al., 2021).

Recent research studies explain that mathematics anxiety is one of the many factors influencing students' mathematics learning achievement. The occurrence of mathematical anxiety often accompanies low achievement in learning mathematics. Students with high mathematics learning achievement will tend to have low mathematics anxiety. Mathematics anxiety experienced by students can be caused by basic assumptions about mathematics itself, learning experiences in the classroom, teaching methods and family. Mathematics is considered a complex subject. Difficulties in mathematics can cause anxiety in students.

Anxiety in mathematics means being anxious about everything related to mathematics. Anxious about being unable to work on questions, anxious when taking math lessons, anxious when asked by the teacher, and so on (Aunurrofiq & Junaedi, 2017).

The problem of learning mathematics is supported by research conducted by Maulani et al. (2021) which states that the types of difficulties experienced by students are in remembering facts, remembering concepts, understanding facts, understanding concepts, evaluating procedures, and communicating metacognitively. The difficulty factors experienced by students in solving math problems in the form of story questions are that students feel the time given is not enough, give up easily, are less thorough, often forget, feel anxious, and are in a hurry to work on questions. Furthermore, research from Tias & Wutsqa (2015) states that students' mathematical difficulties lie in difficulty in remembering facts, difficulties in understanding facts, difficulties in applying facts, difficulties in analyzing facts, difficulties in remembering concepts, difficulties in understanding concepts, difficulties in applying concepts, difficulties in analyzing concepts, difficulty understanding procedures, difficulties in using procedures, difficulties in analyzing procedures, difficulties in remembering visual-spatial concepts, difficulties in applying visual-spatial, difficulties in analyzing visual-spatial. The difficulty factors experienced by high school students in solving math problems are: students are less thorough, rushing in doing questions, forgetting, lack of time to work on questions, giving up quickly, being fooled, and anxious.

Based on a preliminary study conducted by researchers at SMAN 5 Kendari, researchers distributed online questionnaires to several classes XI students at SMAN 5 Kendari. In distributing the online questionnaire, it was known that some of the problems faced by class XI students were anxious about learning mathematics online. The first problem is: that class XI students at SMAN 5 Kendari feel tense or anxious in dealing with math problems when learning online, as some students are often late in sending assignments given by the teacher. This is explained by Hendriana et al. (2017) that students experience continuous anxiety during online learning. The second problem is that class XI students of SMAN 5 Kendari experience severe difficulties. It feels that they are already at the maximum threshold in mathematics and feel helpless, such as some students only sending part of the answers to their assignments. Marliani & Hakim (2015) explain that anxiety is a subjective feeling of restless mental tension as a general reaction to an inability to cope with a problem.

2. METHODS

This research is quantitative research with a correlational research method. Quantitative research is a study based on the philosophy of positivism, used to examine specific populations or samples, data collection using research instruments, and quantitative data analysis to test predetermined hypotheses (Sugiyono, 2013). This study aims to determine the relationship between mathematics learning anxiety and mathematics learning difficulties for XI grade students of SMAN 5 Kendari during the covid-19 pandemic. In this study, the researcher did not give treatment; the researcher wanted to find out the relationship between the X and Y variables and later expected to change the students' condition for the better. This research was conducted at SMAN 5 Kendari on April 13, the first semester of the 2021 academic year. There are several reasons why the researchers chose the research location. First, based on a preliminary study, several problems were found by students learning mathematics. Second, the research location is affordable for researchers to minimize the funding for this research. Third, both teachers and students are very cooperative. This can be seen when the researchers conducted a preliminary study. The students and teachers were very responsive and enthusiastic in providing the information needed in this study. Data was collected by distributing questionnaires (surveys) to students of class IX MIPA, XI IPS, and XI Language and Culture (BB) SMA Negeri 5 Kendari. Data collection was carried out using online instruments using the google form. For categorizing

the level of anxiety and learning difficulties in mathematics, the researchers used the guidelines from Sugiyono (2015) as follows:

Table 1 Categorization of Anxiety and Difficulty in Learning Mathematics of Students

Score	Category
$X < (\overline{X} - 1,0SD)$	Low
$(\bar{X} - 1,0SD) \le X < (\bar{X} + 1,0SD)$	Moderate
$(\overline{X} + 1.0SD) \le X$	High

Where X is the student's score/total score, \bar{X} is the mean score of students, and SD is the standard deviation of the student's overall score.

3. RESULT AND DISCUSSION

Descriptive Analysis

Data on students' mathematics learning anxiety scores during the covid-19 pandemic was obtained from a mathematics learning anxiety questionnaire filled out by class XI students of SMAN 5 Kendari. It consists of 21 statement items, each with four alternative answers. If the statement is positive: very appropriate, it is worth 4, appropriate is worth 3, less appropriate is worth 2, not appropriate is worth 1, and if the statement is negative: very appropriate is worth 1, appropriate is 2, less appropriate is worth 3, not appropriate is worth 4. Then the student learning anxiety questionnaire data scores are processed, and the results can be seen as follows:

Table 2 Statistics of Students' Mathematics Learning Anxiety Scores during the Covid-19 Pandemic

Statistic	Value
Number of Samples	200
Mean	43,46
Standard Deviation	6,47
Lowest Score	22,00
Highest Score	61,00

Table 2 shows that the average score of students' mathematics learning anxiety during the covid-19 pandemic was 43.46; the standard deviation was 6.47; The highest score was 61.00, and the lowest score was 22.00 from a total sample of 200. Furthermore, the student learning anxiety data questionnaire scores during the covid-19 pandemic were interpreted into pictures of student learning anxiety scores.

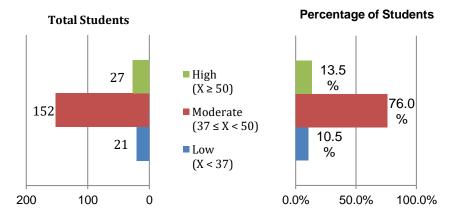


Figure 1 Number and Percentage of Students Based on Anxiety Levels in Learning Mathematics

From Figure 1 above, it is known that there are 27 students (13.5%) who have high learning anxiety, 152 students (76.0%) who have moderate learning anxiety, and 21 students (10.5%) who have learning anxiety in the low category. Based on this data, the percentage of students' learning anxiety scores during the COVID-19 pandemic is in the moderate category.

Table 3 Statistics of Students' Mathematics Learning Difficulty Scores during the Covid-19 Pandemic

Statistic	Value
Number of Samples	200
Mean	60,83
Standard Deviation	8,51
Lowest Score	31,00
Highest Score	85,00

From Table 3, the average value is 60.83, the standard deviation is 8.51, the highest score is 85.00, and the lowest score is 31.00 from a total sample of 200. Furthermore, the data on the questionnaire scores on students' mathematics learning difficulties during the COVID-19 pandemic were interpreted into the picture of student learning difficulties scores in Figure 2 below.

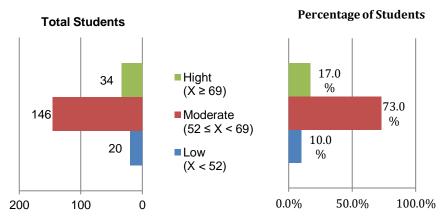


Figure 2 Number and Percentage of Students by Level of Difficulty in Learning Mathematics

From Figure 2 above, there are 34 students (17.0%) in the high category, 146 students (73.0%) in the moderate category, and 20 students (10.0%) in the low category. Based on this data, the trend of the percentage of students' mathematics learning difficulties questionnaire scores during the COVID-19 pandemic was in the moderate category.

Table 4. Statistics of Students' Mathematics Learning Anxiety Scores during the Covid-19 Pandemic by gender

	Value		
Statistic	Male	Female	
Number of Samples	76	124	
Mean	44,54	42,79	
Standard Deviation	6,10	6,62	
Lowest Score	22	24	
Highest Score	61	61	

From Table 4 for male students' mathematics learning anxiety scores during the covid-19 pandemic, the average value was 44.54; the standard deviation of 6.10; the highest score was 61, and the lowest score was 22 from a total sample of 76. Furthermore, for female students' mathematics learning anxiety scores during the covid-19 pandemic, the average score was 42.79; the standard deviation of 6.62; The highest score was 61, and the lowest score was 24 out of a total sample of 124. Furthermore, the data on students' mathematics learning anxiety questionnaire scores during the covid-19 pandemic was interpreted into the image of male students' learning anxiety scores in Figure 3 below.

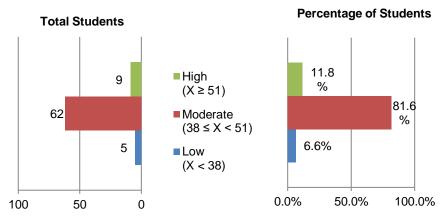


Figure 3 Number and Percentage of Male Students Based on Anxiety Levels in Learning Mathematics

From Figure 3 above, there are nine students (11.8%) in the high category, 62 students (81.6%) in the moderate category, and five students (6.6%) in the low category. Based on this data, the trend of the percentage of male students' mathematics learning anxiety questionnaire scores during the COVID-19 pandemic was moderate.

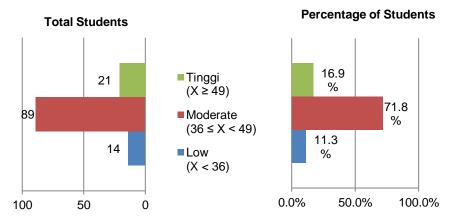


Figure 4 Number and Percentage of Female Students Based on Anxiety Levels in Learning Mathematics

From Figure 4 above, there are 21 students (16.9%) in the high category, 89 students (71.8%) in the moderate category, and 14 students (11.3%) in the low category. Based on this data, the trend in the percentage of female students' mathematics learning anxiety questionnaire scores during the COVID-19 pandemic was in the moderate category.

Table 5. Statistic of Students' Mathematics Learning Difficulty Scores during the Covid-19
Pandemic by Gender

Statistic	Value		
Statistic	Male	Female	
Number of Samples	76	124	
Mean	61,13	60,64	
Standard Deviation	9,62	7,78	
Lowest Score	31	43	

Highest Score 84 85

From Table 5 for the score of male students' mathematics learning difficulties during the covid-19 pandemic, the average score was 61.13; the standard deviation of 9.62; the highest score was 84, and the lowest score was 31 out of a total sample of 76. Furthermore, for female students' math learning difficulties score during the covid-19 pandemic, the average score was 60.64; the standard deviation of 7.78; The highest score was 85, and the lowest score was 43 out of a total sample of 124. Furthermore, the data on students' mathematics learning anxiety questionnaire scores during the covid-19 pandemic was interpreted into the picture of male students' learning difficulties scores in Figure 5 below.

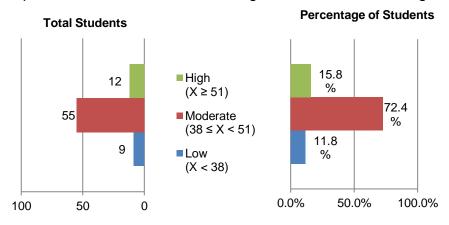


Figure 5 Number and Percentage of Male Students by Level of Difficulty in Learning Mathematics

From Figure 3 above, there are 12 students (15.8%) in the high category, 55 students (72.4%) in the moderate category, and nine students (11.8%) in the low category. Based on this data, the trend in the percentage of male students' mathematics learning difficulties questionnaire scores during the COVID-19 pandemic was moderate.

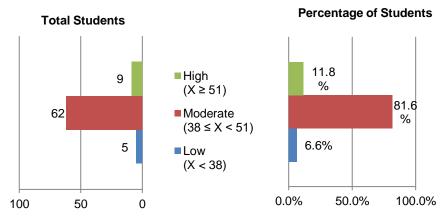


Figure 6 Number and Percentage of Female Students Based on Their level of Difficulty in Learning Mathematics

From Figure 6 above, there are nine students (11.8%) in the high category, 62 students (81.6%) in the moderate category, and five students (6.6%) in the low category. Based on this data, the trend in the percentage of female students' mathematics learning difficulties questionnaire scores during the COVID-19 pandemic is in the moderate category.

Hypothesis Testing

Before testing statistical hypotheses to see whether there is a relationship between anxiety in learning mathematics and students' learning difficulties in mathematics during the covid-19 pandemic, the normality of the data was tested for each variable. The results can be seen in Table 4 below.

Table 4. Data Normality Test Results

Kolmogorov-Smirnov Variable Test			Shapiro-V	Vilk Test
	Statistic	Sig.	Statistic	Sig.
Mathematics Learning Anxiety	0,068	0,026	0,986	0,040
Difficulty in Learning Mathematics	0,082	0,002	0,979	0,005

Table 4 shows that the significance value (sig.) for the Kolmogorov-Smirnov test and the Shapiro-Wilk test is < 0,05. It can be concluded that the data on mathematics learning anxiety and students' learning difficulties in mathematics during the covid-19 pandemic did not follow a normal distribution (not normally distributed). Because the data does not meet the assumption of a normal distribution, the hypothesis testing in this study uses Spearmanrank correlation analysis with the following formula:

$$\rho = 1 - \frac{6\sum_{i=1}^{n} d_{i}^{2}}{n(n^{2} - 1)} \rho = 1 - \frac{6\sum_{i=1}^{n} d_{i}^{2}}{n(n^{2} - 1)}$$
 (Widiyanto, 2013).

Keterangan:

 ρ = spearman rank correlation value

 $d_i = difference of each pair of rank$

n = number of rank pairs for spearman

Research hypothesis testing was conducted to determine the relationship between mathematics learning anxiety and students' learning difficulties in mathematics during the pandemic. The formulation of the proposed hypothesis is as follows:

1. Sentence hypothesis

H0 = there is no relationship between anxiety in learning mathematics and difficulty in learning mathematics for class IX students of SMAN 5 Kendari

H1 = there is a relationship between anxiety in learning mathematics and difficulty in learning mathematics for class IX students of SMAN 5 Kendari

2. Statistical Hypothesis

 $H0 = \rho = 0$

H1 = $\rho \neq 0$

Note:

 ρ = The magnitude of the relationship between the variables of mathematics learning anxiety and mathematics learning difficulties of class IX students at SMAN 5 Kendari.

The results of testing the research hypothesis can be seen in the following table:

Table 5. Correlation Analysis Results

Variable	Difficulty in Learning Mathematics	Statistic
Mathematics Learning Anxiety	0,329	Koefisien Korelasi Spearman's rho

0.000

Sig. (2-tailed)

From table 5, it can be seen that the value of sig. = 0.000 < 0.05, so it can be said that there is a significant positive relationship between students' mathematics learning anxiety and students' mathematics learning difficulties during the Covid-19 pandemic. Then, spearman's rho correlation value can be seen to see how strong the relationship between students' mathematics learning anxiety and mathematics learning difficulties is. From the output of the analysis above, the *spearman's rho* correlation value between Students' Mathematics Learning Anxiety (X) and Students' Mathematics Learning Difficulties (Y) is 0.329 (positive relationship). According to Sugiyono (2013), the guidelines for determining the strength of the relationship between variables are as follows:

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0.000 - 0.199 = very low or very weak

0.200 - 0.399 = low or weak

0.400 - 0.599 = moderate or moderately strong

0.600 - 0.799 = high or strong

0.800 - 1,000 = very high or very strong
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Therefore, from the results of hypothesis testing, it is known that there is a weak positive relationship between students' mathematics learning anxiety and students' mathematics learning difficulties during this covid-19 pandemic.

Discussion

Based on the results of data analysis on students' mathematics learning anxiety during the covid-19 pandemic, it is known that the score is centred on the value of 43.46 with a spread size of 6.47. This explains that the anxiety of learning mathematics for class XI students at SMA Negeri 5 Kendari during the COVID-19 pandemic is quite diverse. Based on the results of data analysis, it is also known that the anxiety of learning mathematics in class XI students at SMA Negeri 5 Kendari during the covid-19 pandemic tends to be at a moderate level with a percentage of 88.0%. These results are similar to the research results reported by (Rahman et al., 2015), where mathematics learning anxiety in class X MA 1 Watampone tends to be at the moderate level with a percentage of 63%. Judging from the indicators measuring students' mathematics learning anxiety during the covid-19 pandemic, it is known that the student's Mathematics Learning Anxiety score during the covid-19 pandemic in terms of male students is centred on a value of 44.54 with a spread size of 6.10. This explains that students' anxiety in learning mathematics during the COVID-19 pandemic in terms of male students at SMA Negeri 5 Kendari is guite diverse. Then, the student Mathematics Learning Anxiety score during the COVID-19 pandemic in female students was 42.79, with a spread size of 6.62. This explains that students' anxiety in learning mathematics during the covid-19 pandemic in terms of male students at SMA Negeri 5 Kendari is more diverse than the scores of Students' Mathematics Learning Anxiety during the covid-19 pandemic of female students. These results are similar to the results of the research reported by (Nofrialdi et al., 2018) on mathematics learning anxiety in class X MIA SMA Negeri 2 Kerinci, namely differences in anxiety levels based on gender, indicating that there is no significant difference between the levels of anxiety experienced by male students. Both male and female, but male students were more anxious than female students. According to Andrian in Nofrialdi et al. (2018), anxiety can cause positive reactions and become a useful stimulus to solve problems, depending on a teacher directing that anxiety can be positive. The study results Auliya showed that mathematics anxiety significantly affected students' mathematical understanding abilities. Anxiety based on gender is an interesting thing to be reviewed. Mathematics anxiety occurs when students take a learning outcome test, and several factors affect learning outcomes which can also cause students to experience anxiety

because of these factors. Factors that affect learning outcomes that can also cause students to experience anxiety include psychological factors, school, and family (Slameto, 2010).

From the results of data analysis, it is also known that students' learning difficulties in mathematics during the COVID-19 pandemic have a score centred on a score of 60.83 with a spread size of 8.51. This explains that students' learning difficulties in mathematics during the COVID-19 pandemic at SMA Negeri 5 Kendari are pretty diverse. Based on the results of data analysis, it is also known that students' learning difficulties in mathematics during the COVID-19 pandemic at SMA Negeri 5 Kendari tend to be at a moderate level with a percentage of 73.0%. These results are similar to the research results reported by Rahman et al. (2015), where mathematics learning anxiety in class X MA 1 Watampone tends to be at the moderate level with a percentage of 63%. Judging from the indicators measuring students' learning difficulties in mathematics during the covid-19 pandemic, it is known that the score of students' difficulty in learning mathematics during the covid-19 pandemic in terms of male students is centred on a score of 61.13 with a spread size of 9.62. This explains that the difficulties in learning mathematics for students during the COVID-19 pandemic in terms of male students at SMA Negeri 5 Kendari are pretty diverse. Then, the difficulty score of Students' Mathematics Learning during the covid-19 pandemic in female students centred on a score of 60.64 with a spread size of 7.78. This explains that students' difficulty in learning mathematics during the covid-19 pandemic in terms of male students at SMA Negeri 5 Kendari is more diverse than the scores of difficulty in learning Mathematics students during the covid-19 pandemic in terms of female students. Gender differences affect the way students learn. According to Al-Attiyah & Nasser (2016), girls are stronger in the verbal and emotional fields, while boys tend to be more kinesthetic and visual-spatial. Although there are differences that show the superiority of male students in spatial skills. female students are superior in mathematical (verbal) communication skills, more motivated, and more organized in learning (MZ, 2013). Male students have substantially more positive attitudes and higher mathematics participation levels than female students (Hall, 2012). Many believe boys are better at math and computers and better suited to work in the computer industry than girls (Forgasz et al., 2019).

Based on the results of hypothesis testing using the Spearman-rank correlation, it is known that there is a significant positive relationship between students' mathematics learning anxiety and mathematics learning difficulties of Class XI students of SMA Negeri 5 Kendari during the Covid-19 pandemic where the two variables have a low positive relationship. If students' anxiety in learning mathematics increases, the difficulty in learning mathematics will also increase. Vice versa, if the difficulty of learning mathematics increases, the anxiety in learning mathematics will also increase. These results are in line with the research results conducted by Utaminingsih (2017). Utami & Fuadiah (2018) explained that mathematics anxiety could be influenced by an interest in mathematics, self-anxiety, gender, and class differences. For example, mathematics anxiety affects students' self-anxiety. The more confident students are, the lower their math anxiety, and the feelings of students who are less confident, the higher their math anxiety will be.

Then also these results are in line with research conducted by Safitri & Jusra (2021) that learning difficulties are more likely to be associated with psychological disorders such as frustration, anxiety, adjustment barriers, and emotional disorders, so that learning difficulties can be related to psychological factors, especially mental disorders. Personality in adaptation and self-confidence. According to Sumarmo, self-confidence is a feeling of confidence in one's abilities. A person is less concerned with what he will do but can have a sense of freedom in activities that become his passion or what he likes. In addition, having the ability to handle every obligation that has been carried out well when connected socially with others, the desire to achieve goals, and recognize talents and incompetence.

A student should grow into someone with the skills instilled in him. Therefore, self-confidence is essential. Lack of trust in the individual can cause problems for that person. Students with a high sense of courage can easily interact with other students. In addition, the

child will also be able to express opinions, respect the values given by others, and think and act decisively in making decisions. Students with relatively low levels of self-confidence are known to be more challenging to communicate and compete and have confidence in their inability to outperform other students (Safitri & Jusra, 2021).

4. CONCLUSION

Then the Statistical Hypothesis Testing results showed a significant relationship between students' mathematics learning anxiety and students' mathematics learning difficulties in Class XI SMA Negeri 5 Kendari during the Covid-19 pandemic. The relationship between mathematics learning anxiety and mathematics learning difficulties for class XI students of SMAN 5 Kendari using Spearman-rank correlation analysis is 0.329 with a significance value of 0.000 < = 0.05. Or in other words, there is a weak positive relationship between students' mathematics learning anxiety and students' mathematics learning difficulties during this covid-19 pandemic. Based on these results, the researcher suggests that teachers continue to pay attention and monitor student learning outcomes by providing optimal guidance, direction, and teaching. Then, there needs to be a more profound understanding to conduct another study, such as the effect of anxiety and difficulty in learning mathematics on students' learning outcomes or mathematical abilities.

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6. REFERENCES

- Al-Attiyah, A., & Nasser, R. (2016). Gender and age differences in life satisfaction within a sex-segregated society: Sampling youth in Qatar. *International Journal of Adolescence and Youth*, *21*(1), 84–95. https://doi.org/10.1080/02673843.2013.808158
- Anita, I. W. (2014). Pengaruh Kecemasan Matematika (Mathematics Anxiety) Terhadap Kemampua n Koneksi Matematis Siswa SMP. *Infinity: Journal Ilmiah Program Studi Matematika STKIP Siliwangi Bandung*, *3*(1), 125. https://doi.org/10.22460/infinity.v3i1.43
- Auliya, R. N. (2016). Kecemasan Matematika dan Pemahaman Matematis. *Formatif: Jurnal Ilmiah Pendidikan MIPA*, 6(1), 12–22. https://doi.org/10.30998/formatif.v6i1.748
- Aunurrofiq, M., & Junaedi, I. (2017). Kecemasan Matematik Siswa dalam Menyelesaikan Soal-Soal Pemecahan Masalah. *UMJER: Unnes Journal of Mathematics Education Research*, 6(2), 157–166.
- Dzulfikar, A. (2013). Studi Literatur: Pembelajaran Kooperatif Dalam Mengatasi Kecemasan Matematika dan Mengembangkan Self Efficacy Matematis Siswa. Seminar Nasional Matematika Dan Pendidikan Matematika Dengan Tema "Penguatan Peran Matematika Dan Pendidikan Matematika Untuk Indonesia Yang Lebih Baik", November, 978–979. http://eprints.uny.ac.id/10730/1/P 7.pdf
- Fauzy, A., & Nurfauziah, P. (2021). Kesulitan Pembelajaran Daring Matematika Pada Masa Pandemi COVID-19 di SMP Muslimin Cililin. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, *5*(1), 551–561. https://doi.org/10.31004/cendekia.v5i1.514
- Fitriyani, Y., Fauzi, I., & Sari, M. Z. (2020). Motivasi Belajar Mahasiswa Pada Pembelajaran Daring Selama Pandemi Covid-19. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran, 6*(2), 165–175.
- Forgasz, H., Barkatsas, A., Bishop, A. J., Clarke, B., Keast, S., Tiong-Seah, W., & Sullivan, P. (2019). Gender and mathematics: Theoretical frameworks and findings. *Research in*

- *Mathematics Education in Australasia 2004 2007*, 271–290. https://doi.org/10.1163/9789087905019_014
- Hall, J. (2012). Gender Issues in Mathematics: An Ontario Perspective. *Journal of Teaching and Learning*, 8(1). https://doi.org/10.22329/jtl.v8i1.3004
- Hendriana, H., Rohaeti, E. E., & Sumarmo, U. (2017). *Hard Skills dan Soft Skills Matematik Siswa* (1st ed.). Refika Aditama.
- Imro'ah, S., Winarso, W., & Baskoro, E. P. (2019). Analisis Gender Terhadap Kecemasan Matematika Dan Self Efficacy Siswa. *KALAMATIKA Jurnal Pendidikan Matematika*, *4*(1), 23–36. https://doi.org/10.22236/kalamatika.vol4no1.2019pp23-36
- Marliani, N., & Hakim, A. R. (2015). Pengaruh metode belajar dan kecemasan diri terhadap hasil belajar matematika peserta didik. *JKPM (Jurnal Kajian Pendidikan Matematika)*, 01(01), 136–150.
- Maulani, M., Alipatan, M., & Khotimah, H. (2021). Kesulitan Belajar Matematika Siswa Kelas X Ditinjau. *Jurnal Kompetensi*, *14*(1), 40–51.
- MZ, Z. A. (2013). Perspektif Gender Dalam Pembelajaran Matematika. *Marwah: Jurnal Perempuan, Agama Dan Jender, 12*(1), 15. https://doi.org/10.24014/marwah.v12i1.511
- Nofrialdi, I., Maison, M., & Muslim, M. (2018). Tingkat Kecemasan Matematika Siswa SMA Negeri 2 Kerinci Kelas X MIA Sebelum Menghadapi Tes Matematika Berdasarkan Gender dan Hubungannya dengan Hasil Belajar. *Edumatika: Jurnal Riset Pendidikan Matematika*, 1(2), 11. https://doi.org/10.32939/ejrpm.v1i2.248
- Nurmila. (2016). Hubungan Antara Kecemasan Matematika Dan Kesulitan Belajar Dengan Perilaku Belajar Siswa Di SMPN 3 Tanete Riaja Kabupaten Barru [UIN Alauddin Makassar]. In *Skripsi*. http://repositori.uin-alauddin.ac.id/1501/1/Nurmila.PDF
- Patih, T., Febriawan, M., & Aini, N. (2019). Deskripsi Kemampuan Literasi Matematika Siswa SMP/MTs Negeri di Kota Kendari. In Kadir, M. Anggo, L. Sahidin, L. O. A. Jazuli, H. Samparadja, & Salim (Eds.), *SNPMAT II* (pp. 99–112). Universitas Halu Oleo Press. http://ocs.uho.ac.id/index.php/snpmat2/SNPMAT2/index
- Rahman, U., Nursalam, & Tahir, M. R. (2015). Pengaruh Kecemasan dan Kesulitan Belajar Matematika Terhadap Hasil Belajar Matematika Pada Siswa Kelas X MA Negeri 1 Watampone Kabupaten Bone. *MaPan: Jurnal Matematika Dan Pembelajaran*, 3(1), 86–102. http://journal.uin-alauddin.ac.id/index.php/Mapan/article/view/2752
- Safitri, O. S., & Jusra, H. (2021). Analisis Kesulitan Belajar dan Self Confidence Anak Berkebutuhan Khusus Tipe Slow Learner Dalam Pembelajaran Matematika. *JPMR: Jurnal Pendidikan Matematika Raflesia*, 6(2), 68–80.
- Slameto. (2010). Belajar & Faktor-Faktor yang Mempengaruhi. PT Rineka Cipta.
- Sugiyono. (2013). Metode Penelitian Kuantitatif, Kualitatif dan R & D. CV. Alfabeta.
- Sugiyono. (2015). *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R & D.* CV. Alfabeta.
- Susanti, E., & Syam, S. S. (2017). Peran Guru dalam Meningkatkan Kemampuan Literasi Matematika Siswa Indonesia. *Seminar Matematika Dan Pendidikan Matematika*, *November* 2017, 30–35. https://www.researchgate.net/publication/328813314_Peran_Guru_dalam_Meningkatka n Kemampuan Literasi Matematika Siswa Indonesia
- Tias, A. A. W., & Wutsqa, D. U. (2015). Analisis Kesulitan Siswa Sma Dalam Pemecahan Masalah Matematika Kelas Xii Ipa Di Kota Yogyakarta. *Jurnal Riset Pendidikan Matematika*, 2(1), 28. https://doi.org/10.21831/jrpm.v2i1.7148
- Utami, N. S., & Fuadiah, N. F. (2018). Tingkat Kecemasan dan Pengaruhnya Terhadap Hasil Belajar Siswa pada Pelajaran Matematika. *Math Didactic: Jurnal Pendidikan Matematika*, 4(2018), 327–335.
- Utaminingsih, A. (2017). Gender dan Wanita Karir (Cetakan pe). UB Press.
- Widiyanto, M. A. (2013). Statistika Terapan: Konsep & Aplikasi SPSS dalam Penelitian Bidang Pendidikan, Psikologi & Ilmu Sosial Lainnya. PT Elex Media Komputindo.
- Yulia, E. R., Wahyuni, I., & Maharani, A. (2021). Kesulitan Belajar Siswa pada Pembelajaran

Daring Matematika di Masa Pandemi. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 5(3), 3009–3016. https://doi.org/10.31004/cendekia.v5i3.731