

The Influence of Self-Confidence and Curiosity on Student Performance in Online Learning

Ade Mirza^{1*}, Revi Lestari Pasaribu²

Mathematics Education, Tanjungpura University
Jalan Prof. Dr. H. Hadari Nawawi, Pontianak, West Kalimantan, Indonesia
^{1*}ade.mirza@fkip.untan.ac.id; ²revi.pasaribu@fkip.untan.ac.id

Article received: 22-05-2024, revision: 11-06-2024, published: 30-07-2024

Abstrak

Rasa ingin tahu dan rasa percaya diri merupakan faktor internal peserta didik yang berperan dalam memengaruhi proses serta hasil belajar. Penelitian ini bertujuan untuk menggambarkan pengaruh rasa percaya diri dan rasa ingin tahu terhadap hasil belajar matematika dalam pembelajaran daring, baik secara teoritis maupun empiris. Metode penelitian yang digunakan ini adalah survei dengan pendekatan korelasional. Subjek penelitian terdiri dari 71 mahasiswa program studi pendidikan matematika. Data yang diperoleh dianalisis menggunakan metode deskriptif dan inferensial. Analisis inferensial mencakup uji korelasi sederhana Pearson's Product Moment dan korelasi ganda dengan dua prediktor, setelah memenuhi syarat normalitas dan linearitas. Hasil penelitian menunjukkan bahwa hasil belajar matematika mahasiswa belum memuaskan, dengan lebih dari 50,70% mahasiswa memperoleh nilai di bawah 61. Selain itu, diketahui juga bahwa rasa ingin tahu (X_1) memiliki pengaruh signifikan terhadap hasil belajar (Y), Rasa percaya diri (X_2) juga berpengaruh terhadap hasil belajar (Y), dan terdapat hubungan signifikan antara rasa ingin tahu (X_1) dan rasa percaya diri (X_2) terhadap hasil belajar (Y).

Kata Kunci: Hasil Belajar; Pengaruh; Rasa Ingin Tahu; Rasa Percaya Diri.

Abstract

Curiosity and self-confidence are internal factors of students that play a role in influencing the learning process and outcomes. This research aims to describe the influence of self-confidence and curiosity on mathematics learning outcomes in online learning, both theoretically and empirically. The research method used is a survey with a correlational approach. The research subjects consisted of 71 students from the mathematics education study program. The data obtained were analyzed using descriptive and inferential methods. Inferential analysis includes a simple Pearson's Product Moment correlation test and multiple correlation with two predictors, after fulfilling the normality and linearity requirements. The research results show that students' mathematics learning outcomes are not satisfactory, with more than 50.70% of students getting a score below 61. In addition, it is also known that curiosity (X_1) has a significant influence on learning outcomes (Y), self-confidence (X_2) also influences learning outcomes (Y), and there is a significant relationship between curiosity (X_1) and self-confidence (X_2) on learning outcomes (Y).

Keywords: Learning Outcomes; Influence; Curiosity; Self-confidence.

I. INTRODUCTION

Education is one of the essential needs of human life. Elban (2017) state that educational activities are an effort made by the community to maintain the survival of their culture and civilization. Education also plays an essential role in determining the quality of human resources. In today's modern era, everyone needs the education to be able to increase knowledge and explore the potential that exists within him (Furqan et al., 2020; Talia, Afriansyah, & Sumartini, 2024). However, the current situation is vastly different from the previous one. As a result, the implementation of educational activities has undergone a sudden shift, transitioning from offline learning to online learning (Demuyakor, 2020). This happened due to the emergence of the Covid-19 virus outbreak, which resulted in the restriction of all offline activities (Iqbal & Sohail, 2021).

Current technological developments influence how learning takes place in the world of education (Iqbal & Sohail, 2021; Ranila, Yuniarta, & Prihatnani, 2023). the government has also begun to change the education system to better follow current technological developments. (Mirza, 2020). where, learning is now online-based. Although it is not the same as Classroom-based offline learning has transitioned to online learning as a solution to adapt to the advancements in the current education system (Mirza, 2020). Online learning is carried out to expand educational services' reach and increase educational services' availability so that academic activities can continue to run as they should (Kurniawati & Noviani, 2021; Alshurideh et al., 2021).

The implementation of online learning can be done with media such as zoom, Edmodo google class, Whatsapp, google meet, and so on (Nur & Gushendra, 2022; Purba, 2021; Fitria, 2020; Dewi & Afriansyah, 2022). This certainly should not be a reason not to study seriously and even reduce learning motivation for students, especially college students. Although its implementation has shortcomings, there is no other choice but to optimize online learning. Technology will be a bridge in transferring knowledge from lecturers to students in an emergency like this. Of course, this problem can have an impact on student learning outcomes (Ariawan, 2022; Khalil et al., 2020; Nguyen, 2017).

Facts on the ground show that it is not uncommon for lecturers to experience various obstacles in online learning practices, especially in mathematics content courses (Nur & Gushendra, 2022). Often students judge that mathematics content subjects are complex. As a result, students do not have the desire to try to understand the mathematical material being taught. Not to mention the students' lack of confidence in their abilities, adding to the obstacles to developing their potential in mathematics. This indicates that the curiosity and confidence of a student is an internal factors that can affect the learning process and learning outcomes (Santi & Widyasari, 2021).

External factors include teaching staff, learning facilities and infrastructure, assessment policies, social environment, and curriculum. Internal factors encompass attitudes toward learning, motivation, concentration, retention of learning outcomes, application of knowledge, self-

confidence, intelligence, study habits, and personal goals (Febrina & Ilyas, 2020; Ismail et al., 2018). According to Dimiyati and Mudjiono in (Mawaddah et al., 2020). Pandemic period affects student learning outcomes from external factors, namely changes in social and environmental conditions and curricula that must adapt to pandemic conditions and the lack of adequate learning facilities and infrastructure for online learning. while from internal factors, almost all aspects experienced a significant change from the situation. Curiosity and Self Confidence are internal factors that affect learning outcomes in learning (Bäck et al., 2017; Amalia, Wanabuliandari, & Rahayu, 2022).

Curiosity serves as the foundational asset for students in the learning process (Edu et al., 2021). Curiosity motivates students to seek answers and satisfy their inquisitiveness, often driving them to actively engage in the process of exploration and discovery (Koch & Locher, 2021; Afriansyah, 2021). In the process of seeking knowledge, students can take various approaches, such as asking questions directly to lecturers, engaging in discussions with peers, and exploring learning materials from diverse sources, including books, journals, and online platforms. Student curiosity can bring a better impact if the student has high self-confidence (Labrague et al., 2019). Not infrequently, students have high curiosity, but they are afraid to convey it; not seldom do they have arguments but are not presented because of shame and fear of being wrong, and not a few students are not sure what they have tried. States that

the main form of self-confidence in mathematics learning is the interaction of students both with teachers and fellow students (Ranjit Singh Malhi, 2012).

Several researchers have studied self-confidence and curiosity, but the researchers conducted it in biology subjects, the results of which showed a positive relationship between the two and also influenced student motivation (Suryanda et al., 2022). Likewise, research conducted by Setiawan found an influence of self-confidence and curiosity on student perseverance (Setiawan et al., 2022). If we look back at the research on the relationship between self-confidence and curiosity in online learning, especially in mathematics learning in higher education, it is still minimal, so researchers will conduct this research theoretically and empirically.

II. METHOD

This quantitative correlational research (Ellis-Jacobs, 2011), attempts to investigate the relationship between self-confidence and curiosity towards learning outcomes in online learning, both individually and together (Rohmani & Andriani, 2021). In analyzing the relationship between variables, two types are taken into account: independent variables (X) and the dependent variable (Y). This study identifies two independent variables as exogenous factors, namely curiosity (X_1) and self-confidence (X_2), while the dependent or endogenous variable is learning outcomes (Y).

The implementation of this research activity uses a survey method with an

associative approach. With this associative approach, the data analysis was carried out using correlational analysis. The design of the relationship between variables as the basis or paradigm adopted in this study can be described as follows.

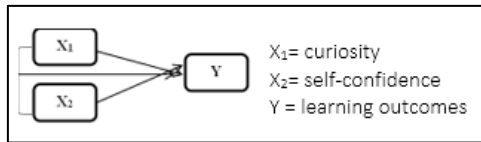


Figure 1. Schematic of Relationship Between Variables.

The population of this study is accessible, consisting of all students enrolled in the Mathematics Study Program at FKIP Untan Pontianak. The research sample was selected purposively, specifically targeting all fifth-semester students, excluding those who were repeating the semester. Therefore, the subjects of this study comprised all fifth-semester students in the Mathematics Education Study Program at FKIP Untan Pontianak. The number of students who became subjects or respondents in the study was 71.

Meanwhile, the instrument trial was carried out on students in other semesters randomly selected. In the implementation of this instrument trial, 44 students were willing to respond and, at the same time, return the questionnaire given.

Techniques in this study were carried out in two ways: measurement and test techniques. The measurement technique was used to obtain data on student curiosity and self-confidence. Meanwhile, a test was administered to collect data on students' learning outcomes. Data on curiosity and self-confidence were gathered using a questionnaire as the data

collection instrument. The questionnaire, designed to measure students' curiosity and self-confidence, utilized a checklist and a Likert scale (Jusuf, 2018; Sugiyono, 2018).

Each statement of the curiosity exogenous variable is equipped with five answer options with weights, and measurement scales for positive comments are: (1) Never, (2) Rarely, (3) Sometimes, (4) Often, and (5) Always. For the exogenous self-confidence variable statement, it is equipped with four answer options with weights, and measurement scales for positive comments are: Disagree, Doubtful, Agree, and Strongly agree. As for negative statements, the opposite weight is five (5) to one (1) for the curiosity variable and four (4) to one (1) weight for the self-confidence variable.

Before being used for data collection, the exogenous variable instrument was tested first. The statement items from the instrument were obtained which were valid and had a fairly high-reliability coefficient, which was more than 0.70. The reliability coefficient for the curiosity instrument was 0.893 and the self-confidence instrument was 0.947. The validity of the instrument items was determined using Pearson's Product-Moment correlation, while the reliability of the instrument was tested using the Cronbach's Alpha formula. Both the validity and reliability calculations were performed using the Excel software.

The data collected in this study were analyzed using both descriptive and inferential methods. Descriptive analysis was employed to calculate the mean, range, standard deviation, frequency distribution, and percentages (Charry et al., 2020; Loeb et al., 2017). In contrast,

inferential analysis is used to test the statistical hypothesis of the research problem (Li et al., 2021). The statistical test used is simple correlation analysis and multiple correlation analysis with two predictors after meeting the linearity requirements.

In this study, the number of samples is 71, so standard assumptions can be used for hypothesis testing. This is based on the expert opinion that the central limit theory (Ding et al., 2016) can be the basis for accepting the standard distribution assumption for a large enough sample size, namely $n = 30$ or more.

For inferential data analysis, three research hypotheses were tested: (1) curiosity has a significant impact on student learning outcomes in online learning, (2) self-confidence significantly affects student learning outcomes in online learning, and (3) there is a significant relationship between the exogenous variables of curiosity and self-confidence and student learning outcomes in online learning.

Hypothesis (1) and (2) were tested using a simple Pearson's Product Moment correlation test, while hypothesis (3) was tested using a multiple correlation test with two predictors with a significance level of $= 0.05$. The statistical hypothesis of the problem studied in this research is as follows.

$$H_0: \rho = 0$$

$$H_a: \rho \neq 0$$

As a guideline for providing an interpretation of the correlation coefficient obtained, it is based on the criteria for the

degree of correlation coefficient according to Pearson's Correlation value.

III. RESULT AND DISCUSSION

A. Result

1. Description of Learning Outcomes Data

Data on learning outcomes in this study is the average score of student learning outcomes for mathematics education courses for mathematics content courses in semester V with a scale of 0-100. This data is taken from the results of the mid-semester exams for Multivariable Calculus and Discrete Mathematics courses, whose lectures are online, in the 2021/2022 academic year. Descriptive statistical calculations were carried out using the Excel program to provide an overview of the distribution of data or the distribution of learning outcomes data. From the calculation results, the average score is 61.73, the median is 60, the maximum score is 85, the minimum score is 40, the range is 45, and the standard deviation is 11.472. The learning outcomes data can be presented as a frequency distribution table based on the Sturges rule, with $n = 71$, so the number of classes is $1 + 3.3 \log (71) = 7.11$ rounded 7. The class interval is the range divided by many courses, namely $45/7 = 6.43$, which is rounded up to 7.

Table 1.
Distribution of Student Frequency based on Learning Outcome

No	Interval	Frequency	%
1	40-46	7	9.86
2	47-53	12	16.90
3	54-60	17	23.94
4	61-67	15	21.13
5	68-74	10	14.08
6	75-81	6	8.45
7	82-88	4	5.63
Total		71	100.00

Distribution of learning outcomes data can be seen quickly and clearly, then based on the data distribution in Table 1, it needs to be presented in the form of a bar chart as follows.

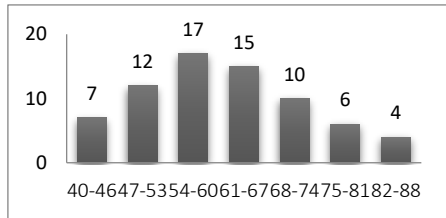


Figure 2. Data Distribution Diagram of Student Learning Outcomes.

2. Description of Curiosity Data

From the criteria set and the number of questionnaires given by the respondents, 71 students could be used as samples in this study. The questionnaire to capture curiosity consists of 18 items with nine favorable and unfavorable statements. Each statement is given five answer options. The answers from each student to each account in this questionnaire were then transformed into quantitative data in the form of scores according to the state of the statement.

The average total score of Curiosity questionnaire is 70.69. The maximum score is 90, the minimum score is 48, the range is 42, and the standard deviation is 9.99. Referring to the Sturges rule, this data can be presented as a frequency distribution in Table 2 and a bar chart in Figure 3.

Table 2.
Frequency Distribution of Student Curiosity

No	Interval	Frequency	%
1	48-53	4	5.63
2	53-59	6	8.45
3	60-66	10	14.08
4	67-72	23	32.39
5	73-78	14	19.72
6	79-84	9	12.68
7	85-90	5	7.04

Total	71	100.00
--------------	----	--------

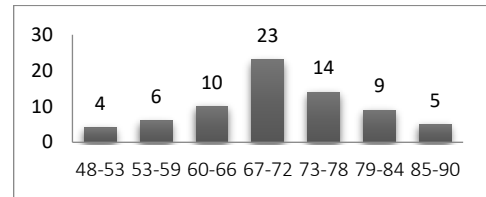


Figure 3. Curiosity Data Distribution Chart.

Based on the curiosity questionnaire data presented in Table 3, it is known that the average questionnaire score is 70.69, with a standard deviation of 9.999. Observing the data distribution in table 3, it appears that 32.39% of students' curiosity is in the average class interval (67-72, if the average curiosity questionnaire score is added to the standard deviation, a score of 80.689 is obtained. A questionnaire score that reaches more than 80,689 can be categorized as high. In contrast, a questionnaire score less than the average value minus the standard deviation of 60.691 can be classified as low and in the medium category if the questionnaire score ranges from 60.691 to 80,689.

Based on these criteria, students' curiosity is included in the low category at around 14.08%, and the high standard is at least 19.72%. The rest, about 66.19% (more than half of the respondents), fall into the medium category. From the results of this analysis, it can be concluded that the curiosity of students whose lectures are carried out online can be said to be still unsatisfactory. Only a tiny proportion (19.72%) have sufficient interest (high category).

The effect of curiosity (X_1) on learning outcomes (Y) in this study was examined by testing the hypothesis using Pearson's Product Moment simple correlation

analysis. This correlation test is applied by considering the data's normality and linearity requirements. In this study, both conditions have been met. The data normality test was conducted using a non-parametric analysis with the one-sample Kolmogorov-Smirnov test, with the calculation results criteria obtained Asym sig (2-tailed) > 0.05. As for the linearity with the F test. The results of the correlation test are as follows.

Correlations			
		Rasa Ingin Tahu	Hasil Studi
Rasa Ingin Tahu	Pearson Correlation	1	.841**
	Sig. (2-tailed)		.000
	N	71	71
Hasil Studi	Pearson Correlation	.841**	1
	Sig. (2-tailed)	.000	
	N	71	71

** . Correlation is significant at the 0.01 level (2-tailed).

Figure 4. Calculation results of Correlation between variable X₁ and Y.

3. Description of Self-Confidence Data

The data on the student self-confidence research variable in this study was obtained from the results of a self-confidence questionnaire that was distributed simultaneously with a self-confidence questionnaire, namely to all students of the mathematics education study program in the fifth semester and programmed courses Multivariable Calculus and Discrete Mathematics. The questionnaire to capture self-confidence consists of 36 items with statements in the form of favorable and unfavorable, each with 18 items. Each account is given four answer options. The answers from each student to each word in this questionnaire were then transformed into quantitative data in the form of scores according to the state of the statement.

The results of student answers to the self-confidence questionnaire can be seen

in appendix 8. Based on these data, the average total score is 109.13. The maximum score is 137, the minimum score is 79, the range is 58, and the standard deviation is 15.075. Referring to the Sturges rule, this data can be presented as a frequency distribution Table 3 and a bar chart Figure 5.

Table 3.
Frequency Distribution of Student Self-Confidence

No	Interval	Frequency	%
1	79-87	5	7.04
2	88-96	8	11.27
3	97-105	16	22.54
4	106-114	18	25.35
5	115-123	11	15.49
6	124-132	12	16.90
7	133-142	1	1.41
Total		71	100.00

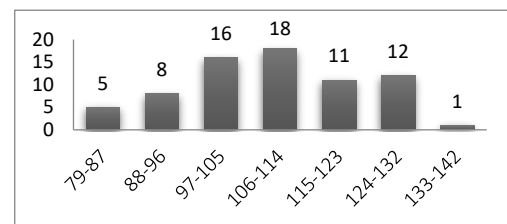


Figure 5. Self Confidence Data Distribution Chart.

Based on the self-confidence questionnaire data presented in table 3, it is known that the average score of the questionnaire is 109.13 with a standard deviation of 15.075. The data distribution in table 4.3 shows that 25.35% of students' self-confidence is in the class average interval (106-114), if the average curiosity questionnaire score is added to the standard deviation, then a score of 124.205 is obtained. Obtaining a questionnaire score that reaches more than 124.205 can be categorized as high. In contrast, a questionnaire score that is less than the average value minus the standard deviation of 94.055 can be classified as low and

included in the medium category if the questionnaire score is in the range from 94.055 to 124.205.

Based on these criteria, the students' self-confidence is in the low category, around 18.31%, and the high standards are 18.31%. The rest, about 63.38% (more than half of the respondents), fall into the moderate category. From the results of this analysis, it can be concluded that the self-confidence of students whose lectures are carried out online can be said to be still not satisfactory. Only a small percentage (18.31%) have sufficient self-confidence (high category).

The results of calculations to test the effect of self-confidence (X_2) on learning outcomes (Y) in this study were examined by testing hypotheses using Pearson's Product Moment simple correlation analysis. This correlation test is applied by considering the data's normality and linearity requirements. The result showed that there is a significant influence (relationship) between self-confidence (X_2) and learning outcomes (Y). The results can be seen in Figure 6.

		Self Confident	Hasil Studi
Self Confident	Pearson Correlation	1	.830**
	Sig. (2-tailed)		.000
	N	71	71
Hasil Studi	Pearson Correlation	.830**	1
	Sig. (2-tailed)	.000	
	N	71	71

** . Correlation is significant at the 0.01 level (2-tailed).

Figure 6. Calculation Results of Correlation between variable X_2 and Y.

4. The Influence of Curiosity and Self-Confidence on Learning Outcome

To find out how the relationship between curiosity (X_1) and self-confidence (X_2) on learning outcomes simultaneously (simultaneously), it was carried out using a

multiple correlation test. There is a significant relationship between curiosity (X_1) and self-confidence (X_2) together on learning outcomes (Y). table 3. Referring to the guideline for the degree of the correlation coefficient, the level of the relationship between curiosity and self-confidence together (simultaneously) on student learning outcomes in online learning is included in the solid category (range 0.800 – 1,000). This means that the acquisition of student learning outcomes in online learning will get good (optimal) results if supported by high curiosity (curiosity) and self-confidence. The results of the calculation of the double correlation between curiosity (X_1) and self-confidence (X_2) on learning outcomes (Y) in this study can be seen in Figure 7.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.895 ^a	.802	.796	6.019	.802	137.267	2	68	.000

a. Predictors: (Constant), Self Confident, Rasa Ingin Tahu

Figure 7. Calculation results of Correlation between variable X_2 and Y

B. Discussion

The data obtained in this study indicates that the learning outcomes of most students fall into the "less than satisfactory" category. Additionally, more than half of the respondents are classified within the moderate category. Based on this analysis, it can be concluded that the mathematics learning outcomes of students participating in online lectures are still not satisfactory, because more than half of the respondents showed learning outcomes that were in the moderate and low categories. This is understandable because lectures that are carried out online

have many determining factors, including the existence of basic and supporting literature, the availability of facilities and infrastructure (computers, and internet networks), and the seriousness of each student in learning and developing their knowledge. This is certainly related to the curiosity and self-confidence of students in carrying out their lecture process.

The analysis of the research results also indicates that the curiosity of students participating in online lectures remains unsatisfactory. Only a small proportion exhibit sufficient curiosity or fall into the high category. According to the correlation coefficient relationship guidelines in Table 3, the relationship between curiosity and student learning outcomes in online learning is classified as very strong. It is clear that obtaining good learning outcomes must be accompanied by a very strong drive for curiosity. Conversely, a lack of/weak curiosity will certainly make it difficult to expect to obtain high learning outcomes.

From the results of the study, it can be concluded that the self-confidence of students whose lectures are conducted online can be said to be still unsatisfactory. Only a small portion have sufficient self-confidence or are in the high category. It is clear that obtaining good learning outcomes must also be accompanied by very strong self-confidence. Conversely, lack of/weak self-confidence can hinder the enthusiasm for learning which ultimately has an impact on optimal learning efforts. Therefore, self-confidence needs to be built so that enthusiasm and motivation to learn to grow well are expected to provide

support for achieving high learning outcomes.

The results of research related to the influence of self-confidence on curiosity show that student learning outcomes in online learning will get good results if supported by high curiosity and self-confidence.

In line with research (Suryanda et al., 2022), in biology learning it was found that self-confidence and curiosity have a positive influence on student motivation. This also has an impact on student learning outcomes. As well as research conducted by (Setiawan et al., 2022) that self-confidence and curiosity result in better student perseverance, this also has an impact on student learning outcomes.

According to (Hanifah Ameliah & Munawaroh, 2016), self-confidence and curiosity have a positive influence on the mathematics learning outcomes of grade VII students. Even self-confidence can improve students' creative thinking skills (Trisnawati et al., 2018) . and according to (Salirawati, 2012) self-confidence, curiosity, and entrepreneurial skills are 3 important characteristics that students must have.

Therefore, the importance of the role of lecturers or teachers is to increase students' self-confidence and curiosity in order to provide optimal learning outcomes.

IV. CONCLUSION

Based on the analysis and discussion of the data in this study, the following conclusions were drawn: 1) More than 50% of students in the Mathematics Education program have unsatisfactory learning

outcomes. 2) There is a significant relationship between curiosity (X1) and learning outcomes (Y), with a correlation coefficient of 0.841. 3) There is a significant relationship between self-confidence (X2) and learning outcomes (Y), with a correlation coefficient of 0.830. 4) Curiosity (X1) and self-confidence (X2) collectively have a significant relationship with learning outcomes (Y), reflected in a correlation coefficient of 0.895. This coefficient increases when both variables, X1 and X2, simultaneously improve.

Given the possible weaknesses that may occur due to limitations and omissions in the implementation of this research, several suggestions can be made for a more in-depth study. 1) it is necessary to carry out a more rigorous standardization of research instruments by observing and considering various more comprehensive theories regarding the psychological variables of curiosity and self-confidences. 2) it is necessary to research on a broader scale, involving students from several universities with the same characteristics as research subjects.

ACKNOWLEDGEMENT

A big thank you to Universitas Islam Riau for their valuable support, which has enabled the successful execution and completion of this research. This research was supported by Universitas Islam Riau through Research Grant 544/KONTRAK/P-PT/DPPM-UIR/06-2023.

REFERENCES

Afriansyah, E. A. (2021). *Realistic mathematics education berbasis*

emergent modeling untuk meningkatkan kemampuan berpikir kritis dan kreatif matematis serta curiosity mahasiswa calon guru (Doctoral dissertation, Universitas Pendidikan Indonesia).

Alshurideh, M. T., al Kurdi, B., AlHamad, A. Q., Salloum, S. A., Alkurdi, S., Dehghan, A., Abuhashesh, M., & Masa'deh, R. (2021). Factors Affecting the Use of Smart Mobile Examination Platforms by Universities' Postgraduate Students During the Covid-19 Pandemic: An Empirical Study. *Informatics*, 8(2). <https://doi.org/10.3390/informatics8020032>

Amalia, N. A., Wanabuliandari, S., & Rahayu, R. (2022). Pengembangan Ethno-Virtual Card Berbasis Kemampuan Pemecahan Masalah Matematis Siswa dan Rasa Ingin Tahu. *Mosharafa: Jurnal Pendidikan Matematika*, 11(2), 317-326. <https://doi.org/10.31980/mosharafa.v11i2.723>

Ariawan, I. P. W. (2022). The Academic Impact of Online Mathematics Learning During Covid-19 for Junior High School Students. *Jurnal Elemen*, 8(1) <https://doi.org/10.29408/jel.v8i1.4517>

Bäck, L., Hildingsson, I., Sjöqvist, C., & Karlström, A. (2017). Developing Competence and Confidence in Midwifery-Focus Groups with Swedish Midwives. *Women and Birth*, 30(1). <https://doi.org/10.1016/j.wombi.2016.08.004>

Charry, K., Coussement, K., Demoulin, N., & Heuvinck, N. (2020). Descriptive Analysis. In *Marketing Research with*

- IBM® SPSS Statistics*. Routledge.
<https://doi.org/10.4324/9781315525532-2>
- Demuyakor, J. (2020). Coronavirus (Covid-19) and Online Learning in Higher Institutions of Education: A Survey of the Perceptions of Ghanaian International Students in China. *Online Journal of Communication and Media Technologies*, 10(3).
<https://doi.org/10.29333/ojcm/8286>
- Dewi, R. P., & Afriansyah, E. A. (2022). Pembelajaran Matematika Berbasis Aplikasi Google Classroom pada Materi Bangun Ruang Sisi Datar. *Plusminus: Jurnal Pendidikan Matematika*, 2(1), 39-52.
<https://doi.org/10.31980/plusminus.v2i1.1084>
- Ding, H., Guan, J., Liu, N., & Wang, G. (2016). Modeling of Heavy Tailed Sea Clutter Based on the Generalized Central Limit Theory. *IEEE Geoscience and Remote Sensing Letters*, 13(11).
<https://doi.org/10.1109/LGRS.2016.2596322>
- Edu, A. L., Jaya, P. R. P., & Ni, L. (2021). The Phenomenon of Learning Motivation of Elementary School Students. *International Journal of Elementary Education*, 5(2).
<https://doi.org/10.23887/ijee.v5i2.33934>
- Elban, M. (2017). University Students' Views on the Education and Teaching of Civilization History: Bayburt University Education Faculty Sample. *Journal of Education and Training Studies*, 5(10).
<https://doi.org/10.11114/jets.v5i10.2560>
- Ellis-Jacobs, K. (2011). A Quantitative Correlational Study on the Impact of Patient Satisfaction on a Rural Hospital. *Internet Journal of Allied Health Sciences and Practice*, 9(4).
<https://doi.org/10.46743/1540-580x/2011.1375>
- Febrina, S., & Ilyas, A. (2020). Factors Influencing Learning Behavior and Its Implications for Guidance and Counseling Services. *Jurnal Neo Konseling*, 2(2).
- Fitria, T. N. (2020). Teaching English through Online Learning System during Covid-19 Pandemic. *Pedagogy : Journal of English Language Teaching*, 8(2).
<https://doi.org/10.32332/pedagogy.v8i2.2266>
- Furqan, Z., Nidaa Fatima, S., & Abbas Awan, G. (2020). Tele-Education in the Post-COVID Period; A New Normal. In *Anaesthesia, Pain and Intensive Care*, 24(3).
<https://doi.org/10.35975/apic.v24i3.1274>
- Hanifah Ameliah, I., & Munawaroh, M. (2016). Pengaruh Keingintahuan Dan Rasa Percaya Diri Siswa Terhadap Hasil Belajar Matematika Kelas Vii Mts Negeri I Kota Cirebon. *Eduma : Mathematics Education Learning and Teaching*, 5(1).
<https://doi.org/10.24235/eduma.v5i1.598>
- Iqbal, Sofia, & Sohail, S. (2021). Challenges Of Learning During The Covid-19 Pandemic. *Journal of Gandhara Medical and Dental Science*, 8(2).

- <https://doi.org/10.37762/igmds.8-2.215>
- Ismail, A. O. A., Mahmood, A. K., & Abdelmaboud, A. (2018). Factors Influencing Academic Performance of Students in Blended and Traditional Domains. *International Journal of Emerging Technologies in Learning*, 13(2).
<https://doi.org/10.3991/ijet.v13i02.8031>
- Jusuf, H. (2018). The Models Of Checklist Method In Evaluating Elt Textbooks. *Al-Lisan*, 3(2).
<https://doi.org/10.30603/al.v3i2.422>
- Khalil, R., Mansour, A. E., Fadda, W. A., Almisnid, K., Aldamegh, M., Al-Nafeesah, A., Alkhalifah, A., & Al-Wutayd, O. (2020). The Sudden Transition to Synchronized Online Learning During the Covid-19 Pandemic in Saudi Arabia: A Qualitative Study Exploring Medical Students' Perspectives. *BMC Medical Education*, 20(1).
<https://doi.org/10.1186/s12909-020-02208-z>
- Koch, K., & Locher, P. S. (2021). Autonomes Chemielernen im Fernunterricht und Darüber Hinaus! *Chimia*, 75(1–2).
<https://doi.org/10.2533/chimia.2021.67>
- Kurniawati, A. D., & Noviani, J. (2021). Indonesian Students' Perception about the Effectiveness of E-Learning Implementation During Covid-19. *New Educational Review*, 66.
<https://doi.org/10.15804/tner.2021.66.4.08>
- Labrague, L. J., McEnroe-Petitte, D. M., Bowling, A. M., Nwafor, C. E., & Tsaras, K. (2019). High-Fidelity Simulation and Nursing Students' Anxiety and Self-Confidence: A systematic review. *Nursing Forum*, 54(3).
<https://doi.org/10.1111/nuf.12337>
- Li, K., Zhang, Y., & Wang, C. (2021). Estimate the Trend of Covid-19 Outbreak in China: A Statistical and Inferential Analysis on Provincial-level Data. *Procedia Computer Science*, 187.
<https://doi.org/10.1016/j.procs.2021.04.092>
- Loeb, S., Dynarski, S., McFarland, D., Morris, P., Reardon, S., & Reber, S. (2017). *Descriptive Analysis in Education: A guide for researchers*. U.S. Department of Education, Institute of Education Sciences. National Center for Education Evaluation and Regional Assistance, March.
- Mawaddah, N., Syahrilfuddin, S., & Noviana, E. (2020). Hubungan Antara Self Confidence Dengan Hasil Belajar Matematika Siswa Kelas V Sd Negeri 136 Pekanbaru. *Tunjuk Ajar: Jurnal Penelitian Ilmu Pendidikan*, 3(2).
<https://doi.org/10.31258/jta.v3i2.261-274>
- Mirza, A. (2020). Implementasi Sistem Pembelajaran Daring Berbantuan Edmodo Pada Mahasiswa. *Jurnal AlphaEuclidEdu*, 1(2).
<https://doi.org/10.26418/ja.v1i2.43419>
- Nguyen, V. A. (2017). The Impact of Online Learning Activities on Student Learning Outcome in Blended Learning Course. In *Journal of Information and Knowledge Management*, 16(4).
<https://doi.org/10.1142/S021964921750040X>

- Nur, J., & Gushendra, R. (2022). Indonesian English Teachers' Perceptions on Using Online Teaching Platforms. *Proceeding of International Conference on Language Pedagogy (ICOLP)*, 1(1). <https://doi.org/10.24036/icolp.v1i1.26>
- Purba, R. A. (2021). The Effectiveness Combination of Blended Learning and Flipped Classroom with Edmodo as a Digital Media Innovation for Learning From Home. *Journal of Education Technology*, 5(3).
- Ranila, R., Yunianta, T. N. H., & Prihatnani, E. (2023). Developing Android-Based Counting Game as Learning Media to Train Students' Creative Thinking. *Mosharafa: Jurnal Pendidikan Matematika*, 12(3), 599-614. <https://doi.org/10.31980/mosharafa.v12i3.830>
- Ranjit Singh Malhi. (2012). *Transforming Our Educational System: The Brutal Truth*. The Malaysian Insider.
- Rohmani, N., & Andriani, R. (2021). Correlation between academic self-efficacy and burnout originating from distance learning among nursing students in Indonesia during the Covid-19 pandemic. *Journal of Educational Evaluation for Health Professions*, 18. <https://doi.org/10.3352/JEEHP.2021.18.9>
- Salirawati, D. (2012). Self-Confidence, Curiosity, And Entrepreneurship: Three Important Characters for the Students. *FMIPA Universitas Negeri Yogyakarta*, 2.
- Santi, T. K., & Widyasari, R. (2021). Character Education: Analysis of Self-Regulated Learning on Systems Online Learning during the Covid-19 Pandemic. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(2). <https://doi.org/10.33258/birci.v4i2.2041>
- Setiawan, Y. E., Choirudin, & Abrori, M. S. (2022). The Effect of Curiosity on Self-Confidence and Persistence. *International Journal of Early Childhood Special Education*, 14(3).
- Sugiyono. (2018). Prof. Dr. Sugiyono. 2018. *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Suryanda, A., Heryanti, E., & Khairunnisa, F. (2022). Are Self-Confidence and Curiosity in Studying Biology Related to Achievement Motivation? *Bio-Inoved : Jurnal Biologi-Inovasi Pendidikan*, 4(2). <https://doi.org/10.20527/bino.v4i2.12576>
- Talia, Y., Afriansyah, E. A., & Sumartini, T. S. (2024). Assessing Problem-Solving Proficiency in Mathematics: Insights from Seventh-Grade Students. *Plusminus: Jurnal Pendidikan Matematika*, 4(2), 215-228. <https://doi.org/10.31980/plusminus.v4i2.2206>
- Trisnawati, I., Pratiwi, W., Nurfauziah, P., & Maya, R. (2018). Analisis Kemampuan Berpikir Kreatif Matematis Siswa Sma Kelas Xi Pada Materi Trigonometri Di Tinjau Dari Self Confidence. *JPMI (Jurnal Pembelajaran Matematika Inovatif)*, 1(3). <https://doi.org/10.22460/jpmi.v1i3.p383-394>

AUTHOR'S BIOGRAPHY

Ade Mirza, M.Pd.



Born in Sanggau, West Kalimantan, 28 October 1965. Faculty member at Tanjungpura University. Completed undergraduate studies in Mathematics Education at FKIP Untan, Pontianak, in 1988; Completed graduate studies in Mathematics Education at IKIP Malang, Malang, in 1996.

Revi Lestari Pasaribu, M.Si.



Born in Siak, 22 June 1992. Faculty member at Tanjungpura University. Completed undergraduate studies in Mathematics Education at Universitas Riau, Pekanbaru, in 2015; Completed graduate studies in Mathematics at University of North Sumatra, Medan, in 2018.