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The relationship of self-efficacy to students' final exam results

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Abstract. This study aims to determine the relationship between self-efficacy and students' final exam results which is the result of the final assessment of the semester. The population of this study is the students at MAN 1 Lampung Selatan and MTsN 1 Lampung Selatan. The subject of this study was a superior grade student in the school. The number of subjects in this study was 107 students. Self-efficacy is measured with a self-efficacy scale based on Bandura's theory. Students' final exam results data is based on the results of a semester final assessment, even math subjects. The data analysis technique used is the analysis of the Bivariate Pearson correlation with an equivalent significance of 0.05. This study resulted in a correlation coefficient ($r = 0.414$) with Sig. = 0.000. Since the Sig.= 0.000 < 0.05 the H_0 is rejected. This means that there is a significant relationship between self-efficacy and students' final exam results.

Keywords: self-efficacy, final exam

1. Introduction
The individual opportunity manages to do its job, depending on its self-efficacy level [1]. People, in general, will do what they believe will succeed and otherwise do not do it if they feel it will not succeed. Self-efficacy refers to the personal beliefs or beliefs of a person on his or her own ability to perform an effectively determined task [2]. Self-Efficacy is one of the important factors for students in achieving students' final exam results. High Self-efficacy students help students to accomplish effective and well-planned tasks. Students will believe in his abilities and confidently apply them as a form so that they accomplish the goal [3].

Reveals that levels of motivation, affective state, and the actions of people are more based on what they believe than on what is objectively occurring. Strong Self-efficacy enhances human achievement and personal well-being in many respects [4].Self-efficacy beliefs work in conjunction with other sociocognitive factors, such as the outcome of expectations or objectives, in the arrangement of human Behavior [5].Individuals are expected to have strong beliefs and opinions about themselves in mathematical processes and skills and in contexts where mathematics is used [6].Self-efficacy students, who are students ' confidence in their abilities, affect students ' mathematical problem-solving skills [7].Self-efficacy mathematics can be distinguished from the size of other attitudes towards mathematics in terms of self-efficacy mathematics is a situational specific assessment or problem of individual belief in its ability to successfully perform or To resolve a particular question or problem [8].

The purpose of this research is to see if there is a positive relationship between self-efficacy and students' final exam results. Self-efficacy has a remarkable effect on motivation, effort, persistence,

and individual performance [1]. Action and performance options are influenced by self-efficacy. Self-Efficacy indicates how strong someone's belief that they have the skills to do something, they can be assured that other factors will make them succeed [9].The self-efficacy concept has a strong influence on the approach to duty, persistence to accomplish the same, as well as the level of effort [10].Students with different self-confidence demonstrate different levels of cognitive, social and emotional involvement in school [11].The various definitions given regarding self-efficacy include general academic purpose-oriented attitudes.

2. Method

This research is quantitative. The population of this research is the students of MAN 1 South Lampung and MTsN 1 South Lampung. Samples were taken based on special characteristics, which are high-grade students in both schools. The research samples amounted to 107 students (two classes of X from MAN 1 South Lampung and two classes of VIII from MTsN 1 South Lampung).

Data shows in this research with a poll or self-efficacy questionnaire. The Data for student learning results is the result of the semesterfinal assessment even mathematics lesson year 2018/2019. This self-efficacy poll is based on a Likert scale using four options answers to existing statements, namely: Strongly agree (SA), Agree (A), Disagree (D), and strongly disagree (SD).

Table 1. Alternative scores for questionnaire answers

Alternative Answer	Score
Strongly Agree (SA)	4
Agree (A)	3
Disagree (D)	2
Strongly Disagree (SD)	1

Instrument reliability valuewith Cronbach Alpha-model shows the correlation coefficient valueis 0.878. This suggests that the self-efficacy scale has good reliability.

The purpose of this research is to know the relationship between self-efficacy and student students' final exam results. The study used the Pearson Correlation Bivariate analysis. The terms of use of such analysis are (1) ratio scale/interval, (2) data to a normal distribution, and (3) there is a linear relationship between research variables.

The linearity test shows the value of Deviation from Linearity Sig. is $0.536 > 0.05$, that's mean the structured data is linear.Normal distribution test shows the value of Asym. Sig. (2-tailed) amounting to $0.200 > 0.05$, that's mean the data have a normal distribution.

The analysis of Bivariate Pearson's correlation is further used by SPSS. The hypothesis in this study is (1) H_0: There is no relation between self-efficacy and student students' final exam results, (2) H_1: There is a relation between self-efficacy and students' final exam results.

3. Result and Discussion

Based on the test results of statistical analysis with correlation test Bivariate Pearson using the SPSS application, the acquired correlation coefficient of $R = 0.414$. The significance value (2-tailed) is $0.000 < 0.005$, which means there is a significant relationship between self-efficacy and students' final exam results.

Table 2. Bivariate Pearson Correlation Analysis

		Learning Outcome	Self Efficacy
Learning Outcome	Pearson Correlation	1	0,414
	Sig. (2-tailed)		0,000
	N	107	107
Self Efficacy	Perason Correlation	0,414	1

Sig. (2-tailed)	0,000	
N	107	107

Table 2 shows the value of correlate coefficient is R = 0.414 > T table (0.1900) then it can be concluded that there is a relationship between self-efficacy and students' final exam results. These results represent linearly that the higher the self-efficacy of students will have a better impact on student students' final exam results. Likewise, in contrast, students with low self-efficacy will feel unsure of their ability to have an impact on low students' final exam results.

The test result of Bivariate Pearson's correlation suggests that there is a linear relationship between self-efficacy and the students' final exam results in even math subjects. Xu and Qi [12] in his research stated that for mathematics, self-efficacy was instrumental in the mediation between teacher-student relations and academic achievement. The self-efficacy dimensions expressed by Bandura [8] are magnitude, strength and generality influence the outcome of learning because of the confidence and resilience of the students in the effort to complete the task. As stated by [3] that self-efficacy makes one belief in their ability to overcome obstacles that hamper the achievement of their goals. In this case, students believe that they can effectively accomplish the task. Furthermore, high self-efficacy can cultivate the ability to carry out self-control and diligence, and it will affect student students' final exam results[13].

Self-efficacy academic beliefs affect student education performance because of the effects they produce through the four psychological processes [14] i.e., cognitive processes, motivation, and effective and selection [11]. There are three dimensions of attribution that affect the success or failure of a person in learning, namely (1) Locus of Control: Referring to beliefs about whether the results given are caused by individuals or by some external factors outside Its control, (2) Stability: Refers to the cause attributed to unstable or stable factors that lead to On positive or negative results, and (3) Controllability: Refers to whether a person feels or has no control over the results given [11].Self-efficacy assessment can make students do activities that attract their attention seriously or avoid situations that are believed to exceed their abilities[15].

The results of this study are self-efficacy is one predictor of student learning outcomes. Statements in the questionnaire such as "I believe I can work on difficult questions" or "I believe I answer the exam questions correctly" can lead to student self-efficacy, perhaps low, medium, or high. Students with high self-efficacy will have results that are directly proportional to their high academic scores. This also applies to students who have moderate and low self-efficacy. This statement is supported by the results of previous studies which showed that there was a significant relationship between self-efficacy and student learning outcomes [16].

4. Conclusion

Based on the results of the analysis and discussion in this study, it can be concluded that there is a linear relationship between self-efficacy and student students' final exam results. This research suggests that self-efficacy is one of the important factors in student learning success. High self-efficacy students will be confident of their ability and strive to accomplish the task effectively, thereby impacting good students' final exam results.

5. Acknowledgments

6. References

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