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Artikel

**The Effect of Academic Self-Concept on Students' English Achievement**Ahmad Nadhif<sup>1\*</sup>, Ulfi Fitriyaningsih<sup>2</sup>, Aries Fitriani<sup>3</sup><sup>1,2,3</sup>Institut Agama Islam Negeri Ponorogo, Ponorogo\*Corresponding Address: [nadheef@yahoo.com](mailto:nadheef@yahoo.com)**Article info**

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**Key Word:**

Academic self-concept  
English achievement

**ABSTRACT**

This study aims at investigating whether there is a substantial effect of academic self-concept on students' English accomplishment at the eleventh-grade students at MA Ma'arif Klego in academic year 2019/2020. This research was conducted in an ex-post facto design involving thirty eight students using questionnaire and documentation as the technique of the data collection. The data was then analyzed by applying the simple linear regression formula by SPSS 23.00 for windows. The result shows that there is significant effect of academic self-concept on students' English achievement. It is proven by the value of F-test:  $28.618 > F\text{-table } 4.10$  and the significance value:  $0.000$  lower than  $0.05$ . The equational regression model is  $Y=63.677 + 0.3X$ .

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**INTRODUCTION**

There is a revolution in the field of psychology, which emphasises a positive psychology and focuses on how healthy, normal and exceptional individuals can get the most from life. In line with this emphasis, Marsh and Martin (2011) argue, a positive self-concept is valued as a desired result in many disciplines of psychology such as educational, developmental, sport/exercise, health, social, and personality psychology, as well as in many other social science disciplines. In this regard, Branden (1994) states that self-concept is considered as a exceedingly vital and influential cause in that it is closely linked to people's behaviours and numerous emotional and cognitive outcomes such as anxiety, academic achievement, happiness, suicide, deficient self-esteem, etc.

Self-concept, in Marcgargo (1991)'s view, is the set of perceptions or reference points one has about her/himself; or more precisely the set of characteristics, attributes, qualities and deficiencies, capacities and limits, values, and relationships that individuals know to be descriptive of themselves and which they perceive as data concerning their identity. In the same vein, Wylie (1961) states that self-concept refers to the one's perceptions and feelings toward her/himself and it plays a central role concerning mental health and the achievement of psychological maturity.

Shavelson, *et al.* (1976) assert that self-concept is a multifaceted, hierarchical construct. They showed a possible representation of this hierarchy in which general self-concept appeared at the apex and was categorized into academic and nonacademic self-concepts. Meanwhile, according to Nathan and Goetz (2013:82), academic self-concept (ASC) refers to

the declarative self-evaluation of one's cognitive abilities or the personal beliefs someone establish about their academic abilities or skills. A person's ASC develops with mental and physical growth and begins to develop at early childhood. Parenting styles and early educators, as concluded by Berner and Mistry (2007), have an influence on ASC. In this respect, Marsh and Yeung (1998:75) finds out that academic self-concept reaches its lowest point in middle adolescence and increases through early adulthood.

Academic self-concept research by Guay, *et. al.*, as cited by Meerah & Mazlan (2017), imposes that determining the direction of the relation between academic selfconcept and academic achievement has been a critical issue in this field. Meanwhile, Mars & Craven (1997) argue that academic self-concept and achievement are mutually reinforcing, each leading to gains in the other. Dariyo (2003: 56) also suggests that students with high self-concept tend to be motivated to achieve their goals; while those with less self-concept tend to lose motivation and interest, which in turn impact their academic achievement. Furthermore, the research findings conducted by McNerney *et. al.* (2012) suggest that academic selfconcept, learning strategies, and academic achievement have reciprocal relationships with each other.

This study tries to investigate whether such claims are also true for the eleventh-grade students of MA Ma'arif Klego in academic year 2019/2020, especially whether there is significant effect of academic self-concept on their English achievement.

## RESEARCH METHOD

This study is designed in the form of causal-comparative research. By this design, the researchers attempts to determine the cause, or reason, for existing differences in the behavior or status of groups of students. In other words, established groups are already different on some variable, which thus cannot be manipulated, and the researcher tries to recognize the main cause of this dissimilarity. Such research is occasionally called *ex post facto*, which is Latin for "after the fact," due to the fact that both the effect and the alleged cause have already existed and must be studied in retrospect.

The population of this research is all eleventh-grade students of MA Ma'arif Klego consisting of thirty-eight students. The sample is taken through saturated sampling technique which means that all the population are the sample of this research.

The instrument to collect the data are questionnaire, which is used to measure the level of students' academic self-concept, and documentation of the students' scores at the final exam of English to measure their achievement.

The questionnaire is adapted from the theory developed by Musa Matovu consisting of 20 questions. The researchers test the validity and reliability on 19 students who are not the sample of the study before distributing the questionnaire to the participants of the research. The result is as follows.

### Instrument Validity

In this study, the researchers used SPSS 23.00 version in measuring the validity. The analysis is used to find out the  $r_{xy}$ , then it is consulted with r-table with 5% significance level for product moment with  $df$  or  $db$  is  $n-r$ ;  $19 - 2 = 17$ . The r-table is 0,456. If the value of  $r_{xy}$  is equal to or higher than the value of r-table, it indicates that item is a valid. If the value of  $r_{xy}$  is lower than the value of r-table, it indicates that item is invalid.

The result of the validity test shows that 20 items of the questionnaire proposed to 19 respondents are valid.

### Instrument Reliability

To test the reliability, the formula of Alpha Cronbach is applied. The result of the test shows that the reliability of the instrument is 0,888. The value of reliability is counted with

the r-table on the significance of 5%. The value of the r-table is 0,456. Because the value of “r” index reliability is 0,888 > r-table (0,456), the test is therefore reliable.

### Data Analysis

The collected data is then analyzed to decide whether or not there is significant influence of academic self-concept on students’ English learning achievement of the eleventh grade students of MA Ma’arif Klego in academic year 2019/2020.

In this research, the data is analyzed through 2 types of test, namely assumption test and hypothesis test. Before analyzing the data and the hypothesis, the researchers make sure that the data fulfill the requirement of assumption test that are normality and linearity and hypothesis test.

### Assumption Test

Assumption test is categorized into two: normality and linearity tests. The distribution of the normality data is called normality test. The normality test of the data can be measured by several statistic test. The SPSS with Kolmogorov-Smirnov formula was applied in this research.

The linearity test is a linear test of line regression. It is used in the form of simple linear regression analysis and multiple linear regression analysis. By finding the regression line model from the independent variable X to the dependent variable Y, the linearity test will be accumulated.

### Hypothesis test

In testing the hypothesis, the researchers make use of regression analysis. There are two kinds of regression analysis: simple linear regression and multiple linear regressions. Because there are only two variables in this research, simple linear regression is selected to analyze the data, using SPSS program version 23.00 for windows.

## FINDINGS AND DISCUSSION

The variables of this research consisted of two variable namely Academic Self-Concept (X) and English learning achievement (Y). The obtained data are described as follow.

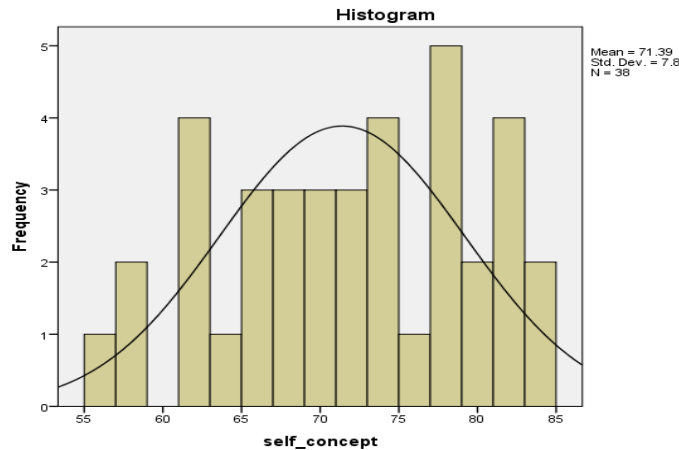
### The Students’ Self-Regulation of Learning

As can be seen in Table 1, the result of the questionnaire of academic self-concept shows that the highest score is 83 and the lowest score is 56. In this regard, the mean is 71.39, the standard deviation is 7.800, the variance is 60.840, and the range is 27.

**Table 1.** Statistics descriptions of students’ academic self-concept questionnaire score

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Academic self_concept	38	27	56	83	71.39	7.800	60.840
Valid N (listwise)	38						

As for the frequency distribution, the result is presented in figure 1 below.



**Figure 1.** Histogram for the frequency distribution of the students' self-concept

From the histogram in figure 1, the mean is 71.39 and the deviation standard is 7.800. It also can be seen that the determination category of students' academic self-concept is good, medium, or low. The students' score is classified into good, medium, or low based on the below critirea:

- a. Score which is more than  $M + 1.SD$  ( $71.39 + 7.800 = 79$ ) is categorized as 'good'.
- b. Score which is between  $M - 1.SD$  to  $M + 1.SD$  ( $63 - 79$ ) is categorized as 'medium'.
- c. Score which is less than  $M - 1.SD$  ( $71.39 - 7.800 = 63$ ) is categorized as 'low'.

Based on the above criteria, the following table is the configuration of the students' score on their academic self-concept, which shows that 8 students or 21% are categorized as good; 23 students or 61% are medium; and 7 students or 18% are low.

**Table 2. The categorization of students' academic self-concept**

No.	Score	Frequency	Percentage	Category
1.	More than 79	8	21%	Good
2.	63 – 79	23	61%	Medium
3.	Less than 63	7	18%	Low
Total		38	100 %	

**Students' English Learning Achievement**

The result of final examination shows that the highest score is 93, and the lowest score is 80, the mean is 85,08, and the standard deviation is 3.514. Table 3 below shows more detailed description on the examination result.

**Table 3.** Statistic description on students' final test scores

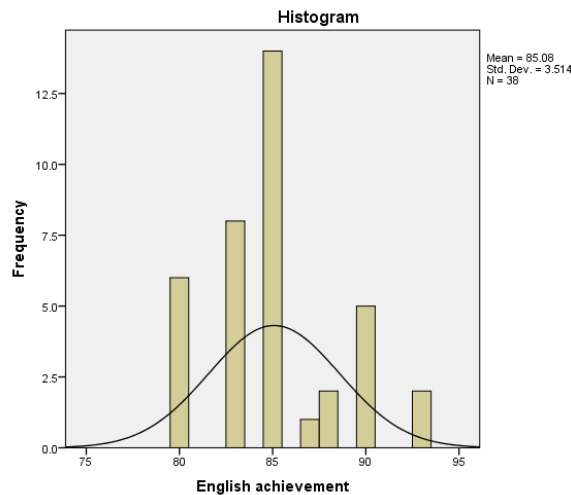
	N	Range	Min.	Max.	Mean	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
English achievement	38	13	80	93	85.08	570	3.514
Valid N (listwise)	38						

Meanwhile, the frequency distribution of the test result is presented in table 4 below.

**Table 4.** Frequency distribution of students' final test score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	80	6	15.8	15.8	15.8
	83	8	21.1	21.1	36.8
	85	14	36.8	36.8	73.7
	87	1	2.6	2.6	76.3
	88	2	5.3	5.3	81.6
	90	5	13.2	13.2	94.7
	93	2	5.3	5.3	100.0
	Total	38	100.0	100.0	

The table shows that the students' score varies. There are 6 students (15.8%) who get 80; 8 students (21.1%) get 83; 14 students (36.8%) score 85; 1 student (2.6%) get 87; 2 students (5.3%) score 88; 5 students (13.2%) score 90; and 2 students (5.3%) get 93. These data is presented in the form of histogram in figure 2 below.



**Figure 2.** Histogram for Students' English test scores.

The students' score is categorized based on the following criteria:

- Score which is more than  $M + 1.SD$  ( $85.08 + 3.514 = 89$ ) is categorized as 'good'.
- Score which is between  $M - 1.SD$  to  $M + 1.SD$  ( $82 - 89$ ) is categorized as 'medium'.
- Score which is less than  $M - 1.SD$  ( $85.08 - 3.514 = 82$ ) is categorized as 'low'.

Based on the criteria, the data (as can be seen in table 5) shows that 19% or 7 students are categorized as good, 65% or 25 students medium, and 16% or 6 students low. Hence, the majority of the students achieve medium score.

**Table 5.** The categorization of students' English learning achievement

No.	Score	Frequency	Percentage	Category
1.	More than 89	7	19%	Good
2.	82 – 89	25	65%	Medium
3.	Less than 82	6	16%	Low
Total		38	100 %	

## DATA ANALYSIS

Before analyzing the data and coming to the hypothesis, the researchers make sure that the data fulfills the requirement of assumption test. They are as follows.

### Assumption Test

Assumption test consists of normality and linearity test.

#### Normality test

This research use the SPSS with Kolmogorov-Smirnov formula. The whole computation for normality test is as follows.

**Table 6.** Test of normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Academic Self_Concept	.106	38	.200*	.955	38	.126

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The table above shows the significant value is 0.126. The significant value is greater than 0.05. It indicates that the test is normal in distribution.

#### Linearity test

The whole computation for linearity test can be at Table 7 below. The deviation from linearity is 0.482, which is higher than 0.05. Hence, it can be concluded that this sample is linear in distribution.

**Table 7.** Linearity Test

		Sum of Squares	Df	Mean Square	F	Sig.	
English achievement * academic self-concept	Between Groups	(Combined)	345.596	21	16.457	2.369	.042
		Linearity	202.292	1	202.292	29.116	.000
		Deviation from Linearity	143.304	20	7.165	1.031	.482
		Within Groups	111.167	16	6.948		
Total		456.763	37				

### Hypothesis Test

The analysis of how academic self-concept influence the students' English achievement can be seen on the following table.

**Table 8.** Model summary of simple linear regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.665 <sup>a</sup>	.443	.427	2.659

a. Predictors: (Constant), academic self-concept

Based on the table above, the value  $R$  as the symbol of coefficient correlation shows score 0,665. It means that the correlation between the two variables is moderate. Moreover, the value of  $R$ -square/coefficient determinations informs how well the independent and dependent variable interact. The  $R$ -square above is 0.443. It implies that the independent variable (academic self-concept) give 44.3% contribution on the dependent variable (English learning achievement).

The analysis then focus on the linearity of each variable, namely the independent variable  $X$  (self-regulated learning) toward the dependent variable  $Y$  (English learning achievement), as presented in the ANOVA table below.

**Table 9.** Anova table

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	202.292	1	202.292	28.618	.000 <sup>b</sup>
Residual	254.471	36	7.069		
Total	456.763	37			

a. Dependent Variable: English achievement

b. Predictors: (Constant), academic self-concept

Referring to the ANOVA table above, the  $F$ -test is 28.618, which higher than  $F$ -table 4.10  $F$ -table with  $df1 = 1$ ,  $df2 = 146$  listed 7.06. The significant value is 0,000. It means that the regression model equation is significant because it has already fulfilled the criteria of linearity. The criteria is that if the significant value is less than 0.05, the linear regression can be applied.

After that, the analysis focuses on the effect of the independent variable  $X$  (self-regulated learning) on the dependent variable  $Y$  (English learning achievement). It is presented in the coefficient table below.

**Table 10.** Coefficients table

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
1 (Constant)	63.677	4.024		15.825	.000
Academic self_concept	.300	.056	.665	5.350	.000

a. Dependent Variable: English achievement

Table 10 above gives clear description about equation regression model through unstandardized coefficients  $B$ . It is found that the equation regression model is  $Y=63.677 + 0.3X$ .

Meanwhile, the t-score is 5.350, which is then compared to the 5% significance level that is 2.021. The significance value is 0,000 and the T-score is greater than T-table. Hence, the criteria of linearity (a significance value  $< 0.005$ ) has been fulfilled. Referring to the result before, it can be concluded that  $H_a$  is accepted and  $H_0$  is rejected. This proves that academic self-concept is significantly influence or affect the students' English achievement. The  $R$ -square is 0.443 implying that independent variable (academic self-concept) gives 44.3% contribution on the dependent variable (English learning achievement).

## CONCLUSION

This study aims at measuring whether there is significant effect of academic self-concept (based on the criteria developed by Musa Matovu) on English achievement of the students in the eleventh grade of MA Ma'arif in academic year 2019/2020. The result of this ex post facto research proves that there is significant influence of the students' academic self-concept on their English achievement. This is therefore more evidence on how important especially for teachers to help their students improve their academic self-concept.

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