

## The influence of Achievement Motivation and Academic Self-concept toward Academic Achievement of Public Junior High School in Malang

Shophia Terry Kurniawaty<sup>1</sup>, Mohamad Syafiq<sup>2</sup> & Mufied Fauziah<sup>3</sup>
Universitas Negeri Malang, Indonesia
emailphia@yahoo.co.id<sup>1</sup>, Mohammadsyafiq\_afik@yahoo.com<sup>2</sup>, mufiedfauziah@gmail.com<sup>3</sup>

Abstract: Academic achievement is a starting point for the students to succeed in learning. There are two main factors that contribute to succeed of the students' academic achievement there are the achievement motivation and academic self-concept. Both are non-cognitive factors that can affect the academic achievements. This research aimed of testing the influence of achievement motivation and academic self-concept towards student academic achievement of junior high school in Malang. Sample of this study were 183 males and 210 female students. Showed that academic self-concept directly influenced academic achievement (0.153 with the significance of 0.022). Academic motivation directly influenced academic achievement (0,180 with the significance of 0,010). Academic self-concept directly influenced the academic motivation (0.725 with value significance 0.000). Academic self-concept indirectly influenced through academic motivation (0.131 value significance 0.000). In showed, the results showed there were direct and indirect influenced of academic self-concept and achievement motivation toward the academic achievement.

Keyword: Academic achievement, achievement motivation and academic self-concept

Academic achievement is a starting point to succeed or whether students in academics. Even being a part of the student's graduation from determining a level of education. Academic achievement is generally viewed as the embodiment of the achievement of the knowledge or skill developed in school subjects (Busari, 2000), but on the other hand, the success and failure of the student is a potential event that faced students along the way of his education. Academic achievement in a school or institution becomes very important to be examined because the academic achievement is the success criteria of learning process in the institution. According to Damrongpanit, Reungtragul & Pittayanon (2010) academic achievement becomes important and need to be underlined because guidance increased the quality of national education in the nation. Most communities have argued that low academic achievement more determined by factors of intelligence, talents, interests, and support from family, school or community environment.

Guidance and counseling services are extremely important conducted by counselors at the school. It's evident from the research results Hussain (2006) concluded that counseling significantly affects the attitude of learning, the habit of learning, and academic achievements of junior high school students. Development of students 'academic achievement is a thing that could not be ignored by the counselors. According to Modo (2013), students who obtain guidance and counseling service gets an academic achievement than students who do not get the guidance and counseling services. Thus the development of academic achievement could be supported by the grant guidance and counseling services. In line with the opinion of the Modo (2013), Sink & Stroh's (2003) stated that the guidance and counseling program is a comprehensive, school-based real benefits to students in terms of improved academic achievement.



One of the non-cognitive factors can deliver someone in academic achievement and a few other things is motivated achievers. Motivated achievers have a high influence against the success of student achievement in school. Ardhana (1990) explained that motivated achievers are an important factor to achieve the feat, both in academic achievers as well as in other fields. While Slavin (1994) revealed that one type of motivation in education is the most important motivation achievers (achievement motivation).

One type of motivation that drives a person to improve the quality of the self and achieve a certain standard of excellence is an accomplished motivational. McClelland explains achievement motivation is the motivation that drives individuals to achieve success in competing with certain standards of excellence (*standard of excellence*). Therefore, if there is high achievers students' motivation then the academic achievement of students will be high.

The motivation of overachievers has close relation with the academic self-concept. Students are subject and object in process of learning activities (behavioral) study. Behavior study that was done is certainly influenced by the characteristics of the students as a manifestation of the concept itself. Rogers (in Burns, 1993) explains the self-concept to be the most important determinant of an individual's response to the environment, this means that when self-concept of positive student then learning behavior will be influenced towards the positive. Otherwise when the self-concept of negative student in learning, then conduct his studies will realize the negative behavior. For example, lazy, do not create tasks, don't listen to the teacher's explanation, did not want to attend school, and even aloof.

Research results showed that success academic achievement of students one of the factors that contributing is the academic self-concept. Students who have a positive self-concept looked at themselves can be accomplished in the context of academic in the learning environment and they feel comfortable in the social environment in the classroom. Self-concept of students is one of the factors that affect the achievement of their learning. It makes the basis for researchers that the factors of non-cognitive influence academic achievement is very important to examined in education

#### **METHOD**

## **Program Study**

The research design was use Non-experimental Research (Gall et.al. 2003). This study will not do the manipulation or comparison of treatment agonists the variables were examined, but do the measurements in a natural setting (natural). The researcher measure and explain the influence inter-variable. Gall (2003: 289 & 295) explained that measurement and explaining on this study used Causal Relationship explanatory Study. Its mean this study not only explain the relationship but most them. That is explained the influence level between variables.

## **Population and Sample**

The population in this research is the total number of grade VII, VIII and IX Public Junior High School in Malang City at period 2015/2016, the total number of 20,852 students from 26 schools. Sampling techniques using cluster random sampling then known 393 sample student consists of 210 female and 183 male.

#### **Instrument**

This study, the instrument of academic self-concept adapted "Validation of the Academic Self-Concept Questionnaire in the Vietnam School Survey Round 1" who developed by Louise



Yorke. The instrument of achievement motivation adapted the instrument who developed by Hani Mufaridah (2015) with the tittle of thesis "model of academic achievement theoretic of senior high school of student in Malang city". The purpose of the instrument is to obtain data information that regard to the variables research that is motivated achievers, academic self-concept. Academic self-concept is taken from administration of the average value of daily examination and the result of semester middle examination for mathematic, IPA, IPS, English and Indonesia.

## **Data Analysis**

Technique of data analysis used in this study is path analysis. Path analysis is a statistical method which used to test the hypothesis that interconnected between three or more variables and can test the strength comparison either directly or indirectly between variables Gall dkk (2003: 347).

#### **RESULT**

#### **Test of Assumptions**

#### Test of linear

The purpose of the test linear was to know the linear or whether the relationship between each variable (Cohen, 1983). Testing criteria mentions that if the value of the probability < level of significance (alpha ( $\alpha$ =5%)) then there is a linear relationship between the endogenous variables against exogenous variables. Linear test results are presented in the following table:

Table 1 Summary: Linear Test of Academic Self-concept, Achievement Motivation, Academic Achievement

Exogen	Endogen	F	Sig.	Description
Academic Self-concept	Academic Achievement	61.366	0.000	Linear
Achievement Motivation	Academic Achievement	68.520	0.000	Linear
Academic Self-concept	Achievement Motivation	433.086	0.000	Linear

Based on table 1 Note that relationship endogenous against exogenous have probability < level of significance (alpha ( $\alpha$ =5%)). Thus it can be stated that all relationships exogenous against endogenous stated linear.

## **Test of Normality**

Test of normality assumption to know whether residual generated by path analysis model (normal or abnormal distribution). Residual normal stated when the probability of the test of Kolmogorov Smirnov value greater than the level of significant (alpha=5%). Following are the results of testing the assumptions of normality through Kolmogorov Smirnov:

Tabel 2 Normality Test of Academic Self-concept, Achievement Motivation and Academic Achievement

Relation Between Variables	Model 1: the influence of academic self- concept and achievement motivation towards academic achievement	Model 2: the influence of academic self-concept against achievement motivation		
Kolmogorov-Smirnov Z	0.035	0.042		
Probabilities	0.200	0.095		



Testing the assumptions of normality of Model 1 was the influence of academic self-concept and achievement motivation towards academic achievement ( $Kolmogorov\ Smirnov\$ of 0.035, probabilities 0.200). Model 2 was the influence of academic self-concept against achievement motivation ( $Kolmogorov\ Smirnov\$ of 0.042, probabilities 0.095). These results indicate that the probability >  $level\ of\ significant\$ ( $\alpha$ =5%). This means the residual generated by both models revealed normal distribution.

#### **Test of Heteroskedastisitas**

Heteroskedastisitas test to find out which residual has a homogeneous variety (constant) or not from an observation to other observations (Dachlan, 2014). Heterokedastisitas test can be observed through the Scatter Plot in Figure 1. Testing criteria stated residual dots is spread randomly. Then the conclusion stated assumption heteroskedastisitas are fulfilled.

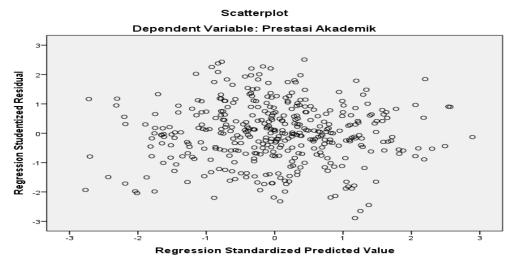


Figure 1 Test of Heteroskedastisitas: Academic Achievement (The Dependent Variable)

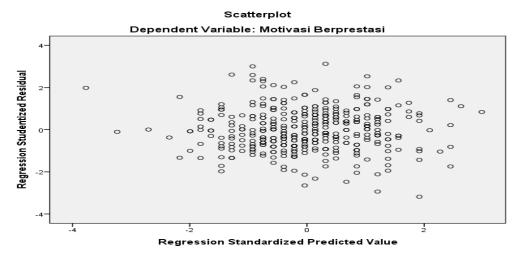


Figure 2 Test of Heteroskedastisitas: Achievement motivation (The Dependent Variable)

The results of tests the assumption heteroskedastisitas using scatter plots, which are residual dots generated by the model of influential academic self-concept and achievement motivation toward academic achievement. Influential academic self-concept toward achievement motivation is random spread



#### **Test of Multikolinieritas**

Test multikolinieritas used to present the degree in which a variable can be explained by other variables or inter-correlation between the variables. Multikolinieritas testing is expected between the independent variables are not mutually correlated. How to detect whether there are multikolinieritas can be done by looking at the value of the Variance Inflation Factor (VIF) of each independent variable against the dependent variable. If the value of the VIF smaller equal to 10 then stated there is no model multikolinier. Assumption multikolinieritas test results can be known through the following table:

Table 3 Multikolinieritas Test against Academic Achievement

#### Coefficients<sup>a</sup>

	Model	Collinearity Statistics		
	Wodel	Tolerance	VIF	
	(Constant)			
1	Academic Self-concept	.459	2,180	
	Achievement motivation	.423	2,365	

#### **Dependent Variable: Academic Achievement**

Based on the results of the analysis table 3, it can be inferred that all variables have values that VIF is not more than 10, conclusion the assumption does not occur multikolinieritas be fulfilled.

#### **Goodness of fit Model**

Goodness of fit Model is used to know the magnitude of diversity of exogenous variables in explaining the diversity of endogenous variables, or in other words to know the magnitude of the contribution of exogenous variables against endogenous variables. Goodness of fit Model in the analysis of the Path is done using the coefficient of determination of Total  $(R_m^2)$ . As for the results of the Goodness of fit models that have been summarized in the following table:

Table 4 Summary Goodness of fit Model

Variable	$R^2$	
Academic Achievement	0,214	
Achievement Motivation	0,526	
$R_{\rm m}^2 = 1 - ((1 - R_{\rm Y1}^2) * (1 - R_{\rm Y2}^2))$		
$R_{\rm m}^2 = 1 - ((1 - 0.214) * (1 - 0.526)) = 0.627$		

R-square variable academic achievement valued at 0.214 or at 21.4%. It can be shown that academic achievement is described by academic self-concept, achievement motivation (21.4%), or in other words the contribution of academic self-concept, achievement motivation against academic achievement (21.4%), while the balance (78.6%) is the contribution of other variables that are not discussed in this study.

R-square of achievers motivation variables are (0.526 or 52.6%). It may indicate that the diversity of motivations overachievers capable described by academic self-concept (52.6%), or in other words the contribution of academic self-concept against motivation achievers (52.6%), while the balance (47.4%) is the contribution of other variables that are not discussed in this study.



The coefficient of determination of Total  $(R_m^2)$  value (0,627 or 62,7%). It may indicate that the diversity of academic achievement are able to explained by the model as overall (62.7%), or in other words the contribution of academic self-concept, motivation of overachievers against academic achievement (62.7%), while the balance (37.3%) is the contribution of other variables that are not discussed in this study.

Table 5 Output Anova Academic Achievement

	N	O	<b>T</b> 7	٨	a
A	IN	u	v	А	•

Mod	el	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	1935.609	4	483.902	26.398	.000 <sup>b</sup>
1	Residual	7112.531	388	18.331		
	Total	9048.140	392			

#### **Dependent Variable: Academic Achievement**

#### **Predictors: (Constant Academic Self-concept, Achievement Motivation)**

Based on the results of test Anova in table 5 were obtained F-count (26,398) with significance (0.000 < 0.05), then a significant regression model or can be said to deserve is used to predict academic achievement. It shows that there is a significant influence of the variable academic self-concept, achievement motivation against academic achievement.

Table 6 Output Coefficients Academic Achievement

#### Coefficients<sup>a</sup>

	110101105					
Model		Unstandar	dized Coefficients	Standardized Coefficients	T	Sig.
		В	Std. Error	Beta		
	(Constant)	48,454	3,087		15,694	,000
1	Academic Self Concept	2,485	1,078	,153	2,304	,022
	Achievement Motivation	3,053	1,173	,180	2,602	,010

## **Dependent Variable: Academic Achievement**

Based on table 6 partial tests can know that academic self-concept of variables, the motivation of overachievers has significant effects against variable academic achievement, shown with the value the significance of each variable is smaller than 0.05, are 0.022 for academic Self-concept, 0.010 to motivation of overachievers. The following interpretations of each variable:

- a. academic self-Concept towards academic achievement produces a value T-count (2.304, sig 0.022). The results of these tests indicate that significance < alpha (5%). This means there is a significant influence of the academic self-concept directly toward academic achievement. Thus the hypothesis 1 is fulfilled.
- b. achievement motivation towards academic achievement produces a value T-count (2.602, sig 0.010). The results of these tests indicate that significance < alpha (5%). This means there is a significant influence of the achievement motivation directly toward academic achievement. Thus the hypothesis 2 is fulfilled.
- c. academic self-Concept towards achievement motivation produces a value T-count (20.811, sig 0.000). The results of these tests indicate that significance < alpha (5%). This means there is a significant influence of the academic self-concept directly toward achievement motivation. Furthermore the influence of academic self-concept towards academic achievement through motivation overachievers. It known that the academic self-concept significantly influence toward achievement motivation, and overachievers motivation



toward academic achievement. Because of these significant lines then it can be stated that there is a significant influence of the academic self-concept towards academic achievement through motivation overachievers. Thus motivated achievers are able to mediate the influence of academic self-concept toward academic achievement.

Table 7 Conclusion the Influence of Total against Academic Achievement

Variables				Influential		
Exogenous	Endogenous	Mediation	Direct	Indirect	Total	
Academic Self- concept	Academic Achievement	Achievement motivation	0,153	0,131	0,284	
Achievement motivation	Academic Achievement	-	0,180	-	0,180	
Academic Self- concept	Achievement motivation	-	0,725	-	0,725	

In table 7 can be known the existence of a direct influential directly or indirectly between the three exogenous and endogenous variables with the following details:

- a) The variables of academic self-concept of directly influential against the academic achievement (0.153, sig 0.022). It showed that the academic self-concept of an influential positive and significantly against academic achievement. Thus the better academic self-concept then tends to be able to increase academic achievement.
- b) The variables of achievement motivation of directly influential against the academic achievement (0.180, sig 0.010). It showed that the achievement motivation of an influential positive and significantly against academic achievement. Thus the better achievement motivation then tends to be able to increase academic achievement.
- c) The variables of academic self-concept of directly influential against the achievement motivation (0.725, sig 0.000). It showed that the academic self-concept of an influential positive and significantly against achievement motivation. Thus the better academic self-concept then tends to be able to increase achievement motivation.
- d) The variables of academic self-concept of indirectly influential against the academic achievement (0.131, sig 0.000). It showed that the academic self-concept of an influential positive and significantly against academic achievement through achievement motivation. Thus the better achievement motivation then tends to be able to increase achievement motivation. Thus the better motivated achievers that is caused by the better academic self-concept then tends to be able to increase academic achievement.

#### **DISCUSSION**

#### The Influence between Constructs the Research

## 1. The influence of Academic self-Concept towards academic achievement

Data analysis results against path analysis showed the academic self-concept that significantly and positively affect academic achievement (0,153, p=0,022), so the influence of independent variables generally accepted empirical. The results of this research are consistent with research conducted by Greene & Zirkel at (Waschull, 2005), Fink at Burns (1993), John & Grieneeks at Burns (1993), Shavelson et.al at Skoe & Lippe (2005), Tan & Yates (2007).

This analysis explains the concept of the self is low that the academic achievement will be low (Fink dalam Burns, 1993). Self-concepts among students of both men and women are



not much different. In other words, gender does not join in forming a self-concept (John & Grieneeks dalam Burns, 1993).

Self-concept of students is one of the factors that affect academic achievement (Bloom, Byrne, Hansford & Hattie, Marsh & Wilie in Hamachek, 1995). Should students have a positive view on their self can be aroused the confidence, motivation for more socializing and attain better achievements (Dayakisni & Yuniardi, 2008).

## 2. The influence of Motivation towards Academic Achievers

Data analysis results against path analysis shows that significant and positive motivation achievers affect academic achievement (0,180, p=0,010), so the influence of independent variables generally accepted empirical. The research is in line with the results of the study Rozhkova (2011) in his dissertation entitled "Measurement of the Implicit and Explicit Achievement Motive: New Perspectives" indicates that the motivation (explicit) to Excel is a predictor of academic success.

Research results (d "Ailly, 2003) shows that there is a difference in academic achievement results from motivation extrinsic and intrinsic motivation although the difference is not much different, where the retrieved external motivation with contributions to academic achievement (0,66), While the contribution of intrinsic motivation towards learning outcomes is (0.89). Achievement motivation is personal factors greatly affect academic achievement. Much research has proven the existence of the influence the motivation of overachievers against academic achievement, so it is inferred that the low-high motivation achievers will have an effect on the level of academic achievement that will be achieved by students. That is, if the motivation of the student's high achievers, then the academic achievement of students will be high anyway, in the understanding that there is influence the motivation of overachievers against academic achievement are significantly (Eliot, et.al. 2000; Pintrich in Pokay & Blumfeld, 1990).

Ringness reported research results by Anderman & Young (1994), that the individual who has the motivation high achievers also gained good academic achievement, compared with academic achievement earned by students who have the motivation of underachieving. According to Glover & Burning (1990), students who have the motivation high achievers will always want to work hard to succeed without expectation of getting reward or praise. The students like this have a strong tendency to do something upon the intrinsic satisfaction of success itself.

The motivation of overachievers can support the success in learning. The achievement motivation in a person involves processes that provide energy, redirect, and maintain behavior. Motivated behavior is behavior that contains energy has its direction and can be maintained. Motivation as a factor that influence and become a push directly on the behavior factors such as: interest, need, values, attitudes, aspirations and incentives. Motivation as a driving factor for doing an activity is very important in the learning activities of students.

# 3. Indirect Influence Academic Self Concept towards academic achievement through Motivation Achievers

Data analysis results against path analysis showed that the academic self-concept of indirect effect was significantly and positive against academic achievement through academic motivation (0, 725, p = 0.000) so the influence of independent variables generally accepted empirical. The results of this research are consistent with research conducted by Schunk (1991), Nilsen (2009), Damrongpanit, Reungtragul & Pittayanon (2010)

Self-concept consists of several dimensions, among others such as academic aspects and social aspects. Lots of personality concepts, one of which the self-concept. Students who have a positive self-concept will spur the emergence of great achievers motivation in themselves.



Self-concept of students is one of the factors that affect the motivation of achievers. Should students have a positive view on yourself will resurrect self-confidence and self-motivation for more socializing and achieve higher academic achievement (Dayakisni & Yuniardi, 2008).

Academic self-concept highly on students that possible to influence directly, improve achievement academic or foster academic motivation better. The research is in line with the research that has been done by Schunk (1991), Nilsen (2009), Damrongpant, reungtragul, Pittayon (2010), Elliot, Dweek (2005), Marsh, Hau, (2004), Long (2007), Pietsch, Walker, Champman (2003)

Academic self-concept is important variable that explained empiric study and identified that determine the realization of the potential of individual intellectual. The level of student's confident and their potential will managed well. Especially student had good self-concept. Student who had positive self-concept will contemplate their self can achieve achievement motivation can support the success in learning. Achievement motivation in a person involves processes that provide energy, directing and maintaining behavior. Motivated behavior is behavior that contains energy has its direction and can be maintained. Motivation as a factor that influence and become a push directly on the behavior factors other. Such as: interest, needs, attitudes, values and aspirations of the incentive. Motivation as a supporting factor for doing an activity is very important in the learning activities of students

## The finding of hypothesis

Three hypotheses have been found from result of researching. The following details of the three hypotheses:

- 1. The path confession from achievement motivation against academic achievement of 0,01 < 0,05, so the hypothesis H<sub>a</sub>1 accepted.
- 2. The path confession from academic self-concept against academic achievement of 0,022 < 0.05, so the hypothesis H<sub>a</sub>2 accepted.
- 3. The path confession from academic self-concept against academic achievement trough achievement of 0,000 < 0,05, so the hypothesis  $H_a5$  accepted.

#### The implications for guidance and Counseling

Education is something important and very noteworthy. The reason, if education is going well, so the person's life will go well. The school as a formal education institutions have a responsibility to develop the cognitive aspects as well as the non-cognitive aspects of students. The aspect of non-cognitive is achievement motivation and academic self-concept that Counselor assignments. The efforts of developing of student's non-cognitive aspects implemented through the activities of the guidance and Counseling services that autonomy by counselor. Counselor can develop programs that focus on improving the academic achievement of students. This is due to academic achievement to starting point the success or failure of students on academic and determinant of graduation students from academic level.

The finding about academic self-concept and very high achieving motivation related to guidance and counseling services. Especially was related to the social-personal services. Thus students can be assisted in academic achievement through individual planning service. The development of this service can implemented with program an activity that based on the results of reseach.



#### SUMMARY AND ADVICE

## **Summary**

Based on the results of hypothesis testing correlation between achievement motivations, academic self-concept and academic achievement can be summed up as follows. *First*, academic self-concept was influential direct significantly toward academic achievement. *Second*, achievement motivations influential direct significantly toward academic achievement. *Third*, academic self-concept was influential direct significantly toward academic motivation. *Four*, academic self-concept was influential indirect significantly toward academic achievement through motivation achievers.

Theoretic model of achievement academic of junior high school students in Malang city. That has developed empirical support and it has been proven feasible. The result of theory model that is academic achievement is influenced directly by motivation achievers, academic self-concept. Furthermore, academic achievement is influenced indirectly by the academic self-concept through motivation achievers. So it can be inferred that the person who has good self-concept and high achievement motivation will produce a good achievement.

#### Advice

Counselors can analyses students having regard to any other aspect (motivation achievement, academic self-concept, the ability of taking perspective from others, and the ability of thinking lateral) In addition to cognitive aspects that support the academic achievement of students. The fourth aspect could be developed through the program of guidance of counseling in program personal-social. Furthermore, the Counselor can make the results in this study to giving guidance and counseling services.

#### **REFERENCES**

- Burns, R.B. 1993. Konsep Diri, Teori, Pengukuran, Perkembangan dan Perilaku (alih bahasa oleh Eddy). Jakarta: Archan.
- Busari, A.O. 2000. Stress Inoculation Training and Self-statement Monitoring Technique in the Reduction of Test Anxiety among Adolescent Under-achievers in Ibad University. Tesis. Ibad: Ibad University.
- Damrongpanit, S., Reungtragul, A. & Pittayanon, T. 2010. An investigation of the Effect between Academic Self-Concept, NonAcademic Self-Concept, and Academic Achievement: Causal Ordering Models. *Reaserch in Higher Education Journal*.
- Ardhana, W. 1990. Atribusi Terhadap Sebab-sebab Keberhasilan dan Kegagalan serta kaitannya dengan Motivasi untuk Berprestasi. Jurnal Forum Penelitian IKIP Malang.4, 3-4.
- Gall, M.D., Gall, J.P. & Borg, W.R. 2003. *Educational Research: An Introduction*. Boston: A & B Publications.
- Hussain, A. 2006. Effect of Guidance Service on Study Attitudes, Study Habits, and Academic Achievement of Secondary School Students. *Bulletin of Education & Research*, 28 (1): 35-45.
- McClelland, D. 1987. Human Motivation. New York: Cambridge University Press.
- Modo, F., Sanni, K., Uwah, C. & Mogbo, I. 2013. Guidance and Counseling Service in Secondary School as Coping Strategy for Improved Academic Performance of Students





- in Akwa Ibom State, Nigeria. *In Journal of Research on Humanities and Social Sciences*. 3 (4), pp.43-47.
- Mufarida, H. 2015. *Model Teoritik Prestasi Akademik Siswa SMAN Kota Malang*. Tesis. Universitas Negeri Malang.
- Sing & Stroh. 2003. What are the Effects of Comprehensive Developmental Guidance Programs on Early Elementary Students' Academic Achievement?. *Professional School Counseling*, 6: 352-364
- Slavin, R.E. 2009. *Psychology Theory and Practice*. Massachussets: Allan and Bacon.

