

## Enhancing Teacher's Creativity by Strengthening Achievement Motivation and Transformational Leadership

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### ABSTRACT

This study aims to determine the correlation between achievement motivation toward teacher creativity. This study is conducted in Vocational High School in West Java Province. The study population is 185 teachers, and the number of samples is 127, decided by proportional random sampling. Data collection is taken from questionnaires. The data analysis technique used correlation regression partial and multiple and SITOREM Analysis. Based on the results of data analysis, it is known that there is a positive relationship between teacher creativity and motivation to excel. This means that the motivation to excel has an effect of 62.4%.

Furthermore, the positive relationship between teacher creativity and transformational leadership contributed 41.9%. If both are simultaneous, the contribution will be 64.6%. These results show that all free variables affect increasing teacher creativity. Based on the results of the SITOREM analysis, you can optimize each indicator; the calculation of the average indicator score is carried out based on the research results in the field. It turns out that almost all indicators need to be improved, and only 2 of them are maintained. Therefore, it can be concluded that the teacher's creativity could be enhanced by strengthening achievement motivation and transformational leadership either partially or concurrently.

**Keywords:** Teacher Creativity, Achievement Motivation, Transformational Leadership

### INTRODUCTION

Vocational High Schools are needed for teachers who have high Creativity. Teachers who are communicative in teaching and learning activities in the classroom will attract students. In addition to a communicative delivery, teaching aids by the teacher are also needed at this time. Classroom management with a layout that changes every week fosters a love for students to always be present in the classroom. The creative ideas of teachers expressed in student learning activities become an attraction for students in learning so that they impact the quality results of graduates.

However, the facts on the ground have not fully shown the results as expected. The initial survey conducted in October 2020 through a questionnaire on teachers in several civil servant teachers of State Vocational Schools in Bogor Regency showed problems with teacher creativity. The data obtained indicated that the Creativity of State Vocational Schools was not optimal at the Branch Office of the Regional Office 1 of West Java Province, with the following details:

- (1) 57% of teachers have not been moved to learn new things. Teachers only teach with materials provided by the school;
- (2) 53% of teachers are not open to accepting new, better ideas. Teachers still do not want to take advantage of current merging technologies to find the latest teaching materials;
- (3) 43% of teachers who do not have the desire to excel where teachers have not been confident in using new methods in learning because they feel unfamiliar, so teachers feel hesitant to use them;
- (4) 53% of teachers still have problems with taking risks. In this case, teachers do not want to use the new learning method because they are worried that the time that has been allocated is not enough. So that the targets of the subject matter are not met;
- (5) 47% of teachers are still constrained in finding opportunities or better ways. As a result, teachers are not yet willing to take advantage of the technology developing today.

These results indicate a need to increase teacher creativity through strengthening achievement motivation and transformational leadership. From the theory of experts, it can be synthesized that Creativity is the action of a teacher in developing himself continuously to overcome problems in learning. And the indicators of Creativity are: (a) Happy to learn new things, (b) Open thinking, (c) Having initiative, (d) Daring to take risks, and (e) Finding better ways. The motivation of achievement is a strong impulse from within a person to show excellence in work achievement. Indicators of motivation for achievement are (a) Conducting challenges; (b) Compete positively; (c) Excellence; (d) Mental champion; (e) High standards. In addition, Transformational leadership is a leadership behavior that can inspire motivation so that organizational goals are achieved, provide intellectual

stimulation, and make changes for the organization's development. Indicators of transformational leadership include: (a) Inspiring followers, (b) Having intellectuality, (c) Having concern, and (d) Having an ideal influence.

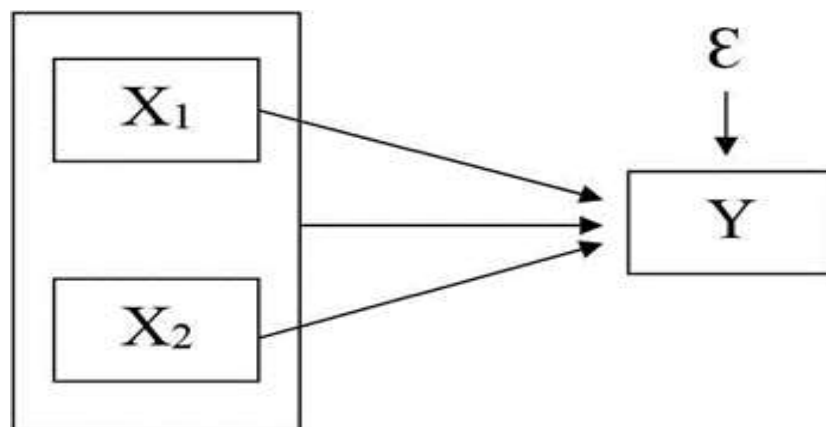
The hypotheses tested in this study include:

1. There is a positive relationship between achievement motivation and teacher creativity.
2. There is a positive relationship between transformational leadership and teacher Creativity.
3. There is a positive relationship between achievement motivation, transformational leadership, and teacher creativity.

## RESEARCH METHOD

This research uses quantitative methods with correlational survey methods and SITOREM analysis. The population in this study was teachers at Vocational High School in West Java. One hundred twenty-seven samples of this study were determined by using the Slovin formula. It is calculated in a *proportional random sampling* technique. Data from quantitative studies were analyzed using descriptive statistics and inferential statistics. Inferential statistics using regression-correlation analysis. Data analysis begins with the analysis of analysis requirements, namely: the normality test of the error estimate and the variance homogeneity test. It is continued with the determination of the regression equation, the regression equation significance test, the regression linearity, and hypothesis testing with correlation tests using ANOVA tables.

The constellation of relationships between the free variables  $X_1$  and  $X_2$  is described following in Figure 1.



**Figure 1. Constellation of research problems**

Information:

Variable  $X_1$  = Motivation for Achievement

Variable  $X_2$  = Transformational Leadership

Variable  $Y$  = Creativity

$\epsilon$  = Other variables

## RESULTS AND DISCUSSION

### 1. The Positive Relationship Between Motivation to Achieve and Teacher Creativity

the results of the hypothesis test of the relationship between achievement motivation and creativity showed that there was a positive relationship between the strength value of the relationship  $r_{y1}$  of 0.624 and the value of the coefficient of determination  $r^2_{y1}$  of 0.389, which means the motivation to achieve contributed to the increase in creativity by 38.9%. Furthermore, the significance of this relationship also obtained very significant results at the significance level of  $\alpha=0.05$  and  $\alpha=0.01$ . It can also be seen in the functional relationship between achievement motivation and creativity, which is indicated by the regression equation  $\hat{y} = 54.764 + 0.620x_1$ , meaning that each increase of one unit of the achievement motivation score can increase the creativity score by 0.620 at a constant of 54.764.

Table 1. Variance Analysis (ANAVA) with Regression Equations  $\hat{Y} = 54,764 + 0,620X_1$

Variance Source	dk	JK	RJK	Fcount	Ftable		Conclusion
					0,05	0,01	
Total (T)	127	2375127	2375127				
Regression(a)	1	2342197	2342197				
Regression (b/a)	1	1711,968	1711,968	6,85**	3,92	6,84	Very Significant
Remnant (S)	125	31218,1	251,759				
Tuna Fit	47	26051,8	554,294	1,26 <sup>ns</sup>	1,52	1,81	Linear
Galat	77	5166,3	67,094				

Information:

dk = degrees of freedom  
 JK = Sum of Squares  
 RJK = Average Sum of Squares  
 \*\* = Very Significant  
 ns = Non significant

The results of this study are supported by several previous studies, including research conducted by Suhail Ahmed Khan and Syed Rizwanuddin (2015), which examined the relationship between motivation to excel and Creativity. The study showed a positive and significant relationship ( $r = 0.318$ ;  $p < 0.05$ ) between achievement motivation and creativity. Furthermore, it shows that the higher the level of inspiration for a person's achievement, the higher the level of creativity will be based on the description above. Therefore, the motivation to excel is one of the determining factors in increasing teacher creativity.

### 1. The Positive Relationship Between Transformational Leadership and Teacher Creativity

Based on the results of data analysis calculations, a correlation value between transformational leadership and creativity was obtained,  $r_{y2} = 0.419$ , and a coefficient of determination  $r^2_{y2} = 0.175$  which means that the relationship between transformational leadership and creativity has a reasonably strong relationship and transformational leadership contributes 17.5% in the improvement of creativity. Furthermore, this relationship also obtained significant results at the significance levels of  $\alpha = 0.05$  and  $\alpha = 0.01$ . Therefore, there is a positive relationship between transformational leadership and creativity.

It can be seen in the functional relationship between transformational leadership and creativity indicated by the regression equation  $\hat{y} = 79.226 + 0.435x_2$ , meaning that each increase of one unit of transformational leadership score can increase the Creativity score by 0.435 at a constant of 79.226.

Table 2. Variance Analysis (ANAVA) with Regression Equation  $\hat{Y} = 79,226 + 0,435X_2$

Variance Source	dk	JK	RJK	Fcount	Ftable		Conclusion
					0,05	0,01	
Total (T)	127	2375127	2375127				
Regression (a)	1	2342197	2342197				
Regression(b/a)	1	5770,28	5770,282	26,56**	3,92	6,84	Very Significant
Remnant (S)	125	27159,8	217,278				
Tuna Fit	42	11525,6	274,419	1,46 <sup>ns</sup>	1,53	1,83	Linear
Galat	83	15634,2	188,364				

The results of this study are supported by research conducted by Yildiz and Ozcan (2014: 82-84), which examined the relationship between transformational leadership and Creativity, and the results of the study concluded that there was a positive relationship that significant ( $r = 0.517$   $p < 0.05$ ,  $p <$

0.01) between transformational leadership and Creativity. Therefore, the higher the level of transformational leadership of the principal, the higher the teacher's level of Creativity of the teacher will also be higher. In addition, Kaveh Teymounrnejad and Reza Elghaei (2017: 1413- 1419) also examined the relationship between transformational leadership and Creativity. The results of the study concluded that there was a significant positive relationship ( $\text{sig} = 5.43$ ;  $\text{sig} > 1.96$ ) between transformational leadership and Creativity. It shows that the higher the level of transformational leadership, the higher the level of Creativity will be. Based on the description above, Transformational Leadership is one of the determining factors in increasing Teacher Creativity.

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## 2. The Positive Relationship Between Achievement Motivation and Transformational Leadership together with Teacher Creativity

the collaborative relationship between the variables of achievement motivation and transformational leadership with creativity has a correlation coefficient of  $r_{y12} = 0.646$  and a coefficient of determination  $r^2_{y12} = 0.418$ , so it can be concluded that 41.8% of creativity can be enhanced through the strengthening of the variables of achievement motivation and transformational leadership together. this double correlation test results partially show a correlation coefficient of 0.509 when transformational leadership is made constant and 0.026 when achievement motivation is made persistent. the motivation for achieving civil servant teachers at Vocational High School throughout Bogor regency has a more dominant strength than the support of the principal's transformational leadership in increasing teacher creativity. the contribution or coefficient of determination of the achievement motivation variable in increasing teacher creativity is relatively higher, 38.9%, compared to the transformational leadership contribution of 17.5%. the difference in the acquisition of the value of the coefficient of determination of the two variables individually gives the meaning that based on the respondent's assessment, the motivation factor.

achieving contributes more positively and significantly to the improvement of creativity. in addition, the value of the coefficient of determination of the variables achievement motivation and transformational leadership together provides a value of 41.8%. this shows that according to respondents' assessment, the two factors of achievement motivation and transformational leadership contributed more significantly to the improvement of creativity teachers.

Table3. ANAVA Regression Equation Significance Test  $\hat{Y} = 39,775 + 0,541X_1 + 0,192X_2$

Variant Source	dk	JK	RJK	Fcount	Ftable $\alpha=0,05$ $\alpha=0,01$		Conclusion
Total	126	32930,1					
Regression	2	13757,4	6878,74	44,49**	3,07	4,78	Very Significant
Remnant	124	19172,6	154,62				

Based on the description above, motivation to excel and good transformational leadership together can increase teacher creativity.

The strengthened relationship between free and bound variables is to obtain an optimal solution from this study. It can be optimized for each indicator of each research variable by giving weight to each indicator based on the results of the Theory of Scientific Introduction to Operations Research in the field of Management Education, known as SITOREM (Hardienata, S: 2017). The following table shows the result:

Creativeness (Y)				
No	Indicators in the initial state	Indicators after Weighting	Indicator Value	Indicator Rating
1	Happy to learn new things	Open thinking (24%)	3,8	(24%) (3,8): Priority 1 to fix immediately
2	Open thinking	Happy to learn new things (20%)	3,8	(20%) (3,8): Priority 2 to fix immediately
3	Have initiatives	Have initiatives(20%)	3,8	(20%) (3,8): Priority 3 to fix immediately
4	Dare to take risks	Finding better ways(19%)	3,9	(19%) (3,9): Priority 4 to fix immediately
5	Finding better ways	Dare to take risks(17%)	4,0	(17%) (4,0): Maintained

<b>Motivation to Achieve(X1) <math>r_{y1} = 0,624</math></b>				
No	Indicators in initial state	Indicators after Expert Weighting	Indicator Value	Indicator Rating
1	Doing challenges	Champion mentality (24%)	3,9	(24%) (3,9): Priority 1 to fix immediately
2	Compete positively	Superiority (21%)	3,6	(21%) (3,6): Priority 2 to fix immediately
3	Superiority	High standards (20%)	3,9	(20%) (3,9): Priority 3 to fix immediately
4	Champion mentality	Compete positively (18%)	4,0	(18%) (4,0): Maintained
5	High standards	Doing challenges (17%)	3,8	(17%) (3,8): Priority 4 to fix immediately
<b>Transformational Leadership (X2) <math>r_{y2} = 0,419</math></b>				
No	Indicators in the initial state	Indicators after Expert Weighting	Indicator Value	Indicator Rating
1	Inspire his followers	Inspire his followers (28%)	3,8	(28%) (3,8): Priority 1 to fix immediately
2	Have intellectuality	Influence that ideal (26%)	3,8	(26%) (3,8): Priority 2 to fix immediately
3	Have attention	Have intellectuality (25%)	3,9	(25%) (3,9): Priority 3 to fix immediately
4	Have an ideal influence	Have attention (21%)	3,8	(21%) (3,8): Priority 4 to fix immediately

Based on the table above, it can be said that there is a direct influence between achievement motivation and creativity,  $r_{y1} = 0.624$ , and between transformational leadership and creativity,  $r_{y2} = 0.419$ . it means that the increase in motivation to achieve will increase teachers' creativity, and the quality of transformational leadership carried out by the principal can increase teachers' creativity. among the two variables studied, the most substantial strength of the relationship is the relationship between achievement motivation and creativity. it will later be used in sorting indicators that must be improved and maintained in Sitorem analysis.

## CONCLUSIONS AND RECOMMENDATIONS

From the research data analysis, it can be concluded that there is a positive and very significant relationship between achievement motivation and teacher creativity, transformational leadership and teacher creativity, achievement motivation and transformational leadership and teacher creativity.

Based on this study's results, increasing teacher creativity can be done by increasing achievement motivation and transformational leadership. the efforts that can be made to increase teacher creativity through motivation to excel include: teachers are included in the competition of outstanding teachers who can increase their creativity. in addition, teachers are given support and rewards for conducting research that can develop creative ideas. in addition, the principal provides an opportunity for teachers to broaden their horizons by attending training or continuing their studies to a higher level. other things that can be done to increase creativity through achievement motivation and transformational leadership are as follows: the principle facilitates facilities and infrastructure to

support teachers in the development of their creativity.

## REFERENCES

1. Bass, Bernard M. dan Ronald E. Riggio. (2006). *Transformational Leadership*. London: Lawrence Erlbaum Associates, Publishers.
2. Colquitt, Jason A., Jeffery A. Lepine, Michael J. Wesson. (2011). *Organizational Behavior*. New York: Mc. Graw-Hill.
3. Gibson, James L., John M. Ivancevich, James H. Donnelly, dan Robert Konopaske. (2012). *Organizations: Behavior, Structure, Processes*. New York: McGrawHill
4. Gibson, James L., John M. Ivancevich, James H. Donnelly Jr dan Robert Konopaske. (2006). *Organization: Behavior Structure Processes*. New York; McGraw-Hill
5. Greenberg, Jerald & Robert A Baron. (2008). *Behavior in Organization*. New Jersey: Pearson.
6. Hardhienata. 2017. The Development of Scientific Identification Theory to Conduct Operation Research in Education. *IOP Conf. Series: MaterialScience and Engineering*. 166 012007.
7. Harris, O. Jeff, and Sandra J. Hartman. (2002). *Organizational Behavior*. New York: The Haworth Press.
8. Hitt, Michael A., C. Chet Miller, and Adrienne Colella. (2011). *Organizational Behavior*. New Jersey: John Wiley & Sons
9. Hou, Yubo Hou, Ge Gao, Fei Wang, Tingrui Ri, and Zhilan Yu. (2011). Organizational Commitment and Creativity: the Influence of Thinking Style. *Annals of Economics and Finance*, Vol.12 (2)
10. Husaini Usman. (2009). *Manajemen Teori, Praktek, dan Reset Pendidikan*. Jakarta: Bumi Aksara.
11. Ivancevich, John M., Robert Konopaske, dan Michael Matterson. (2008). *Organizational Behavior and Management*. New York: Mc Graw Hill
12. Kaufman, James C & Robert J Stefenberg (2010). *Creativity*. United States: Cambridge University Press.
13. Keitner, Robert and Angelo Kinicki. (2010). *Organizational Behavior*. New York: McGraw-Hill
14. Kinichi, Angelo dan Brian K. Williams. (2008). *Management: a practical introduction, Third edition*. New York; The McGraw-Hill Companies.
15. Robbins, Stephen P., and Timonthy A. Judge. (2013). *Organization Behavior*. New Jersey: Pearson 2013
16. Robbins, Stephen P., and Timothy A. Judge. (2009). *Organizational Behavior*. New York: Pearson Education
17. Samuel O. Salami. (2008). Demographic and Psychological Factors Predicting Organizational Commitment among Industrial Workers. *Anthropologist*, 10(1), pp. 31-38
18. Schermerhorn, John R., Richard N. Osborn, Mary Uhl-Bien, James G. Hunt. (2012). *Organizational Behavior*. New Jersey: John Wiley & Son (Asia) PteLtd.
19. Schunk, Dale H., Paul R. Pintrich and Judith L. Meece. (2008). *Motivation In Education; Theory, Research and Application, Third Edition*. New Jersey: Pearson Education inc.
20. Slameto. 2010. *Belajar dan faktor-faktor yang mempengaruhinya*. Jakarta: RinekaCipta.
21. Sri Narwanti. (2011) *Creative Learning. Kiat Menjadi Guru Kreatif dan Favorit*. Yogyakarta: Familia
22. Sugiyono. 2012. *Statistika untuk Penelitian*. Bandung: Alfabeta
23. Our Asi Siburian. (2013). The Effect of Interpersonal Communication, Organizational Culture, Job Satisfaction, and Achievement Motivation to Organizational Commitment of State High School Teacher in the District Humbang Hasundutan, North Sumatera, Indonesia. *International Journal of Humanities and Social Science Vol. 3 No. 12 [Special Issue – June 2013]*
24. Utami Munandar. (2014). *Pengembangan Kreativitas Anak Berbakat*. Jakarta Rineka Cipta.