Research Article

Creative Thinking of Vocational High School Teachers: Effects of Transformational Leadership and Job Satisfaction*

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Abstract

In the teaching and learning process, a teacher must be able to make creative thinking steps, because it can provide a more optimal contribution in achieving the learning objectives of learning. If a teacher does teaching, the teaching implementation process will be more interesting, focused and increase the enthusiasm of students to learn more deeply. Factors of leadership and job satisfaction often become a reference in developing creativity. The purpose of this study was to determine the effect of transformational leadership, job satisfaction on creativity. This research uses a quantitative approach with a survey method. The population in this study were all teachers who had academic qualifications and teacher competency certificates totaling 483 teachers. The sample in this study, Private Vocational Schools teachers in Karawang Regency. The technique used to determine the sample is a simple random sampling technique, which is a technique that provides equal opportunities for each element of the selected population. The sample size in this study uses the Slovin formula. Based on the above calculation, it can be seen that the sample in this study amounted to 219 teachers. The data collection technique uses a questionnaire with a Likert scale. The results of this study indicate there is a direct effect on transformational leadership on creativity, there is a direct effect on job satisfaction on creativity, and there is a direct effect on transformational leadership on job satisfaction.

Keywords: Transformational leadership, job satisfaction, creativity

1. INTRODUCTION

The quality of human resources as workers who are subject to change is a basic capital in the current era of development. The quality workforce will produce a good performance to achieve the expected targets. Humans as workers are the main and most important resource in development. Thus the quality of human resources must be improved to succeed in the current development. The development process is not only carried out in realizing the construction of facilities and infrastructure but building human resources that starts with building a good education. The development of human resources in the field of education, in this case, teachers, should get serious attention from the government by improving the quality of teachers following the competencies of the teachers.

Pedagogic competencies are competencies related to learning, approach and learning evaluation methods. Whereas what is meant by personality competence is that a teacher must reflect a good attitude or behavior that can be an example for students, a teacher must show positive attitudes both students. In addition to teachers must have the competencies described above, teachers must have a spirit of creativity. Creativity is the ability possessed by someone to produce something new in the form of ideas or the work produced is different from before. In the creativity of freedom and flexibility of thinking is one of the ways that must be done, it is used to answer various questions and be able to think of new ideas in order to add variety in the teaching process.
see various problems from different perspectives, as well as look for various alternatives and be able to use various approaches in thinking.

In the teaching and learning process, a teacher must be able to make creative thinking steps, because it can provide a more optimal contribution in achieving the learning objectives of learning. By doing creativity by a teacher, the teaching implementation process will be more interesting, focused and increase the enthusiasm of students to learn more deeply.

As expressed by (Schoff, 2016), the results of his research, someone said to be creative, namely, (1) Observe, (2) Understand the world (environment), (3) Imagine, (4) Explore, (5) Express, (6) Involved and sustained, (7) Think, (8) Develop crafts. Meanwhile, according to Cropley, a more specific list of teacher behaviors that fosters creativity is (1) Encourage students to learn independently, (2) Having a cooperative and integrative teaching style (3) Motivate their students to master knowledge factually, so they have a strong foundation for different thoughts (4) Delay in assessing students' ideas until they have really worked and are clearly formulated (5) Encourage flexible thinking (6) Conduct self-evaluation on students (7) Give students' suggestions and questions seriously (8) If Offers students the opportunity to work with a variety of materials/knowledge in different conditions (9) A teacher is required to always be creative in teaching, but with the existing limitations and the lack of support and motivation of teachers both internally and externally, the teacher's creativity will be difficult to develop.

1.1. Theoretical Framework

Creativity is the step of thinking or doing things differently. This is a kind of imagination in the form of new ideas that are created and useful for progress in society. Creativity can also be interpreted as a tendency to generate or recognize new ideas and alternative ways that have value in solving problems. In other words, it can be said that creativity is the power or capacity to create and create new objects. Creativity not only produces something new but presents old ideas and combines them with new ideas and can be said to be creative.

Motivation and creativity are important components and influence a person to achieve success. Motivation and creativity are interconnected with one another. When someone has high motivation, without being based on creativity, then the results will not be as expected and not optimal. The same thing when someone has created, but there is no basis for motivation, then the same results will not reach the maximum. According to (George & Jones, 2012), creativity is a new idea that can be useful. These ideas will arise by thinking about new things, by thinking about new ones, and then the ideas will be realized and can contribute, to the welfare of individuals, groups, and organizations. According to (Robbins & Judge, 2017) creativity is the ability to generate new and useful ideas. The new ideas are different from the previous ideas that have been done and the new ideas must be by following existing problems. According to (Griffin & Moorhead, 2014), creativity is the ability of an individual to generate new ideas or to understand new perspectives about new things.

The Creativity that emphasizes new ideas by thinking about new things that can contribute to the organization and can be done by any organization including institutions in schools. Teacher creativity carried out in schools is the main point to achieve good quality education. With the creativity done by a teacher, it can create new ideas in the teaching process that are more effective and dynamic and can make students more enthusiastic in following the lessons. Creativity is not only needed in the corporate world but education is very necessary, this is supported by research results from (Tran, Ho, & Hurle, 2016), said Educational thinkers and researchers believe that each individual has creative potential, and education has responsibilities to foster students' creativity. The same thing was stated by (Ravari & Salari, 2015) that the teacher has a very important role in the education process. A good teacher is the one who is well aware of all creative teaching skills and techniques. The
goals of teacher creativity are 1) Teacher creativity is very useful in transferring more comprehensive knowledge, 2) Teacher creativity is useful for increasing or stimulating the creativity of students.

According to (Hellriegel, Slocum, & Jr, 2011), Transformational leadership sees the future, can inspire members to understand and accept new visions and develop others to become better leaders, and to build group organizations to become learning organizations that are ready to accept challenges and rewards. According to (Griffin & Moorhead, 2014), transformational leadership refers to a set of abilities that enable leaders to recognize the need for change, to create a vision and to guide change, effectively. According to (John R. Schermerhorn, Hunt, Osborn, & Uhl-Bien, 2010), transformational leadership occurs when leaders expand and increase members' interests and move members to selfless and selfish. Meanwhile, according to (Gibson, Ivancevich, James H. Donnelly, & Konopaske, 2009) it defines transformational leadership to identify what members want or like and helps them achieve a level of performance that produces pride that can satisfy them.

Transformational leadership exerts enormous influence and empowers its members to achieve the expected results. The main point is seen by transformational leadership as a vision. Vision, in this case, is a reference for a leader to be able to make changes. Without seeing the vision, a leader cannot change the organization, and cannot inspire his subordinates. According to (John R. Schermerhorn et al., 2010), transformational leadership has four dimensions, namely charisma, inspiration, intellectual stimulation, and individual consideration. First, charisma, in this case, provides vision and mission, instills pride together with respect and trust in its members. Second is an inspiration, in this case, a leader communicates high expectations. Third is intellectual stimulation, a leader encourages intelligence, the rationality of its members to be able to solve problems carefully. Fourth is individual consideration, a leader gives personal attention, treats each member individually, trains and gives advice for the development of himself and the organization.

A leader basically must influence, encourage or motivate his subordinates, but a leader must be able to make every step taken by a leader directing to use the creative power possessed by each of his subordinates. This is supported by the concept of (Robbins & Judge, 2017) Transformational leadership positively influences worker creativity, but suggests leaders need to be aware of factors, which decrease employee creativity in addition to transformational leadership. According to research results from (Gunduz, Cekmecelioglua, & Ozbagb, 2016), which states that transformational leadership behavior is an important mechanism in the development of individual creativity by activating employees with intellectual stimulation.

Job satisfaction is one of the emotional attitudes possessed by everyone who does work. This emotional attitude is influenced by many factors, including salary, work itself, supervision, working conditions, coworkers. Job satisfaction possessed by a person greatly influences the results of the work done, especially the level of one's creativity. If someone at work feels satisfied and comfortable, then they will be more enthusiastic in doing work and this right will increase creativity owned by someone. According to (John R. Schermerhorn et al., 2010), job satisfaction is an attitude that reflects a person's positive and negative feelings towards work, such as coworkers, and the work environment. According to, job satisfaction is a pleasant feeling that results from someone's perception of his work fulfilling his work performance or not fulfilling his work performance. According to (Colquitt, LePine, & Wesson, 2015) Job satisfaction is a pleasant emotional state that results from assessing one's work or work experience. Job satisfaction, according to Colquitt, can reflect how a person feels about work and what is thought about work. According to (Gibson et al., 2009), job satisfaction is the attitude that individuals have about their work. This satisfaction result is based on perceptions about the work, which is based on work environment factors, such as supervisor style, policies, and procedures, workgroup affiliation, working conditions, and additional benefits. The results of job satisfaction do not just appear suddenly, but some factors affect job satisfaction. (Colquitt et al., 2015), mentioned that 8 factors affect job satisfaction, namely: salary, promotion, supervision, coworkers, work itself,
work environment. According to (Robbins & Judge, 2017) transformational leadership positively influences worker creativity, but suggests leaders need to pay attention to factors other than leadership that decrease creativity. According to (Robbins & Coulter, 2012) a leader must demonstrate empowering leadership. Be a leader who lets members of the organization know that the work they do is significant. Allow organizational members to participate in decision making. Show them that you believe they can achieve high levels of performance and results. Being this type of leader will have a positive influence on creativity.

According to (Mullins, 2015) in informal organizations, morale, motivation, job satisfaction and staff performance have a very important influence. This can give members a greater opportunity to use their initiative and creativity in personal development within their organization. The same thing was expressed by (George & Jones, 2012), Work dissatisfaction is positively related to creativity.

2. METHOD

2.1. Methodology

The method used in this study is a survey method with a causality approach. This approach uses path analysis, which is to estimate the influence of exogenous variables, namely Transformational Leadership (X₁), Job Satisfaction (X₂), while the endogenous variable is Creativity (Y). Based on this research theory the dimensions of transformational leadership are inspirational motivation, intellectual simulations, charismatics, individual considerations. Indicators of job satisfaction are supervision, decent salary, comfortable working conditions, personality (CSE). Indicators of creativity are originality, freedom/independence, flexibility, background experience.

The influence between these variables, presented in the problem model constellation as follows:

![Figure 1: Research of constellation](image)

2.2. Population and Samples

The population in this study were district Vocational High School teachers who already had teacher certification totaling 483 teachers. The sample in this study, the teachers of Karawang Regency Private Vocational Schools. The technique used to determine the sample is the simple random sampling technique, using the Slovin formula. Based on the calculation of the Slovin formula, it can be seen that the sample in this study amounted to 219 teachers. For the distribution of samples totaling 219 teachers spread in 50 schools.

To get the data in this study using a Likert scale questionnaire. The compilation of the questionnaire is based on the instrument lines that have been made based on definitions, concepts or theories. Each variable has alternative answers such as Always, Often, Sometimes Rarely, and Never. before getting the research data, do a trial by testing reliability and validity. For reliability using the Alpha Cronbach formula, for the validity of using the product-moment formula. For the analysis of data calculations using path analysis techniques.
3. FINDINGS

3.1. Data Description

Data description of each variable is presented in the following table.

**Table 1. The description of creativity variable data (Y)**

| Information          | Y    |
|----------------------|------|
| Mean                 | 128.47|
| Median               | 128.00|
| Mode                 | 126  |
| Standard Deviation   | 13.476|
| Sample Variance      | 181.589|
| Range                | 62   |
| Minimum              | 98   |
| Maximum              | 160  |
| Sum                  | 27279|
| Count                | 219  |

Table 1 shows the scores obtained on the creativity variable of the highest score of 160 and the lowest score of 168, while the range of the score range is 62. Based on the calculations obtained an mean 128.47; median 128.00, mode 126 standard Deviation 13.476; standard variance 181.589

**Table 2. The description of transformative Leadership variable data (X₁)**

| Information          | X₁   |
|----------------------|------|
| Mean                 | 129.69|
| Median               | 129.00|
| Mode                 | 126  |
| Standard Deviation   | 18.640|
| Sample Variance      | 347.435|
| Range                | 89   |
| Minimum              | 86   |
| Maximum              | 175  |
| Sum                  | 27588|
| Count                | 219  |

Table 2 shows the scores obtained on the transformative Leadership variable of the highest score of 175 and the lowest score of 68, while the range of the score range is 89. Based on the calculations obtained an mean 129.69; median 129.00, mode 126 standard Deviation 18.640; standard variance 347.435.
Table 3. The description of job satisfaction variable data (X_2)

| Information          | X_2        |
|----------------------|------------|
| Mean                 | 126.02     |
| Median               | 126.00     |
| Mode                 | 131        |
| Standard Deviation   | 16,815     |
| Sample Variance      | 182,738    |
| Range                | 80         |
| Minimum              | 85         |
| Maximum              | 165        |
| Sum                  | 26798      |
| Count                | 219        |

Table 3 shows the scores obtained on the job satisfaction variable of the highest score of 165 and the lowest score of 85, while the range of the score range is 80. Based on the calculations obtained an mean 128.47; median 128.00, mode 126 standard Deviation 16.815; standard variance 182,738.

3.2. Requirements Analysis Tests

The analysis test requirements consist of two namely normality test and significance tests. As for the results of the calculation as follows:

3.2.1. Estimated error normality

Normality test is done to determine whether the data coming from the population that are sampled are normally distributed. For normality calculations, use the Liliefors formula.

1) Normality Test for Estimated of Creativity on Transformational Leadership (Y on X_1)

From the results of normality test calculations, the critical value of Liliefors Ltable for n = 219 α = 0.05 is 0.060, it is found that the L_{count} is 0.053 and the L_{table} is 0.060. Thus it can be concluded that the error distribution of estimated creativity on Transformational Leadership is normally distributed.

2) Normality Test for Estimated of Creativity Intention on Job Satisfaction (Y on X_2)

From the results of normality test calculations, the critical value of Liliefors Ltable for n = 219 α = 0.05 is 0.060, it is found that the L_{count} is 0.058 and the L_{table} is 0.060. Thus it can be concluded that the error distribution of estimated creativity on Job Satisfaction is normally distributed.

3) Normality Test for Estimated of Job Satisfaction on Transformational Leadership (X_2 on X_1)

From the results of normality test calculations, the critical value of Liliefors Ltable for n = 219 α = 0.05 is 0.060, it is found that the L_{count} is 0.030 and the L_{table} is 0.060. Thus it can be concluded that the error distribution of estimated job satisfaction on Transformational Leadership is normally distributed.

3.2.2. Significance and Regression Linearity test Significance and Linearity Test of Creativity Regression Equations on Transformative Leadership (Y on X_1)

Calculation and analysis of creativity regression equation (Y) on Transformational Leadership (X_1), it is known that the regression equation is Regression Equation: Ŷ = 83.113 + 0.350X_1. From the calculation results of the significance and linearity of the regression seen f_{count} of 66.282 the value is greater than the F_{table} at 3.885. if taken the real level α = 0.05. It can be concluded that the regression equation of creativity over transformational leadership is very significant. From the regression linearity test, it is obtained F_{table} of 0.900, and the value is smaller than the F_{count} with a value of 1.377, the real level is α = 0.05. So it can be concluded that the regression equation of creativity over
transformational leadership is significant. The effect of transformational leadership ($X_1$) on creativity ($Y$) Regression equation: $\hat{Y} = 83.113 + 0.350X_1$, can be explained in the following graph:

![Graph of regression equations $\hat{Y} = 83.113+0.350X_1$](image)

The form of the relationship between transformational leadership and creativity can be shown by the regression equation $= 83,113 + 0.350 X1$. This regression equation shows significance at the 5% significance level. This regression equation means every change in one unit of a score, will be followed by a change in creativity score, which is at 0.350 units at a constant 83,113.

**Significance and Linearity Test Creativitas Regression Equations on Job Satisfaction ($Y$ on $X_2$)**

Calculation and analysis of the creativity regression equation ($Y$) for Job Satisfaction ($X_2$), it is known that the regression equation is the regression equation: $\hat{Y} = 82.810 + 0.362 X_2$. From the results of the calculation of the significance and linearity of the regression, it is seen that the $F_{\text{count}}$ of 55.733 is greater than the $F_{\text{table}}$ at 3.885. if taken the real level $\alpha = 0.05$. It can be concluded that the regression equation of creativity over transformational leadership is very significant. From the regression linearity test, $F_{\text{table}}$ 0.887 is, and the value is smaller than the $F_{\text{count}}$ with a value of 1.383, the real level is $\alpha = 0.05$. So it can be concluded that the regression equation of creativity over transformational leadership is significant. Effect of Job Satisfaction ($X_2$) on creativity ($Y$) Regression equation: $\hat{Y} = 82.810 + 0.362 X_2$, can be explained in the following graph:

![Graph of regression equations $Y = 82.810 + 0.362X_2$](image)

The form of the relationship between Job Satisfaction and creativity can be shown by the regression equation $= 82,810 + 0.362 X_2$. This regression equation shows significance at the 5% significance level. This regression equation means every change in one unit of a score, will be followed by a change in creativity score, which is at 0.362 units at a constant 82,810.
Significance and Linearity Test of Regression Equation Job Satisfaction on Transformational Leadership ($X_2$ on $X_1$)

Calculation and analysis of the Job Satisfaction regression equation ($X_2$) for Transformational Leadership ($X_1$), it is known that the regression equation is Regression equation: $X_2 = 90,364 + 0.275X_1$. From the results of the calculation of the significance and linearity of the regression, the $F_{\text{count}}$ of 22.224 is bigger compared to $F_{\text{table}}$ at 3.885. if taken the real level $\alpha = 0.05$. It can be concluded that the regression equation of creativity over transformational leadership is very significant. From the linearity regression test, it was obtained $F_{\text{table}}$ 1.041, and the value was smaller than the $F_{\text{count}}$ with a value of 1.377, the real level was $\alpha = 0.05$. So it can be concluded that the regression equation of organizational commitment to job satisfaction is significant.

The influence of transformational leadership ($X_1$) on job satisfaction ($X_2$) Regression equation: $X_2 = 90,364 + 0.275 X_1$, can be explained in the following graph:

![Graph of regression equations $X_2 = 90,364 + 0.275 X_1$](image)

**Figure 4.** Graph of regression equations $X_2 = 90,364 + 0.275 X_1$

The form of the relationship between transformative leadership and job satisfaction can be shown by the regression equation $= 90,364 + 0.275 X_2$. This regression equation shows significance at the 5% significance level. This regression equation means every change in one unit of a score, will be followed by a change in creativity score, which is at 0.275 units at a constant 90,364.

### 3.3. Hypothesis Testing

To find out the direct and significant effect between each variable can be seen in the table below.

**Table 4. Summary of Test Results**

| Effect of            | Direct | Path | $t_{\text{count}}$ | $t_{\text{table}}$ |
|---------------------|--------|------|--------------------|--------------------|
| $X_1 - Y$           | 0.263  | 8.141| 1.652              |
| $X_2 - Y$           | 0.173  | 7.465| 1.652              |
| $X_1 - X_2$         | 0.305  | 5.714| 1.652              |
Calculation of the path coefficient can be illustrated with a diagram like below:

**Figure 5. Path analysis diagram**

Based on the model picture above, the path diagram of Transformation Leadership \( (X_1) \), Job Satisfaction \( (X_2) \), towards Creativity \( (Y) \). Based on the structural model, it can be explained as follows:

**First hypothesis:** There is a direct positive effect of transformational leadership \( (X_1) \) on creativity \( (Y) \).

From calculation results anara positive direct influence transformational leadership on creativity at 0.263, the value of \( t_{\text{count}} = 8.141 \) while \( t_{\text{table}} \) at the level of significance is \( \alpha \) (0.05) was 1.652 fort > \( t_{\text{table}} \), then \( H_0 \) is rejected and \( H_1 \) be accepted. Thus, it can be concluded that transformational leadership has a direct effect on creativity.

**The second hypothesis:** There is a direct positive effect of job satisfaction \( (X_2) \) on creativity \( (Y) \).

From the calculation anara positive direct influence job satisfaction on the creativity of 0.173 the value \( t_{\text{count}} = 7.465 \) while \( t_{\text{table}} \) at the level of significance is \( \alpha \) (0.05) was 1.652 fort > \( t_{\text{table}} \), then \( H_0 \) is rejected and \( H_1 \) accepted. Thus, it can be concluded that job satisfaction has a direct effect on creativity.

**The third hypothesis:** There is a direct positive effect of transformational leadership \( (X_1) \) on job satisfaction \( (X_2) \).

From the calculation anara positive direct influence on job satisfaction Leadership Transformasional by 3.05 \( t_{\text{count}} = 4.714 \) while \( t_{\text{table}} \) at the level of significance is \( \alpha \) (0.05) was 1.652 fort > \( t_{\text{table}} \), then \( H_0 \) is rejected and \( H_1 \) received. Thus, it can be concluded that Transformational Leadership has a direct effect on job satisfaction.

**4. DISCUSSION AND CONCLUSION**

**4.1. Transformational Leadership Affect Directly on Creativity**

The results of statistical calculations show there is a direct influence on the Transformational Leadership variable on Creativity. The results of this study are to prove and test the influence of transformative leadership variables on the creativity variable. The calculation result from the path analysis shows that the transformational leadership variable has a \( t_{\text{count}} \) of 8.141 and \( t_{\text{table}} \) 1.652. This proves that is accepted because of the value of \( t_{\text{count}} > t_{\text{table}} \).

Thus to increase the creativity of private vocational school teachers in the Karawang regency, vocational school principals must use transformational leadership. The results of the above study, the same as stated by (Robbins & Judge, 2017) that transformational leadership positively influences
creativity, but leaders need to look at any factors that cause a decrease in creativity. According to, (Suifan & Al-Janini, 2017; Mittal & Dhar, 2015; Mojgan-Afshari, Siraj, Ghani, & Afshari, 2011) transformational leadership has a positive and significant relationship with creativity.

Based on the achievement of dimensions along with transformational leadership indicators, the highest percentage of the four dimensions is the charismatic dimension with indicators giving examples, self-confidence, and having a firm conviction of having a presentation of 25.86%. While the achievement of each indicator with nine statements has the highest achievement of an indicator of charismatic dimensions with an average of 3.83. This is consistent with the results of research from (Suifan & Al-Janini, 2017). The basic concept of transformational leadership occurs when a leader transforms, transforms, subordinates trust the leader, and can perform behaviors that contribute to the achievement of organizational goals, and are motivated to work on a higher level. (Teymournejad & Elghaei, 2017) there are an influence and significant influence realized influence on creativity.

When viewed from various other dimensions the intellectual simulation dimension also influences creativity in accordance with the results of research from (Abdullah, Ling, & Kader, 2016), (Gunduz et al., 2016) said that the relationship between transformational leadership of school principals and teacher creative behavior, and teacher effectiveness will increase, if the principal uses intellectual stimulation and involves the teacher, in this case, empowering the teacher in decision making.

Inspirational motivation also influences (Gumusluoglu & Ilsev, 2009)(Gumusluoglu & Ilsev, 2009), transformational leadership influences creativity and innovation. This is mediated by intrinsic motivation and psychological empowerment. (Mittal & Dhar, 2015) transformational leadership fosters employee creativity and develops a creative work environment, and encourages employees by developing creative self-efficacy can be employee creativity in completing tasks given. (Mahmood, Uddin, & Fan, 2018), intrinsic motivation, task complexity and support for innovation mediate the relationship between transformational leadership and creative process involvement.

So it can be concluded in this study the factors that affect creativity consist of charismatic dimensions, intellectual simulations and inspirational motives, but the most influential on creativity is seen from the achievement of dimensions, the charismatic dimension which most influences creativity.

4.2. Job satisfaction affects directly on creativity

The results of statistical calculations show there is a direct influence on job satisfaction variables on creativity, the results of this study are to prove and test the influence of job satisfaction variables on creativity variables. The results of calculations from the path analysis show that the job satisfaction variable has a $t_{\text{com}}$ of 7.465 and a table of 1.652. This proves that Ho is accepted because of the value of $t_{\text{com}} > t_{\text{table}}$ (7.465> 1.652). This explains that the transformational leadership variable has a direct and significant influence on the creativity variable. This is following the concept of (Mullins, 2015), that in the Organization, morale, motivation, job satisfaction and performance have a very important influence.

This can provide opportunities for larger members to use their initiative and creativity in personal development within their organization. (George & Jones, 2012) state that dissatisfaction in working work experienced by a person is positively related to creativity in the workplace, when employees are committed to staying with the organization and receive useful feedback from them, coworkers.

In line with the results of research conducted by (Taberkhani, 2015) which states that there are significant differences between one's job satisfaction based on education level. The same thing was expressed by, (Anggarwati & Eliyana, 2015) Job satisfaction will be felt when individuals have the opportunity to express their creative aspirations in doing their work. Meanwhile, according to (Norouzpour & Pourmohammadi, 2019), job satisfaction will affect the work and life of teachers.
Satisfied teachers will be more creative in the classroom because this is their mind is not preoccupied with problems that are not related to work.

Based on the achievement of job satisfaction indicators, the highest presentation of the five indicators is supervision with a presentation of 20.95%. While the achievements of all indicators with seven statements have achievements with an average of 4.00. These results are supported by research results from (Anyango, Francis, & O, 2018) as the influence of the type of Internal Instructional Supervision (IIS) used for the effectiveness of teaching, several things can be concluded. First, the type of collaborative supervision is the most desirable, because it is a means of teamwork, which is not intimidating, and allows to increase creativity among others, which is the most significant in terms of teaching effectiveness. The same thing was said according to, (Rahabav, 2016), in his research that, academic supervision if carried out effectively would have a positive impact on the growth of professional teachers. (Qureshi & Hamid, 2017) which states that the importance of supervisor support in the component with job satisfaction.

According to (Raza, Akhtar, Husnain, & Akhtar, 2015), intrinsic motivational factors (job security, achievement, responsibility and work itself) influence on job satisfaction. The same is expressed by (Ayoub, Al-Akhras, Na’anah, & Al-Madadha, 2018), this article emphasizes the importance of psychological empowerment and job satisfaction in the creative performance of the employee. It can be concluded in this study that the most influential factor in creativity is the surveillance indicator. However, other factors must also be considered, such as intrinsic motivation, job security, responsibility, work itself, psychological empowerment to achieve satisfaction at work.

4.3. Transformational Leadership Affect Directly on Job Satisfaction

The results of statistical calculations show there is a direct influence on the Transformational Leadership variable on job satisfaction, the results of this study are to prove and test the influence of the transformative leadership variable on the job satisfaction variable. The results of calculations from the path analysis show that the transformational leadership variable has a \( t_{\text{count}} \) of 4.714 and table of 1.652. This proves that Ho is accepted because of the value of \( t_{\text{count}} \leq t_{\text{table}} \). \( (4.714 \geq 1.652) \).

The results of the study are consistent with supported by the results of research from (Çakır & Özkan, 2019; Kimathi, 2017) these findings, it is clear that the principal is a source of inspiration for teachers to foster a positive work environment that results in teacher job satisfaction, researchers are also interested in how transformational leadership styles affect teacher satisfaction.

Research results from (Ali Yassin Sheikh Ali & Dahie, 2015) that leadership style has a positive effect on job satisfaction in addition to the influence of the principal transformational leadership on teacher job satisfaction has also been found to be a common factor, which affects teacher satisfaction. Research results from (Fabian W. Nyenyemb, Maslowsk, Nimrod, & Peter, 2016), show that transformational leadership styles such as charismatic leadership, individualized consideration, and intellectual and transactional stimulation are related to job satisfaction of teachers in school. Transformational leadership can inspire teachers to act in the best interests of the organization rather than according to their own interests. Transformational leadership leaders provide accommodative leadership and offer guidance to teachers to help them keep changing. Principals who use transformational leadership are based on leader behavior that can cause followers to reach higher levels of thinking; this is because this form of leadership style encourages acceptable behavior and aspirations. This leadership style is different from the others because of the tendency to change the status quo, articulate a vision, convince with a strong sense of optimism, and transformational leadership is manifested to inspire and motivate teachers to achieve effectiveness and efficiency in achieving goals.

From the results of this transformational leadership research, it can be said that the charismatic dimension has a high value compared to other dimensions. The principal must be able to provide
direction, encourage and be an example for teachers to use their personal abilities at work and be given the authority to make decisions rationally without being instructed again. With the opportunity given to the teachers, they feel very happy to be given the freedom and opportunity to use all their abilities without fear of guilt when there is an error in the work process. Feelings of pleasure, happiness is the main key to the success of an organization. Thus, the principal must be able to give full attention to the teachers, namely by paying attention to the factors that affect job satisfaction, so that the achievement of the school goals that have been set can be achieved to the maximum.

5. RECOMMENDATIONS

This research is recommended for principals and education offices to be able to increase teacher creativity. Besides increasing teacher creativity. It also must consider the factors that influence creativity and provide motivation internally and externally to teachers.

Acknowledgement

Thank you to the Karawang District Education Officer and the Principal of the Private Vocational High School for granting permission to conduct research. Also, it is addressed to LPDP as the party who has provided funding to conduct this research.

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