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Modeling And Optimization Of Strengthening Creativity: An Empirical Study Using A Pop-Hr Approach

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Abstract

Teachers who have high creativity in teaching always take advantage of new information and approaches in teaching so that learning activities take place fun. Creative teachers are encouraged to innovate in creating new learning media, using varied learning methods to support the effectiveness of the learning process. This study aims to produce ways and strategies for strengthening creativity by analyzing the influence of transformational leadership variables, teamwork, work motivation, and knowledge sharing. These variables were found during preliminary research using qualitative research stages. This study uses the path analysis method to determine the influence between the variables studied, to analyze indicators to get optimal solutions to strengthen creativity in this study using the SITOREM method. Based on the SITOREM analysis, an optimal solution was obtained that out of 26 indicators there are 14 indicators that are still weak so that they need to be corrected immediately and there are 12 indicators that are already good and can be maintained or developed.

Keywords: Creativity, Transformational Leadership, Teamwork, Work Motivation, Knowledge Sharing, SITOREM Analysis

INTRODUCTION

Education has been in a transition period since the onset of the pandemic. The Indonesian state has designated the entry of the Covid-19 virus as a pandemic, and the disease spreads quickly. To prevent the spread of Covid-19, the World Health Organization (WHO) recommends temporarily suspending activities that can cause social contact. It will affect learning in the classroom. To prevent the spread of the virus, the Ministry of Education and Culture implemented online learning to reduce the risk to education actors' health safety during the Covid-19 pandemic. Online learning can use digital technology platforms, such as WhatsApp, Zoom Meeting, Google Classroom, or other platforms. The problem of online learning is certainly not easy for teachers. Teacher creativity is important in dealing with the Covid-19 problem; as a result, online learning will be problematic if teacher creativity is low.

Teachers with high creativity in teaching always take advantage of new information and teaching approaches so that learning activities are fun. Creative teachers are encouraged to innovate in creating new learning media, using varied learning methods to support learning effectiveness. Teachers with high teaching creativity are not afraid to try various ways so that students are helped to understand the learning material. They dare to face the challenges ahead, including managing the limitations in their work environment, where they will try to use something less useful to become an interesting learning tool. Teachers with creativity show high curiosity and strive to continue developing relevant insights and knowledge to support learning effectiveness. They try to find new ways to make students comfortable, deliver, and dare to do something different and not fixate on one learning pattern and rely on standard teaching materials. Even teachers with high

teaching creativity unconsciously become models of creativity for students.

However, teaching creativity has not been as expected. In a preliminary, 25% of teacher's less creativity to take risks; 23.3% have problems combining ideas into something new; 26.7% have problems with persistent development ideas; 41% have not shown curiosity; 28.7% find it difficult to generate new ideas.

The initial survey results found problems with 28 teachers related to teaching creativity. This situation needs to be addressed so that it does not have the potential to harm and negatively impact learning activities and outcomes that affect the quality of graduates. In this case, the teacher has a very important role in learning activities. Therefore, the gap between expectations.

This research used qualitative exploratory research with quantitative descriptive research for modeling and optimization approaches to manage resources. Sri Setyaningsih & Soewarto Hardhienata (2019) stated, the main idea of management resource modeling and optimization (POP-SDM) is to develop modeling and optimization of management resources which is the theme of the research by exploring other variables that have a positive and dominant influence on the variables that are the theme of the research. Efforts to explore variables that have a positive and dominant influence on the variables that are the theme of the study are carried out using a qualitative exploratory approach to find or build a "theoretical framework", namely a frame of mind, hypothesis, or propositions that become a model of research constellation. Then the "theoretical framework" is tested through a quantitative research approach.

Informants explore the factor of creativity factors are an important key to obtaining data supporting variables that have a positive and dominant effect on creativity. The result of quasi-qualitative research is that variables that have a positive and dominant effect are found, which can then be compiled in the research constellation using path analysis. The resulting modeling is a mathematical model obtained from substructures arranged in research constellations. The variables obtained in qualitative research were analyzed using path analysis so that variable strength values were obtained. This provides a logical picture of the variables that have a positive and dominant effect on creativity in state junior high school teachers in West Jakarta II.

This study aims to produce ways and strategies for strengthening creativity by analyzing the influence of variables that have a positive and dominant effect on creativity. Based on the results of the quality, these variables are, transformational leadership, teamwork, work motivation, and knowledge sharing. Furthermore, the findings of this research will be used as recommendations to related parties, namely the West Jakarta regional education office, school principals and teachers in the West Jakarta area..

The Nature of Creativity (Y)

McShane and Von Glinov suggest that everyone is inherently creative, but some have higher creative potential. In detail, McShane and Von Glinov (2018:198) describe four main characteristics of a person that make him more creative: 1. Cognitive and practical intelligence. Creative people synthesize and analyze information and then apply it. They realize even small pieces of information that are significantly important and then relate to it in ways that no one else imagines. In addition, creative people also have practical intelligence, namely the ability to evaluate an idea's potential benefits; 2. Persistent.

Creative people persistently develop their ideas based on their high need to excel, strong motivation, and sufficient self-esteem. It is important because people need the motivation to keep working and researching their projects, learn from failures, ask others for advice.

The creative person is persistent to negative social pressures over his ideas; 3. Knowledge and experience. Creative people need a foundation of knowledge and experience to reveal new knowledge needed; 4. Independent imagination. Creative people generally have characteristics and values that support their independent imagination, namely: high openness to experience, relatively low to moderate needs to affiliate with others so that when something goes wrong relatively little

humiliated, strong values regarding self-direction in the sense of freedom of thought, as well as self-stimulation includes an interest in challenges.

R. Kreitner and A. Kinicki. (2010:361-362), Expressing creativity is the activity of developing something new or unique. The indicators of creativity are; 1. intrinsic motivation, 2. Using the knowledge and competencies possessed, 3. Enjoy challenging or problem-solving activities.

Cropley et al. (2011:14-30) explains that creativity in developing the latest ideas is irrelevant and effective when implemented. Indicators of creativity are: elaborating knowledge and techniques that are appropriate for problem solutions, combining new things with existing elements, having a new perspective on solutions that allow them to be used, having the anticipation of changes that occur, and creating novelty from existing knowledge.

Starko (2013:283) states that creativity has a purpose and involves trying to make something work, to make something better, more meaningful, or more beautiful. Indicators of creativity. It means novelty, authenticity, eligibility, and culture.

Based on the exposure of previous theoretical theories, both regarding the basic principles of creativity and the formulation more specifically about creativity. It can be interpreted that creativity is the action of a person or group to produce and develop new original ideas so that it can increase the power of imagination different from before. Indicators of teaching creativity; exploring curiosity, generating new ideas, developing ideas persistently, combining ideas into something new, taking risks.

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The Nature of Transformational Leadership (X_1)

Transformational leadership is a state in which the followers of a transformational leader feel trust, admiration, loyalty, and respect for the leader, and they are motivated to do more than they originally expected. According to Bass and Riggio, (2006:47). This transformational leadership has 1) Idealized Influence, an attitude of respect and confidence from its subordinates. Sharing risks, considering needs-led rather than personal needs, and moral and ethical attitudes. 2) Inspirational Motivation, illustrated through an attitude that always provides challenges and meaning for the work of its employees, including behaviors that can demonstrate commitment to organizational goals. Awakening this spirit with optimism and enthusiasm. 3. Intellectual Stimulation.

Managers who demonstrate this type of leadership are always looking for new ideas and unique solutions from their employees. When doing work, managers are constantly encouraged by new approaches. 4. Individualized Consideration, depicted by a leader who constantly listens and pays attention to his employees' special needs and needs attentively.

The transformational leadership formulation put forward by Munevver Olcum Cetina, F. Sehkar Fayda Kinik (2015:519-527) is a leader action that changes the personal values of followers to support the vision and goals of the organization by fostering an environment so that relationships with members are formed by building a climate of trust so that the vision can be applied. This leadership style produces the leader as a moral agent, has a deep vision for the future of the organization, and an inspiring leader.

Setyaningsih (2021:219) argues that transformational leadership is a leader who always communicates with his subordinates using his expertise in attracting and motivating how important their performance is, how proud and confident they are as members of the group and how special the group is so that they can produce innovative and extraordinary work. With indicators; a. Influencing, b. Empowering, and c. Stimulating.

The formulation of transformational leadership according to Niessenietial (2017:41-51) is a meaningful and creative exchange between leaders and followers, guiding followers through changes driven by the vision, strengths and beliefs of members, prioritizing the needs of others above personal needs, charismatic, providing interesting visions and missions, optimism, enthusiasm, and critical.

Based on the presentation of the theory above, it can be synthesized that transformational leadership is the behavior of leaders who consistently show an example in achieving a better state, influencing members through inspiring Motivation, open-mindedness, and attention to members. The indicators are. Exemplary reaching the ideal state, influencing towards better, motivating, d. encouraging open-mindedness, and caring for members.

Nature Teamwork (X_2)

Teamwork is cooperation or collaboration between two or more people to share time, knowledge, and talents with each other in carrying out tasks and efforts to achieve goals. According to Tenner, and Detroit (2002:183), teamwork is a group of people who work together to achieve the same goal and that goal is easier to obtain by doing teamwork than by doing it alone.

Teamwork indicators are evaluation and n reward if the goals to be achieved are exceeded, social relations that are well maintained in the team, Organizational support, leadership participation, characteristics.

Poghosyan, Norful, and Martsolf (2017:77-86) argue that teamwork is a form of work in a group that must be organized and managed properly. The team consists of people who have different expertise and are coordinated to work with the leadership. There is a strong interdependence with each other to achieve a goal or complete an assignment. The indicators are a. willing to cooperate (cooperative), b. Expressing positive hopes, c. Members have complementary skills, d. Active participation of members. e. appreciate input, f. Provide encouragement, and g. Build group spirit.

Robbins (2013:343) argues that teamwork is a group whose members produce group performance that is greater than the sum of individual performances. The indicators are performance is collective; among member group mutual synergy; prioritizing (not individuals), and among members complementing each other's skills and expertise.

Cheng (2020:138-147) argues that teamwork is a group whose members interact with each other, especially to share information and make various decisions to help each member work in responsibility. Indicators are as follows: a. common goals. The effective team has a goal, and all team members really know the goal they want to achieve the organization, b. high enthusiasm. High enthusiasm can be aroused if working conditions are also pleasant.

Based on the theories that have been previously presented, it can be synthesized that teamwork is a group of individuals who communicate with each other, do work regularly, coordinate, work together in carrying out tasks to achieve the goals of together. Teamwork has the following indicators: compactness, trust in each other, interactive communication, collaboration, and responsibility.

The Nature of Work (X_3)

The definition of work motivation is the impulse that moves a person in working to do work with effort effectively to achieve goals, according to Pinder (2008; 11). A set of energetic forces that originate both inside and outside the individual being to initiate work-related behaviors, and to determine which form, direction, intensity, and duration. Indicators of indicators are motivational direction, intensity and duration or persistence.

Paul E. Spector (2008:200) explains that Motivation is a state within a person that relates to certain behavior. One perspective on Motivation states the interrelationship with the direction, intensity, and behavior of perseverance in time concurrently. Motivation leads to specific behavior choices of a large number behavior, existing behavior, while intensity refers to the multiplicity of attempts a person to do his task, and perseverance refer to relationship which

continuously. In other perspectives, motivation requires awareness of the drive to achieve the same wants, needs, and goals.

Mathis, et al. (2008), Motivation is a strong impulse from within a person that encourages to do something or an impulse for someone to do something activity to achieve a goal. Indicators of his Motivation need to do something as well as the drive to do something.

Based on the theories previously described, a synthesis can be made that work motivation is a motivation, a strong desire, a great need, or a person's high expectations to achieve personal or organizational goals according to the desired standards so as to make him make efforts to achieve them. Its dimensions and indicators are: 1. Intrinsic Factors (factors within the self); a. Responsibility, b. Actualization of achievements, c. Self-development; 2. Extrinsic Factors (factors outside the self) consist of: a. Rewards, b. conditions of employment, c. interpersonal relationships.

Nature Knowledge Sharing (X_4)

Organization requires information and nature the order to achieve its goals. Therefore, members' knowledge and experiences are shared in expecting each member experiences an increase in knowledge and experience that supports the achievement of personal goals according to their roles and duties and group and organizational goals. Therefore, the organization requires effective knowledge-sharing activities between members of the organization.

According to Gagne (2009: 571-359), knowledge sharing is a behavior that has much in common with other voluntary behaviors, such as help and prosocial behavior within the organization. Gagne added that several factors influence knowledge sharing, namely a. individuals (e.g., lack of trust, fear of losing power, and lack of social networks). b. Organization (e.g., lack leadership, lack of system reward accordingly, and lack of sharing opportunities). c. Technology (e.g., [IT] information technology systems that do no precise and the lack of exercises.

Bastiaan Roosendaal and Katinka Bijlsma-Frankema (2013:1-13) state that knowledge sharing is a form of extra-altruistic role behavior, sharing knowledge based on a willingness to contribute to a common goal and seeing organizational knowledge as a common good, a willingness that is said to be promoted by both trusts.

Understanding Knowledge sharing according to Sriratanaviriyakula and El-Dena. (2017:287-299), is the flow of information between individuals, either providing, seeking, or receiving knowledge from others and integrating it into their own set of knowledge. The indicators are: provision of task information and knowledge to help others and to collaborate with others to solve problems, develop new ideas, or implement policies or procedures.

It is stated that knowledge sharing is the habituation of sharing knowledge, experience, and expertise between members of the organization, collaborating to utilize that knowledge so that knowledge continues, develops and is beneficial for the achievement of self-and organizational goals. The indicators are leverage organizational support, acquiring knowledge, transferring knowledge, receiving knowledge, and applying knowledge.

Theory of Scientific Introduction, Modeling and Optimization

POP-SDM is a method of modeling and optimizing the strengthening of management resources. Management resources consist of human resources, funding, materials, regulations, facilities and infrastructure, and information. Setyaningsih, and Hardhienata (2019), stated that the main idea (Basic idea) of POP-SDM is to develop modeling and optimization of source. Management power which is the theme of research (research), namely by exploring other variable variables that have a positive and dominant influence on variables that are the theme of research. Surgery research is a common method used in the study and optimization of systems through system modeling. Hardhienata (2017), defines operations research as the application of the scientific method to find the optimal solution

and decision-making of a problem by taking into account resources and existing limitations.

SITOREM is a shorthand of Scientific Identification Theory to Conduct Operation Research in Education Management, which can be interpreted as a scientific method that can be used to identify the variables of Operation Research in the field of Management Education (Soewarto Hardhienata, 2017). Correlation research context and Pathway Analysis, SITOREM is used as a method to identify the strength of the relationship between exogenous variables and bound variables, analysis of the value of research results for each indicator of research variables and analysis of the weight of each indicator of each research variable based on criteria "Cost, Benefit, Urgency and importance".

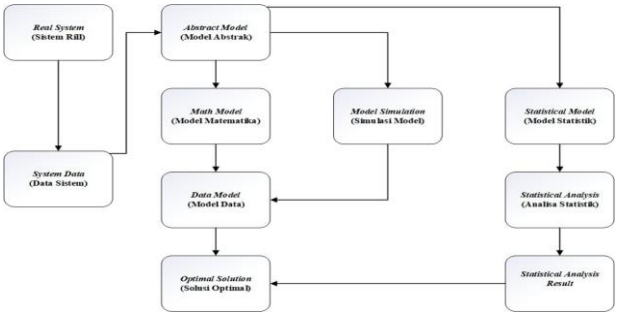


Figure Step Theory of Scientific Introduction to POP-SDM (POP HR) Hardhienata (201

METHODS

Research Design

This research applies the Modeling and Optimization approach of Strengthening Management Resources (POP-SDM) as an alternative method of sequential exploratory method. This method was developed by Setyaningsih and Hardhienata, S. in 2019. This research begins with conducting quality research to explore factors that are suspected to have a positive and dominant effect on the resources to be strengthened. Based on the factors or variables found, constituents are arranged the effect of these variables on the resources to be strengthened so as to produce the researcher's hypothesis.

The research continues at the quantitative research stage to test hypotheses using path analysis. So based on the findings of the path analysis results, a SITOREM analysis was carried out to determine the priority of handling indicators that are still weak. The end result of the application of the POP-HR method is recommendations and strategies to improve aspects of management resources that are still weak as a priority for handling that is positively beneficial to the organization (Setyaningsih & Hardhienata, 2019)

Participants and the context

The teachers selected as samples in this study were teachers with civil servant status at the West Jakarta II State Junior High School. The sample of this study was selected based on teaching experience which was categorized into: 0-10 years of service, 11-12 years of service, and 21-30 years of service, while civil servant teachers who were more than 31 years were not included, because they were considered very experienced. in teaching and approaching retirement. Therefore, based on the above assumptions, the F number of samples in this study amounted to 155 based on the Cochran formula

Research Constellations

The results of empirical research in the field through qualitative research and confirmed by experts, the constellation of influence between variables is obtained as follows:

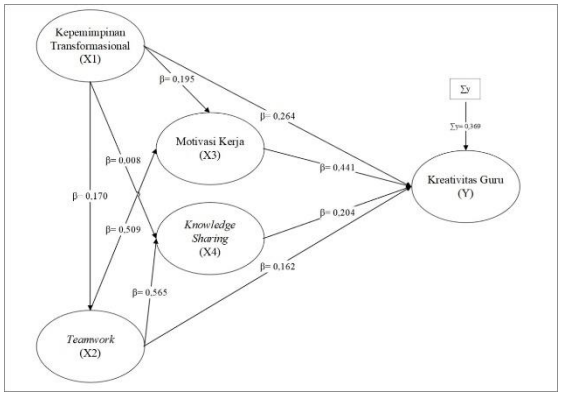


Figure: Stages of the POP-HR Approach

Data Collection Techniques

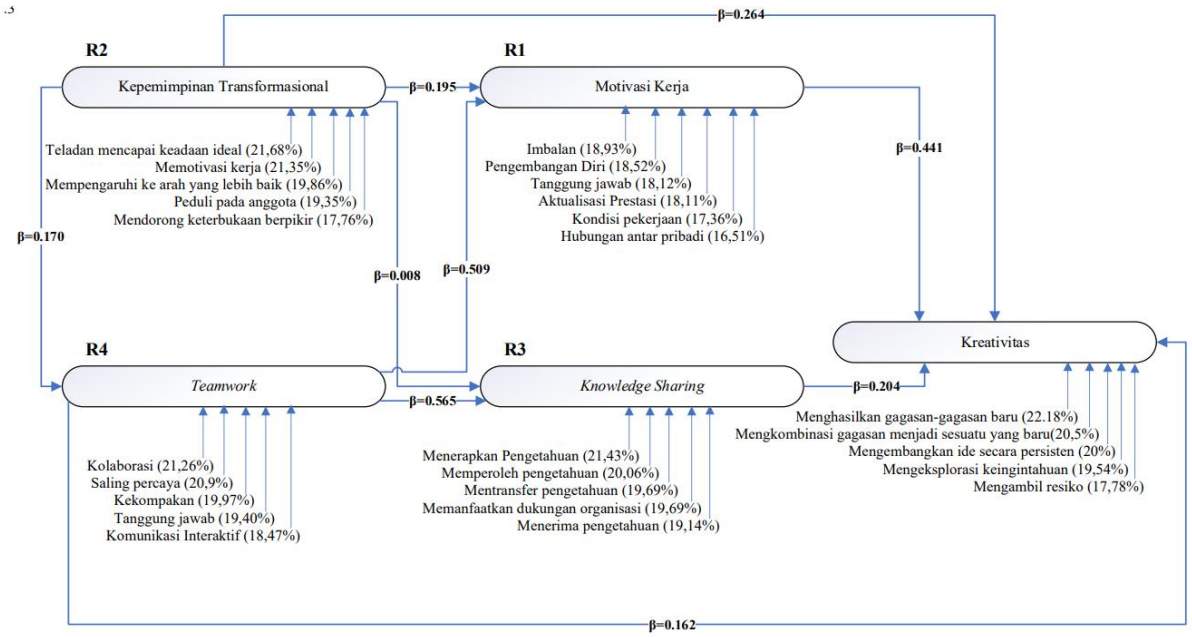
Data collection through interviews with informants consisting of 30 junior high school teachers in the West Jakarta area 2. Then the data was analyzed through the stages of data reduction, data codification, and data display. Quantitative research data obtained by using an instrument in the form of a questionnaire consisting of instruments to measure: 1). (Y), 2). Transformational Leadership (X1), 3). Teamwork (X2), 4). Work Motivation (X3), 5). Knowledge Sharing (X4). Respondents who filled out the five instruments were teachers of SMP Negeri Jakarta Barat 2. The instruments for each variable were developed successively from conceptual definitions, operational definitions, The optimal solution for strengthening, instrument grid, instrument worksheets and instrument calibration. Testing the validity of the items and the reliability of the instrument is based on the results of the instrument trial to 30 test respondents. The results of the validity and reliability tests on research instruments.

Data Analysis Techniques

Qualitative data analysis using Tally Mark/Turus, then expert triangulation. Meanwhile, quantitative data analysis used descriptive statistics, prerequisite analysis test (normality test of estimated standard error (Lilliefors), homogeneity test of variation (Bartlett), regression model linearity test (F-test, t-test and coefficient of determination), and correlation test. hypothesis using path analysis test (path analysis) and indirect influence test (Sobel test). SITOREM analysis through stages 1) contribution analysis (coefficient of determination), 2) analysis of research variables indicators, 3) analysis of research variable indicator weights, and 4) analysis of the determination of the classification of indicators.

FINDINGS

The optimal solution for strengthening creativity based on the results of hypothesis tests, setting priority indicators and calculating the value of indicators, the research results are the optimal solution in strengthening the activity:



Constellation of research variables and indicators

1st Rewards	1. Responsibility
2nd Personal Development	2. Actualization of achievements
3rd Conditions of Employment	3. Exemplary reaching the ideal state
4th Interpersonal relationships	4. Motivating work
5th Care for members	5. Influencing for the better
6th Acquiring knowledge	6. Encourage open-mindedness
7th Transfer knowledge	7. Applying knowledge
8th Leverage organizational support	8. Receiving knowledge
9th Interactive communication	9. Collaboration
10th Generate new ideas	10. Trust each other
11th Combining ideas into something new	11. Compactness
12th Develop ideas persistently	12. Responsibility
13th Exploiting curiosities	
14th Taking risks	

Results of SITOREM Analysis

Discussion

In the discussion of research results will be divided from several research points of view, namely theoretically and practically in the field. Theoretically, several influences between variables will be grouped, namely: exogenous, intervening and endogenous variables. As for the discussion practically in the field, namely: seeing the results of research, both from observations of the environment or the current state and future circumstances.

1) The Influence of transformational leadership (X_1) on creativity (Y)

Transformational leadership has a direct and significant positive impact on the creativity of junior high school teachers in the West Jakarta Region. Based on the results of hypothesis testing, it shows that there is a significant influence between transformational leadership and creativity. The regression equation between transformational leadership variables and creativity is 43,222 + 0.707 X 1. The significance

value (sig), from the output above, the sig value is 0.000 < from (0.05). So there is a significant linear relationship between transformational leadership (X1) and creativity (Y) variables.

The result of calculating the deviation from the linearity of the ANOVA Table is obtained Sig =

The result of the regression calculation of X1 to Y in the ANOVA table was obtained Sig = 0.000 at the real level of α = 0.05 so that Sig < α and F-count were 70.155 and F-table = 3.903 at the real level of α = 0.05 with dk (1) so that F-count > F-table

Transformational Leadership Contribution (X 1) to Creativity (Y) $(ry_1)^2$ of 0.314 which can be interpreted to mean that 31.4% of Creativity can be explained by Transformational Leadership. The remaining 68.6% is a contribution from other factors outside of Transformational Leadership. Guided by the interplay of the correlation coefficient, the relationship between Transformational Leadership and Creativity is moderate.

The model of the contribution of transformational leadership to Creativity can be described by the model of the regression equation $\hat{y} = 43.222 + 0.707\ X_1$.

2) The Effect of teamwork (X_2) on creativity (Y)

Based on the results of the hypothesis test conducted, it can be concluded that Teamwork has a direct and significant positive effect on creativity. This finding provides evidence that teamwork carried out and practiced by organizations or schools has an impact on increasing the creativity of junior high school at West Jakarta Region II.

Based on the results of hypothesis testing, it shows that there is a significant influence between teamwork and creativity the regression equation formed between the variables of Transformational Leadership on Creativity, namely $\hat{y} = -28.810 + 1.369\ X_2$. The significance value (sig), from the above output, obtained a sig value is 0.000 < from α (0.05). Then it can be concluded that there is a significant linear relationship between the Teamwork variable (X_2) and Creativity (Y).

The result of calculating the deviation from linearity ANOVA Table obtained Sig = 0.000 while the real level of α = 0.05 so that S_{ig} < α and F_{count} = 61.896 and F table at the real level of α = 0.05 with dk (1) is F table = 161.448 because $F_{count} < F_{table}$ then H_0 is rejected and H_1 is accepted which means the regression model is linear patterned.

The result of the regression calculation of X_2 to Y in the ANOVA table was obtained Sig = 0.000 at the real level of α = 0.05 so that sig < α and F_{count} 63.379 and F table = 3.890 at the real level of α = 0.05 with dk (1) so that $F_{count} > F_{table}$ then H_0 is rejected and H_1 is accepted, meaning the regression model is significant.

Teamwork contribution (X 2) to Creativity (Y) $(ry_1)^2$ of 0.293 which can be interpreted as 29.3% Creativity can be explained by Teamwork. The remaining 70.7% is contributed by other factors outside of Teamwork. Guided by the interplay of the correlation coefficient, the relationship between Teamwork and Creativity is medium.

The model of teamwork's contribution to Creativity can be described by the regression equation model $\hat{y} = -28.810 + 1.369\ X_2$

3) The Effect of Work Motivation (X_3) on Creativity (Y)

Based on the results of the hypothesis test conducted, it can be concluded that Work Motivation has a direct and significant positive effect on creativity. This finding provides evidence that work motivation carried out and practiced by organizations or schools has an impact on increasing the creativity of junior high school in West Jakarta Region II.

Based on the results of hypothesis testing, it shows that there is a significant influence between

work motivation and creativity so that the regression equation formed between the variables of work motivation on Creativity is $\hat{y} = 67.404 + 0.535$ X3. The significance value (sig), from the above output, obtained a sig value is 0.000 < from α (0.05). Then it can be concluded that there is a significant linear relationship between the variables Work Motivation (X_3) to Creativity (Y).

The result of calculating deviation from linearity ANOVA Table obtained Sig = 0.000 while the real level α = 0.05 so that Sig < α and $F_{count} = 51.818$ and F table at real level α = 0.05 with dk (1) is F table = 161.448 because $F_{count} < F_{table}$ then H_0 is rejected and H_1 is accepted which means the regression model is linear patterned.

The result of the regression calculation X 3 to Y in the ANOVA table was obtained Sig = 0.000 at the real level of α = 0.05 so that Sig < α and F_{count} 51.503 and F table = 3.903 at the real level of α = 0.05 with dk (1) so that $F_{count} >$ F table then H_0 rejected means a significant regression model.

The contribution of Work Motivation (X_3) to Creativity (Y) (ry_1)2 is 0.252 which can be interpreted to mean that 25.2% of Creativity can be explained by work motivation. The remaining 74.8% is a contribution from other factors outside of Work Motivation. Guided by the interplay of the correlation coefficient, the relationship between Work Motivation and Creativity is moderate. The model of the contribution of Work Motivation to Creativity can be described by the model of the regression equation $\hat{y} = 67.404 + 0.535 X_3$

4) The Effect of Knowledge Sharing (X_4) on Creativity (Y)

Based on the results of the hypothesis test conducted, it can be concluded that Knowledge Sharing has a direct and significant positive effect on the creativity of SMP Negeri West Jakarta Region II. These findings provide evidence that Knowledge Sharing carried out and practiced by organizations or schools has an impact on increasing teacher creativity.

Based on the results of hypothesis testing, it shows that there is a significant influence between knowledge sharing and creativity so that the regression equation formed between the variables of Transformational Leadership to Creativity is $\hat{y} = 67.404 + 0.535$ X4. The significance value (sig), from the above output, obtained a sig value is 0.000 < from α (0.05). So, it can be concluded that there is a significant linear relationship between the variables of Knowledge Sharing (X_4) and Creativity (Y).

The result of calculating deviation from linearity ANOVA Table obtained Sig = 0.000 while the real level of α = 0.05 so that Sig < α and $F_{count} = 51.818$ and F table at real level α = 0.05 with dk (1) is F table = 161.448 because $F_{count} < F_{table}$ then H_0 is rejected and H_1 is accepted which means the regression model is linear patterned.

The result of the calculation of regression X4 to Y in the ANOVA table was obtained Sig = 0.000 at the real level of α = 0.05 so that Sig < α and Fcount were 51.503 and F-table = 3.903 at the real level of α = 0.05 with dk (1) so that F-Count > F-table then H0 was rejected and H_1 was accepted, meaning the regression model was significant.

The contribution of knowledge sharing (X_4) to Creativity (Y) (ry_1) 2 is 0.252 which can be interpreted as 25.2% Creativity can be explained by Knowledge Sharing. The remaining 74.8% is a contribution from other factors outside of knowledge sharing. Guided by the interplay of the correlation coefficient, the relationship between knowledge sharing and creativity is moderate. The knowledge sharing contribution model to Creativity can be described by the regression equation model $\hat{y} = 67.404 + 0.535 X_4$

5) The Influence of Transformational Leadership (X1) on Work Motivation (X3)

Based on the results of hypothesis testing, it shows that there is a significant influence between transformational leadership and work Motivation so that the regression equation formed between the variables of Transformational Leadership to Work Motivation is $\hat{y} = 46.230 + 0.667$ X1. The significance value (sig), from the above output, obtained the sig value is 0.017 < from the α (0.05). Then it can be concluded that there is a significant linear relationship between the variables of Transformational Leadership (X_1) and Work Motivation (X_3).

The result of calculating the deviation from the linearity of the ANOVA Table is obtained Sig = 0.000 while the real level is α = 0.05 so that Sig < α and F_{count} = 85.390 and F table at the real level of α = 0.05 with dk (1) is F table = 161.448 because F_{count} < F table then H 0 is rejected and H1 is accepted, which means the regression model is linear patterned.

The result of the regression calculation of X 1 against X 3 in the ANOVA table was obtained Sig = 0.000 at the real level of α = 0.05 so that Sig < α and F-count were 71.388 and F-table = 3.903 at the real level of α = 0.05 with dk (1) so that F-count > F-table then H0 was rejected means a significant regression model.

Transformational Leadership Contribution (X 1) to Work Motivation (X_3) (ry_1)2 of 0.318 which can be interpreted to mean that 31.8% of Work Motivation can be explained by Transformational Leadership. The remaining 68.2 % is a contribution from other factors outside of Transformational Leadership. Guided by the interplay of the correlation coefficient, the relationship between transformational leadership and work motivation is moderate. The model of the contribution of transformational leadership to Work Motivation can be described by the model of the regression equation $\hat{y} = 46.230 + 0.667X_1$.

Based on the results of the data in this study, the results of the research further strengthen theoretical theories and previous research that proves that transformational leadership has a direct positive effect on work motivation.

6) The Effect of Teamwork (X_2) on Work Motivation (X_3)

Based on the results of the hypothesis test conducted, it can be concluded that teamwork has a direct and significant positive effect on the work motivation of junior high school students in West Jakarta Region II. These findings provide evidence that teamwork carried out and practiced by organizations or schools has an impact on increasing work motivation.

Based on the results of hypothesis testing, it shows that there is a significant influence between teamwork and work Motivation so that the regression equation formed between the variables of transformational leadership to work motivation is $\hat{y} = 7.671 + 1.056$ X2. The significance value (sig), from the above output, obtained a sig value is 0.000 < from α (0.05). Then it can be concluded that there is a significant linear relationship between the Teamwork variables (X_2) and Work Motivation (X_3).

The result of calculating deviation from linearity ANOVA Table obtained Sig = 0.000 while the real level of α = 0.05 so that Sig < α and F-Count = 38.410 and F table at real level α = 0.05 with df (1) is F table = 161.448 because F_{count} < F_{table} then H_0 is rejected and H_1 is accepted, which means the regression model is linear patterned.

The result of the regression calculation of X_2 against X 3 in the ANOVA table was obtained Sig = 0.000 at the real level of α = 0.05 so that Sig < α and F_{count} 37.790 and F table = 3.903 at the real level of α = 0.05 with dk (1.195) so that F_{-count} > $F_{-table,}$ then H_0 is rejected and H_1 is accepted, meaning the regression model is significant.

Teamwork Contribution (X 2) to Work Motivation (X_3) (ry_1)2 of 0.198 which can be interpreted that 19.8% of Work Motivation can be explained by Teamwork. The remaining 80.2% is contributed from other factors outside of teamwork. Guided by the interplay of the correlation coefficient, the relationship between Teamwork and Work Motivation is moderate. The model of Teamwork's contribution to Work Motivation can be described by the model of the regression equation $\hat{y} = 7.671 + 1.056\ X_2$

Based on the results of the data in this study, the results of the study further strengthen the theory of theory and previous research which proves that teamwork has a direct positive effect on work motivation

7) The Influence of Transformational Leadership (X_1) on Knowledge sharing (X_4)

Based on the results of the hypothesis test conducted, it can be concluded that transformational leadership has a direct and significant positive effect on the knowledge sharing of teachers at SMP Negeri West Jakarta Region II.

Based on the results of hypothesis testing, it shows that there is a significant influence between transformational leadership and knowledge sharing so that the regression equation formed between the variables of Transformational Leadership to Knowledge Sharing is $\hat{y} = 46.230 + 0.667$ X1. The significance value (sig), from the above output, obtained the sig value is 0.161 > from the α (0.05). So it can be concluded that there is a significantly non-linear relationship between the variables of Transformational Leadership (X_1) and Knowledge Sharing (X_4).

The result of calculating deviation from linearity ANOVA Table obtained Sig = 0.000 while the real level of α = 0.05 so that Sig > α and F_{count} = 85.390 and F table at real level α = 0.05 with dk (1) is F table = 161.448 because $F_{count} \leq F_{table}$ then H_0 is rejected which means the regression model is patterned not linear.

The result of the regression calculation X 1 against X_4 in the ANOVA table was obtained Sig = 0.000 at the real level of α = 0.05 so that Sig < α and F_{count} 71.388 and F table = 3.903 at the real level of α = 0.05 with dk (1) so that $F_{count} > F_{table}$ then H_0 rejected means a significant regression model.

Transformational Leadership Contribution (X 1) to Knowledge Sharing (X_4) $(rxy_1)2$ of 0.318 which can be interpreted to mean that 31.8% of Knowledge Sharing can be explained by Transformational Leadership. The remaining 68.2% are contributions from other factors beyond Transformational Leadership.

Guided by the interplay of the correlation coefficient, the relationship between Transformational Leadership and Knowledge Sharing is moderate. The transformational leadership contribution model to knowledge sharing can be described by the regression equation model $\hat{y} = 46.230 + 0.667\ X_1$.

8) The Effect of Teamwork (X_2) on Knowledge Sharing (X_4)

Based on the results of the hypothesis test conducted, it can be concluded that teamwork has a direct and significant positive effect on the knowledge sharing of teachers at SMP Negeri West Jakarta Region II.

Based on the results of hypothesis testing, it shows that there is a significant influence between teamwork and knowledge sharing so that the regression equation formed between teamwork variables and knowledge sharing is $\hat{y} = 7.671 + 1.056$ X2. The significance value (sig), from the above output, obtained a sig value is 0.000 < from α (0.05). So it can be concluded that there is a significant linear relationship between the Teamwork variable (X_2) and Knowledge Sharing (X_4).

The result of calculating the deviation from linearity ANOVA Table is obtained Sig = 0.000 while the real level is α = 0.05 so that Sig < α and F_{count} = 38.410 and F table at the real level of α = 0.05 with dk (1) is F table = 161.448 because $F_{count} > F_{table}$ then H_0 is rejected and H_1 is accepted, which means the regression model is linear patterned.

The result of the regression calculation X_2 against X_4 in the ANOVA table was obtained Sig = 0.000 at the real level of α = 0.05 so that Sig < α and F_{count} by 37.790 and F table = 3.903 at the real level of α = 0.05 with dk (1.195) so that $F_{count} > F_{table}$ then H_0 is rejected and H_1 is accepted means a significant regression model.

Teamwork contribution (X2) to Knowledge Sharing (X_4) $(ry_1)^2$ is 0.198 which can be interpreted to mean that 19.8% knowledge Sharing can be explained by Teamwork. The remaining 80.2% is contributed by other factors outside of Teamwork. By referring to the interplay of the correlation coefficient, the relationship between Teamwork and Knowledge Sharing is moderate. The teamwork contribution model to knowledge sharing can be described by the regression equation model $\hat{y} = 7.671 + 1.056\ X_2$.

9) The Influence of Transformational Leadership (X_1) on Teamwork (X_2)

Based on the results of the hypothesis test conducted, it can be concluded that transformational leadership has a direct and significant positive effect on the teamwork of teachers of SMP Negeri West Jakarta Region II. These findings provide evidence that transformational leadership undertaken and

practiced by organizations or schools has an impact on improving teamwork.

Based on the results of hypothesis testing, it shows that there is a significant influence between transformational leadership and teamwork so that the regression equation formed between the variables of Transformational Leadership to Teamwork is $\hat{y} = 81.394 + 0.311\ X_1$. The significance value (sig), from the above output, obtained a sig value is 0.000 > from α (0.05). Then it can be concluded that there is a significant linear relationship between the variables of Transformational Leadership (X_1) to Teamwork (X_2).

The result of calculating the deviation from linearity ANOVA Table is obtained Sig = 0.000 while the real level is α = 0.05 so that Sig < α and F_{count} = 104.286 and F_{table} at the real level of α = 0.05 with dk (1) is F table = 161.448 because $F_{count} < F_{table}$ then H_0 is rejected and H_1 is accepted which means the regression model is linear patterned.

The result of the calculation of the regression of X1 against X2 in the ANOVA table was obtained Sig = 0.000 at the real level of α = 0.05 so that Sig < α and F_{table} were 97.134 and F_{table} = 3.903 at the real level of α = 0.05 with dk (1) so that $F_{count} > F_{table}$ then H0 was rejected means a significant regression model.

The result of the calculation of regression X1 against X2 in the ANOVA table was obtained Sig = 0.000 at the real level of α = 0.05 so that Sig < α and F-count were 97.134 and F-table = 3.903 at the real level of α = 0.05 with dk (1) so that F-count > F-table then H_0 was rejected means a significant regression model.

This research has provided results that transformational leadership has a direct positive influence on teacher teamwork to be able to create or develop something new to improve the quality of graduates.

Path analysis on research that resulted in four substructures. In substructure- 1, Y= 0.264 + 0.162X 2 + 0.441X $_3$ + 0.204X 4 + y. while R^2YX_{4321}= 61.1%. This means that if the variables of transformational leadership, teamwork, work motivation, and knowledge sharing are increased, an increase will also occur in teacher creativity. On substructure -2 X3=0.195X 1 + 0.509X 2 +3.

This means that if the variables of transformational leadership and teamwork are improved, an increase will also occur in work motivation. In substructure 3, it is as follows: X 4 = $_{41}$ X $_1$ + $_{42}X_2$+ $_4$. This means that if the variables of transformational leadership and teamwork are increased, an increase will also occur in knowledge sharing. In substructure 4, X_2 =0.170X1. The value of the coefficient of determination while R^2 = 0.29% X 21. The magnitude of the influence of other variables outside of X $_1$ on X_2. This means that if leadership increases, teamwork will also increase. On substructure-5: Y = 0.264X 1 + 0.162X 2 + $X_3$0.441+ 0.204X_4 + 0.195X 1 + 0.509X 2 - 0.008X $_1$ + 0.565X $_2$ + 0.170X 1+ 5. This means that increasing transformational leadership, teamwork, work motivation, and knowledge sharing can increase creativity so that it can improve the quality of graduates produced.

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