

INCREASING TEACHER CREATIVITY THROUGH STRENGTHENING TEAMWORK, PERSONALITY AND WORK MOTIVATION

Ul'fah Hernaeny^{1*}, Didik Notosudjono², Rita Retnowati³

Universitas Indraprasta PGRI, Jakarta, Indonesia

ulfah141414@gmail.com

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ABSTRACT

Creativity is a behavior that must be possessed by humans in order to adapt to a rapidly changing environment. The challenges faced in daily life, including at work, make humans creative, both in thinking and in acting. The purpose of this study is to find solutions, namely strategies and ways to improve teacher creativity by examining the influence of other variables on teacher creativity. These variables are teamwork, personality, and work motivation. This study is a non-parametric study because the entire population of 153 private high school teachers in Depok City, West Java, Indonesia, was taken as a sample. Data were collected using questionnaires and analyzed using PLS-SEM (Partial Least Square-Structural Equation Modeling). The results showed that teamwork, personality and work motivation have positive direct and indirect effects on teacher creativity. A discussion of the research findings and their implications as well as suggestions will be discussed further at the end of the article.

Keywords: teamwork, personality, work motivation and teacher creativity

INTRODUCTION

Education in Indonesia currently requires changes with the rapid advancement of science and technology and the need for appropriate human resources in the global era so as not to lag behind other countries that are also racing to improve the education of their people. UNESCO (United Nations Educational Scientific and Cultral Organization) initiated the Four Pillars of Education to improve the quality of education of a nation. The Four Pillars include learn to know, learn to do, learn to be, and learn to live together. It is hoped that the foundation of these four pillars will be the answer to the problems that arise regarding education and give birth to students who are able to work and can play their role in their respective environments (Wikanti Iffah Juliani, 2020).

The quality of human beings needed by the Indonesian nation in the future is able to face increasingly fierce competition with other nations in the world. The quality of Indonesian people is produced through the implementation of quality education. Therefore, teachers have

a strategic function, role and position. During the Corona virus disease 19 (Covid-19) pandemic, teachers are required to have high creativity, starting from designing online learning models to the effectiveness of the learning patterns implemented. This pandemic does not only affect the health sector, but almost all fields of life including the education sector. In order to break the covid-19 chain, schools are forced to carry out distance learning with an online model as a substitute. This condition derivatively requires all stakeholders involved in education, especially teachers, to adapt so that the quality and learning objectives can be achieved properly. Therefore, teacher creativity is one of the keys to maintaining the quality of learning and the quality of education during a pandemic.

Until now, creativity is still a concern for researchers to continue to be studied. Research conducted by (Morris, 2020) on creativity in teaching and learning activities concluded that creative learning outcomes need to be supported through independent learning through teacher direction in three

ways, namely the teacher helps by finding appropriate information and directly controlling the learning process, or the teacher and students are involved in the process of building meaning together. This research is more directed towards creativity in the process of teaching and learning activities in the classroom. Likewise, research conducted by (Humaidi et al., 2020) creativity is the key to the effectiveness of the learning process carried out by teachers in achieving learning and educational goals.

Teamwork is a group of people who work together to achieve the same goals and these goals will be easier to obtain by doing teamwork than by doing it alone, even with teamwork there will be more creative ideas generated that can make an organization grow faster because of the results of solid teamwork. (Darma et al., 2021) proved that *teamwork* has a positive and significant relationship with teacher creativity, meaning that the diversity of teacher creativity is related to teamwork.

It is explained that an individual in this case is a teacher who has a personality with a higher level of awareness, friendliness, and tolerance for ambiguity is more prone to having new concepts, generating creative ideas that do not necessarily choose creative ideas during concept selection alone but really mature in issuing ideas. The personality of the

teacher is very influential in enhancing his creativity in teaching (Toh et al., 2015).

Work motivation is the power that encourages a person to take actions and activities at work that come from within himself and his environment that are useful for maintaining and improving the quality of his work. High work motivation is one of the important factors in organizational success. Teachers who have high work motivation are challenged to do new things in carrying out their tasks and work. They find new methods of working. This includes producing new products and work results. Meanwhile, the atmosphere at school, which provides the freedom to do new things, makes teachers not afraid to make mistakes at work. This certainly triggers the emergence of creativity at work and can complete the tasks and work given. (Masyhudi et al., 2018) proved that work motivation has a positive and significant relationship with teacher creativity.

The current research is to fill the gap by involving work motivation as the intervening variable (the constellation model can be seen in in Figure 1). This elaborates a non-parametric research approach by taking the entire population as research samples to test the proposed hypothesis that Teamwork and Personality has direct and indirect influences on Teacher Creativity and Work Motivation

Note :
 X1 : TEAMWORK
 X2 : PERSONALITY
 X3 : WORK MOTIVATION
 Y : TEACHER CREATIVITY

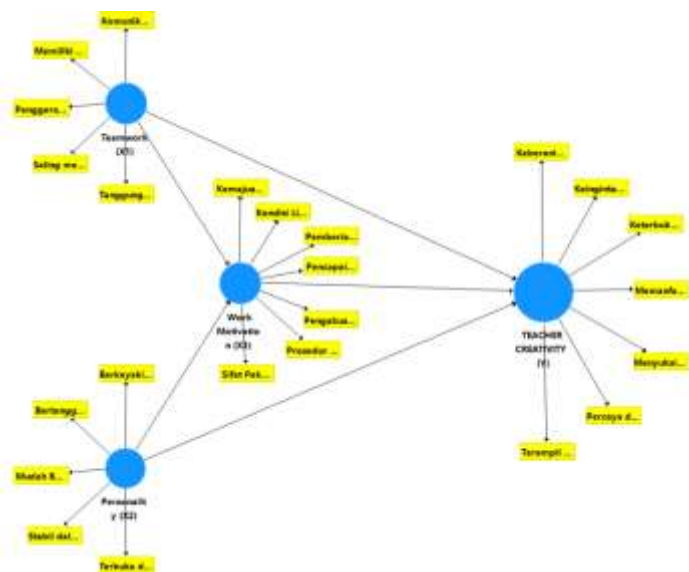


Figure 1. Research Constellation Model

This study was conducted to determine the effect of increasing teacher creativity (Y) through reinforcement, teamwork (X₁), personality (X₂) and work motivation (X₃). There are 7 (seven) research hypotheses developed as follows :

1. There is a direct influence of Teamwork (X₁) towards Teacher Creativity (Y).
2. There is a direct influence of Personality (X₂) towards Teacher Creativity (Y).
3. There is a direct influence of Work Motivation (X₃) towards Teacher Creativity (Y).
4. There is a direct influence of Teamwork (X₁) towards Work Motivation (X₃).
5. There is a direct influence of Personality (X₂) towards Work Motivation (X₃).
6. There is an indirect influence of Teamwork (X₁) towards Teacher Creativity (Y) through Work Motivation (X₃).
7. There is an indirect influence of Personality (X₂) towards Teacher Creativity (Y) through Work Motivation (X₃).

LITERATURE REVIEW

Research by (Darma et al., 2021) entitled "Strengthening Teamwork, Visionary Leadership and Self Efficacy in Efforts to Improve Teachers Creativity" published in Psychology and Education (2021) concluded that there is a positive and significant relationship between teamwork and teacher creativity, meaning that the diversity of teacher creativity is related to teamwork. It is explained that cooperation between group members who have the aim of advancing the organization will have an emotional impact on the organization, there is a bond of feeling between members to support each other in completing tasks. Research by Lina Purnama Asih, Thamrin Abdullah, Sri Setyaningsih and Soehardi (2021) entitled "Improving Teacher Creativity Through Strengthening Organizational Culture, Interpersonal Communication, Personality and Work Abilities In Jakarta" published in Turkish Journal of Computer and Mathematics Education Vol.12 No.13 (2021), 6271-6285, concluded that organizational culture, intrapersonal communication, personality and

abilities have a significant effect on creativity. From the calculation results obtained path coefficient value = 0.351 with t count = 5.609; while t table at real level = 0.05 obtained t table = 1.970; meaning t count > t table then according to the test criteria reject H₀ and accept H₁. Research by (Rais et al., 2022) entitled "Increasing teacher creativity through strengthening transformational leadership, teamwork, and work engagement" published in Pegem Journal of Education and Instruction, Vol. 12, No. 1, 2022 (pp. 232-241) concluded that there is a positive and significant relationship between teamwork and teacher creativity. It is explained that teamwork that emphasizes group goals, active participation of members, prioritizing togetherness, communicating, complementing, and sharing can increase teacher creativity. Work engagement that emphasizes active participation in work, competence, importance of work, development opportunities, performance levels, and interest in organizational goals can improve the quality of teacher services.

Research conducted by Erni Sukmayanti, Nandang Hidayat, Herfina Herfina (2021) concluded that this study confirmed that there is a positive relationship between work motivation and teacher creativity with a very strong correlation level. The functional relationship between work motivation variables and teacher creativity is represented in the form of a regression equation. Based on the table, it is known that the slope constant (a) is 2.842 with a constant (b) of 0.883 so that the regression equation formed between the work motivation variable and teacher creativity is $\hat{Y} = 2.842 + 0.883 X_2$. The table shows the probability value (sig.) 0.000 < the value of 0.05, thus the regression equation $\hat{Y} = 2.842 + 0.883X_2$ is significant. Based on the table, it is known that the contribution of work motivation to teacher creativity (r²y₂) is 0.849 which can be interpreted that 84.9% of teacher creativity can be explained by work motivation. The remaining 15.1% is the contribution of other factors outside of work motivation. The

correlation coefficient between work motivation and teacher creativity is 0.921 ($p > 0.01$). Research conducted by Masyhudi (2018) in his research entitled "Correlation of Pedagogic Competence and Work Motivation to the Creativity of Islamic Religious Education Teachers at Junior High Schools in Jambi City", concluded that there is a positive relationship between Work Motivation and Teacher Creativity ($r = 0.575$, $p < 0.05$). It is explained that work motivation creates a conducive work passion for teachers in carrying out their duties well and optimally.

The following is a theoretical explanation of Teacher Creativity, Teamwork, Personality and Work Motivation.

Teacher Creativity

Creativity is a behavior that must be possessed by humans in order to adapt to a rapidly changing environment. The challenges faced in daily life, including at work, make humans creative, both in thinking and in acting. M. Bel'en (Calavia et al., 2021) stated the same thing that "*Creativity is design discipline and the methodology proposed could have a relevant role in the creativity development inside educational centers*". Creativity is a relevant development in the world of education that can be achieved through the design discipline and the proposed methodology. (Mullen, 2017) states "*Creativity is more dimensional than just making something, seeing differently, and solving problems, for it also includes innovating and inventing, question posing and meaning-making, and change and transformation*". The theory explains that creativity is a power that comes from within a person in the form of imagination involved in making and building things and finding different ways to solve problems. The same concept of creativity put forward by (Hornig et al., 2005) states "*integrated Activities are closely connected to life experience and a basis for the development of creative thinking within education*". The theory explains that creativity is an integrated activity closely related to life experience and the basis for the development of thinking in education. (Reiter-Palmon et al., 2018) menyatakan

bahwa : "*provide a deeper understanding of the various factors that may influence individual creativity in the workplace and how individuals can exhibit creativity in the workplace. Understanding how individual creativity is fostered or inhibited in the workplace is critical to our ability to improve organizational creativity overall. Analyzing how individual creativity is part of the larger, multilevel context, of the team and wider organization is critical*". The point of the above statement is that individual creativity is critical to the ability to enhance the creativity of the organization as a whole. (Kettler et al., 2018) state that creativity is a creative process that produces new products and has a contribution value. (Cropley et al., 2011) define Creativity as a concept of effective novelty generation. (Mullet et al., 2016) state that creativity is a cognitive or physical process influenced by social context and personality characteristics where the result is a product or idea that is new or useful to society. According to (Schermerhorn et al., 2013) Creativity is creating uniqueness and accuracy in responding to the problems faced.

Based on the review of some of the theories above, it can be synthesized that Creativity is an action based on new ideas from teachers to realize their work in the form of products that are able to solve a problem faced and are useful for society. The indicators that can be used in measuring a person's creativity are as follows: 1) Confidence in solving problems, 2) Curiosity about new things, 3) Likes challenging activities, 4) Skilled in finding solutions, 5) Utilizing the knowledge you have, 6) Courage in taking risks, 7) Openness to ideas.

Teamwork

Teamwork is the cooperation or collaboration between two or more people to share time, knowledge and talents in carrying out tasks and achieving goals. According to (Sarjana, 2014) *Teamwork* is the involvement of employees in carrying out tasks and responsibilities that are carried out together and coordinated in an institution to achieve predetermined organizational goals. (Amorim

Neto et al., 2018) state that *teamwork* is Baker, Salas, King, Battles, and Barach (2005) define *teamwork* as work done with others to achieve a common goal through cooperation and communication. In this sense, understanding the team's purpose is a must, and can affect the work done (Baker et al., 2005). Also important are cooperation and communication as ways to guarantee teamwork success (Strom, Strom, & Moore, 1999). P-216. (Hotapeti et al., 2020) state that *Teamwork* can be interpreted as teamwork or cooperation, *teamwork* or *teamwork* is a form of group work with complementary skills and is committed to achieving a pre-agreed mission to achieve common goals effectively and efficiently. According to (Hwang, 2018) *Taskwork* refers to tasks that team members perform either individually or collectively, usually assisted with tools and machines, whereas *teamwork* refers to interpersonal interactions among team members (Bowers, Braun, and Morgan, 1997). It is generally accepted that effective teamwork is characterized by good communication and collaboration among team members as they work toward achieving the common goal. (Rabiatul Adawiyah1), Neti Karnati2), 2019) state that teamwork is an activity carried out by several people who work together in a certain period of time to achieve task-oriented goals with complementary expertise and dependence on each other. According to (Imron et al., 2019) Teamwork is a relatively small group that works on clear work, challenging tasks that are most efficiently completed by the group, which has certainty, together, challenging, goals derived from tasks, which must cooperate and depend on each other to achieve these goals, whose members work in different roles in a team (although some roles can be published), and who have the necessary authority, autonomy and resources that allow them to meet team goals. (Hidayat et al., 2019) state that teamwork is a group of people to work together to achieve the same goals and these goals will be easily obtained by doing teamwork rather than doing it alone.

Based on the theories previously described, it can be synthesized that

Teamwork is an activity carried out by a group of individuals who work together effectively and efficiently to achieve the same goal through a mechanism that has been arranged and agreed upon with full responsibility. The indicators are as follows: 1) Having Togetherness, 2) Motivation, 3) Group Communication, 4) Responsibility, 5) Knowing and trusting each other

Personality

Widodo Widodo. (2021: 129-138) defines Personality is a distinctive and relatively long-lasting way of thinking, feeling or emotion, and acting or behaving that characterizes a person's response to life situations throughout life and to motivate individuals to adapt to the world. (Widodo, 2021) defines Personality is a distinctive and relatively long-lasting way of thinking, feeling or emotion, and acting or behaving that characterizes a person's response to life situations throughout life and to motivate individuals to adapt to the world. (Triatun et al., 2021) state that teacher personality is a trait that is shown through loyalty to the school and the work that is his responsibility. According to (Mahlamäki et al., 2019) Personality is five broad dimensions or factors ranging from sociability, conscientiousness, extraversion, emotional stability (or neuroticism), and openness to experience. (Liang et al., 2018) states that Personality is an inherent difference between individuals and contributes to the differences between individuals themselves related to temperament, attitudes, cognition, motivation and learning style of a person which in turn affects the academic achievement of the individual it self. The definition of personality according to Sharma (2021) is that personality is an inseparable part of talking about behavior in the company. Personality is one of the individual personalities that is stable over time (Bleidorn et al., 2021). Personality is a picture of an individual consisting of thoughts, feelings, and behavior (Cervone et al., 2022). According to (Colquitt, J. A., Lepine, J. A., & Wesson, 2017) explains that "*Personality refers to the structures and propensities inside people that explain their characteristic patterns of thought,*

emotion, and behavior”, namely *Personality* refers to the structures and tendencies that exist in a person that describe the *character*, thoughts, emotions and behavior of that person.

From the various definitions put forward above, it can be synthesized that personality is a set of characters, characters, traits or habits of self that underlie a relatively stable pattern of attitudes in response to ideas, objects or people in the environment. The indicators of personality are: 1) Easy to Socialize, 2) Positive Beliefs, 3) Responsible for making decisions, 4) Stable in conditioning emotions, 5) Open in accepting concepts.

Work Motivation

(R.Jones, 2001) defines “*Work Motivation is psychological forces that determine the direction of a person's behavior in an organization, a person's level of effort, and a person's level of persistence*”. Work motivation is a psychological force that determines the direction of a person's behavior in an organization, a person's level of effort, and a person's level of persistence. According to (Suchyadi, 2017) Motivation is commonly known as the drive or willingness to do something. Motivation is a psychological aspect that can help to organize choices for objects that can be selected. With the support of high motivation to take an action related to the goal, it is hoped that the goal can be achieved. (Rivai et al., 2019) defines Work Motivation as an encouragement for teachers that causes environmental conditions or systems that support and enable the learning process. (Azar et al., 2013) state that work motivation is a set of energetic forces that originate both inside and outside an individual's existence, and determine the form, direction, intensity and duration of work-related behavior. (ZAMEER et al., 2014) state that motivation is the desire of employees to do something given and to foster a sense of responsibility.

Based on the description of Work Motivation from various sources above, it can be synthesized that Work Motivation is the drive, desire that grows from a person who comes from internal and external himself to do

a job with high enthusiasm using his abilities and skills to achieve specific goals or tasks given to him. The indicators that can be used in measuring the level of a person's Work Motivation in performing their duties and functions in an organization are as follows: 1. achievement, 2. nature of work and job-related responsibilities, 3. career advancement and development, 4. provision of rewards, 5. recognition and appreciation, 6. working environment conditions, 7. organizational procedures.

METHOD

The research used a quantitative approach with a survey method. Analysis of research data using *Structural Equation Modeling* (SEM). Exogenous variables are any variables that affect other variables and in this study are, Teamwork, Personality and Work Motivation variables, while endogenous variables are any variables that get influence from other variables in this study are Teacher Creativity variables. The population in this study is Permanent Foundation Teachers (GTJ) of Private High Schools accredited A in Depok City, West Java Province with a population of 728 teachers. The population is spread across 36 schools located in 11 sub-districts (Source:

<https://dapo.kemdikbud.go.id/>,

Dapodikdasmen, Synchronization January 2022, Even Semester 2021/2022). The number of samples used based on the calculation of the affordable population through the *multistage random sampling* procedure was calculated using the Taro Yamane formula (Singh et al., 2014) obtained a sample size of 152.47 rounded to 153.

Research Instruments

This study used Teacher Creativity, Teamwork, Personality and Work Motivation questionnaires. Preliminary trials to test the validity and reliability of the instruments of each variable were conducted on 30 teachers of Permanent Foundation Teachers (GTJ) of A-accredited Private High Schools in Depok City, West Java Province outside the research sample.

The validity of the instrument was calculated using the *Pearson's Product Moment* correlation formula, which looks at the correlation between the instrument item scores and the total score of all instrument items. The calculated *r* value obtained is compared with the *r* table for degrees of freedom $df = n - 2$ where *n* is the number of respondents, namely 30 people. The value of *r* table for $df = 28$ is 0.361 at a significant level of $\alpha = 0.05$ the calculation results are then compared with the critical value table from the *Pearson Product Moment* correlation table (*r* table), if $r \text{ count} \geq r$

table, then the instrument is declared valid, and if $r \text{ count} < r \text{ table}$, then the item is dropped. Furthermore, the reliability test was carried out on valid statement items with the reliability of the instrument analyzed using the two-sided technique with the *Cronbach Alpha* formula, namely on valid items only. The results are concluded if $r \text{ count} \geq 0.7$ then the instrument is declared reliable and can be used as a data collection tool. A recapitulation of the results of the research instrument trial can be seen in Table 1 below.

Table 1. Recapitulation of the Research Instrument Trial Results

No	Variables	Numbers of item tested	Valid Items	Reliability Scores	Remarks
1	Teacher Creativity	40	30	0,903	valid and reliable
2	Teamwork	40	36	0,984	valid and reliable
3	Personality	40	33	0,978	valid and reliable
4	Work Motivation	40	35	0,978	valid and reliable

RESULT and DICUSSION

Measurement Model (Outer Model)

Evaluation

The purpose of evaluating the measurement model is to assess the construct reliability, convergent and discriminant validity of the model being established (Hair et al., 2017).

Construct Reliability Test

Testing for reliability is essential to ensure the measurement model is reliable by assessing the internal consistency reliability of the indicators associated with the construct (Composite Reliability and Cronbach's Alpha values should be above 0,07) and the Average Variance Extracted (AVE) value which should be 0.50 or higher, indicating that the construct explains more than half of the variance of its indicators.

Table 2 presents the values of Cronbach's Alpha and Average Variance Extracted (AVE) for the research variables as the output of the algorithm calculation. The results are as follows: Teacher Creativity has a Cronbach's Alpha of 0.894 and an AVE of 0.631; Teamwork has a Cronbach's Alpha of 0.848 and an AVE of 0.625; Personality has a Cronbach's Alpha of 0.874 and an AVE of

0.700; and Work Motivation has a Cronbach's Alpha of 0.875 and an AVE of 0.573. All values exceed the thresholds for construct reliability, with Cronbach's Alpha values above 0.70 and AVE values above 0.50, confirming that the questionnaires used to measure each variable are reliable.

Convergent Validity Test

Testing for validity of the Measurement Model covers convergent validity and discriminant validity. Table 2 also presents the indicators' loading factor values of each variable. It can be seen that all loading factor values have met with the threshold ($> 0,70$) except Likes challenging activities as the indicators of Teacher Creativity (Y), Easy to Socialize as the indicators of Personality (X₁) and Figure head and Organizational Procedures as the indicators of Work Motivation (X₃) are weak ($<0,70$). However, in social science research, they are still considerably accepted and unnecessarily be deleted to maintain the composite reliability, content validity, or AVE previously achieved. Rather, loadings between 0.40 and 0.70 can be considered acceptable if the overall construct reliability is adequate. Thus, it can be said that

the questionnaires used have a convergent validity.

Table 2. Loading Factors, Cronbach's Alpha and Average Variance Extracted

Indicators	Loading Factors	Cronbach's Alpha	Average Variance Extracted (AVE)
Teacher Creativity (Y)			
Confident in solving problems	0,710		
Curiosity for new things	0,900		
Likes challenging activities	0,428		
Skilled in finding solutions	0,879	0.894	0.631
Utilize the knowledge possessed	0,865		
Courage to take risks	0,808		
Openness to ideas	0,864		
TEAMWORK (X1)			
Having Togetherness	0,738		
Motivational Drivers	0,807		
Group Communication	0,736	0.848	0.625
Responsibility	0,799		
Knowing and trusting each other	0,864		
PERSONALITY (X2)			
Easy to Socialize	0,429		
Positive Beliefs	0,942		
Responsible in making decisions	0,883	0.874	0.700
Stable in conditioning Emotions	0,919		
Open to accepting concepts	0,895		
WORK MOTIVATION (X3)			
Achievement	0,715		
Nature of work and job responsibilities	0,798		
Career progression and development	0,748		
Reward	0,773	0.875	0.573
Recognition and Rewards	0,817		
Working Environment Conditions	0,762		
Organizational Procedures	0,677		

Discriminant Validity Test

Discriminant Validity test in this study was carried out by using the HTMT (Heterotrait-Monotrait) criteria, which is a comparison between the average correlation of

variable measurement items and the geometric root of the average correlation between measurement items. Table 3 presents the HTMT values in the discriminant validity test of the research variables.

Table 3. Discriminant Validity Test of Research Variables

	Teacher Creativity (Y)	Personality (X2)	Work Motivation (X3)	Teamwork (X1)
Teacher Creativity (Y)	1,000			
Personality (X2)	0,755	1,000		
Work Motivation (X3)	0,780	0,794	1,000	
Teamwork (X1)	0,563	0,111	0,118	1,000

The table above shows the HTMT values between variables lower than 0.90 which have complied the threshold

requirement. Thus, all latent variables already have good discriminant validities.

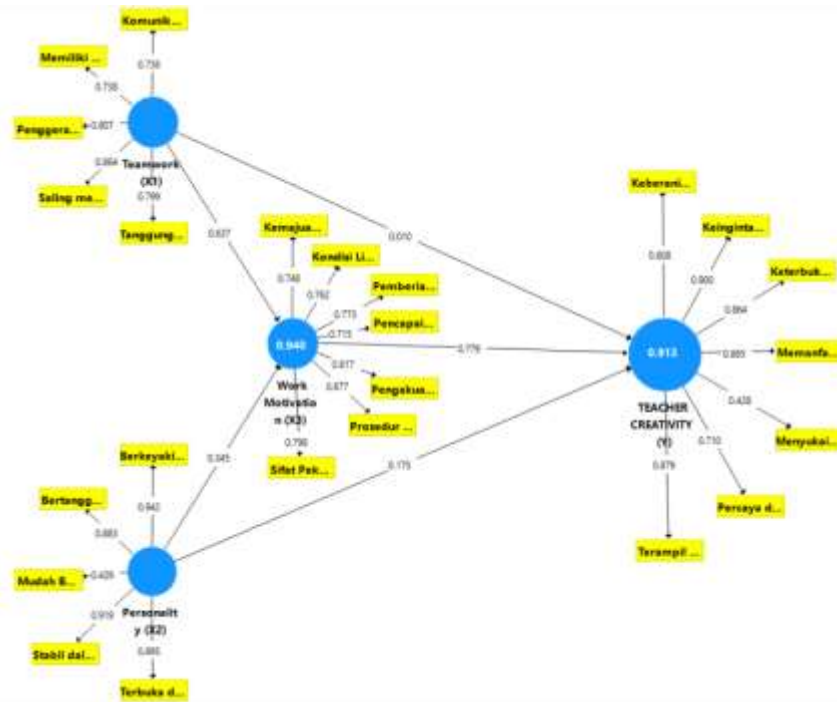


Figure 2. Path Coefficients of Research Variables

Figure 2 portrays the output of bootstrapping calculation of path coefficients (β) of direct influences of Teamwork towards Teacher Creativity (0.010), Personality towards Teacher Creativity (0.175), Work Motivation towards Teacher Creativity (0.779), Teamwork

towards Work Motivation (0.637), Personality and towards Work Motivation (0.345). The significant levels (p values) of the direct influences of Teamwork, Personality and Work Motivation towards Teacher Creativity are described in the table below.

Table 3. Direct and Indirect Path Coefficients

Direct Influence	Original Sample (O)	T Statistics (O/STDEV)	P Values
Teamwork (X1) -> Teacher Creativity (Y)	0,250	2,822	0,003
Personality (X2) -> Teacher Creativity (Y)	0,175	2,237	0,026
Work Motivation (X3) -> Teacher Creativity (Y)	0,779	9,547	0,000
Teamwork (X1) -> Work Motivation (X3)	0,637	11,540	0,000
Personality (X2) -> Work Motivation (X3)	0,345	6,137	0,000
Indirect Influence			
Teamwork (X1) -> Work Motivation (X3) -> Teacher Creativity (Y)	0,496	7,533	0,000
Personality (X2) -> Work Motivation (X3) -> Teacher Creativity (Y)	0,269	5,032	0,000

As seen on the table above, all direct influences of Teamwork on Teacher Creativity, Personality on Teacher Creativity, Work Motivation on Teacher Creativity, Teamwork on Work Motivation, Personality and on Work Motivation are said significant. Whereas, the indirect influences of on Teamwork through Teacher Creativity and Personality on Teacher

Creativity through Work Motivation are also said significant as they are all in the levels of lower than 0,05 and t statistics are greater than 1,96.

Hypothesis Test Results

Table 3 clarifies the results of hypothesis test as follows.

1. Hypothesis 1 is accepted, there is a significant positive direct effect of Teamwork on Teacher Creativity with the acquisition of a t-statistics value of $2.822 > 1.96$ and p-values $0.003 < 0.05$ with a path coefficient $\beta = 0.250$. The t-statistic value of 2.822 is greater than 1.96 (sig. level 0.05). This supports previous research conducted by (Georgiev et al., 2023) *Teamwork building real artifacts contributes to increased creativity*. In addition, teamwork and team teaching provide many advantages because they are able to enhance the creative process to encourage collaboration and coordination in the development of creative problem solving skills (Choudhary et al., 2022). Yi Wu in his research concluded that although teamwork can enhance creativity, its impact can vary based on contextual factors such as team dynamics and leadership style (Wu, 2024).
2. Hypothesis 2 is accepted, there is a significant positive direct effect of Personality on Teacher Creativity with the acquisition of t-statistics value of $2.237 > 1.96$ and p-values $0.026 < 0.05$ with path coefficient $\beta = 0.175$. The t-statistic value of 2.237 is greater than 1.96 (sig. level 0.05). Nam and Nga concluded that personality traits, especially openness to experience, extraversion, and conscientiousness, significantly affect creativity (Nam et al., 2024). Leylak and Say also proved in their research that there is a significant positive relationship between the creative personality traits of classroom teacher candidates and their ability to support creativity, confirming the influence of personality on teacher creativity (LEYLAK et al., 2021).
3. Hypothesis 3 is accepted, there is a significant positive direct effect of Work Motivation on Teacher Creativity with the acquisition of t-statistics value of $9.547 > 1.96$ and p-values $0.000 < 0.05$ with path coefficient $\beta = 0.779$. The t-statistic value of 9.547 is greater than 1.96 (sig. 0.05 level). These results support previous research conducted by Hadiyati et al. found a significant positive direct effect of work motivation on teacher creativity at SMA Batik 2 Surakarta (Hadiyati, 2021). Another supporting study found a significant positive direct effect of work motivation on teacher creativity among ASN Educators in West Jakarta Region II State High Schools, suggesting that higher motivation leads to increased creativity in teaching practices (Rajindra et al., 2020).
4. Hypothesis 4 is accepted, there is a significant positive direct effect of Teamwork on Work Motivation with the acquisition of a t-statistics value of $11.540 > 1.96$ and p-values $0.000 < 0.05$ with a path coefficient $\beta = 0.637$. The t-statistic value of 11.540 is greater than 1.96 (sig. 0.05 level). These findings strengthen the results of previous research and confirm that there is a direct influence of organizational culture, teamwork, and self-efficacy on work motivation (Miranti et al., 2024). This hypothesis is also supported by the results of research by Intan Irani Putri et al, which shows that teamwork positively affects employee performance, which implies a relationship with work motivation (Putri et al., 2023).
5. Hypothesis 5 is accepted, there is a significant positive direct effect of Personality on Work Motivation with the acquisition of a t-statistics value of $6.137 > 1.96$ and p-values $0.000 < 0.05$ with a path coefficient $\beta = 0.345$. The t-statistic value of 6.137 is greater than 1.96 (sig. level 0.05). The research findings show a significant positive relationship between personality traits and work motivation in the Indonesian hospitality industry, highlighting the importance of personality in improving employee motivation and overall job performance (Irdhayanti et al., 2024). Lakshmi showed a significant positive impact of employee personality on work motivation, suggesting that individual personality traits play an important role in increasing motivation levels in an organizational context. This relationship is very important for understanding

organizational behavior (Lakshmi et al., 2023).

6. Hypothesis 6 is accepted, there is a significant indirect positive effect of Teamwork on Teacher Creativity through Work Motivation with the acquisition of t-statistics value of $7.533 > 1.96$ and p-values $0.000 < 0.05$ with path coefficient $\beta = 0.496$. The t-statistic value of 7.533 is greater than 1.96 (sig level. 0.05). Hermawan with his research results The synergy between teamwork and work motivation creates an atmosphere conducive to creativity (Hermawan et al., 2023). Barriers to teacher collaboration, such as lack of time, trust issues, and external expectations, may limit the positive indirect effect of teamwork on teacher creativity through work motivation. Recognizing the benefits of collaboration can help teachers develop strategies to overcome these obstacles (Kolleck, 2019).
7. Hypothesis 7 is accepted, there is a significant indirect positive effect of Personality on Teacher Creativity through Work Motivation with the acquisition of t-statistics value of $5.032 > 1.96$ and p-values $0.000 < 0.05$ with path coefficient $\beta = 0.269$. The t-statistic value of 5.032 is greater than 1.96 (sig. 0.05 level). When teachers perceive themselves as more creative, their motivation to work tends to increase, suggesting an indirect influence of personality on teacher creativity through work motivation (Miranda et al., 2019). Köse's research emphasizes that although certain personality traits may not be directly correlated with teacher motivation, they can still influence creativity indirectly through job satisfaction and engagement (Köse, 2024).

CONCLUSION

This research has found strategies and ways to improve teacher creativity through the strength of direct and indirect effects between research variables. In addition, this study also produced the following findings :

1. There is a positive and significant direct effect of teamwork on teacher creativity, the results of this study support the findings of

previous research conducted by Mullen and Browne-Ferrigno (2018), Dzul Qarnain Darma, et. al. (2021). The implication is that if you want to strengthen *Teamwork*, you need to maintain all the good *Teamwork* indicators, namely 1) Having Togetherness, 2) Motivation, 3) Mutual Knowing and Trust, 4) Group Communication and 5) Responsibility (Johari, Wahat and Zaremohzzabieh 2021); Georgiev (2023).

2. There is a significant positive direct effect of Personality on Teacher Creativity. The results of this study support the findings of research conducted by (Deng, Zheng and Chen, 2020) and (LEYLAK and SAY, 2021). Strengthening Personality is directly related to increasing Teacher Creativity. Therefore, efforts to improve Teacher Creativity can be focused on strategies that strengthen Personality, by improving the weak indicators of Sociability and Positive Beliefs. It also maintains or develops the indicators of Stable in Conditioning Emotions, Responsible in Making Decisions and Open in Accepting Concepts.
3. There is a significant positive direct effect of Work Motivation on Teacher Creativity. The results of this study support the findings of research conducted by (Miranda and Morais, 2019) and (Rajindra, Karnati and Soefijanto, 2020) which imply that strengthening work motivation is directly related to increasing teacher creativity. Therefore, efforts to improve Teacher Creativity can be focused on strategies that strengthen work motivation, by improving weak indicators, namely Achievement and Recognition and Reward. In addition, it also maintains or develops indicators of Working Environment Conditions, Nature of Work and Job Responsibilities, Career Advancement and Development, Organizational Procedures and Rewards.
4. There is a significant positive indirect effect of *Teamwork* on Teacher Creativity through Work Motivation. The results of this study support the findings of research conducted by (Hermawan, Fatih Ghozali and A. Sayuti, 2023) and (Miranti, Hardhienata and

Sunaryo, 2024) which imply that *Teamwork Strengthening* has a positive influence on Work Motivation and that Work Motivation effectively acts as a mediator between *Teamwork* and Teacher Creativity. In other words, strengthening *Teamwork* can increase Work Motivation, and Work Motivation in turn positively affects Teacher Creativity. Therefore, efforts to improve Teacher Creativity can be successful by focusing on strengthening *Teamwork* and strengthening Work Motivation.

5. There is a significant positive indirect effect of *Personality* on Teacher Creativity through Work Motivation. The results of this study support the findings of research conducted by (Haestetika *et al.*, 2023) and (Köse, 2024) which imply that Personality reinforcement has a positive influence on Work Motivation and that Work Motivation effectively acts as a mediator between Personality and Teacher Creativity. In other words, Personality reinforcement can increase Work Motivation, and Work Motivation in turn positively influences Teacher Creativity. Therefore, efforts to improve Teacher Creativity can be successful by focusing on strengthening Personality and strengthening Work Motivation.

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