

The Effect of Leadership on Performance Through Work Involvement Based on Engineering Process Values On Educational Quality Assurance School Team in Central Java Indonesia

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Abstract: This study investigates the relationship between leadership and performance with intervening work involvement intervention variables based on process engineering values. The novelty is used as intervening. This quantitative research was conducted by survey. The research population was 360 members of the Indonesia Central Java province model school quality assurance team. The sampling of this study used purposive sampling of 313 teachers of the model school quality assurance team in the province of Central Java, Indonesia. However, 26 respondents were considered outliers, so they had to be dropped from the analysis. results Based on the distance mahalonobis, the respondents who meet the number of 287. The method of analysis is quantitative with path analysis. The data is processed with IBM Statistical Package for the Social Sciences (IBM SPSS) 22.0 and AMOS 24. The findings demonstrate that leadership and performance have a good direct or indirect link.

Keywords: leadership, work engagement based on engineering process values, performance

1. Introduction

The Industrial Revolution 4.0 requires organizations to be able to compete in order to survive in global competition. An organization must always improve the quality of organizational capabilities and resources (HR) which is a strategy so that it can always develop schools as an organization. The data shows that improving the quality of education has not been well and integrated, especially at the school level. In the results of the quality mapping of the Ministry of Education and Culture, it is known that the achievement of the national education standards, quality at the junior high school's level in general has not reached the the national education standards (**LPMP Central Java, 2019**). This belief is evidenced by findings that the influence of leadership and organizational performance is still a priority over the last four decades (**Cannella, Jr & Rowe, 1995**). Along with this, during the last few decades, the question regarding leadership paradigms and behaviors which is able to improve organizational performance has received considerable attention from researchers and managers. Until now there are still ideas about the effect of leadership on performance (**Jing & Avery, 2016**)

Although quite a lot of investigation of the link between leadership and performance has been carried out, but there is still a theoretical gap on the topic of effective leadership in relation to organizational performance, many studies show results that are still unclear (**Zeb, Ahmad, & Saeed, 2018**). A review of various studies such as research conducted by **Analoui (1999)**, **Avery (2004)**, **House & Aditya (1997)**, **Shamir & Howell (1999)** and **Yukl (1999)** imply that there are constraints, challenges, and unsolved issues about the connection between leadership and organizational performance. Furthermore, methodological and contextual problems make drawing concrete conclusions regarding leadership effectiveness and organizational success challenging. (**Zeb, Ahmad, & Saeed, 2018**).

2. Significance Of The Study

It is predicted that research will be able to contribute to the advancement of management theory, especially in the educational environment, in this case at the secondary school level. In practical terms, this study's findings are anticipated to contribute suggestions, especially regarding the increasing involvement of work based on the values of the engineering process in the school quality assurance team and school leadership factors. Furthermore, this is expected to affect the performance of the school's quality assurance committee so that the value of the school will increase.

3. Review Of Related Studies

The right leadership will affect performance. In the world of business and education, there are two popular leadership theories, namely transactional and transformational. Both terms are derived from the opinion of James Burns, who is recognized as a pioneer of modern leadership theory. Burns (in Marzano, Waters, & McNulty, 2005) initially described that leadership generally motivates followers to act towards certain goals which are a representation of values and drive desires as well as needs, ideas, opinions and ideals of both leaders and followers. Burns outlines the key differences between transactional leadership and transformational leadership.

An educational institution is no different from an organization, where there must be a common goal to be achieved. A good organization must be managed by a professional leader who can take advantage of the potential of the organization in order to achieve common goals (Amtu, 2014, p. 107). Principals must have the appropriate approach in place to empower educators through cooperation, offering chances for educators in diverse activities that promote school initiatives (Mulyasa E., 2005). A leader is someone who is able to be an agent of change who can influence his attitude and appearance (Gibson, 2006). Effective leaders can do so to meet individual, group, and organizational goals. Leaders focus on the future (Bennis, 2003). In his book *On Becoming a Leader*, he forecasts the characteristics that would be required for leadership in the twenty-first century. Bennis highlights the need of modern leaders not relying on their own abilities or charm to effect change. Bennis lists four essential elements of good leadership. To begin, leaders should be able to involve people by developing a common vision. Second, leaders must issue unambiguous directives. Third, leaders must have a strong value system and a belief in a greater cause to motivate their actions. Finally, leaders must be able to respond to constant demand to change.

A superior organization requires unique precious, uncommon, unique, and non-substitutable resources. Efforts to strengthen organizational capacity and human resources are through giving special attention related to individual behavior within the organization so that they can achieve efficient and effective performance (Pudjiomo; Sahrah, 2019). To attain good execution, representatives may need to keep up tall association within the company. Be that as it may, tall association does not essentially lead to great execution. When individuals are not objectively arranged and not dedicated on their work engagement (Bakker, Demerouti & ten Brummelhuis, 2011). Job involvement does not increase performance due to their involvement in things other than work assignments that serve organizational goals (Demerouti, 2006). Extra-role behavior which is defined as behavior that is beneficial to the organization is needed for the success of an organization, including diligent work involvement and being able to solve problems together.

The synthesis of work engagement and engineering process design leads to the construction of a new concept of work engagement based on engineering process values. The Engineering process design was chosen because it was inspired by Qitep (2016) which stated that the engineer is a person who always tries to find solutions (to life's problems). The reason for this novelty was chosen because this concept is defined as the superiority of the value of persistence and problem solving in employee engagement as an effort to improve organizational performance. Performance involvement from employees based on engineering values, namely the process of work involvement to actively find solutions, actively find faults from their work, then try again with different improvements/methods. This cycle is repeated. The solution found is the optimal solution (so it can always be optimized every time, not something final). For an engineer, failure is a familiar thing. The most important lesson is not only the final product/idea that provides a way out of the problem, but also recognizing failure as part of the learning that must be remembered. Therefore, the main value that is firmly held by an engineer is perseverance.

The concept of work involvement based on the values of the engineering process has 5 dimensions. The five dimensions are: (1) engagement, namely identifying problems, which is the behavior of actively engaging employees to identify problems from the constraints they face (2) exploration, namely brainstorming, employee involvement behavior to identify problems. find and explore solutions can be through discussion, (3) explanation, namely design means employee involvement behavior that clarifies and reinforces a set of facts to clarify the causes, context, and consequences of these facts. (4) elaboration or redesign, namely the act of employee involvement in adding more information to existing information to bring up more complex products. This means expanding and developing ideas by including details to reinforce original simple ideas and (5) evaluation is a test, refine and reflect i.e. employees are involved in testing, refining work packages to reflect the efforts associated with the preparation and implementation of testing a product.

Performance is the achievement of the organization in a certain period (Rusli, Basri, Arafah; 2020). Employee performance is defined by how far a person carries out his obligations and work assignments (Singh et.al 1996, in Nugroho, 2006:18). Faustino Gomes (1995, in Nugroho, 2006: 18) explains that performance is evidenced by recording the results or outcomes resulting from a certain work function or activity within a period

of time. The school quality assurance team performance affects school quality. The performance of this team in improving the quality of schools is important in supporting schools to achieve the National Education Standards. The opinion of Singh et.al (1996) states that performance is how far a person carries out his obligations and work duties. The leadership reflects on the employee's performance (Budiansyah, 2021).

The performance of the School Education Quality Assurance Team in this study is also based on the opinion of Wexley & Yukl (1997, p. 129). Performance is the technique of each element in an agency in carrying out their respective duties and roles in sync with existing regulations. A. Dale Timpe (in Mangkunegara, 2010, p. 15) argues that performance factors are seen from internal factors and external factors, which are described as follows: (1) Internal (dispositional) factors are factors associated with a person's personality. For example, a good individual's performance is due to having high competence and an individual with this type is a hard worker, on the other hand someone with poor performance is caused by not having made efforts to improve his competence; (2) External factors are elements that affect a person's performance originating from the environment. For example, the behavior, attitudes, and behavior of coworkers, both subordinates and leaders, work facilities and also the organizational climate. These internal and external factors are the types of attributions that affect performance.

4. Objectives Of The Study

According to the foundation of the issue, problem identification, and problem limitation, the researcher wants to examine whether there is an influence between school leadership on the performance of quality assurance teams at the Central Java Model Middle School in order to improve the quality of the school, the goals of this study are formulated as follows:

- To analyze the effect between leadership on the value-based work engagement of the engineering process
- To analyze the effect between leadership on performance
- To analyze the effect direct and leadership on performance through engineering values-based work engagement intervening?

5. Hypotheses Of The Study

Theoretical thinking and the results of previous research shows the hypothesis :

- H(1) There is an influence between leadership on the basis of work commitments values of the engineering process
- H (2) There is an influence between leadership on performance
- H (3) There is leadership has an indirect impact on the achievement through intervening work involvement based on engineering values.

6. Population And Sample

The study population was 360 members of the Central Java provincial model school quality assurance team. Sampling of this study used purposive sampling. The number of samples was determined by Roscoe's opinion, namely the appropriate sample in a study conducted from 30 to 500. The designed questionnaire was distributed evenly to 90 schools through a google form, which filled 313 respondents. However, 26 respondents were considered outliers, so they had to be dropped from the analysis. results Based on the distance mahalonobis, the respondents who meet the number of 287 respondents.

6.1. Statistical Techniques Used in the Present Study

This research uses purposive sampling. Survey instrument: the instrument consists of two sections, the first of which discusses the demography of the respondents such as name, gender and years of service. The second instrument consists of 31 items. Leadership from innovation and visionary, Value-based work involvement in the engineering process including identifying problems, brainstorming, design, redesign and evaluation. Performance variables consist of coordination, mapping, coaching, monitoring, evaluation and recommendations. The initial distribution of the questionnaire was carried out with a small sample first, by using a total of 32 questionnaires to find out whether the instrument test data from the questionnaire was valid and reliable. The data used was carried out on 16 to 23 September 2020, and then tested. The results of the questionnaire turned out to be acceptable, and then a large sample of 48 questionnaires was distributed from September 25, 2020 to October 26, 2020. The questionnaire used a five-point Likert-type scale, ranging from a clear difference of opinion (score 1) to completely agree (score 5). The questionnaire is planned to be distributed evenly to 90 schools through the google form, which fills in as many as 313 respondents. However, 26 respondents were considered outliers, so they had to be dropped from the analysis. Based on the results of the mahalonobis distance, the respondents who met the number of respondents were 287. Data analysis tools: The statistical analysis is done in two steps. In the first stage, descriptive statistics of measurement items and instrument validity data were analyzed using IBM

Statistics SPSS 22.0 for Windows. The 0.05 level was used a priori to decide on statistical significance, and finally, the Pearson correlation coefficient was used to test the relationship between the overalls. Test data and path analysis were analyzed with the AMOS 24 program.

6.2.Data Analysis and Interpretation

Respondents who were male who were involved in this study were 47% or 147 respondents. While the female gender amounted to 53% or 166 respondents. respondents who worked for 15-20 years had the highest number who were involved in this study, which amounted to 72% or 225 respondents, the second most respondents who worked for 11-15 years with a total of 18% or 56 respondents. Furthermore, the respondents who worked for 6-10 years amounted to 5% or 15 respondents and the respondents who worked for 1-5 years and 21-25 years each were 2% or 7 respondents, the least of which were respondents with more than 30 years of service. year, which is 1% or 3 respondents. The questionnaire employs a five-point Likert-type scale, and the Pearson Product-Moment Correlation coefficient is used to determine the correlation coefficient. Validity test using loading factor analysis. Hair et al. (2006) argue that loading factors of minimum level between 0.3 and 0.4 is considered to meet the explanatory purpose. Reliability refers to the consistency or stability of a series of test scores (Johnson & Christensen 2008). To test the consistency of the questionnaire, this study used the internal consistency method using Cronbach's alpha. Cronbach's alpha provides an estimate of the reliability of a homogeneity test or an estimate of the reliability of each dimension in a multidimensional test (Johnson & Christensen 2008). Cronbach's alpha over 0.7 is considered reliable (de Vaus 2002).

Test for Validity and Reliability

The following describes the table of the results of the leadership factors' validity and dependability.

Table 1. the results of the validity and reliability of the leadership variables.

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-----|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| KP1 | 36.69 | 23.060 | .857 | .948 |
| KP2 | 36.63 | 23.081 | .890 | .946 |
| KP3 | 36.91 | 22.991 | .819 | .950 |
| KP4 | 36.69 | 23.254 | .824 | .950 |
| KP5 | 36.81 | 23.964 | .729 | .954 |
| KP6 | 36.88 | 23.210 | .785 | .952 |
| KP7 | 36.75 | 22.839 | .869 | .947 |
| KP8 | 36.84 | 22.781 | .858 | .948 |
| KP9 | 37.06 | 23.286 | .738 | .954 |

Source : output SPSS

From the table above, it shows that the Corrected Total Item Correlation column shows that all numbers above the value of 0.3, this means that the statements contained in the leadership variable can be said to be valid.

Table 2. Results of the Leadership Variable Reliability Test

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .955 | 9 |

Source: SPSS output

From SPSS processing, Cronbach's Alpha value is 0.955. This value is greater than 0.7 so it can be concluded that nine items above are reliable to measure the dependability of the leadership variable.

Table 3. Test the validity of work engagement based on engineering process values

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| EJI10 | 39.44 | 25.415 | .798 | .940 |
| EJI11 | 39.31 | 26.028 | .747 | .942 |
| EJI12 | 39.63 | 25.274 | .808 | .939 |
| EJI13 | 40.06 | 26.319 | .636 | .947 |
| EJI14 | 39.91 | 25.314 | .863 | .937 |
| EJI15 | 39.44 | 25.222 | .830 | .938 |
| EJI16 | 39.75 | 24.774 | .856 | .937 |
| EJI17 | 39.41 | 25.410 | .808 | .939 |
| EJI18 | 39.81 | 25.706 | .734 | .943 |
| EJI19 | 39.81 | 24.415 | .725 | .945 |

Source: SPSS output

From the results of the SPSS output above, we can see that the Corrected Item-Total Correlation in each statement is above the value of 0.3. We can conclude that the statements contained in the variable of work involvement based on the values of the engineering process are valid. The results obtained from testing the quality of the performance variable instrument through the validity and reliability test using AMOS 24 can be seen in the following table.

Table 4. Test the Validity of Performance Variables

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| KJ37 | 48.19 | 58.222 | .882 | .983 |
| KJ38 | 48.22 | 57.467 | .901 | .983 |
| KJ39 | 48.13 | 58.371 | .864 | .984 |
| KJ40 | 48.22 | 56.693 | .919 | .982 |
| KJ41 | 48.31 | 55.899 | .962 | .981 |
| KJ42 | 48.28 | 58.789 | .846 | .984 |
| KJ43 | 48.22 | 57.144 | .932 | .982 |
| KJ44 | 48.28 | 57.176 | .944 | .982 |
| KJ45 | 48.28 | 57.176 | .944 | .982 |
| KJ46 | 48.31 | 58.157 | .921 | .982 |
| KJ47 | 48.28 | 57.693 | .894 | .983 |
| KJ48 | 48.16 | 57.620 | .880 | .983 |

Table 5. Reliability Test Results of Performance Variables

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .984 | 12 |

From SPSS data processing, it is known that the statements on the performance variable show good validity. This can be seen from the Corrected Item-Total Correlation value in 12 statements which show numbers above 0.7. From the results of SPSS processing, Cronbach's Alpha value is 0.984. The value is greater than 0.7. This means that each statement item from the commitment variable has a high reliability value. From the description of the validity and reliability of each variable, it can be concluded that the measurement tool used in this study is valid. Overall, the results of the reliability and validity tests indicate that the measurement instruments used in this study are both reliable and valid.

Data Normality Test with Univariate and Multivariate Normality

Testing the level of normality of the data is carried out by evaluating skewness and kurtosis. The results of the univariate test are declared normal if the coefficient of skewness and kurtosis with a critical ratio value (c.r)

between -2.58 to 2.58. (Ferdinand, 2005:139). If there is a value outside this number, it can be tolerated if the Multivariate value is still around ± 2.58 . The results of the data normality test can be seen in Table 6 below

Tabel 6. Assesment of Normality

| Variable | min | max | skew | c.r. | Kurtosis | c.r. |
|--------------|--------|--------|--------|--------|----------|-------|
| JMLKP | 29,000 | 45,000 | -1,203 | -8,320 | 1,099 | 3,801 |
| JMLEJI | 30,000 | 50,000 | -,574 | -3,969 | ,263 | ,909 |
| JMLKJ | 35,000 | 60,000 | -,774 | -5,354 | ,207 | ,717 |
| Multivariate | | | | | 9,331 | 9,447 |

The test results get a critical ratio value below and exceeding ± 2.58 on all manifest variables, namely the skewness test has a CR value ranging from -8.320 to -3.969, and in kurtosis it ranges from 3.801 to 0.717. In the table above, it can be seen that all questions are not normally distributed because each question item has an absolute value of c.r. kurtosis 2.58. This indicates that the data has a normal distribution. Data on the table. 6 also shows that the multivariate result is 9.447 which means multivariately, the data is also not normally distributed because the results that should appear are multivariate values of -2.58 to 2.58. The solution for the abnormal data is bootstrapping or resampling.

Bollen-Stine Bootstrap (Default model)

The model fit better in 1729 bootstrap samples.

It fit about equally well in 0 bootstrap samples.

It fit worse or failed to fit in 271 bootstrap samples.

Testing the null hypothesis that the model is correct, Bollen-Stine bootstrap $p = ,136$

Previously, researchers ran AMOS to increase the bootstrapping sample by 2000. From the output of the generation process, there were 271 samples that were known to be unresponsive of the model being developed. From these results, the Bollen-Stine p value is $271/2000=0.136$. The results of the Bootstrap Test of this study changed the Multivariate normality $9.447 > 2.58$ to $0.136 < 2.58$. If the conventional significance criterion is used ($p = 0.05$), the p value generated by the model shows $p = 0.136$, more than 0.05 ($p > 0.05$). The conclusion that can be drawn is that the developed model can be continued.

Multicollinearity Test Results

Multicollinearity testing is a way to detect the presence of two or more exogenous variables that have a very strong relationship because they have high similarity. The structural test for the presence of multicollinearity is seen through the coefficient of determination of the sample covariance. A very small determinant indicates the presence of multicollinearity, if this happens then the data cannot be used for further analysis (Ferdinand, 2005). The test results show the determination value of the covariance of the model is 46409,733. The conclusions drawn are that there is no multicollinearity, there is no mutual dependence between variable

Outliers Test Results

The next action is a test of outliers. Outliers are conditions in which data has unique characteristics and looks very different from the extreme observations, either single variables or combination variables (Hair et al, 1995). Outlier test is a test to ensure that the analyzed data has a uniform range. In multivariate analysis, there are outliers that can be evaluated by Chi-square to Mahalanobis Distance Squared at a significance level of 0.005 with degrees of freedom a number of variables contained in the study. The chi-square value with 5 degrees of freedom at a significance level of 0.05 ($p < 0.05$) was 11.07. If the value of the mahalanobis distance is greater than 11.07, the value is a multivariate outlier. From the results of outlier evaluation processing, it is known that there are 26 outliers.

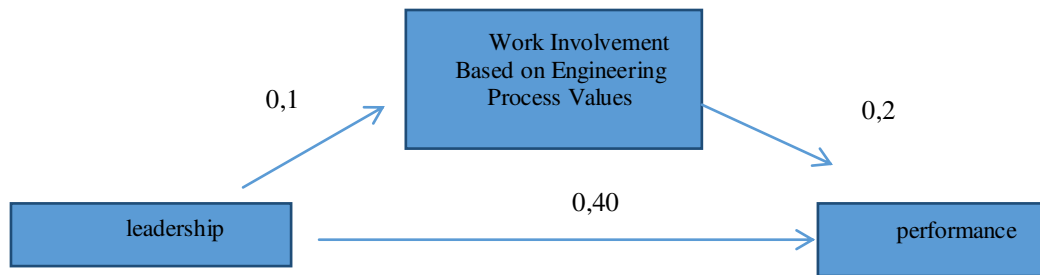
Goodness of Fit Model Test

Determining a model to be accepted or rejected statistically requires a goodness of fit model test. If the model is accepted, the researcher can continue to interpret the path coefficients in the model. The analysis was carried out using AMOS version 24, based on the test results obtained the size of the model of fit as follows: in absolute fit measures, Chi-square with a number of 3,540 is included in the minimum category so that it is said to be in goodness of fit, p -value 0.06 exceeds the value 0.05. RMSEA of 0.094 is included in the marginal fit category. GFI shows a value of 0.995 exceeding 0.9. From these results, the absolute value of fit measures is said to meet the goodness of fit criteria. The criteria based on incremental fit measures can be seen from the AGFI value of 0.927 (good fit), NFI of 0.095 (good fit), TLI of 0.962 (good fit), CFI of 0.996 (good fit), RFI of 0.948 (good fit). The results of the Parsimonius fit measure are known to be CMIN/DF of 3.540 (good fit). From the

results of the goodness of fit test which shows that all conditions are met or can be concluded in accordance with the recommended Cut of Value criteria. The amount of Chi Square number, p-value, RMSEA, GFI, NFI, TLI, RFI, CFI, AGFI and CMIN/DF provide information that the fit test of this model produces a good rate of return. The conclusion that can be drawn is that the dimensions that make up the exogenous and endogenous variables are appropriate, so this research model can be accepted and hypothesis testing can be continued.

Path Analysis

This study uses data analysis in the form of path analysis or path analysis using the AMOS (Analysis of Moment Structures) version 24 program. The path analysis model was chosen because this research model contains intervening variables, namely commitment and work involvement based on engineering process values that moderate the relationship between leadership and school quality assurance team performance. The indirect effect will be difficult to analyze when using multiple regression models. After the model identification process, an evaluation of the estimated parameters of the variables is carried out, where the results are presented in the following figure.



Source: Estimation results with AMOS 24 (2021)

The basis for determining the significant effect is the significance category ($\alpha = 5\%$). If the p-value shows less than 0.05, it is said that H_0 is rejected. The second strategy is to check the C.R. (Critical Ratio). When C.R. shows greater than 1.96 then H_0 is rejected. This means that the effect of exogenous variables on endogenous variables is shown in the significant table. The sign (***) contained in P (probability value) means that it shows a very small number (less than 0.01).

6.3. Hypothesis Test Results

From the results of data processing with the AMOS version 24 program, it was also found that significantly all variables affect the significance level of 5% (alpha 0.05). So this proves that the null hypothesis is rejected, which means that the variables of leadership, organizational culture, commitment and work involvement based on engineering process values have a significant effect on employee performance.

The analysis of the significance of path coefficients is assessed through the significance of the magnitude of the regression weight, such as the following summary table of the path analysis results:

Table 7. Regression Weights: (Group number 1 - Default model)

| | | Estimate | S.E. | C.R. | P | Label |
|--|--|----------|------|-------|------|-------|
| Work Involvement Based on Engineering Process Values | Leadership | ,148 | ,065 | 2,270 | ,023 | par_4 |
| performance | Work Involvement Based on Engineering Process Values | ,311 | ,082 | 3,779 | *** | par_1 |
| Performance | Leadership | ,712 | ,092 | 7,712 | *** | par_2 |

From the results of the loading factor table above, if the software output results in the value of CR (Critical Ratio) > 1.96 at a significance of $P < 0.05$ with an error of 5% for /2, then the proposed research hypothesis can be accepted. The results of the research hypothesis testing the influence between variables can be seen in the following table:

Table 8. Hypothesis test results

| Hipotesis | CR (>1.96) | P (<0.05) | category |
|--|---------------|--------------|----------|
| H1 There is an effect in leadership on Work Involvement Based on Engineering Process Values | 2,270 | ,023 | accepted |
| H2 There is an effect in Work Involvement Based on Engineering on performance | 3,779 | *** | accepted |
| H3 There is an effect in leadership on performance | 7,712 | *** | Accepted |

6.4. Interpretation Based on Regression Weight

The path coefficient in this study is a coefficient that has gone through the standardization stage and shows the magnitude of the direct influence of the independent variable on the dependent variable in the path analysis model as shown in the table below:

Table 9. Standardized Regression Weights: (Group number 1 - Default model)

| | | | Estimate |
|--------|---|--------|----------|
| JMLEJI | < | JMLKP | ,126 |
| JMLKJ | < | JMLEJI | ,208 |
| JMLKJ | < | JMLKP | ,406 |

With the path coefficient, it can be shown the correlation of direct and indirect effects in the path model.

1) Relationship of leadership to value-based work engagement process engineering proses

The estimated parameter value of the standardized regression weight coefficient yields a value of 0.126 and a C.R value of 5.424 indicating that the relationship between leadership and work involvement based on engineering process values is positive. This shows that the leadership variable affects the work involvement based on the values of the engineering process of the quality assurance team by 12.6%. Strong leadership will result in an increase in the quality of schools as indicated by an increase in the results of meeting national education standards.

2) Relationship of work involvement based on engineering process values to performance.

The estimated parameter value of the standardized regression weight coefficient produces a value of 0.208 and a C.R value of 3.779 indicating that the relationship between work involvement based on engineering process values and performance is positive. Based on this, it can be concluded that the stronger the work involvement based on the values of the engineering process that is carried out will improve the performance of the school quality assurance team which will result in an increase in school quality as indicated by an increase in the results of meeting national education standards.

3) The relationship between leadership and performance

The parameter estimated value of the standardized regression weight coefficient yields a value of 0.406 and the C.R value of 7.712 indicates that the relationship between leadership and performance is positive. This figure shows that the leadership variable has an influence on the performance variable. The magnitude of this influence can be described as that the stronger the leadership level of the principal, the stronger the performance produced by the quality assurance team. The strong performance of the quality assurance team will result in an increase in the quality of schools as indicated by an increase in the results of meeting national education standards.

The relationship of leadership to performance through value-based work engagement intervening process engineering. Leadership variables on performance variables through work involvement variables based on engineering process values (leadership → work involvement based on engineering process values → performance) amounted to $0.126 \times 0.406 = 0.05116$ This means that the leadership variable indirectly affects the performance variable by 5.116% .

6.5. Discussion

The findings of this study are supported by the theoretical concept of several experts who say that leadership has an influence on performance. This opinion, among others, by Maxwell (2004) who explains that every effective leader has a vision of a dream that must be realized. In his opinion, a leader with a vision and mission will be able to influence his employees so that they also increase the performance of accompanying the leader; in realizing the ideals of the organization, a good organization can be ensured to be managed by professional leaders who can utilize the potential of the organization to achieve common goals (Amtu, 2014, p. 107). A leader is someone who can alter his attitude and appearance by becoming a change agent. (Gibson, 2006). Effective leaders can do so to meet individual, group, and organizational goals. Leaders focus on the future (Bennis, 2003). The findings of these results are in accordance with the novelty in the research, namely work engagement based on the values of the engineering process is the behavior of employees who are members of an organization to always try to be involved in work diligently and solve problems with colleagues, in an effort to improve organizational performance. Work involvement based on engineering process values has the potential to improve performance. The results of the study also support the theory of experts. Brown (in Prihatini, 2013) describes that job involvement refers to the degree to which individuals psychologically sided with the organization and the urgency of work for self-actualization. Brown states explicitly that if individuals have high work involvement, they can be motivated by their work and immersed in their work. Robbins S. (2001) adds that employees who have a high level of involvement are very impartial and genuinely care about their field of work.

Representative engagement has developed as an critical driver of trade victory in today's competitive commercial centre. Worker engagement is characterized as the person level of employees' cognitive, enthusiastic and behavioural states coordinated towards wanted organizational results (Shuck & Wollard, 2010). The zone of worker engagement as a prevailing source of competitive advantage and who is able to illuminate organizational issues that lead to organizational victory in connection to monetary execution (Yap & Kee, 2017) and efficiency.

7. Recommendations

- Principals should apply good leadership, create a conducive work environment using a family approach. The purpose of this is so that there is no misunderstanding or miscommunication between the teacher and the principal which can lead to a distant relationship between the principal and the teacher. If the relationship between the principal is good then the teacher and the positive action towards the principal. This will improve employee performance.
- To the teachers as the assurance team to be aware of their duties and implement them systematically and to create a quality culture as a form of professional responsibility and duty. The growth of internal motivation is always fostered to improve performance.
- For stakeholders to play an active role in improving the quality of education and human resources in schools through collaboration. The government needs to make integrated efforts to support education quality assurance by improving the performance of each task of the relevant institutions.
- With the many limitations in this study, it is hoped that further research on improving performance by adding changes to exogenous and endogenous variables is expected. This research is also expected to be a further reference for other researchers for theory development. Nutritional report cards might be used on college campuses, which will assist them continue to use them in their school instruction.

8. Conclusion

There is an effect between leadership on performance with a positive influence value. It implies that the better the implementation of the principal's leadership values, the better the performance of the employees. There is also an effect between leadership on the basis of work engagement, the values of the engineering process with a positive influence value. It means that the better the implementation of the principal's leadership values, the better the work involvement based on the values of the engineering process, namely active work involvement that is diligent and solves organizational problems. This study's findings revealed a substantial positive relationship between leadership and performance so that to improve performance it is necessary to pay attention to the effectiveness of the leader. The research output empirically supports research carried out by Sharkie (2009), Cools, (2010), Salman (2011), Mulyadi (2014), Khan & Rashid (2018), and Rusli et al (2020), Juwainia A, et al (2021).

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