

## Antecedents of Human Resource Competitiveness and Employee Performance and Their Influence on Organizational Performance Among Regional Contract Workers in East Kutai Regency Mediated by Education Level, Skills, and Work Relationships

Ausy Riana<sup>1</sup>, Djoko Setyadi<sup>2</sup>, Irwansyah<sup>3</sup>, Ariesta Heksarini<sup>4</sup>

<sup>1</sup>STIE Nusantara Sangatta, Indonesia

<sup>2,3,4</sup>Universitas Mulawarman, Indonesia

Email: ausy.riana@yahoo.co.id, [djoko.setyadi@gmail.com](mailto:djoko.setyadi@gmail.com), [irwansyah@feb.unmul.ac.id](mailto:irwansyah@feb.unmul.ac.id),  
[ariesta.heksarini@feb.unmul.ac.id](mailto:ariesta.heksarini@feb.unmul.ac.id)

### ABSTRACT

*This research was conducted in East Kutai Regency, East Kalimantan Province, aiming to examine the influence of human resource competitiveness on the welfare of regional contract workers (TK2D). It also compares which mediation variables—education level, skills, or relationships between TK2D and superiors—most dominantly affect their welfare. The study's title reflects its practical focus on current issues. The research uses a Mixed Method approach with an explanatory sequential design, combining quantitative and qualitative methods conducted in two stages. It also incorporates exploratory and experimental research types. Stratified sampling selected 379 regional contract workers as respondents. Structural Equation Modeling (SEM) analysis was performed with WarpPLS 6.0 software. Findings show that skills and employment relations significantly influence HR competitiveness ( $p < 0.05$ ), while education level has an insignificant effect. Employee performance is negatively influenced by skills but positively by organizational aspects. Organizational performance is significantly affected by education level and employee performance ( $p < 0.05$ ). The model explains 76.1% of HR competitiveness variance, 2% of employee performance variance, and 41.7% of organizational performance variance. These results highlight the importance of prioritizing skills development and improving employment relations in regional government policies to enhance both individual welfare and organizational performance within the public sector.*

### KEYWORDS



Human Resource Competitiveness, Employee Performance, Organizational Performance, Education Level, Skills, Employment Relations

*This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International*

## INTRODUCTION

The development of science and technology is progressing rapidly, requiring every organization, especially government organizations, to work more professionally and demonstrate strong performance (Bristol-Alagbariya et al., 2022). One of the main challenges faced by government organizations today is improving the quality of employees to enhance the competitive advantage of human resources (Agustian et al., 2023; Elrehail et al., 2020; Khemraj, 2023). According to the World Bank (2020), public sector human resource management in developing countries faces significant challenges related to competency gaps, limited training opportunities, and wage disparities between permanent and contract employees. The Organization for Economic Co-operation and Development (OECD, 2019) also emphasizes that human capital development in the public sector is critical for achieving organizational efficiency and service delivery effectiveness. In Indonesia, the National Development Planning Agency (UNDP Indonesia, 2021) reports that contract workers in local governments often experience lower job security and limited access to professional

development compared to civil servants, creating systemic inequalities that affect organizational performance. The government plays an essential role in preparing strategic programs to produce high-quality human resources (Makhanya, 2024).

For the Government of Indonesia, as stated in the RPJPN, high competitiveness is the key to achieving national progress and prosperity (Berawi et al., 2019; Pribadi & Chan, 2022; Valentina et al., 2025). Human resource development must be directed toward building strong competitive capabilities (Amarakoon et al., 2018; Chapman et al., 2018). With high human resource competitiveness, regions will develop more rapidly (Abdulah et al., 2021; Delery & Roumpi, 2017; Indrawati & Kuncoro, 2021). However, the phenomenon that continues to occur in East Kutai Regency is that many TK2D employees still earn below the MSE (Regency Minimum Wage).

The low income level of Regional Contract Labor (TK2D) has a direct impact on their welfare (Wang et al., 2019). This issue is compounded by the continuous increase in the number of TK2D employees, which has now reached more than 7,362 people—exceeding the number of civil servants, which stands at only 6,241. This situation not only affects the performance of local government but also the overall well-being of TK2D. The large number of TK2D employees has led to numerous problems such as declining work productivity, reduced morale, stress, conflicts among colleagues, difficulty in achieving organizational goals, budget overruns, and increased turnover intentions among high-performing employees.

Over time, these impacts have become more complex, affecting organizational performance, employee productivity, and the welfare of TK2D (Wahab et al., 2024). Additional issues have also emerged, including demands for health insurance and occupational safety protection, social jealousy among colleagues with different lengths of service, and the growing burden on local government expenditures. Such conditions are considered highly ineffective and inefficient. Furthermore, the phenomenon of the increasing number of honorary employees compared to civil servants is not unique to East Kutai Regency but occurs in many regions across Indonesia (Sholahuddin, 2021).

This research urgency is underscored by the immediate need to address the widening inequality between permanent and contract workers in Indonesia's public sector (Utomo et al., 2025). The Indonesian government's commitment to bureaucratic reform (as outlined in Presidential Regulation No. 81/2010) emphasizes merit-based human resource management, yet the growing reliance on contract workers without adequate compensation and development opportunities contradicts these reform objectives. Moreover, the social and economic impacts—including reduced employee motivation, increased workplace stress, and diminished public service quality—necessitate immediate empirical investigation to inform evidence-based policy interventions (Newman et al., 2017).

Several recent studies have examined related issues in public sector human resource management (Boselie et al., 2021; Kravariti & Johnston, 2020; Zeraatkar et al., 2021). Cik (2021) found that competency development significantly affects employee performance in Indonesian local government, with skills training showing the strongest impact. Mahfouz (2021) demonstrated that work motivation and organizational commitment mediate the relationship between HR practices and performance among contract workers. In the context of employment relations, Nkgapele (2024) revealed that nepotism and patronage networks in regional governments negatively affect merit-based recruitment and organizational performance. Antecedents of Human Resource Competitiveness and Employee Performance and Their Influence on Organizational Performance Among Regional Contract Workers in East Kutai Regency Mediated by Education Level, Skills, and Work Relationships

effectiveness. However, these studies have primarily focused on either permanent civil servants or examined single aspects of HR management without integrating multiple mediating variables. Furthermore, Mesiya (2019) investigated the role of education level in employee performance but did not consider the unique challenges faced by contract workers, particularly regarding job security and income inequality. Dewi (2024) explored skills development in public organizations but limited their analysis to training programs without examining broader competitiveness factors. Despite this growing body of literature, no comprehensive study has simultaneously examined how education level, skills, and employment relations mediate the relationship between HR competitiveness and organizational performance specifically among regional contract workers in Indonesia's decentralized government system.

The novelty of this research lies in its integrated approach to examining three distinct mediating pathways (education level, skills, and employment relations) through which HR competitiveness influences organizational performance among TK2D workers. Unlike previous studies that examined these factors in isolation or focused solely on permanent employees, this research uniquely addresses the marginalized contract worker population within Indonesia's public sector. Additionally, this study employs a mixed-method sequential explanatory design that combines quantitative structural equation modeling with qualitative insights, providing both statistical validation and contextual understanding of the phenomena. This methodological approach enables deeper exploration of the paradoxical findings often overlooked in purely quantitative studies, such as why certain HR interventions may have counterintuitive effects in the contract worker context. Furthermore, the research contributes to theory by testing the applicability of Human Capital Theory and Resource-Based View in a non-Western, public sector, and precarious employment context, which has been underexplored in existing literature.

The objectives of this research are threefold: (1) to examine and confirm the influence of HR competitiveness on the welfare and performance of regional contract workers (TK2D) in East Kutai Regency; (2) to compare and identify which mediating variables (education level, skills, or employment relations) have the most dominant effect on TK2D welfare and organizational outcomes; and (3) to provide empirical evidence and policy recommendations for improving human resource management practices in local government, particularly concerning contract worker employment. The benefits of this research include: (a) theoretical contributions to public sector HRM literature by integrating multiple mediation pathways in explaining organizational performance; (b) practical implications for regional government policymakers in designing more equitable and effective HR policies for contract workers; and (c) social implications for improving the welfare and job security of thousands of TK2D workers across Indonesia. The research findings are expected to inform evidence-based interventions that can enhance both individual employee wellbeing and organizational performance in decentralized governance contexts.

## **METHOD**

The research employed a Mixed Method approach, specifically the explanatory sequential design, which combines quantitative and qualitative research conducted sequentially. In the first stage, the research is carried out using quantitative methods, followed

by qualitative methods in the second stage. The type of research used is observational with a cross-sectional design. The analytical tool applied in this study is WarpPLS.

The research focuses on Regional Contract Workers (TK2D) in East Kutai Regency. The reason for selecting East Kutai Regency as the research location is that it has the highest number of TK2D among the ten regencies/cities in East Kalimantan Province. Based on data obtained from the East Kutai Regency Personnel, Education, and Training Agency, the population in this study consisted of 7,362 TK2D. This includes 34 employees with master's degrees, 2,000 employees with bachelor's degrees, and the remainder being high school and junior high school graduates.

The sampling technique used in this study is Stratified Sampling. This technique is appropriate when the population is heterogeneous and can be divided into homogeneous subgroups or strata. Within each stratum, conditions are uniform, while differences exist between strata. These strata may consist of education levels such as elementary, junior high, high school, and higher education. The purpose of using this technique is to ensure that each stratum is represented, thereby producing a representative sample.

Therefore, the researchers used the measure of the formula from Slovin, as follows:

$$n = \frac{N^2}{1 + ne} = \frac{7.362^2}{1 + 7.362 (0.052)} = 379$$

Where:  $n$  =

sample size  $n$

= population

size

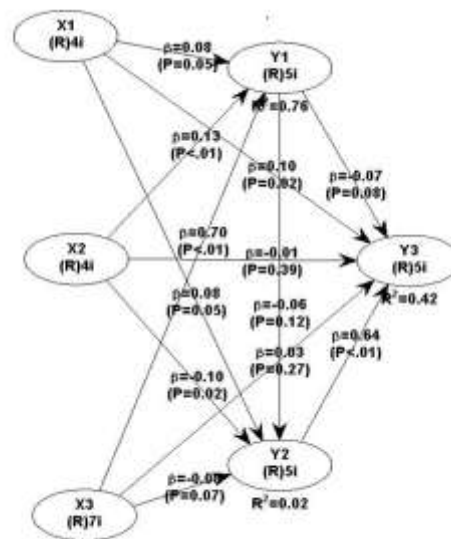
$e$  = Error (percentage of inaccuracy allowance of 5%)

The samples were selected from 18 sub-districts in East Kutai Regency, namely: North Sangatta, South Sangatta, Bengalon, Pandan Bay, Rantau Pulung, Kaliurang, Muara Wahau, Kongbeng, Busang, Telen, Kaubun, Batu Ampar, Muara Ancalong, Muara Bengkal, Long Mesangat, Karangan, Sangkulirang, Sandaran.

Data collection was carried out using a Google Form and a direct meeting with TK2D, as well as with the questionnaire submission process in this study, carried out in stages:

1. The TK2D population in East Kutai Regency is grouped into three categories (High School, Undergraduate and Master's Education)
2. Based on these choices, the selected respondents were contacted via e-mail and/or telephone for information about this study.
3. Every question is sent via google form link via e.mail or WhatsApp
4. Confirmation is done by phone and *e-mail* after 1 (one) week of the respondent receiving the questionnaire.
5. At the time of confirmation and collection of answers, interviews were also conducted with several respondents from organizational actors to strengthen, clarify and expand the researcher's insight into the empirical phenomena in this study.

## RESULT AND DISCUSSION



**Figure 1. Research Model with Loading Factors**

All loading factors have a value of 0.50 so that the research can be continued to analyze the measurement model or outer model and the structural or inner model. Based on Figure 1, the indicators that exert the dominant influence on the variables are as follows:

- 1) Based on the results of the research, the loading factor value has an impact on the variable of education level with the highest indicator that affects the level of education is the indicator of Suitability of the level of education with work can be interpreted as TK2D in East Kutai Regency having knowledge of good services in the current field of work ( $X_{1.2}$ ) with a loading factor value of 0.887 while the lowest indicator that affects the level of education is the indicator of Ability in carrying out duties can be interpreted as when taking TK2D education in East Kutai Regency has been given learning related to current work ( $X_{1.4}$ ) with a loading factor value of 0.836.
- 2) Based on the results of the research on the value of the loading factor that impacts the skill variable with the highest indicator that affects skills is the Initiative (INT) indicator, TK2D in East Kutai Regency has the impulse to act to exceed what is needed or demanded from the job, doing something without waiting for orders first. This action is carried out to improve or improve work results or avoid problems or create new opportunities ( $X_{2.2}$ ) with a loading factor value of 0.895 while the lowest indicator that affects skills is the Impact and influence (IMP) indicator, TK2D in East Kutai Regency have skills in persuasion, convincing, influencing or impressing so as to gain support from others ( $X_{2.3}$ ) with a loading factor value of 0.753.
- 3) Based on the results of the study, the loading factor value has an impact on the employment relationship variable with the highest indicator that affects the employment relationship is the indicator of a person becoming TK2D because he has a family relationship with the leader ( $X_{3.4}$ ) with a loading factor value of 0.870 while the lowest indicator that affects the employment relationship is the indicator a person works as a TK2D because he has competencies that other TK2D does not have ( $X_{3.3}$ ) with a loading factor value of 0.535.



- 4) Based on the results of the research, the loading factor value has an impact on the variable of human resource competitiveness with the highest indicator that affects the competitiveness of human resources is the indicator of personal competitiveness, which is a behavioral device related to the ability of TK2D in East Kutai Regency in self-realization, self-transformation, self-identity and self-understanding (Y1.3) with a loading factor value of 0.876 while the lowest indicator that affects the competitiveness of human resources is the indicator of spiritual competitiveness, namely understanding, appreciation and experience of religious principles owned by TK2D in East Kutai Regency (Y1.5) with a loading factor value of 0.551.
- 5) Based on the results of the research, the loading factor value has an impact on employee performance variables with the highest indicators that affect employee performance are the Creativity indicator; TK2D creativity in East Kutai Regency in work planning to achieve more effective organizational goals runs effectively (Y2.4) with a loading factor value of 0.741 while the lowest indicator that affects employee performance is the Work Quality indicator; The level of work quality efficiency achieved from TK2D in East Kutai Regency, either individually or collectively, has been in accordance with the agency's expectations (Y2.1) with a loading factor value of 0.561.
- 6) Based on the results of the research, the loading factor value has an impact on organizational performance variables with the highest indicator that affects organizational performance is the Accountability indicator: a condition in which officials, institutions and public service organizations are responsible for their actions and responsive to the public (Y3.3) with the loading factor value of 0.818 while the lowest indicator that affects organizational performance is the useful indicator: conditions where public service policies and programs have prioritized the public interest, have used human, financial and time resources optimally and economically (efficiency), and have been achieved in accordance with the expected objectives (effectiveness) (Y3.5) with a value of Loading factor of 0.549.

## Measurement Model or Outer Model

### 1) Convergent Validity

**Table 1: Results For Outer Loadings**

|             | X1     | X2     | X3     | Y1     | Y2     | Y3     | Type (a) | SE    | P value |
|-------------|--------|--------|--------|--------|--------|--------|----------|-------|---------|
| <b>X1.1</b> | 0.881  | 0.037  | -0.131 | 0.057  | -0.039 | 0.002  | Reflect  | 0.045 | <0.001  |
| <b>X1.2</b> | 0.887  | 0.144  | -0.135 | -0.009 | 0.053  | -0.035 | Reflect  | 0.045 | <0.001  |
| <b>X1.3</b> | 0.868  | -0.026 | 0.25   | -0.091 | -0.03  | 0.026  | Reflect  | 0.046 | <0.001  |
| <b>X1.4</b> | 0.836  | -0.165 | 0.021  | 0.044  | 0.016  | 0.008  | Reflect  | 0.046 | <0.001  |
| <b>X2.1</b> | -0.018 | 0.873  | 0.182  | -0.01  | -0.078 | 0.071  | Reflect  | 0.045 | <0.001  |
| <b>X2.2</b> | -0.016 | 0.895  | 0.038  | -0.159 | -0.005 | 0.061  | Reflect  | 0.045 | <0.001  |
| <b>X2.3</b> | -0.071 | 0.753  | -0.47  | 0.377  | 0.011  | -0.028 | Reflect  | 0.046 | <0.001  |
| <b>X2.4</b> | 0.096  | 0.878  | 0.183  | -0.151 | 0.073  | -0.109 | Reflect  | 0.045 | <0.001  |
| <b>X3.1</b> | 0.06   | 0.294  | 0.821  | -0.248 | -0.062 | 0.045  | Reflect  | 0.046 | <0.001  |
| <b>X3.2</b> | 0.107  | -0.05  | 0.818  | -0.276 | 0.071  | -0.088 | Reflect  | 0.046 | <0.001  |
| <b>X3.3</b> | -0.434 | 0.064  | 0.535  | 0.12   | 0.116  | -0.12  | Reflect  | 0.048 | <0.001  |
| <b>X3.4</b> | 0.007  | 0.019  | 0.87   | -0.172 | -0.046 | 0.02   | Reflect  | 0.045 | <0.001  |
| <b>X3.5</b> | -0.05  | 0.089  | 0.844  | 0.179  | 0.014  | -0.006 | Reflect  | 0.046 | <0.001  |
| <b>X3.7</b> | 0.075  | -0.257 | 0.748  | 0.085  | 0.012  | 0.015  | Reflect  | 0.046 | <0.001  |
| <b>X3.8</b> | 0.089  | -0.158 | 0.846  | 0.354  | -0.059 | 0.089  | Reflect  | 0.046 | <0.001  |

|      | X1     | X2     | X3     | Y1     | Y2     | Y3     | Type (a) | SE    | P value |
|------|--------|--------|--------|--------|--------|--------|----------|-------|---------|
| Y1.1 | 0.039  | 0.002  | 0.255  | 0.87   | -0.005 | -0.046 | Reflect  | 0.045 | <0.001  |
| Y1.2 | 0.09   | -0.183 | 0.44   | 0.854  | -0.089 | 0.063  | Reflect  | 0.046 | <0.001  |
| Y1.3 | -0.055 | -0.043 | 0.267  | 0.876  | 0.034  | -0.019 | Reflect  | 0.045 | <0.001  |
| Y1.4 | 0.004  | 0.037  | -0.27  | 0.874  | 0.019  | 0.019  | Reflect  | 0.045 | <0.001  |
| Y1.5 | -0.119 | 0.289  | -1.081 | 0.551  | 0.06   | -0.025 | Reflect  | 0.048 | <0.001  |
| Y2.1 | -0.185 | -0.02  | 0.468  | -0.249 | 0.561  | 0.203  | Reflect  | 0.047 | <0.001  |
| Y2.2 | -0.061 | 0.029  | 0.114  | -0.107 | 0.663  | 0.241  | Reflect  | 0.047 | <0.001  |
| Y2.3 | 0.059  | -0.143 | -0.12  | 0.17   | 0.705  | -0.13  | Reflect  | 0.047 | <0.001  |
| Y2.4 | 0.089  | 0.128  | -0.163 | 0.011  | 0.741  | -0.175 | Reflect  | 0.046 | <0.001  |
| Y2.5 | 0.052  | -0.003 | -0.189 | 0.117  | 0.708  | -0.136 | Reflect  | 0.047 | <0.001  |
| Y3.1 | 0.051  | -0.003 | -0.024 | -0.066 | 0.41   | 0.6    | Reflect  | 0.047 | <0.001  |
| Y3.2 | -0.038 | 0.043  | 0.073  | -0.075 | 0.13   | 0.755  | Reflect  | 0.046 | <0.001  |
| Y3.3 | 0.014  | -0.016 | 0.015  | 0.029  | -0.138 | 0.818  | Reflect  | 0.046 | <0.001  |
| Y3.4 | -0.056 | -0.154 | 0.199  | -0.006 | -0.212 | 0.743  | Reflect  | 0.046 | <0.001  |
| Y3.5 | 0.051  | 0.176  | -0.365 | 0.14   | -0.134 | 0.549  | Reflect  | 0.048 | <0.001  |

Source: WarpPLS Output 2025

Validity is assessed by looking at convergent validity (the amount of the original sample estimate/loading factor for each construct), provided that the loading factor is above 0.50. From the results of the output of the research model, it was found that the loading factor was above 0.50 (p-value < 0.05). This can be seen from the results of the Result for Outer Loading where the original sample estimation > 0.50 so that the research instrument is said to meet the convergent validity.

## 2) Discriminant Validity

Constructs with good validity require that the AVE value must be above 0.50. In table 2 as follows:

**Table 2: Average Variance Extracted & AVE Root**

| Variable                                     | AVE   | Information | $\sqrt{AVE}$ | Information |
|----------------------------------------------|-------|-------------|--------------|-------------|
| Education Level (X1)                         | 0,754 | Valid       | 0,868        | Valid       |
| Skills (X <sub>2</sub> )                     | 0,725 | Valid       | 0,851        | Valid       |
| Employment Relations (X <sub>3</sub> )       | 0,625 | Valid       | 0,791        | Valid       |
| Human Resources Competitiveness (Y1)         | 0,664 | Valid       | 0,815        | Valid       |
| Employee performance (Y <sub>2</sub> )       | 0,461 | Invalid     | 0,679        | Valid       |
| Organizational Performance (Y <sub>3</sub> ) | 0,490 | Invalid     | 0,700        | Valid       |

Source: WarpPLS Output 2025

Average Variance Extracted shows an AVE value above 0.50, which means that the variable instrument is valid discriminatory. Another way to determine the discriminant validity of a variable can be obtained from the square root of AVE ( $\sqrt{AVE}$ ) of a construct compared to the correlation values between other constructs. If the value is higher than the correlation

between other constructs, it can be concluded that the research instrument meets the criteria of discriminant validity.

### 3) *Composite Reliability*

*Composite Reliability* is used to determine the amount of reliability or answers given by respondents in the study, with the following table description:

| <b>Table 3: Composite Reliability</b>             |                                     |
|---------------------------------------------------|-------------------------------------|
| <b>Variable</b>                                   | <b><i>Composite Reliability</i></b> |
| Education Level (X <sub>1</sub> )                 | 0,924                               |
| Skills (X <sub>2</sub> )                          | 0,913                               |
| Employment Relations (X <sub>3</sub> )            | 0,920                               |
| Human Resources Competitiveness (Y <sub>1</sub> ) | 0,906                               |
| Employee performance (Y <sub>2</sub> )            | 0,809                               |
| Organizational Performance (Y <sub>3</sub> )      | 0,825                               |

Source: WarpPLS Output 2025

To find out the reliability of all constructs, it can be seen from the composite reliability value. A reliable construct if the composite reliability value is above 0.70. The output results show all constructs on the variables of core self-evaluation, skills, employment relations, employee performance, organizational performance and performance, reliable because the composite reliability value is > 0.70.

### **Measurement Model or Inner Model**

#### **1) Goodness of Fit Model Inspection**

The determination coefficient or value of  $R^2$  (R-square) is used to determine the percentage (%) of the influence of exogenous variables on endogenous variables, or in other words can explain endogenous phenomena or variations can be explained by exogenous variables, with the explanation of the table below:

| <b>Table 4: R – square</b>                        |                 |                          |
|---------------------------------------------------|-----------------|--------------------------|
| <b>Endogenous Variable</b>                        | <b>R Square</b> | <b>R Square Adjusted</b> |
| Human Resources Competitiveness (Y <sub>1</sub> ) | 0,761           | 0,759                    |
| Employee Performance (Y <sub>2</sub> )            | 0,020           | 0,009                    |
| Organizational performance (Y <sub>3</sub> )      | 0,417           | 0,409                    |

Source: WarpPLS Output 2025

The model examination can be seen from the value of  $R^2$  (R-square), meaning that the model can explain the influence of exogenous variables on endogenous variables as follows:

- 1) The phenomenon or variation in human resource competitiveness can be explained by variables of education, skills, and employment relationships, of 76.1 percent ( $0.761 \times 100\%$ ) while the rest is explained by variations of other variables outside of the research model of 23.9 percent ( $100\% - 76.1\%$ ).
- 2) The phenomenon or variation in employee performance can be explained by variables of education, skills, employment relations, and competitiveness of human resources by 2% percent ( $0.020 \times 100\%$ ) while the rest is explained by variations of other variables outside the research model of 98 percent ( $100\% - 2\%$ ).



- 3) The phenomenon or variation in organizational performance can be explained by variables of education level, skills, employment relations, human resource competitiveness, employee performance of 41.7 percent ( $0.417 \times 100\%$ ) while the rest is explained by variations of other variables outside the research model of 58.3 percent ( $100\% - 41.7\%$ ).

Based on Table 5.11 an equation can be made to calculate Q-square predictive relevance, as follows:

$$\begin{aligned} Q^2 &= 1 - (1 - R^2_{12}) (1 - R^2_{22}) (1 - R^2_{32}) \\ &= 1 - (1 - 0.761) (1 - 0.020) (1 - 0.417) \\ &= 1 - (0.239) (0.980) (0.583) \\ &= 0.832 \end{aligned}$$

The calculation results show a predictive relevance value of 0.832 or 83.2%, so the model is worthy of being said to have a relevant predictive value. A predictive relevance value of 83.2% indicates that the diversity of data that can be explained by the model is 83.2% or in other words, the information contained in the data of 83.2% can be explained by the model. While the remaining 16.8% is explained by other variables (which are not yet contained in the model) and errors. This result is said to be that the WarpPLS model that has been formed is quite good, as it can explain 83.2% of the information, making it suitable for interpretation.

## 2) T-test testing

**Table 5: Results for Inner Weights**

| Direct Effect                                                         | Coefficient | T ratios for Path Coefficients | P-Value | Result                    |
|-----------------------------------------------------------------------|-------------|--------------------------------|---------|---------------------------|
| Education Level (X1) → Human Resources Competitiveness (Y1)           | 0.083       | 1.631                          | 0.052   | Insignificant positives   |
| Skills (X2) → HR Competitiveness (Y1)                                 | 0.129       | 2.562                          | 0.005   | Significant positives     |
| Employment Relations (X3) → HR Competitiveness (Y1)                   | 0.698       | 14.975                         | 0.001   | Significant positives     |
| Education Level (X1) → Employee Performance (Y2)                      | 0.081       | 1.604                          | 0.055   | Insignificant positives   |
| Skills (X2) → Employee Performance (Y2)                               | -0.101      | -2.001                         | 0.023   | Significant negatives     |
| Employment Relations (X3) → Employee Performance (Y2)                 | -0.077      | -1.516                         | 0.065   | Negative is insignificant |
| Education Level (X1) → Organizational Performance (Y3)                | 0.1         | 1.971                          | 0.025   | Significant positives     |
| Skills (X2) → Organizational Performance (Y3)                         | -0.014      | -0.277                         | 0.391   | Negative is insignificant |
| Employment Relations (X3) → Organizational Performance (Y3)           | 0.031       | 0.604                          | 0.273   | Insignificant positives   |
| HR Competitiveness (Y1) → Employee Performance (Y2)                   | -0.059      | -1.154                         | 0.125   | Negative is insignificant |
| Human Resource Competitiveness (Y1) → Organizational Performance (Y3) | -0.072      | -1.407                         | 0.08    | Negative is insignificant |
| Employee Performance (Y2) → Organizational Performance (Y3)           | 0.638       | 13.573                         | 0.001   | Significant positives     |

Source: WarpPLS Output 2025

Based on Table 5, it can be known the positive influence and significance level of each variable, if the T-Statistic (T ratios for Path Coefficients) > 1.96 means that the exogenous variable has a significant influence on the endogenous variable and if the T-Statistic (T ratios

for Path Coefficients)  $< 1.96$ , the exogenous variable has an insignificant influence on the endogenous variable with the following explanation:

- 1) The level of education has a positive and insignificant effect on the competitiveness of TK2D human resources in East Kutai Regency. This can be proven by the value of the coefficient of influence of the level of education on the competitiveness of human resources, which is 0.083 with a positive influence. The T-Statistic value (T ratios for Path Coefficients) is  $1.631 < 1.96$  and the P-Value result is  $0.052 > 0.05$ , this means that the level of education on the competitiveness of human resources has an insignificant effect. The results of this study mean that if the education level of TK2D in East Kutai Regency is improved, it will be able to increase the competitiveness of TK2D human resources in East Kutai Regency with an intangible (insignificant) increase.
- 2) Skills have a significant positive effect on the competitiveness of TK2D human resources in East Kutai Regency. This can be proven by the value of the coefficient influence of skills on the competitiveness of human resources, which is 0.129 with a positive influence. The T-Statistic value (T ratios for Path Coefficients) is  $2.562 > 1.96$  and the P-Value result is  $0.005 < 0.05$ , this means that skills have a significant effect on the competitiveness of human resources. The results of this study mean that if the skills of TK2D in East Kutai Regency are improved, it will be able to increase the competitiveness of TK2D human resources in East Kutai Regency with a real (significant) increase.
- 3) Employment relations have a significant positive effect on the competitiveness of TK2D human resources in East Kutai Regency. This can be proven by the value of the coefficient of the influence of the employment relationship on the competitiveness of human resources, which is 0.698 with a positive influence. The T-Statistic value (T ratios for Path Coefficients) is  $14.975 > 1.96$  and the P-Value result is  $0.001 < 0.05$ , this means that the work relationship on the competitiveness of human resources has a significant effect. The results of this study mean that if improvements are made in the TK2D work relationship system of East Kutai Regency, it will be able to increase the competitiveness of TK2D human resources in East Kutai Regency with a real (significant) increase.
- 4) The level of education has a positive effect on the performance of TK2D in East Kutai Regency. This can be proven by the value of the influence coefficient of education level on employee performance, which is 0.081 with a positive influence. T-Statistic value (T ratios for Path Coefficients) of  $1.604 < 1.96$  and P-Value result of  $0.055 > 0.05$ , this means that the level of education on employee performance has an insignificant effect. The results of this study mean that if the education level of TK2D in East Kutai Regency is improved, it will be able to improve the performance of TK2D in East Kutai Regency with an unreal (insignificant) increase.
- 5) Skills have a significant negative effect on the performance of TK2D in East Kutai Regency. This can be proven by the value of the coefficient of the influence of skills on employee performance, which is -0.101 with a negative influence. The T-Statistic value (T ratios for Path Coefficients) is  $2.001 > 1.96$  and the P-Value result is  $0.023 < 0.05$ , this means that skills on employee performance have a significant effect. The results of this study mean that if the TK2D skills of East Kutai Regency are improved, it will be able to reduce the performance of TK2D in East Kutai Regency with a significant decrease.
- 6) Employment relationships have a negative effect on the performance of TK2D in East Kutai Regency. This can be proven by the value of the coefficient of the influence of the employment relationship on employee performance, which is -0.077 with a negative influence. The T-Statistic value (T ratios for Path Coefficients) is  $1.516 < 1.96$  and the P-Value result is  $0.065 > 0.05$ , this means that the employment relationship to employee performance has an insignificant effect. The results of this study mean that if the working

relationship of TK2D in East Kutai Regency is improved, it will be able to reduce the performance of TK2D in East Kutai Regency with an unreal (insignificant) decrease.

- 7) The level of TK2D education in East Kutai Regency has a negative and insignificant effect on organizational performance. This can be proven by the value of the influence coefficient of education level on organizational performance, which is -0.059 with a negative influence. T-Statistic value (T ratios for Path Coefficients) of  $1.154 < 1.96$  and P-Value result of  $0.125 > 0.05$ , this means that the level of education on organizational performance has an insignificant effect. The results of this study mean that if the education level of TK2D in East Kutai Regency is improved, it will reduce organizational performance in TK2D in East Kutai Regency with an intangible (insignificant) decrease.
- 8) The TK2D skills of East Kutai Regency have a significant positive effect on organizational performance. This can be proven by the value of the coefficient of influence of skills on organizational performance, which is 0.100 with a positive influence. The T-Statistic value (T ratios for Path Coefficients) is  $1.971 > 1.96$  and the P-Value result is  $0.025 < 0.05$ , this means that skills have a significant effect on organizational performance. The results of this study mean that if the skills of TK2D in East Kutai Regency are improved, it will be able to improve organizational performance in TK2D in East Kutai Regency with a real (significant) increase.
- 9) The working relationship of TK2D East Kutai Regency has a negative and insignificant effect on organizational performance. This can be proven by the value of the coefficient of the influence of the employment relationship on the performance of the organization, which is -0.014 with a negative influence. the value of T-Statistic (T ratios for Path Coefficients) is  $0.277 < 1.96$  and the result of the P-Value is  $0.391 > 0.05$ , this means that the relationship between work and the performance of the organization has an insignificant effect. The results of this study mean that if the working relationship of TK2D in East Kutai Regency is improved, it will decrease organizational performance in TK2D in East Kutai Regency with an unreal (insignificant) decrease.
- 10) The competitiveness of human resources has a negative and insignificant effect on the performance of TK2D in East Kutai Regency. This can be proven by the value of the coefficient of the influence of HR competitiveness on employee performance, which is -0.059 with a negative influence. T-Statistic value (T ratios for Path Coefficients) of  $1.154 < 1.96$  and the P-Value result of  $0.125 > 0.05$ , this means that the competitiveness of HR on employee performance has an insignificant effect. The results of this study mean that if the competitiveness of TK2D human resources in East Kutai Regency is increased, it will reduce employee performance in TK2D East Kutai Regency with an unreal (insignificant) decrease.
- 11) The competitiveness of TK2D HR in East Kutai Regency has a negative and insignificant effect on organizational performance. This can be proven by the value of the coefficient of the influence of human resources competitiveness on organizational performance, which is -0.072 with a negative influence. T-Statistic value (T ratios for Path Coefficients) of  $1.407 < 1.96$  and P-Value results of  $0.080 > 0.05$ , this means that the competitiveness of HR on organizational performance has an insignificant effect. The results of this study mean that if the competitiveness of TK2D HR in East Kutai Regency is improved, it will reduce organizational performance in TK2D East Kutai Regency with an intangible (insignificant) decrease.
- 12) The performance of TK2D in East Kutai Regency has a significant positive effect on the performance of the organization. This can be proven through the value of the coefficient of the influence of employee performance on organizational performance, which is 0.638 with a positive influence. The T-Statistic value (T ratios for Path Coefficients) is  $13.573 > 1.96$  and the P-Value result is  $0.001 < 0.05$ , this means that employee performance has a

significant effect on organizational performance. The results of this study mean that if the performance of TK2D in East Kutai Regency is improved, it will be able to improve organizational performance in TK2D in East Kutai Regency with a real (significant) improvement.

The analysis of the indirect effects of the test results can be seen in table 6 below:

| <b>Table 6: Results for Indirect Effects</b>                                                                                             |                    |                |                           |
|------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------|---------------------------|
| <b>Recap of Indirect Effect Results through HR Competitiveness (Y<sub>1</sub>) (2 segments)</b>                                          |                    |                |                           |
| <b>Indirect Effect</b>                                                                                                                   | <b>Coefficient</b> | <b>P-Value</b> | <b>Result</b>             |
| X1 → Y1 → Y2                                                                                                                             | -0.005             | 0.447          | Negative is insignificant |
| X2 → Y1 → Y2                                                                                                                             | -0.008             | 0.417          | Negative is insignificant |
| X3 → Y1 → Y2                                                                                                                             | -0.041             | 0.128          | Negative is insignificant |
| <b>Recap of Indirect Effect Results through Employee Performance (Y<sub>2</sub>) (2 segments)</b>                                        |                    |                |                           |
| <b>Indirect Effect</b>                                                                                                                   | <b>Coefficient</b> | <b>P-Value</b> | <b>Result</b>             |
| X1 → Y2 → Y3                                                                                                                             | 0.046              | 0.184          | Insignificant positives   |
| X2 → Y2 → Y3                                                                                                                             | -0.074             | 0.073          | Negative is insignificant |
| X3 → Y2 → Y3                                                                                                                             | -0.099             | 0.026          | Significant negatives     |
| Y1 → Y2 → Y3                                                                                                                             | -0.037             | 0.15           | Negative is insignificant |
| <b>Recap of Indirect Effect Results through HR Competitiveness (Y<sub>1</sub>) and Employee Performance (Y<sub>2</sub>) (3 segments)</b> |                    |                |                           |
| <b>Indirect Effect</b>                                                                                                                   | <b>Coefficient</b> | <b>P-Value</b> | <b>Result</b>             |
| X1 → Y1 → Y2 → Y3                                                                                                                        | -0.003             | 0.458          | Negative is insignificant |
| X2 → Y1 → Y2 → Y3                                                                                                                        | -0.005             | 0.435          | Negative is insignificant |
| X3 → Y1 → Y2 → Y3                                                                                                                        | -0.026             | 0.188          | Negative is insignificant |

Source: WarpPLS Output 2025

Based on Table 6, it can be seen the indirect influence of the variables of education level (X1), skills (X2) and employment relations (X3) on organizational performance (Y3) through the competitiveness of human resources (Y1) and employee performance (Y2), if the P-Value < 0.05 means that the exogenous variable has a significant influence on the endogenous variable and if the P-Value > 0.05, the exogenous variable has a non-significant effect on the endogenous variable with the following explanation:

- 1) The level of education has a negative insignificant influence on employee performance through the competitiveness of human resources with a coefficient value of -0.005, it can also be seen that the level of education has an insignificant influence on employee performance through the competitiveness of human resources because it has a P-value (0.447 > 0.05) TK2D in East Kutai Regency. This means that the competitiveness of human resources has not been able to mediate the influence of the level of education on the performance of TK2D in East Kutai Regency.
- 2) Skills have a negative influence on employee performance through HR competitiveness with a coefficient value of -0.008, it can also be known that skills have an insignificant influence on employee performance through HR competitiveness because they have a P-value (0.417 > 0.05) TK2D in East Kutai Regency. This means that the competitiveness of human resources has not been able to mediate the influence of skills on TK2D performance in East Kutai Regency.

- 3) Employment relations have a negative and insignificant influence on employee performance through HR competitiveness with a coefficient value of -0.041, it can also be seen that employment relationships have an insignificant influence on employee performance through HR competitiveness because they have a P-value ( $0.128 > 0.05$ ) TK2D in East Kutai Regency. This means that the competitiveness of human resources has not been able to mediate the influence of work relationships on the performance of TK2D in East Kutai Regency.
- 4) The level of education has a positive and insignificant influence on organizational performance through employee performance with a coefficient value of 0.046, it can also be seen that the level of education has an insignificant influence on organizational performance through employee performance because it has a P-value ( $0.184 > 0.05$ ) TK2D in East Kutai Regency. This means that employee performance has not been able to mediate the influence of education level on organizational performance in TK2D in East Kutai Regency.
- 5) Skills have a negative influence on organizational performance through employee performance with a coefficient value of -0.074, it can also be seen that skills have an insignificant influence on organizational performance through employee performance because they have a P-value ( $0.073 > 0.05$ ) TK2D in East Kutai Regency. This means that employee performance has not been able to mediate the influence of skills on organizational performance in TK2D in East Kutai Regency.
- 6) Employment relations have a significant negative influence on organizational performance through employee performance with a coefficient value of -0.099, it can also be known that employment relationships have a significant influence on organizational performance through employee performance because they have a P-value ( $0.026 < 0.05$ ) TK2D in East Kutai Regency. This means that employee performance has not been able to mediate the influence of work relationships on organizational performance in TK2D in East Kutai Regency.
- 7) The competitiveness of human resources has a negative influence on organizational performance through employee performance with a coefficient value of -0.037, it can also be seen that the competitiveness of human resources has an insignificant influence on organizational performance through employee performance because it has a P-value ( $0.150 > 0.05$ ) TK2D in East Kutai Regency. This means that employee performance has not been able to mediate the influence of human resource competitiveness on organizational performance in TK2D in East Kutai Regency.
- 8) The level of education has a negative insignificant influence on organizational performance through the competitiveness of human resources and employee performance with a coefficient value of -0.003, it can also be seen that the level of education has an insignificant influence on organizational performance through the competitiveness of human resources and employee performance because it has a P-value ( $0.458 > 0.05$ ) TK2D in East Kutai Regency. This means that the competitiveness of human resources and employee performance has not been able to mediate the influence of education level on organizational performance in TK2D in East Kutai Regency.
- 9) Skills have an insignificant negative influence on organizational performance through the competitiveness of human resources and employee performance with a coefficient value



of -0.005, it can also be known that skills have an insignificant influence on organizational performance through the competitiveness of human resources and employee performance because they have a P-value ( $0.435 > 0.05$ ) TK2D in East Kutai Regency. This means that the competitiveness of human resources and employee performance has not been able to mediate the influence of skills on organizational performance in TK2D in East Kutai Regency.

- 10) Employment relations have a negative insignificant influence on organizational performance through the competitiveness of human resources and employee performance with a coefficient value of -0.026, it can also be seen that employment relations have an insignificant influence on organizational performance through the competitiveness of human resources and employee performance because they have a P-value ( $0.188 > 0.05$ ) TK2D in East Kutai Regency. This means that the competitiveness of human resources and employee performance has not been able to mediate the influence of work relations on organizational performance in TK2D in East Kutai Regency.

## CONCLUSION

This study found that skills and employment relations are key factors directly enhancing the human resource competitiveness of Regional Contract Workers (TK2D) in East Kutai Regency. However, the pathways to organizational performance are complex: while skills positively impact organizational outcomes, they unexpectedly have a significant negative effect on individual employee performance. Employee performance itself remains the strongest positive driver of organizational performance. The expected mediating roles of HR competitiveness and employee performance were mostly unsupported, indicating that the connection between individual attributes and organizational success is influenced by unmeasured contextual factors such as job insecurity, motivational issues, or systemic inefficiencies in public sector employment. Future research should use longitudinal designs to better understand causal dynamics over time and incorporate mediators like work motivation, perceived organizational support, job insecurity, and compensation fairness to explain these paradoxical effects. Qualitative studies are recommended to explore whether skilled contract workers face demotivation due to limited career progression or lack of permanent status. Expanding research to compare different regional governments or contrast contract workers with permanent civil servants could offer valuable insights into the distinctive factors influencing performance within Indonesia's public sector human resource system.

## REFERENCES

- Abdulah, M. H. A. Bin, Gardi, B., & Darmawan, D. (2021). Innovation in Human Resource Management to enhance Organizational Competitiveness in the Era of Globalization. *Journal of Social Science Studies*, 1(1), 51–58.
- Agustian, K., Pohan, A., Zen, A., Wiwin, W., & Malik, A. J. (2023). Human resource management strategies in achieving competitive advantage in business administration. *Journal of Contemporary Administration and Management (ADMAN)*, 1(2), 108–117.
- Amarakoon, U., Weerawardena, J., & Verreyne, M.-L. (2018). Learning capabilities, human resource management innovation and competitive advantage. *The International Journal of Human Resource Management*, 29(10), 1736–1766.
- Antecedents of Human Resource Competitiveness and Employee Performance and Their Influence on Organizational Performance Among Regional Contract Workers in East Kutai Regency Mediated by Education Level, Skills, and Work Relationships

- Berawi, M. A., Susantono, B., Miraj, P., Sari, M., Saroji, G., Berawi, A. R. B., & Sidqi, H. (2019). Accelerating Nation Competitiveness Through Economic Corridor Development: Indonesia Masterplan Revisited. *International Scientific Conference on Innovations in Digital Economy*, 77–100.
- Boselie, P., Van Harten, J., & Veld, M. (2021). A human resource management review on public management and public administration research: stop right there... before we go any further.... *Public Management Review*, 23(4), 483–500.
- Bristol-Alagbariya, B., Ayanponle, O. L., & Ogedengbe, D. E. (2022). Developing and implementing advanced performance management systems for enhanced organizational productivity. *World Journal of Advanced Science and Technology*, 2(1), 39–46.
- Chapman, E. F., Sisk, F. A., Schatten, J., & Miles, E. W. (2018). Human resource development and human resource management levers for sustained competitive advantage: Combining isomorphism and differentiation. *Journal of Management & Organization*, 24(4), 533–550.
- Cik, A., Asdar, M., Anwar, A. I., & Efendi, S. (2021). Impact of training and learning organization on employee competence and its implication on job satisfaction and employee performance of bank in Indonesia. *Psychology and Education*, 58(1), 140–156.
- Delery, J. E., & Roumpi, D. (2017). Strategic human resource management, human capital and competitive advantage: is the field going in circles? *Human Resource Management Journal*, 27(1), 1–21.
- Dewi, L., Utomo, N., & Puspitasari, F. (2024). *Evaluating the Impact of Training and Skill Development Programs on Employee Performance in Private Banks*.
- Elrehail, H., Harazneh, I., Abuhjeeleh, M., Alzghoul, A., Alnajdawi, S., & Ibrahim, H. M. H. (2020). Employee satisfaction, human resource management practices and competitive advantage: The case of Northern Cyprus. *European Journal of Management and Business Economics*, 29(2), 125–149.
- Indrawati, S. M., & Kuncoro, A. (2021). Improving competitiveness through vocational and higher education: Indonesia's vision for human capital development in 2019–2024. *Bulletin of Indonesian Economic Studies*, 57(1), 29–59.
- Khemraj, S. (2023). Enhancing Competitive Advantage through Learning Capabilities and Innovative Human Resource Management. *Intersecta Minds Journal*, 2(1), 26–41.
- Kravariti, F., & Johnston, K. (2020). Talent management: a critical literature review and research agenda for public sector human resource management. *Public Management Review*, 22(1), 75–95.
- Mahfouz, S., Bahkia, A. S., & Alias, N. (2021). The impact of human resource management practices on employee performance and the mediating role of employee commitment. *Journal of Governance and Regulation/Volume*, 10(4).
- Makhanya, M. T. B. (2024). Strategic Workforce Planning: Integrating Human Capital Needs With Organisational Goals for Optimal Performance in the Public Sector. *Journal of Public Administration*, 59(3), 542–557.
- Mesiya, A. Y. (2019). Factors affecting employee performance: An investigation on private school sector. *International Journal of Experiential Learning & Case Studies*.

- Newman, J., Cherney, A., & Head, B. W. (2017). Policy capacity and evidence-based policy in the public service. *Public Management Review*, 19(2), 157–174.
- Nkgapele, S. M., & Mofokeng, S. (2024). Merit-based recruitment in the South African Public Service: Challenges and opportunities. *International Review of Social Sciences Research*, 4(4), 148–170.
- OECD. (2019). *Recommendation of the Council on Public Service Leadership and Capability*. OECD Legal Instruments. <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0445>
- Pribadi, K. S., & Chan, T.-K. (2022). Indonesia and National Development Planning. In *Construction in Indonesia* (pp. 1–18). Routledge.
- Sholahuddin, A. (2021). Employee Behavior in the Regional Civil Service Agency of East Kutai Regency, Indonesia Social Reality Study on Employee Competency Standards. *International Journal of Advances in Scientific Research and Engineering*.
- Utomo, S., Gesmi, I., & Othman, Z. (2025). Public Services Amid Infrastructure Inequities: A Case Study of Indonesia's Outer Islands. *International Journal of Sustainable Development & Planning*, 20(5).
- Valentina, J., Yanto, S., & Sundari, S. (2025). Defense Industry Development as a Catalyst for National Defense and Economic Transformation in Achieving Indonesia's 2045 Goals. *Asian Journal of Management, Entrepreneurship and Social Science*, 5(04), 314–434.
- Wahab, A. A. A., Haque, R., Muhamad, M., Senathirajah, A. R. S., & Qazi, S. Z. (2024). Impact of employee performance in context of sustainable growth in education sector: A prospective of mentorship's effect. *International Journal of Religion*, 5(10), 455–474.
- Wang, S., Chan, K., & Han, K. (2019). Impacts of social welfare system on the employment status of low-income groups in urban China. *Public Administration and Policy*, 22(2), 125–137.
- World Bank. (2020). *Civil service reform: A review of World Bank assistance*. World Bank Independent Evaluation Group. <https://ieg.worldbankgroup.org/evaluations/civil-service-reform>
- Zeraatkar, S., Rajabi Farjad, H., & Naghashzadeh, S. (2021). Exploration of the Challenges of Human Resource Management in the Public Sector and Their Effects on Productivity. *Journal of Research in Human Resources Management*, 12(4), 197–224.