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## The Influence of Human Resource Development Strategy, Personnel Competence and Work Motivation On Performance of The Personnel of 242 Radar Unit Tanjung Warari

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**Abstract:** This research aims to the influence of human resource development strategy, personnel competence, and work motivation on the performance of Radar Unit 242 Tanjung Warari. This research uses a quantitative approach, survey methods and path analysis. The population is 90 of personnel. With a simple random sampling technique, 70 respondents were obtained. Data were analyzed using Excel and SPSS. The research results show that: human resource development strategy has a direct positive and significant effect on work motivation of 0,432; personnel competence has a direct positive and significant effect on work motivation of 0,450; human resource development strategy has a direct positive and significant effect on performance of 0,428; personnel competence has a direct positive and significant effect on performance of 0,262; work motivation has a direct positive and significant effect on performance of 0,234. Implications, to increase the performance of Radar Unit 242 Tanjung Warari to improve the human resource development strategy, personnel competence, and work motivation.

**Keyword:** Human Resource Development Strategy, Competence, Work Motivation, & Performance

### INTRODUCTION

Radar Unit 242 Tanjung Warari is an implementing unit of Comando Sector III which is directly under Comander Comando Sector III which is tasked with preparing and implementing guidance and operation of all units within its ranks, empowering air defense areas and organizing operational support for other units. In the modern era, the role of human resources is becoming increasingly vital, especially in the defense sector. Radar Unit 242 Tanjung Warari as the front guard in maintaining Indonesia's air sovereignty in the Eastern Region, requires trained and qualified human resources. Effective human resource development can improve

the operational capability of defense radar, which is an important component in the air defense system.

In this context, the operational capability of Radar Unit 242 Tanjung Warari is highly dependent on the quality and readiness of the human resources who operate it. Human resource development in the military environment, especially in the aspect of defense radar, requires a strategic approach that includes education, technical training, tactical development, and mastery of new technology so that each personnel can carry out their duties optimally.

However, the challenges faced in improving the performance of the personnel of Radar Unit 242 Tanjung Warari are quite diverse, ranging from a limited training budget, and minimal career development opportunities for personnel, to a lack of attention to improving personnel competency in the field of radar operations. In addition, there are obstacles in achieving ideal operational readiness, such as limited training support facilities, lack of emergency scenario simulations, and mismatches between personnel technical skills and the development of radar technology that continues to advance. This shows that factors such as personnel competency, human resource development strategies, and work motivation are very important in supporting the performance of Radar Unit 242 Tanjung Warari personnel.

The performance measurement of Radar Unit 242 Tanjung Warari personnel as Indonesian Air Force soldiers uses standardized measurements that are determined as the basis for assessing individual soldier performance. This is guided by the Decree of the Chief of Air Force Number: Kep/131/V/2019 dated May 31, 2019, concerning individual assessment of the Indonesian Air Force. The results of the assessment will be directly related to the work behavior of Radar Unit 242 Tanjung Warari personnel.

The results of observations also show that the personnel of Radar Unit 242 Tanjung Warari are still not optimal in terms of quantity and quality of work in carrying out their work duties, and many checklists are still missed in radar maintenance activities. The defense missions faced by the Indonesian Air Force are increasingly diverse and complex, including airspace surveillance, threat management, and participation in humanitarian missions. These missions require personnel with high analytical and technical skills to manage them. The operational demands of the radar, which operates 365 days a year and 24 hours nonstop, must be balanced with qualified manning.

Based on these problems, the problems of this research can be formulated as follows: (1) Does human resource development strategy have a direct effect on the work motivation?; (2) Does personnel competence have a direct effect on the work motivation?; (3) Does human resource development strategy have a direct effect on the performance?; (4) Does personnel competence have a direct effect on the performance?; and (5) Does work motivation have a direct effect on the performance?

## **Performance**

Performance is the result of work or achievement achieved by a person, group, or organization in carrying out their duties or responsibilities based on certain standards, targets, or goals that have been previously set. Performance reflects the effectiveness, efficiency, and productivity in the use of resources to achieve the desired results.

To understand in depth the meaning of performance, a definition is needed. According to Mangkunegaran describes performance as the result of work in terms of quality and quantity achieved by an employee in carrying out their duties in accordance with the responsibilities given, performance is influenced by two main factors, namely individual competence (intellectual and emotional abilities) and work motivation. The combination of the two will produce optimal productivity in an organization (Mangkunegara, 2021). Performance is a

person's ability to complete tasks and responsibilities given, in accordance with the targets set by the organization (Sutrisno, 2021). Performance is defined as the result of work functions performed by individuals or teams, that contribute to organizational goals either directly or indirectly (Noe, 2021).

Based on Sutrisno's definition, here are some dimensions of performance: (1) punctuality, demonstrates an individual's ability to complete tasks within a specified time limit; (2) productivity, focuses on the amount of work that can be completed by an individual in a certain time, according to the standards set by the organization; (3) effectiveness, refers to the level of achievement of work results by the goals and objectives of the organization; (4) target achievement, an individual's ability to meet previously set work standards or targets (Sutrisno, 2021).

### **Human Resource Development Strategy**

Human resource development strategy is a structured approach designed to improve the skills, competencies, and productivity of employees in an organization. Human resource development strategy is described as a structured effort made to improve employee skills, knowledge, and abilities (Dessler, 2021). The importance of human resource development as a strategic investment for the organization (Noe, 2021). Human resource development strategy includes various ongoing initiatives, including training and development of capabilities to produce a competent workforce (Armstrong, 2019).

According to Armstrong, here are some dimensions of human resource development strategy: (1) sustainable development, focusing on continuous development, ensuring that the workforce continues to develop in the long term; (2) training initiatives, special training programs designed to improve employees' technical and interpersonal skills; (3) employee capability development, improving competency so that the workforce remains competent and in line with the needs of the organization; (4) achieving organizational goals, human resource development is carried out to be in line with the company's long-term vision and goals (Armstrong, 2019).

### **Personnel Competence**

Personnel competence is the ability and skills possessed by individuals that are directly related to the tasks and responsibilities of the work that must be carried out, including knowledge, skills, and behaviors that enable individuals to succeed in their work (Robbins & Judge, 2021). Personnel competence refers to a combination of knowledge, skills, attitudes, and values possessed by individuals, which enable them to carry out tasks and roles effectively within an organization (Sumarwan, 2020)

Personnel competence is a combination of technical and non-technical skills possessed by individuals, which are needed to support organizational performance and achieve the goals of the organization (Nurkholis, 2023). Personnel competence is a set of qualifications that include the knowledge, skills, and attitudes needed by individuals to carry out work in an effective and efficient manner in the organization (Fahmi, 2020).

Based on the definition of Fahmi, here are some dimensions of personnel competence: (1) knowledge, refers to the understanding of theories, information, and concepts needed to carry out work tasks properly. This knowledge can include technical and non-technical aspects relevant to the job; (2) skills, skills refer to the practical ability to apply knowledge in work situations. These skills include technical skills (eg use of tools or devices) as well as other practical skills that support performance, such as time management or analytical skills; (3) attitudes, attitudes include personal behaviors and values that support effective and efficient ways of working. This involves work ethic, responsibility, motivation, and the ability to work in a team or adapt to the organizational environment (Fahmi, 2020).

## Work Motivation

Work motivation comes from two main aspects: internal and external factors. Internal factors include self-confidence (self-efficacy) and personal drive to develop or achieve certain targets. While external factors include rewards such as promotions, salaries, and a supportive work environment. Combining these two factors is key to building employee motivation, especially in creating a productive and enjoyable work atmosphere (Swaminathan, 2020). Work motivation is a continuous psychological phenomenon. He stated that motivation arises from individual values or expectations of rewards, which can be in the form of incentives or recognition of performance (Kondalkar, 2020).

Work motivation is a dynamic process that involves interactions between individual needs, behavior, and results assessed by the organization. Employees tend to work harder if they see a direct relationship between their efforts and the rewards received. Factors such as leadership patterns, work facilities, and the balance between effort and reward influence this process (Tampubolon, 2020).

The self-determination theory, it is emphasized that work motivation has two main types, namely intrinsic motivation (the drive from within the individual to do work because they feel happy or interested) and extrinsic motivation (drive triggered by external rewards such as bonuses or promotions) (Ryan & Deci, 2022).

Based on the definition of Mangkunegara, here are some dimensions of work motivation, including: (1) arousal, the process of generating drive or enthusiasm to work; (2) Direction, channeling employee energy into activities that are relevant to organizational goals; (3) maintenance, maintaining consistency and stability of work behavior in the long term; (4) effectiveness and efficiency, the drive to work effectively (achieving goals) and efficiently (optimizing resources); (5) behavioral driving factors, motivation as a trigger for work activities carried out by individuals (Mangkunegara, 2021).

## METHOD

The type of research used is quantitative with a survey research design. Research is carried out to study or analyze the influence of one variable on other variables. The variables to be studied consist of 4 (four) variables: (1) human resource development strategy ( $X_1$ ), (2) personnel competence ( $X_2$ ), (3) work motivation ( $X_3$ ), and (4) performance ( $Y$ ). The population of this study was the personnel of 242 Radar Unit Tanjung Warari, consisting of 90 personnel. The sampling technique used is simple random sampling. The research sample was taken as many as 90 personnel, for the research instrument test there were 20 personnel and for the research test there were 70 personnel. The data collection technique uses a questionnaire with a Likert scale. Analysis of research data using computer tools, namely the Statistical Package for Social Scienc (SPSS) program. Data analysis carried out included normality tests, linearity tests, homogeneity tests, hypothesis tests, and path analysis.

## RESULTS AND DISCUSSION

This research was measured using a research instrument in the form of a questionnaire with a score scale (rating scale) of 1 to 5, for the performance variable consisting of 25 items, the human resource development strategy variable consisting of 20 items, the personnel competence variable consisting of 23 items, and the work motivation variable consisting of 24 items.

### Testing Requirements Analysis

Test analysis requirements in this research include: normality test, linearity test, and homogeneity test.

## Normality Test

The statistical test carried out to test the normality of the error distribution in this study was the Kolmogorov-Smirnov test. The results of the data normality test are shown in Table 1.

**Table 1. Normality Test Results**  
**One-Sample Kolmogorov-Smirnov Test**

		Performance	Hr Development Strategy	Personnel Competence	Work Motivation
N		70	70	70	70
Normal Parameters <sup>a,b</sup>	Mean	100.67	75.54	95.97	97.29
	Std. Deviation	4.717	4.286	4.111	4.202
Most Extreme Differences	Absolute	.089	.083	.098	.092
	Positive	.082	.083	.065	.092
	Negative	-.089	-.065	-.098	-.070
Test Statistic		.089	.083	.098	.092
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>	.200 <sup>c,d</sup>	.093 <sup>c</sup>	.200 <sup>c,d</sup>

Source: Research Results, 2025

Based on the results of Kolmogorov-Smirnov statistical calculations, a significance value (Asymp. Sig.) was obtained for the performance variable of 0,200, the human resource development strategy variable of 0,200, the personnel competence variable of 0,093, and the work motivation variable of 0,200. These four variables have a significance value (Asymp. Sig.) > 0.05. Thus, it can be concluded that the distribution of error scores for the four research variables comes from a normally distributed population.

## Linearity Test

The linearity test is a perfect (near perfect) linear relationship between several or all independent variables. The results of the linearity test are shown in Table 2.

**Table 2. Linearity Test Results**

Path	Sig. Deviation from Linearity	Sig. Table ( $\alpha$ )	Conclusion
X <sub>3</sub> atas X <sub>1</sub>	0,482	0,05	Linear
X <sub>3</sub> atas X <sub>2</sub>	0,924	0,05	Linear
Y atas X <sub>1</sub>	0,320	0,05	Linear
Y atas X <sub>2</sub>	0,258	0,05	Linear
Y atas X <sub>3</sub>	0,913	0,05	Linear

Source: Research Results, 2025

Based on the results of linearity test calculations, the scores for variable X<sub>1</sub> (human resource development strategy) against X<sub>3</sub> (work motivation) obtained a deviation from linearity value of 0,482, variable X<sub>2</sub> (personnel competence) against X<sub>3</sub> (work motivation) the deviation from linearity value is obtained 0,924, variable X<sub>1</sub> (human resource development strategy) against Y (performance) obtained a deviation from linearity value of 0,320, variable X<sub>2</sub> (personnel competence) against Y (performance) the deviation from linearity value is obtained 0,258, variable X<sub>3</sub> (work motivation) against Y (performance) obtained a deviation from linearity value of 0,913. The five variable relationships are greater than  $\alpha = 0.05$ . Thus it can be concluded that the five relationships between variables have a linear relationship.



## Homogeneity Test

The data homogeneity test aims to find out whether the two samples come from a homogeneous population or not. This research's homogeneity test used the Levene test. The homogeneity test results are shown in Table 3.

**Table 3. Homogeneity Test Results**

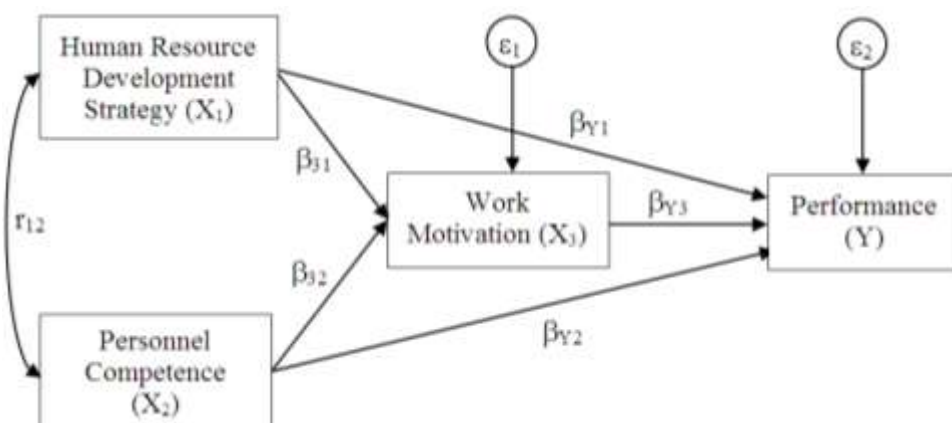
Path	Levene Statistic	df1	df2	Sig.	Conclusion
X <sub>3</sub> over X <sub>1</sub>	0,013	1	138	0,909	Homogeneous Data
X <sub>3</sub> over X <sub>2</sub>	0,038	1	138	0,846	Homogeneous Data
Y over X <sub>1</sub>	0,905	1	138	0,343	Homogeneous Data
Y over X <sub>2</sub>	1,618	1	138	0,206	Homogeneous Data
Y over X <sub>3</sub>	1,161	1	138	0,283	Homogeneous Data

Source: Research Results, 2025

Based on the results of the homogeneity test calculation for the variable score X<sub>1</sub> (human resource development strategy) against X<sub>3</sub> (work motivation), the value Sig. of 0,909, the variable X<sub>2</sub> (personnel competence) against X<sub>3</sub> (work motivation) obtained a Sig value of 0,846, the variable X<sub>1</sub> (human resource development strategy) against Y (performance) obtained a Sig value of 0,343, the variable X<sub>2</sub> (personnel competence) against Y (performance) obtained a Sig value of 0,206, and the variable X<sub>3</sub> (work motivation) against Y (performance) obtained a Sig value of 0,283. The five variable relationships are greater than  $\alpha = 0.05$ . Thus it can be concluded that the five relationships between variables come from a homogeneous population.

## Structural Model and Matrix Between Variables

The structural model of human resource development strategy (X<sub>1</sub>), personnel competence (X<sub>2</sub>), and work motivation (X<sub>3</sub>) on performance (Y), is displayed in Figure 1.



Source: Research Results, 2025

**Figure 1. Structural Model of Relationships Between Variables**

Path analysis is used to analyze the pattern of influence between variables with the aim of determining the direct or indirect influence of a set of independent variables (exogenous) on the dependent variable (endogenous). This path analysis technique will be used to test the magnitude of the contribution shown by the path coefficient on each path diagram of the causal influence between variables X<sub>1</sub>, X<sub>2</sub>, and X<sub>3</sub> on Y. In this research, path analysis is divided into two substructures, namely substructure 1 and substructure 2.

### Causal Relationship Model Between Substructure Variables 1

The causal relationship between variables in Substructure 1 consists of an endogenous variable, namely  $X_3$  (work motivation), and two exogenous variables, namely  $X_1$  (human resource development strategy) and  $X_2$  (personnel competence). The results of calculating and testing the path coefficient in substructure 1 are shown in Table 4.

**Table 4. Substructure t-test 1 Effect of Variables  $X_1$  and  $X_2$  on  $X_3$  Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	21.162	7.107		2.978	.004
Hr Development Strategy	.424	.096	.432	4.406	.000
Personnel Competence	.460	.100	.450	4.589	.000

a. Dependent Variable: WORK MOTIVATION

Source: Research Results, 2025

Based on the table above, it can be seen that the standardized coefficients beta value for the human resource development strategy variable has a path coefficient value of 0,432, while the work motivation variable has a path coefficient value of 0,450. The results of calculating the correlation coefficient in substructure 1 are shown in Table 5.

**Table 5. Model Summary Substructure 1 Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.808 <sup>a</sup>	.653	.642	2.513

a. Predictors: (Constant), Personnel Competence, Hr Development Strategy

Source: Research Results, 2025

The coefficient of determination (Adjusted R Square) is the percentage contribution of the two exogenous variables (human resource development strategy and personnel competence) to the endogenous variable (work motivation) of 0,642. This shows that the magnitude of the influence of the work motivation value variable ( $X_3$ ) is explained by human resource development strategy and personnel competence of 0,642. Meanwhile, the residual coefficient ( $\varepsilon_1$ ) obtained a value of 0,598, which means that the number of variants of human resource development strategy and personnel competence variables that were not examined in the model and had no effect on the work motivation variable was 0,598. This fairly high residual value gives the conclusion that not only human resource development strategy and personnel competence influence work motivation, but there are several other variables that also influence work motivation. Thus the substructure equation 1 is  $X_3 = 0,598 + 0,432X_1 + 0,450X_2$

### Model of Causal Relationships Between Substructure Variables 2

The causal relationship between variables in Substructure 2 consists of an endogenous variable, namely  $Y$  (performance), and three exogenous variables, namely  $X_1$  (human resource development strategy),  $X_2$  (personnel competence), and  $X_3$  (work motivation). The results of calculating and testing the path coefficient in substructure 2 are shown in Table 6.

**Table 6. Substructure t-test 2 Effect of Variables X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub> on Y Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	10.621	7.972		1.332	.187
Hr Development Strategy	.471	.115	.428	4.097	.000
Personnel Competence	.300	.121	.262	2.481	.016
Work Motivation	.263	.129	.234	2.043	.045

a. Dependent Variable: PERFORMANCE

Source: Research Results, 2025

Based on the table above, it can be seen that the standardized coefficients beta value for the human resource development strategy variable has a path coefficient value of 0,428, the personnel competence variable has a path coefficient value of 0,262, and the work motivation variable has a path coefficient value of 0,234. The results of calculating the correlation coefficient in substructure 2 are shown in Table 7.

**Table 7. Model Summary Substructure 2 Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.836 <sup>a</sup>	.698	.685	2,649

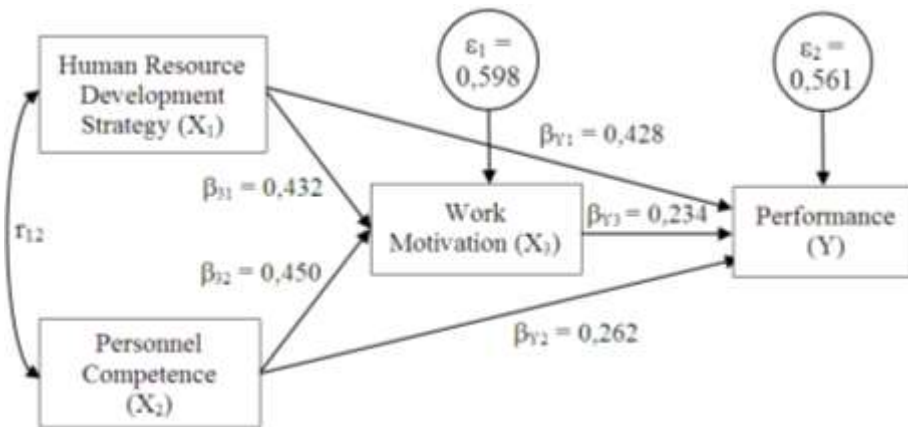
a. Predictors: (Constant), Work Motivation, Hr Development Strategy, Personnel Competence

Source: Research Results, 2025

The coefficient of determination (Adjusted R Square) is the percentage contribution of the three exogenous variables (human resource development strategy, personnel competence, work motivation) to the endogenous variable (performance) of 0,685. This shows that the magnitude of the influence of the performance value variable (Y) is explained by human resource development strategy, personnel competence and work motivation of 0,685. Meanwhile, the residual coefficient ( $\varepsilon_2$ ) obtained a value of 0,561, which means that the number of variants of human resource development strategy, personnel competence and work motivation variables that were not examined in the model and had an effect on the performance variable was 0,561. This fairly high residual value gives the conclusion that not only human resource development strategy, personnel competence and work motivation influence performance, but there are several other variables that also influence performance. Thus the substructure equation 2 is  $Y = 0,561 + 0,428X_1 + 0,262X_2 + 0,234X_3$ .

Based on the results of the analysis of substructure 1 and analysis of substructure 2, the relationship path diagram between variables in this study can be displayed in Figure 2.





Source: Research Results, 2025

**Figure 2. Causal Relationship of Variables  $X_1$ ,  $X_2$  and  $X_3$  to  $Y$**

Based on the results of the path coefficient calculation, coefficient model, substructure 1 obtained two path coefficients, namely  $\beta_{31} = 0,432$  and  $\beta_{32} = 0,450$  and substructure 2 obtained three path coefficients, namely  $\beta_{Y1} = 0,428$ ;  $\beta_{Y2} = 0,262$ ;  $\beta_{Y3} = 0,234$ . In detail, the results of calculating the path coefficients for substructure 1 and substructure 2 are presented in Table 8.

**Table 8. Correlation Coefficient Matrix and Path Coefficient Between Variables**

No	Path	Path Coefficient ( $\beta$ )	$t_{\text{count}}$	$t_{\text{table}} (0,05)$	Sig.	Test Decision
1	$\beta_{31}$	0,432	4,406	1,99	0,000 ( $< 0,05$ )	$X_1$ has a direct positive and significant effect on $X_3$
2	$\beta_{32}$	0,450	4,589	1,99	0,000 ( $< 0,05$ )	$X_2$ has a direct positive and significant effect on $X_3$
3	$\beta_{Y1}$	0,428	4,097	1,99	0,000 ( $< 0,05$ )	$X_1$ has a direct positive and significant effect on $Y$
4	$\beta_{Y2}$	0,262	2,481	1,99	0,016 ( $< 0,05$ )	$X_2$ has a direct positive and significant effect on $Y$
5	$\beta_{Y3}$	0,234	2,043	1,99	0,045 ( $< 0,05$ )	$X_3$ has a direct positive and significant effect on $Y$

Source: Research Results, 2025

## Hypothesis Testing

First Hypothesis, tests the influence of the human resource development strategy variable ( $X_1$ ) on work motivation ( $X_3$ ). The calculation results obtained the path coefficient value ( $\beta_{31}$ ) = 0,432 with  $t_{\text{count}} = 4,406$  and at the real level  $\alpha = 0.05$  obtained  $t_{\text{table}} (0.05) = 1.99$  for  $n = 70$ , and the value of Sig. = 0.000, because the value of  $t_{\text{count}} (4,406) > t_{\text{table}} (1.99)$  and the value of Sig. (0,000)  $< 0.05$ , then reject  $H_0$ , thus the path coefficient is significant. These findings show that human resource development strategy has a direct positive and significant effect on work motivation.

Second Hypothesis, tests the influence of personnel competence variables ( $X_2$ ) on work motivation ( $X_3$ ). The calculation results obtained the path coefficient value ( $\beta_{32}$ ) = 0,450 with  $t_{\text{count}} = 4,589$  and at the real level  $\alpha = 0.05$  obtained  $t_{\text{table}} (0.05) = 1.99$  for  $n = 70$ , and the value of Sig. = 0,000, because the value of  $t_{\text{count}} (4,589) > t_{\text{table}} (1.99)$  and the value of Sig. (0,000)  $< 0.05$ , then reject  $H_0$ , thus the path coefficient is significant. These findings show that personnel competence has a direct positive and significant effect on work motivation.

Third Hypothesis, tests the influence of the human resource development strategy variable ( $X_1$ ) on performance ( $Y$ ). The calculation results show that the path coefficient value ( $\beta_{Y1}$ ) = 0,428 with  $t_{\text{count}} = 4,097$  and at the real level  $\alpha = 0.05$ ,  $t_{\text{table}} (0.05) = 1.99$  for  $n = 70$ ,

and the Sig. = 0,000, because the value of  $t_{\text{count}}$  (4,097) >  $t_{\text{table}}$  (1.99) and the value of Sig. (0,000) < 0.05, then reject  $H_0$ , thus the path coefficient is significant. These findings show that human resource development strategy has a direct positive and significant effect on performance.

Fourth Hypothesis, tests the influence of personnel competence variables ( $X_2$ ) on performance (Y). The calculation results show that the path coefficient value ( $\beta_{Y2}$ ) = 0,262. with  $t_{\text{count}} = 2,481$ , and at the real level  $\alpha = 0.05$ , we get  $t_{\text{table}} (0.05) = 1.99$  for  $n = 70$ , and the Sig value. = 0,016, because the value of  $t_{\text{count}} (2,481) > t_{\text{table}} (1.99)$  and the value of Sig. (0,016) < 0.05, then reject  $H_0$ , thus the path coefficient is significant. These findings show that personnel competence has a direct positive and significant effect on performance.

Fifth Hypothesis, tests the influence of the work motivation variable ( $X_3$ ) on performance (Y). The calculation results show that the path coefficient value ( $\beta_{Y3}$ ) = 0,234 with  $t_{\text{count}} = 2,043$ . and at the real level  $\alpha = 0.05$ ,  $t_{\text{table}} (0.05) = 1.99$  for  $n = 70$ , and the value of Sig. = 0,045, because the value of  $t_{\text{count}} (2,043) > t_{\text{table}} (1.99)$  and the value of Sig. (0.045) < 0.05, then reject  $H_0$ , thus the path coefficient is significant. These findings show that work motivation has a direct positive and significant effect on performance.

The results of the analysis and statistical tests on the proposed hypotheses are presented as a summary of the results of hypothesis testing in Table 9.

**Table 9. Recapitulation of Hypothesis Testing Results**

No	Hypothesis	Statistic Test	Decision	Conclusion
1	The influence of $X_1$ on $X_3$	$H_0 : \beta_{31} = 0$ $H_1 : \beta_{31} > 0$	$H_0$ rejected $H_1$ accepted	Direct positive and significant effect
2	The influence of $X_2$ on $X_3$	$H_0 : \beta_{32} = 0$ $H_1 : \beta_{32} > 0$	$H_0$ rejected $H_1$ accepted	Direct positive and significant effect
3	The influence of $X_1$ on Y	$H_0 : \beta_{Y1} = 0$ $H_1 : \beta_{Y1} > 0$	$H_0$ rejected $H_1$ accepted	Direct positive and significant effect
4	The influence of $X_2$ on Y	$H_0 : \beta_{Y2} = 0$ $H_1 : \beta_{Y2} > 0$	$H_0$ rejected $H_1$ accepted	Direct positive and significant effect
5	The influence of $X_3$ on Y	$H_0 : \beta_{Y3} = 0$ $H_1 : \beta_{Y3} > 0$	$H_0$ rejected $H_1$ accepted	Direct positive and significant effect

Source: Research Results, 2025

## Discussion

*First*, human resource development strategy ( $X_1$ ) has a direct effect on work motivation ( $X_3$ ). The results of the research findings show that the first hypothesis is accepted as true, thus human resource development strategy has a direct positive and significant effect on work motivation. This provides empirical confirmation and interpretation of the importance of paying attention to increasing human resource development strategy to improve work motivation. If human resource development strategy increases so that work motivation will increase. A well-designed human resource development strategy has a direct impact on work motivation, both intrinsic and extrinsic. Personnel who receive training, career development and attention from the organization will be more motivated to provide optimal performance. Thus, the relationship between human resource development strategies and work motivation is positive and mutually reinforcing. Employee training and development highlights the importance of human resource development as a strategic investment for the organization. Human resource development strategies play a role in maintaining personnel readiness to face changes in the work environment, such as technological advances or competitive dynamics, so that personnel remain relevant and productive (Noe, 2021). Work motivation is a dynamic process that involves interactions between individual needs, behavior and results assessed by the organization (Tampubolon, 2020).

Based on the analysis above, theoretically and empirical evidence carried out in this research shows that human resource development strategy has a direct positive and significant effect on the work motivation of the the personnel of 242 Radar Unit Tanjung Warari.

*Second*, personnel competence ( $X_2$ ) has a direct effect on work motivation ( $X_3$ ). The results of the research findings show that the second hypothesis is accepted as true, thus personnel competence has a direct positive and significant effect on work motivation. This provides empirical confirmation and interpretation of the importance of paying attention to increasing personnel competence to improve work motivation. If personnel competence increases, the the personnel of 242 Radar Unit Tanjung Warari will have competence, so that work motivation will increase. Personnel competencies are the abilities and skills possessed by individuals that are directly related to the job duties and responsibilities that must be carried out, including knowledge, skills and behavior that enable individuals to be successful at work (Robbins & Judge, 2021). Personnel competency refers to an individual's ability to carry out their duties and responsibilities effectively which includes aspects of knowledge, skills and attitudes. This competency is an important foundation in supporting productivity and work success. Work motivation is an impulse that encourages someone to take action to achieve work goals. Motivation can come from intrinsic factors (such as personal satisfaction) or extrinsic factors (such as rewards and recognition). Personnel competency has a direct influence on work motivation, because competent personnel tend to be more confident, satisfied with their work, and feel appreciated for their contributions. Competencies that match job requirements also help create a conducive work environment, where personnel are motivated to continue to develop and achieve organizational goals.

Based on the analysis above, theoretically and empirical evidence carried out in this research shows that personnel competence has a direct positive and significant effect on the work motivation of the personnel of 242 Radar Unit Tanjung Warari.

*Third*, human resource development strategy ( $X_1$ ) has a direct effect on performance ( $Y$ ). The results of the research findings show that the third hypothesis is accepted as true, thus human resource development strategy has a direct positive and significant effect on performance. This provides empirical confirmation and interpretation of the importance of paying attention to increasing human resource development strategy to improve performance. Theoretically, the results of this research are in line with the research results of (Khan *et al.*, 2023), (Dessler & Cole, 2021), which concludes that human resource development strategy has a positive and significant influence on performance. Human resource development strategies have a direct effect on organizational performance due to various interrelated factors. One of the main aspects is personnel training and development. Personnel development can improve skills and knowledge, thereby increasing the quality and quantity of work. Effective human resource development can increase personnel motivation and job satisfaction, leading to better performance. Development programs that address personnel needs can also help in retaining top talent, which plays an important role in the stability and improvement of organizational performance. In addition, proper talent management can optimize individual and team potential, strengthen collaboration, and produce more efficient and productive performance. Thus, human resource development strategies not only have an impact on improving individual performance, but also on the performance of teams and the organization as a whole.

Based on the analysis above, theoretically and empirical evidence carried out in this research shows that human resource development strategy has a direct positive and significant effect on the performance of the personnel of 242 Radar Unit Tanjung Warari.

*Fourth*, personnel competence ( $X_2$ ) has a direct effect on performance ( $Y$ ). The results of the research findings show that the fourth hypothesis is accepted as true, thus personnel competence has a direct positive and significant effect on performance. This provides empirical confirmation and interpretation of the importance of paying attention to increasing

personnel competence to improve performance. Theoretically, the results of this research are in line with the research results of (Sutrisno *et al.*, 2021), which concluded that personnel competence has a positive and significant influence on performance. Personnel competency is a set of qualifications that include the knowledge, skills and attitudes needed by individuals to carry out work in an effective and efficient manner within the organization (Fahmi, 2020). Personnel competency is a combination of technical and non-technical skills possessed by individuals that are needed to support organizational performance and achieve organizational goals (Nurkholis, 2023). Personnel competency has a direct influence on performance because the level of ability, knowledge, skills and attitudes possessed by personnel greatly determines how effectively they can carry out their duties and responsibilities. Personnel who have high competence tend to be better able to complete work with better quality, more efficiently and faster. These competencies include not only technical skills, but also interpersonal, problem-solving, and decision-making abilities that can directly impact performance. High competency enables personnel to adapt to changes and challenges in the work environment, which also contributes to achieving optimal results. Organizations that have personnel with high competence will be better able to achieve their goals and improve their overall performance.

Based on the analysis above, theoretically and empirical evidence carried out in this research shows that personnel competence has a direct positive and significant effect on the performance of the personnel of 242 Radar Unit Tanjung Warari.

*Fifth*, work motivation ( $X_3$ ) has a direct effect on performance (Y). The results of the research findings show that the fifth hypothesis is accepted as true, thus work motivation has a direct positive and significant effect on performance. If the the personnel of 242 Radar Unit Tanjung Warari has a high level of work motivation, then the the personnel of 242 Radar Unit Tanjung Warari will have optimal performance. This provides empirical confirmation and interpretation of the importance of paying attention to increasing work motivation to improve performance. If work motivation increases, the the personnel of 242 Radar Unit Tanjung Warari so performance will increase. Theoretically, the research results are in line with the research results of (Ryan & Deci, 2022), (Sutrisno *et al.*, 2021), which concluded that work motivation has a positive and significant influence on performance. McCormick stated that "work motivation is determined as conditions which influence the arousal, direction, and maintenance of relevant behaviors in work settings" (Mangkunegara, 2021). Work motivation is defined as a condition that has the effect of generating, directing and maintaining behavior related to the work environment. Work motivation has a direct effect on performance because high motivation encourages personnel to work harder, be committed, and focus on achieving organizational goals. Personnel who have high work motivation will be more productive, proactive, and show more dedication in completing their tasks. This motivation can come from various factors, such as rewards, recognition, opportunities for growth, or a sense of personal satisfaction in work. When work motivation is high, personnel tend to have greater enthusiasm to achieve optimal results, contribute to achieving organizational goals, and overcome challenges that arise. Conversely, less motivated personnel may experience decreased performance, lack of initiative, and delays in completing work. Therefore, high work motivation plays an important role in improving performance both individually and in teams within the organization.

Based on the analysis above, theoretically and empirical evidence carried out in this research shows that work motivation has a direct positive and significant effect on the performance of the personnel of 242 Radar Unit Tanjung Warari.

## CONCLUSION

1. Human resource development strategy has a direct positive and significant effect on the work motivation of the personnel of 242 Radar Unit Tanjung Warari by 0,432.
2. Personnel competence has a direct positive and significant effect on the work motivation of the personnel of 242 Radar Unit Tanjung Warari of 0,450.
3. Human resource development strategy has a direct positive and significant effect on the performance of the personnel of 242 Radar Unit Tanjung Warari by 0,428.
4. Personnel competence has a direct positive and significant effect on the performance of the personnel of 242 Radar Unit Tanjung Warari by 0,262.
5. Work motivation has a direct positive and significant effect on the performance of the personnel of 242 Radar Unit Tanjung Warari by 0,234.

This research has implications for the Radar Unit 242 Tanjung Warari, namely knowing empirical data about the influence of human resource development strategy, personnel competence, and work motivation on the performance of the personnel of 242 Radar Unit Tanjung Warari. Personnel will further improve their work motivation through increasing human resource development strategy, and personnel competence. While improving performance can be sought through increasing human resource development strategy, personnel competence, and work motivation. Through testing the five hypotheses proposed in this research, it shows that: First, the work motivation of the the personnel of 242 Radar Unit Tanjung Warari will be higher, if the human resource development strategy and personnel competence of the personnel increases; Second, the performance of the personnel of 242 Radar Unit Tanjung Warari will be higher, if human resource development strategy increses, personnel competence increses, and work motivation also increses.

## REFERENCE

- Armstrong, M. (2019). *Armstrong's Handbook of Human Resource Management Practice* (15th ed.). Kogan Page.
- Deci, E. L., & Ryan, R. M. (2022). *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. New York: Guilford Press.
- Dessler, G. (2021). *Human Resource Management* (15th ed.). New York: Pearson.
- Dirwan, A. (2021). *Dasar-dasar Metodologi Penelitian*. Jakarta: Pena Persada.
- Fahmi, I. (2020). *Manajemen Sumber Daya Manusia: Teori dan Aplikasi*. Salemba Empat.
- Hasibuan, M. S. (2020). *Manajemen Sumber Daya Manusia*. Jakarta: Bumi Aksara.
- Kondalkar, V.G. (2020). *Organizational Behaviour*. New Delhi: New Age International Publishers.
- Mangkunegara, A.A.A.P. (2021). *Manajemen Sumber Daya Manusia Perusahaan*. Bandung: Remaja Rosdakarya.
- Noe, R. A. (2021). *Employee Training and Development* (7th ed.). McGraw-Hill Education.
- Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2021). *Human Resource Management: Gaining a Competitive Advantage* (9th Edition). New York: McGraw-Hill Education.
- Nurkholis. (2023). *Pengembangan Kompetensi Personel untuk Meningkatkan Kinerja Organisasi*. Jakarta: Erlangga.
- Robbins, S.P., & Judge, T.A. (2021). *Organizational Behavior* (17th ed.). New York: Pearson.
- Sedarmayanti. (2021). *Manajemen Sumber Daya Manusia, Reformasi Birokrasi, dan Manajemen Pegawai Negeri Sipil*. Bandung: Refika Aditama.
- Snell, S., & Bohlander, G. (2021). *Principles of Human Resource Management* (17th ed.). Cengage Learning.



- Sugiyono. (2020). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Sumarwan, A.I. (2020). *Kompetensi Personel dalam Organisasi Modern*. Yogyakarta: Graha Ilmu.
- Sutrisno, E. (2021). *Manajemen Sumber Daya Manusia*. Jakarta: Kencana Prenada Media Group.
- Swaminathan, V. (2020). *Employee Motivation and Organizational Success*. London: Sage Publications.
- Tampubolon, R. (2020). *Motivasi Kerja: Perspektif Psikologi dan Organisasi*. Jakarta: Gramedia Pustaka Utama.
- Umam, K. (2021). *Manajemen Sumber Daya Manusia: Teori, Praktik, dan Strategi SDM di Organisasi*. Yogyakarta: Andi Offset.
- Werner, J. M., & DeSimone, R. L. (2023). *Human Resource Development* (7th ed.). Cengage Learning.
- Wibowo. (2021). *Manajemen Kinerja*. Jakarta: RajaGrafindo Persada.
- Widodo. (2022). *Metodologi Penelitian, Populer & Praktis*. Jakarta: RajaGrafindo Persada.