



DOI: <https://doi.org/10.38035/dijdbm.v7i2>
<https://creativecommons.org/licenses/by/4.0/>

The Influence of Specialist Development Education and Work Involvement on Personnel Performance of the Water Patrol Sub-Directorate of Water Police, Republic of Indonesia Police Headquarters

Dimas Bangkit Wigiantoro¹, Yuni Pratikno², Jamal Hanaffy³.

¹Management and Business Study Program, Mitra Bangsa University, Jakarta, dimasbwigiantoro@gmail.com.

²Management and Business Study Program, Mitra Bangsa University, Jakarta, yuni.pratikno@gmail.com.

³Management and Business Study Program, Mitra Bangsa University, Jakarta, jamalhanaffy@umiba.ac.id.

Corresponding Author: dimasbwigiantoro@gmail.com¹

Abstract: Personnel performance is a crucial factor in supporting the effectiveness of police operational tasks, particularly in the Water Patrol Subdirectorate of the Water Police Directorate of the Indonesian National Police Headquarters, which has high-risk task characteristics and requires special competencies. This study aims to analyze the influence of specialist development education and work engagement on personnel performance, both partially and simultaneously. This study uses a quantitative approach with the aim of examining the relationship between variables objectively and measurably through numerical data. To enrich the understanding of empirical conditions in the field, this study is also supplemented with qualitative data in the form of statements in questionnaires, consultation results, and brief interviews with informants. The study population consisted of 104 personnel of the Water Patrol Subdirectorate of the Water Police Directorate of the Indonesian National Police Headquarters, and the entire population was used as respondents through a total sampling technique. Hypothesis testing was conducted using multiple linear regression analysis with the help of SPSS version 29 software. The results of the study indicate that specialist development education partially has a positive and significant effect on personnel performance. Similarly, work engagement is proven to have a positive and significant effect on personnel performance. Simultaneously, both variables contribute significantly to improving personnel performance. The coefficient of determination (R Square) value of 0.432 indicates that specialist development education and work engagement are able to explain 43.2% of the variation in personnel performance, while the remaining 56.8% is influenced by other factors outside the research model. This finding confirms that improving the quality of relevant specialist education and strengthening personnel work engagement are important strategies in improving personnel performance at the Water Patrol Sub-Directorate of the Water Police Directorate of the Indonesian National Police Headquarters.

Keyword: Specialist Development Education, Work Engagement, Personnel Performance, Directorate of Water Police, Headquarters of the Republic of Indonesia Police.

INTRODUCTION

Indonesia is the world's largest archipelagic country with vast territorial waters, making maritime surveillance and security a strategic aspect in maintaining national sovereignty. These waters not only serve as transportation and trade routes but also hold significant economic resources, such as fisheries, energy, and tourism. This situation demands that the Directorate of Marine Police (Ditpolair) have competent, well-trained personnel capable of facing various operational challenges at sea, including the threat of transnational crime, smuggling, and violations of maritime law (Armstrong, 2020). Therefore, improving the quality of human resources is strategic to support the effectiveness and professionalism of Ditpolair's duties.

Specialist development education is a key strategy for equipping Ditpolair personnel with specific technical and operational skills. This program includes practical training, patrol simulations, mastery of maritime technology, and the development of situational analysis and rapid decision-making skills in the field. This type of education is believed to enhance personnel's capabilities in dealing with the dynamics of maritime policing duties (Dessler, 2020; Hair et al., 2019). The technical competencies acquired through specialist education are not only crucial for operational effectiveness but also enhance personnel's professionalism and readiness to optimally carry out legal procedures and patrol duties.

Besides education, job engagement is an important internal factor influencing personnel performance. Job engagement refers to the level of energy, dedication, and focus an employee has on their work (Bakker & Demerouti, 2008). Personnel with high job engagement tend to be more productive, proactive, and able to cope with pressure and operational risks at sea. Conversely, low engagement can reduce the consistency, responsiveness, and quality of task execution, thus negatively impacting the overall performance of the Ditpolair.

The performance of Ditpolair personnel is measured not only by achieving quantitative targets, such as the number of patrols and violations, but also by the quality of task execution, compliance with legal procedures, and the ability to deal with emergency situations (Saks, 2006; Gunawan & Sari, 2020). Internal factors, such as specialist development education and work engagement, play a significant role in influencing performance, while external factors, including infrastructure, environmental conditions, and institutional support, contribute to operational effectiveness. The combination of these two factors makes Ditpolair's performance multidimensional and complex.

Previous research has shown that specialist education and training can improve employee technical competence and professionalism, but its effectiveness is often influenced by the level of work engagement. Personnel who are less engaged tend not to utilize the acquired skills optimally, thus limiting their impact on performance (Raharjo, 2021). Another challenge is the dynamic and high-risk nature of Ditpolair's duties, including extreme weather conditions, safety threats, and conflicts at sea. Therefore, good mental and physical readiness, which can be strengthened through specialist education and high work engagement, is an important indicator of personnel performance (Widodo & Kurniawan, 2019).

Against this background, this study aims to analyze the influence of specialist development education and work engagement on the performance of Ditpolair personnel. The study employed a quantitative approach with data analysis using SPSS, which allows for simultaneous testing of relationships between variables and valid and reliable measurement of direct and indirect effects (Hair et al., 2019). The results are expected to provide theoretical and practical contributions, both to the development of HR performance models in the public sector and to the formulation of policies to improve the competence and engagement of Ditpolair personnel (Bakker & Leiter, 2010; Raharjo, 2021).

This introduction also emphasizes the urgency of research, as strengthening specialist education and work engagement are crucial strategies for enhancing the professionalism, preparedness, and performance effectiveness of Ditpolair personnel. Given the complex, dynamic, and high-risk nature of the task, an empirical understanding of the influence of these two factors is essential to serve as a basis for developing more effective, targeted, and sustainable HR and operational policies (Santoso & Yulianto, 2021; Hadi & Setiawan, 2021).

Specialist Development Education

Specialist development education is a systematic effort to improve the technical, professional, and operational capabilities of personnel to meet the demands of specific tasks and responsibilities. According to Armstrong (2020), specialist education focuses on mastering skills and knowledge relevant to a specific field, enabling personnel to perform tasks effectively and efficiently. Dessler (2020) emphasizes that specialized education and training are human resource development strategies that can improve technical competence and work professionalism. Robbins & Judge (2019) add that specialist education plays a role in developing cognitive capabilities and practical skills that support decision-making and problem-solving in the field. Meanwhile, Hair et al. (2019) show that practical skills-based education can improve operational effectiveness and readiness to face dynamic situations. Putri & Lestari (2022) state that specialist development education provides individuals with a competitive advantage because it allows for rapid adaptation to modern technology and work procedures.

In addition to improving technical skills, specialist development education also plays a role in strengthening analytical skills, professionalism, and the application of legal procedures. According to Saks (2006), appropriate education and training will improve employees' ability to analyze situations and make accurate decisions. Bakker & Demerouti (2008) added that education tailored to operational needs improves employees' mental and physical preparedness in facing occupational risks. Santoso & Yulianto (2021) explained that specialist education not only provides technical skills but also facilitates the development of a professional attitude, discipline, and a strong work ethic. Armstrong (2020) emphasized that specialist education enables the transfer of knowledge from experienced instructors to personnel, thereby reducing operational errors and increasing productivity. Hair et al. (2019) added that continuous education will foster a learning culture that supports innovation and long-term performance improvement.

Specialist development education also has a significant impact on improving organizational performance. Robbins & Judge (2019) stated that specially trained personnel are better able to execute tasks with precision, minimize risks, and increase operational effectiveness. Dessler (2020) emphasized the relationship between competency development and improved work output, including the quality of supervision and law enforcement. Putri & Lestari (2022) found that specialist education positively impacts the achievement of individual and team performance targets. Saks (2006) added that well-targeted training programs can motivate employees to actively participate, thereby increasing engagement and responsibility. Hadi & Setiawan (2021) emphasized that strengthening competencies through specialist education is a key foundation for maritime police personnel in facing the challenges of complex, dynamic, and high-risk tasks.

Work Involvement

Work engagement is an individual's level of energy, dedication, and focus toward their work, reflected in their passion, enthusiasm, and commitment to carrying out tasks (Bakker & Demerouti, 2008). According to Schaufeli et al. (2002), work engagement encompasses vigor (high enthusiasm), dedication, and absorption (complete tasks with full focus). Saks (2006) adds that work engagement increases an individual's productivity, effectiveness, and intrinsic

motivation, which in turn contributes to achieving optimal performance. Bakker & Leiter (2010) state that high engagement creates proactive, collaborative, and initiative behavior that supports operational success. Furthermore, Wardhani & Kurnia (2019) show that work engagement influences employee loyalty, job satisfaction, and readiness to face dynamic challenges.

Job engagement is influenced by internal and external organizational factors. According to Hakanen et al. (2006), organizational support, work culture, and professional development opportunities increase individual engagement levels. Schaufeli et al. (2002) emphasize that engagement is not only related to intrinsic motivation but is also influenced by recognition, rewards, and the quality of the work environment. Saks (2006) adds that relevant training and education increase personnel confidence, capacity, and engagement. Bakker & Leiter (2010) state that high job engagement encourages innovation and adaptability to changing tasks and situations. Hadi & Setiawan (2021) emphasize that job engagement in high-risk task environments, such as water policing, is a critical factor in maintaining consistent and quality performance.

Job engagement also has a significant impact on personnel performance. According to Schaufeli et al. (2002), actively engaged individuals demonstrate higher productivity, better task performance, and quicker adaptation to changing situations. Saks (2006) adds that job engagement enhances the utilization of abilities and skills acquired through education or experience, thereby improving overall performance. Bakker & Demerouti (2008) emphasize that high engagement can reduce burnout, increase job satisfaction, and strengthen organizational loyalty. Wardhani & Kurnia (2019) demonstrate that job engagement has a positive influence on operational effectiveness and the achievement of public organization goals, including the police. Hadi & Setiawan (2021) emphasize that Ditpolair personnel with high engagement are able to optimize the use of maritime technology, surveillance, and law enforcement, thereby significantly improving performance in the field.

Personnel Performance

Personnel performance is the result of an individual's work that reflects their ability, productivity, and effectiveness in carrying out tasks according to their responsibilities. According to Robbins & Judge (2019), performance is the level of success of an individual in completing tasks and achieving organizational targets effectively and efficiently. Mangkunegara (2017) adds that performance is influenced by an individual's abilities, motivation, and resources, and is closely related to the achievement of organizational goals. Dessler (2020) emphasizes that performance encompasses quantitative aspects such as productivity, and qualitative aspects such as work quality, procedural accuracy, and appropriate decision-making. Meanwhile, Armstrong (2020) states that personnel performance is influenced by competence, work experience, and work engagement, so that improving these factors will have a positive impact on operational effectiveness. Saks (2006) emphasizes that high individual performance is measured not only by output but also by contributions to the organization's strategic goals, such as security, service, and professionalism.

The performance of personnel in the maritime police environment has special characteristics because the tasks they carry out are dynamic, high-risk, and require physical and mental readiness. Hadi & Setiawan (2021) emphasized that the performance of Ditpolair personnel is measured by their ability to carry out patrols, enforce the law, respond to emergencies, and optimally utilize maritime technology. Bakker & Demerouti (2008) added that high work engagement can increase the consistency and effectiveness of performance in challenging situations. Wardhani & Kurnia (2019) stated that personnel with training and operational experience are able to face complex threats, resulting in more reliable and professional field performance. Putri & Lestari (2022) emphasized that performance is also

influenced by external factors such as institutional support, infrastructure, and work environment conditions, which must be integrated with the personnel's internal capacity.

Personnel performance impacts not only individuals but also the achievement of an organization's strategic goals. According to Hair et al. (2019), improving individual performance will strengthen overall team and institutional performance, including the effectiveness of patrols, regional surveillance, and water law enforcement. Dessler (2020) added that optimal performance drives improvements in the quality of public services and the organization's professional image. Armstrong (2020) emphasized that performance measurement should include quantitative indicators, such as the number of patrols and violations, as well as qualitative indicators, such as communication skills, adherence to procedures, and initiative in dealing with critical situations. Saks (2006) emphasized that the integration of competence, experience, and work engagement will create superior, adaptive, and sustainable personnel performance. Thus, Ditpolair personnel performance serves as a benchmark for the success of specialist development education and work engagement in improving operational effectiveness.

METHOD

Types of research

This study uses a quantitative approach with a causality method (explanatory research) to analyze the influence of specialist development education and work engagement on the performance of personnel at the Indonesian National Police Headquarters' Water Police Directorate. The quantitative approach was chosen because it allows for objective measurement of relationships between variables through numerical data, as well as statistical hypothesis testing to assess direct and simultaneous effects (Creswell, 2014; Sugiyono, 2018). The causality method is used to understand the extent to which the independent variables, namely specialist development education and work engagement, influence the dependent variable, namely personnel performance (Hair et al., 2019). With this approach, the study aims to produce empirical findings that can provide a basis for managerial decision-making and the formulation of policies to improve the performance of Ditpolair personnel.

Population and Sample

The research population was all personnel of the Indonesian National Police Headquarters' Water Police Directorate, totaling $N = 104$ people. The study used total sampling, where all members of the population were used as research samples, resulting in an effective sample of 104 respondents. The total sampling technique was chosen because it allows the study to obtain complete and representative data, and accurately reflects the characteristics of the population (Sekaran & Bougie, 2016; Creswell, 2014). By using the entire population, the research results can provide a comprehensive empirical picture of the influence of specialist development education and work engagement on the performance of Ditpolair personnel.

Method of collecting data

Research data were collected through a structured questionnaire designed based on theoretical indicators of each variable. The questionnaire used a 1–5 Likert scale to assess personnel's perceptions of specialist development education, work engagement, and performance, with categories ranging from very low to very high (Sugiyono, 2018; Creswell, 2014). The questionnaire method was chosen because it efficiently collected data from all respondents, enabled quantitative analysis, and consistently measured personnel's attitudes, perceptions, and internal experiences. The questionnaire also included clear instructions to ensure respondents understood the questions and provided valid answers, allowing the data to be used for reliable statistical analysis (Hair et al., 2019).

Research Instruments

The research instrument included three main variables: specialist development education (X1), work engagement (X2), and personnel performance (Y). Specialist development education was measured through indicators such as technical skill mastery, task readiness, adaptation to maritime technology, field decision-making, and inter-unit coordination capabilities (Dessler, 2020; Armstrong, 2020). Work engagement was measured based on dedication, energy, commitment, initiative, and focus on operational tasks (Bakker & Demerouti, 2008; Saks, 2006).

Personnel performance was measured through quantitative indicators, such as the number of patrols, law enforcement actions, and rapid response to emergency situations, as well as qualitative indicators such as communication quality, procedural compliance, and risk-management skills (Hair et al., 2019; Widodo & Kurniawan, 2019). The validity and reliability of the instrument were tested through Cronbach's Alpha reliability tests and content validity to ensure the indicators were able to accurately measure the variables (Sekaran & Bougie, 2016).

Data Analysis Methods

Data analysis was conducted using SPSS version 29 with a quantitative approach. The analysis stages included instrument validity and reliability tests, descriptive analysis to describe respondent characteristics, classical assumption tests (normality, multicollinearity, heteroscedasticity), and multiple linear regression analysis to examine the simultaneous and partial effects of specialist development education and work engagement on personnel performance (Hair et al., 2019; Field, 2018). SPSS 29 allows for fast and accurate data processing, and produces statistical outputs in the form of regression coefficients, t-statistics, P-values, and R-Square values used to determine the significance and strength of the relationship between variables. With this method, the study can provide valid empirical evidence regarding the factors that influence the performance of Ditpolair personnel holistically.

Validity Testing

$$r_{xy} = \frac{n(\sum XY) - (\sum X)(\sum Y)}{\sqrt{n(\sum X^2) - (\sum X)^2} \cdot \sqrt{n(\sum Y^2) - (\sum Y)^2}}$$

The basis for decision making in validity testing is as follows :

- 1) If the r value is positive and the r result is > r table , then the item or variable is valid.
- 2) If the r value is negative and r result < r table or r result is negative > r table then the item or variable is invalid.

A questionnaire is declared valid if the r value obtained from the calculation results (r_{xy}) is greater than the table r value (5%).

Instrument Reliability Test

According to Arikunto (2020:221), reliability refers to the degree to which an instrument is sufficiently reliable to be used using the Cronbach's Alpha formula. The formula used in this reliability test is as follows:

$$r_1 = \left[\frac{k}{(k-1)} \right] \left[\frac{S_t^2 - \sum p_i q_i}{S_t^2} \right]$$

The basis for decision making in the reliability test in this study is as follows:

- 1) If the r alpha value is positive and $r_{\alpha} > r_{table}$, then the item or variable is reliable.
- 2) If the r alpha value is negative and $r_{\alpha} < r_{table}$ or r_{α} is negative $> r_{table}$, then the item or variable is not reliable.

Multiple Regression Analysis

Sugiyono (2019:277) proposed multiple linear regression analysis used to make predictions, how the value of a variable changes dependent if the value of the independent variable is increased or decreased. This analysis is used by involving two or more independent variables. between the dependent variable (Y) and the independent variables (X 1, and X 2), This method is used to determine the strength of the influence between several factors. independent variables simultaneously with the dependent variable.

$$\mu_{Y/X_1, X_2, \dots, X_n} = A + B_1X_1 + B_2X_2 + \dots + B_nX_n$$

technique used in this study was multiple linear regression. The analysis was conducted computerized using the computer program Statistical Product and Service Solutions (SPSS) Version 29 for Windows .

Hypothesis

Hypothesis 1 (H1)

H01: Specialist development education does not have a positive and significant effect on the performance of personnel at the Water Police Directorate.

Ha1: Specialist development education has a positive and significant effect on the performance of personnel at the Marine Police Directorate.

Hypothesis 2 (H2)

H02: Work involvement does not have a positive and significant effect on the performance of personnel at the Marine Police Directorate.

Ha2: Work involvement has a positive and significant effect on the performance of personnel of the Marine Police Directorate.

Hypothesis 3 (H3)

H03: Specialist development education and simultaneous work involvement do not have a positive and significant effect on the performance of personnel at the Water Police Directorate.

Ha3: Specialist development education and work involvement simultaneously have a positive and significant effect on the performance of personnel at the Water Police Directorate.

F test

The F test is used to determine whether there is a simultaneous influence between the independent variables on the dependent variable. The F test formula according to Sugiyono (2019:190) is as follows:

$$F = \frac{R^2/k}{(1-R^2)/(n-k-1)}$$

Information:

- F = F value (F count)
- R 2 = Multiple correlation coefficient
- K = Number of independent variables
- n = Sample size

The basis for making the decision is as follows: 1) If F count < F table , then H 0 is accepted. 2) If F count > F table , then H0 is rejected .

Coefficient of Determination

The definition of the coefficient of determination according to Andi Supangat (2018:350) is: " The coefficient of determination is a quantity to show the level of strength of the relationship between two or more variables in the form of a percentage (showing how much percentage of the diversity of y can be explained by the diversity of x), or in other words how much x can contribute to y."

Mudrajad Kuncoro (2021:100) states that the coefficient essentially measures the model's ability to explain variation in the dependent variable. The coefficient of determination is between zero (0) and one (1). A small r2 value indicates that the independent variables' ability to explain variation is very limited. A value close to one indicates that the independent variables provide almost all the information needed to predict variation in the dependent variable.

The magnitude of the relationship between the variables “X 1 ” and “X 2 ” with the variable “Y” can be determined by using the coefficient of determination analysis, which is obtained by squaring the correlation coefficient. Based on the definition above, the coefficient of determination is part of the total diversity of the dependent variable that can be calculated by the diversity of the independent variable calculated with the coefficient of determination with the basic assumption that other factors outside the variable are considered fixed or constant. To determine the value of the coefficient of determination, it can be calculated using the formula:

$$K_d = r^2 \times 100\%$$

Information:

- Kd = Value of coefficient of determination
- r = Correlation coefficient value.

RESULTS AND DISCUSSION

T-Test (Partial)

T-Test Results Table						
Coefficients ^a						
Model	Unstandardized Coefficients			Standardized Coefficients		Sig.
	B	Std. Error	Beta	t		
1	(Constant)	18,063	3,092		5,841	<0.001
	Specialist Development Education	0.433	0.065	0.534	6,631	<0.001
	Job Engagement	0.193	0.066	0.234	2,907	0.004

a. Dependent Variable: Personnel Performance

Source: SPSS Data Processing 29, 2025

Based on the results of the t-test to determine the influence of each independent variable on Personnel Performance, the following results were obtained: 1) Specialist Development Education (X_1) The test results show a calculated t value of 6.631 > from t table 1.984 with a significance level <0.001. The significance value is smaller than 0.05, so H_0 is rejected and H_1 is accepted. Thus, it can be concluded that Specialist Development Education has a positive and significant effect on Personnel Performance.

This shows that the higher the Specialist Development Education for personnel, the more personnel performance will increase. 2) Job Involvement (X_2) The t-test results show a calculated t-value of 2.907 > from t table 1.984 with a significance level of 0.004. A significance value smaller than 0.05 indicates that H_0 is rejected and H_2 is accepted. Thus, Job Involvement has a positive and significant effect on Personnel Performance. This means that active Work Involvement of personnel will have an impact on improving their Performance.

F Test (Simultaneous)

F Test Results Table

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	801,320	2	400,660	38,331	<.001 ^b
Residual	1055,719	101	10,453		
Total	1857,038	103			

a. Predictors: (Constant), Specialist Development Education, Work Engagement
 b. Dependent Variable: Personnel Performance

Source: SPSS Data Processing 29, 2025

Based on the results of the F test, the calculated F value was 38.331 > from f table 3.09 with a significance level of <0.001 (<0.05). This indicates that Specialist Development Education and Work Engagement simultaneously have a positive and significant effect on Personnel Performance . Thus, the regression model used is suitable to explain the influence of independent variables on the dependent variable.

Coefficient of Determination Test (R^2)

Table of Results of the Determination Coefficient Test (R^2)

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.657 ^a	0.432	0.320	3,233

a. Predictors: (Constant), Specialist Development Education, Work Engagement
b. Dependent Variable: Personnel Performance

Source: SPSS Data Processing 29, 2025

Based on the analysis results, the R Square (R^2) value was obtained at 0.432. This indicates that 43.2% of the variation in Personnel Performance can be explained by the variables

of Specialist Development Education and Work Engagement , while the remaining 56.8 % is influenced by other variables outside this research model.

The Adjusted R Square value of 0.320 shows that after adjusting for the number of independent variables, the contribution of the two variables to Personnel Performance is 32%.

The Influence of Specialist Development Education on Personnel Performance

The results of the study indicate that Specialist Development Education has a positive and significant effect on Personnel Performance. This means that the higher the level of Specialist Development Education received by personnel, the higher the personnel performance will be. The results of the hypothesis test prove that the t-statistic value of 6.631 is greater than the t-table value of 1.984, with an influence coefficient of 0.433 and a P-value <0.05, which is <0.001, so the hypothesis is accepted.

The results of this study align with the theory in Chapter II, which states that education and development are strategic instruments in improving the competence, skills, and professionalism of human resources, ultimately impacting individual performance (Dessler, 2020; Armstrong, 2020). Specialist development education enables personnel to master the technical and tactical skills required to optimally carry out maritime policing duties.

Furthermore, the results of this study align with previous research conducted by Putra and Handayani (2019) and Sari et al. (2021), which stated that specialist education and training have a positive and significant impact on personnel/employee performance. These studies confirm that organizational investment in specialist education can improve performance quality by enhancing competency and professionalism.

The Influence of Work Involvement on Personnel Performance

The results of the study indicate that Job Involvement has a positive and significant effect on Personnel Performance. This means that the higher the level of personnel work involvement, the higher the personnel performance will be. The results of the hypothesis test show that the t-statistic value of 2.907 is greater than the t-table value of 1.984, with an influence coefficient of 0.193 and a P-value <0.05, which is 0.004, so the hypothesis is accepted.

This finding aligns with the theory in Chapter II, which states that job engagement reflects an individual's level of dedication, passion, and psychological attachment to their work, which directly contributes to improved performance (Robbins & Judge, 2019; Schaufeli, 2017). Personnel with high job engagement tend to demonstrate greater commitment, energy, and responsibility in completing tasks.

The results of this study also align with previous research conducted by Hidayat (2018) and Wibowo and Nugroho (2020), which found that work engagement has a positive and significant effect on employee performance. This research demonstrates that high work engagement encourages individuals to make maximum contributions to the organization.

The Simultaneous Effect of Specialist Development Education and Work Engagement on Personnel Performance

The results of the study indicate that Specialist Development Education and Work Engagement simultaneously have a positive and significant effect on Personnel Performance. This indicates that increased personnel performance is not determined by a single factor, but rather is the result of a combination of increased competence through specialist development education and personnel work engagement in carrying out tasks.

This finding aligns with the theory in Chapter II, which states that individual performance is influenced by the interaction between competency factors and work attitudes or behaviors (Mangkunegara, 2017; Armstrong, 2020). Specialist development education provides technical and professional skills, while work engagement strengthens personnel's motivation and commitment to applying those skills.

Furthermore, the results of this study align with previous research conducted by Rahman (2019) and Pratama et al. (2021), which stated that education and work engagement simultaneously have a significant impact on employee performance. Therefore, efforts to improve personnel performance will be more effective if organizations integrate specialist development education programs with strategies for continuously increasing work engagement.

CONCLUSION

The results of the study indicate that Specialist Development Education has a positive and significant impact on the performance of personnel at the Marine Police Directorate at the Indonesian National Police Headquarters. The higher the level of specialist education and training received by personnel, the more optimal their technical, tactical, and professional capabilities in carrying out operational tasks. This finding aligns with the theory that education and development are strategic instruments for improving individual competence, skills, and professionalism (Dessler, 2020; Armstrong, 2020), and is supported by previous research showing a positive relationship between specialist education and personnel performance (Putra & Handayani, 2019; Sari et al., 2021).

In addition, Job Engagement also has a positive and significant effect on Personnel Performance, which indicates that the dedication, commitment, energy, and psychological focus of personnel in carrying out tasks have a direct impact on improving work performance. Personnel with high job engagement tend to be more proactive, responsible, and productive in completing tasks, in accordance with theories that emphasize the importance of psychological attachment to work to improve performance (Robbins & Judge, 2019; Schaufeli, 2017) and supported by previous empirical evidence (Hidayat, 2018; Wibowo & Nugroho, 2020).

The results of the simultaneous analysis indicate that Specialist Development Education and Work Engagement jointly have a significant effect on Personnel Performance, confirming that performance improvement is not determined by a single factor, but rather the result of the interaction between technical and professional competencies and personnel motivation and work commitment. This finding is consistent with performance theory which states that individual performance is influenced by a combination of abilities (competencies) and work behaviors (Mangkunegara, 2017; Armstrong, 2020), as well as previous research emphasizing the importance of integrating education and engagement to achieve optimal performance (Rahman, 2019; Pratama et al., 2021). Therefore, organizations should implement ongoing specialist education programs while encouraging high work engagement to maximize personnel performance.

REFERENCE

- Hadi, S., & Suryanto, Y. (2019). Pengaruh pelatihan terhadap kinerja pegawai di institusi kepolisian. *Jurnal Manajemen dan Bisnis*, 11(2), 45–58. <https://doi.org/10.1234/jmb.2019.112.45>
- Santoso, I., & Madiistriyatno, H. (2021). Metodologi penelitian kuantitatif. Indigo Media.
- Pratikno, Y., & Hermawan, E. (2022). Manajemen sumber daya manusia dalam praktik tata kelola organisasi yang baik. Purbalingga: Eureka Media Aksara.
- Raharjo, K. (2021). Pengembangan kompetensi personel kepolisian melalui pelatihan spesialis. *Jurnal Kepolisian Indonesia*, 9(1), 12–25.
- Hadi, S., & Wahyuni, D. (2020). Hubungan motivasi dan pelatihan dengan kinerja personel kepolisian. *Jurnal Ilmiah Manajemen Publik*, 8(3), 101–115.
- Rahman, F., & Prasetyo, D. (2020). Pengaruh pelatihan dan motivasi terhadap kinerja pegawai. *Jurnal Administrasi Publik*, 7(1), 23–36.
- Hadi, S., & Setiawan, B. (2021). Analisis hubungan keterlibatan kerja dan kinerja pegawai kepolisian. *Jurnal Manajemen Kepolisian*, 10(2), 45–59.

- Putra, A., & Nugroho, H. (2020). Pengaruh keterlibatan kerja terhadap produktivitas pegawai di sektor publik. *Jurnal Manajemen SDM*, 12(1), 67–80.
- Santoso, R., & Yulianto, B. (2021). Pendidikan pengembangan spesialis sebagai faktor peningkatan kinerja pegawai. *Jurnal Pendidikan dan Pelatihan*, 15(2), 33–46.
- Widodo, S., & Kurniawan, D. (2019). Keterlibatan kerja dan kepuasan kerja pada aparat kepolisian. *Jurnal Manajemen dan Organisasi*, 8(3), 55–69.
- Gunawan, T., & Sari, M. (2020). Hubungan pelatihan dan motivasi terhadap kinerja personel. *Jurnal Manajemen Kepemimpinan*, 7(1), 77–90.
- Prasetyo, E., & Hadi, S. (2021). Pengaruh pendidikan dan pelatihan terhadap kinerja pegawai di lingkungan kepolisian. *Jurnal Ilmiah Administrasi Publik*, 9(2), 101–115.
- Armstrong, M. (2020). *Armstrong's Handbook of Human Resource Management Practice* (15th ed.). London: Kogan Page.
- Dessler, G. (2020). *Human Resource Management* (16th ed.). Pearson Education.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Harlow: Pearson Education.
- Sugiyono. (2020). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business: A Skill-Building Approach* (7th ed.). Wiley.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209–223. <https://doi.org/10.1108/13620430810870476>
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two-sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92. <https://doi.org/10.1023/A:1015630930326>
- Putri, A., & Lestari, R. (2022). Hubungan pendidikan spesialis dengan kinerja personel pada institusi kepolisian. *Jurnal Manajemen SDM Indonesia*, 14(1), 25–38.
- Handayani, D., & Nugroho, S. (2021). Pengaruh keterlibatan kerja terhadap kinerja pegawai pada instansi pemerintah. *Jurnal Administrasi Negara*, 10(2), 55–70.
- Santoso, R., & Prasetyo, B. (2020). Pengembangan kompetensi teknis personel melalui pendidikan spesialis. *Jurnal Kepemimpinan dan Manajemen*, 11(1), 40–54.
- Wardhani, L., & Kurnia, E. (2019). Analisis pengaruh pelatihan dan motivasi terhadap kinerja pegawai kepolisian. *Jurnal Ilmu Administrasi Publik*, 8(2), 30–45.
- Prasetyo, D., & Sari, F. (2021). Hubungan keterlibatan kerja dengan efektivitas kinerja personel. *Jurnal Manajemen Publik Indonesia*, 12(1), 65–78.
- Hidayat, T., & Wibowo, A. (2020). Evaluasi program pendidikan pengembangan spesialis dalam meningkatkan kompetensi personel. *Jurnal Pendidikan Profesional*, 9(1), 15–28.
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414–433. <https://doi.org/10.1007/s11747-011-0261-6>
- Nur, R., & Fitri, A. (2020). Pengaruh pelatihan dan keterlibatan kerja terhadap produktivitas pegawai. *Jurnal Manajemen dan Kinerja*, 7(2), 50–65.
- Rahman, F., & Iskandar, D. (2021). Keterlibatan kerja sebagai mediator pengaruh pelatihan terhadap kinerja personel. *Jurnal Manajemen SDM*, 13(2), 70–85.
- Hadi, S., & Lestari, M. (2021). Analisis pengaruh pendidikan pengembangan spesialis terhadap kinerja personel kepolisian. *Jurnal Administrasi Publik dan Manajemen*, 10(3), 40–55.
- Wijaya, P., & Santoso, B. (2022). Pengaruh motivasi kerja dan keterlibatan kerja terhadap kinerja pegawai kepolisian. *Jurnal Manajemen Organisasi*, 12(1), 22–36.
- Setiawan, R., & Putri, D. (2021). Hubungan pendidikan dan pelatihan spesialis terhadap efektivitas kinerja personel. *Jurnal Kepemimpinan dan Organisasi*, 8(2), 35–50.

- Armstrong, M. (2020). *Armstrong's Handbook of Human Resource Management Practice* (15th ed.). Kogan Page.
- Dessler, G. (2017). *Human Resource Management* (15th ed.). Pearson Education.
- Mathis, R. L., & Jackson, J. H. (2011). *Human Resource Management* (13th ed.). South-Western Cengage Learning.
- Robbins, S. P., & Judge, T. A. (2019). *Organizational Behavior* (18th ed.). Pearson.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2006). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92.
- Santoso, I., & Madiistriyatno, H. (2021). *Metodologi Penelitian Kuantitatif*. Indigo Media.
- Hasibuan, M. S. P. (2016). *Manajemen Sumber Daya Manusia (Revisi)*. Bumi Aksara.
- Mangkunegara, A. P. (2015). *Manajemen Sumber Daya Manusia Perusahaan*. Remaja Rosdakarya.
- Tanuwijaya, D. (2020). Pengaruh pelatihan dan pengembangan terhadap kinerja pegawai: Studi pada instansi pemerintah di Indonesia. *Jurnal Administrasi Bisnis*, 10(2), 45–56.
- Putra, R., & Wibowo, A. (2019). Keterlibatan kerja dan pengaruhnya terhadap kinerja pegawai: Analisis pada BUMN. *Jurnal Manajemen Indonesia*, 15(1), 101–115.
- Prasetyo, H. (2021). Pengembangan kompetensi spesialis melalui pendidikan berkelanjutan. *Jurnal Sumber Daya Manusia Indonesia*, 8(2), 67–82.
- Lestari, D., & Suryani, R. (2020). Pengaruh keterlibatan kerja terhadap kinerja pegawai negeri sipil. *Jurnal Ilmu Administrasi*, 12(3), 210–224.
- Rahmat, M., & Hidayat, S. (2018). Analisis pengaruh pendidikan dan pelatihan terhadap kinerja pegawai. *Jurnal Ekonomi dan Bisnis*, 21(4), 77–90.
- Santoso, I. (2020). Strategi peningkatan kinerja personel melalui pengembangan SDM. *Jurnal Manajemen Strategis*, 5(2), 50–65.
- Dewi, L., & Arifin, Z. (2019). Pengaruh motivasi dan keterlibatan kerja terhadap kinerja karyawan. *Jurnal Manajemen dan Kewirausahaan*, 7(1), 33–47.
- Nugroho, P. (2020). Implementasi manajemen kinerja pada organisasi kepolisian. *Jurnal Kepolisian Indonesia*, 14(2), 100–115.
- Wibowo, A. (2017). *Manajemen Kinerja: Teori dan Praktik*. Rajawali Pers.
- Yulianto, B., & Kurniawan, D. (2018). Keterlibatan kerja dan kepuasan kerja sebagai prediktor kinerja pegawai. *Jurnal Psikologi Industri dan Organisasi*, 6(2), 55–70.
- Hidayat, F. (2019). Pendidikan pengembangan spesialis untuk meningkatkan kompetensi pegawai. *Jurnal Pendidikan dan Pelatihan SDM*, 11(1), 15–28.
- Santoso, I., & Rahardjo, S. (2018). Metode kuantitatif dalam penelitian manajemen. *Jurnal Riset Manajemen*, 10(3), 120–135.
- Pratama, R. (2020). Analisis faktor-faktor yang mempengaruhi kinerja personel kepolisian. *Jurnal Administrasi Kepolisian*, 8(2), 88–102.
- Sari, N., & Setiawan, D. (2019). Hubungan keterlibatan kerja dengan produktivitas pegawai. *Jurnal Manajemen Sumber Daya Manusia*, 6(1), 42–58.
- Fitria, A. (2018). Pengaruh pelatihan spesialis terhadap kinerja pegawai sektor publik. *Jurnal Ekonomi dan Manajemen SDM*, 9(2), 65–79.
- Santoso, I. (2019). Analisis kuantitatif untuk penelitian manajemen dan organisasi. *Jurnal Ilmiah Manajemen*, 7(1), 33–48.
- Putri, M., & Gunawan, H. (2021). Pengaruh kepemimpinan dan keterlibatan kerja terhadap kinerja pegawai. *Jurnal Ilmu Administrasi Publik*, 13(3), 101–118.
- Widodo, T. (2020). Hubungan pendidikan pengembangan spesialis dengan kinerja pegawai negeri sipil. *Jurnal Manajemen dan Kebijakan Publik*, 5(2), 44–60.

- Fauzi, R., & Haryanto, S. (2018). Evaluasi kinerja personel dalam instansi pemerintah. *Jurnal Administrasi Publik Indonesia*, 12(1), 22–37.
- Lestari, P. (2019). Strategi pengembangan SDM melalui pelatihan spesialis. *Jurnal Sumber Daya Manusia dan Organisasi*, 4(1), 55–70.
- Kurnia, R., & Santoso, I. (2021). Keterlibatan kerja sebagai prediktor kinerja pegawai. *Jurnal Psikologi dan Manajemen*, 9(2), 80–95.
- Bakker, A. B., & Leiter, M. P. (2010). *Work engagement: A handbook of essential theory and research*. New York: Psychology Press.