

## **Linking Training And Intellectual Intelligence To Employee Performance: The Role Of Work Commitment**

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### **Abstract**

This study examines the influence of training and intellectual intelligence on the performance of personnel at the Southeast Sulawesi Regional Police's Directorate of Special Criminal Investigation (Ditreskrimsus) and assesses work commitment as a moderating variable in both relationships. Researchers used a quantitative approach with an explanatory design and collected data through a survey of one hundred and twenty-five personnel who met the research criteria. Researchers used a closed-ended questionnaire compiled from indicators from previous studies, then adapted it to the context of law enforcement organizations so that each statement was relevant to the respondents' work situations. Researchers measured responses using a five-point Likert scale from strongly disagree to strongly agree. Researchers analyzed the data using SEM PLS with SmartPLS through measurement of evaluation models to ensure the validity and reliability of indicators, then evaluated the structural model to test the strength and significance of the relationships between variables. The results of the analysis showed improved training performance, so that improved training quality was related to improvements in work methods, procedural accuracy, and consistency of task implementation. Intellectual intelligence also improved performance and made the largest contribution, so that the ability to understand information, analyze situations, and make work decisions became important determinants of the quality of results. Moderation testing showed that work commitment strengthened the influence of training on performance, because highly committed personnel were more disciplined in applying training materials in their daily work. Work commitment also strengthens the influence of intellectual intelligence on performance, as it encourages the use of optimal thinking skills to complete tasks and maintain work standards.

**Keywords:** Training, Intellectual Intelligence, Work Commitment, Performance

### **Abstrak**

Penelitian ini menguji pengaruh pelatihan dan kecerdasan intelektual terhadap kinerja personil Ditreskrimsus Polda Sultra, serta menilai komitmen kerja sebagai variabel moderasi pada kedua hubungan tersebut. Peneliti memakai pendekatan kuantitatif dengan desain eksplanatori dan mengumpulkan data melalui survei pada seratus dua puluh lima personil yang memenuhi kriteria penelitian. Peneliti menggunakan kuesioner tertutup yang disusun dari indikator penelitian terdahulu, lalu menyesuaikannya dengan konteks organisasi penegak hukum agar setiap pernyataan relevan dengan situasi kerja responden. Peneliti mengukur jawaban menggunakan skala Likert lima poin dari sangat tidak setuju sampai sangat setuju. Peneliti menganalisis data menggunakan SEM PLS dengan SmartPLS melalui evaluasi model pengukuran untuk memastikan validitas dan reliabilitas indikator, lalu evaluasi model struktural untuk menguji kekuatan dan signifikansi hubungan antar variabel. Hasil analisis menunjukkan pelatihan meningkatkan kinerja, sehingga peningkatan kualitas pelatihan berhubungan dengan perbaikan cara kerja, ketepatan prosedur, dan konsistensi pelaksanaan tugas. Kecerdasan intelektual juga meningkatkan kinerja dan memberi kontribusi paling besar, sehingga kemampuan memahami informasi, menganalisis situasi, dan mengambil keputusan kerja menjadi penentu penting kualitas hasil. Pengujian moderasi menunjukkan komitmen kerja memperkuat pengaruh pelatihan terhadap kinerja, karena personil yang berkomitmen tinggi lebih disiplin menerapkan materi pelatihan dalam pekerjaan harian. Komitmen kerja juga memperkuat pengaruh kecerdasan intelektual terhadap kinerja, karena komitmen mendorong pemakaian kemampuan berpikir secara maksimal untuk menyelesaikan tugas sampai tuntas dan menjaga standar kerja.

**Keywords:** Pelatihan, Kecerdasan Intelektual, Komitmen Kerja, Kinerja

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## **INTRODUCTION**

The complexity of law enforcement organizations' tasks, particularly in addressing increasingly sophisticated specialized crimes, makes improving personnel performance a crucial agenda. One key strategy for improving performance is through structured training and developing cognitive capacities, such as intellectual intelligence. Both approaches have been proven to increase individual effectiveness in facing high work demands. However, training and intelligence alone do not always guarantee successful performance; another factor plays a crucial role in strengthening their effects: work commitment. Work commitment serves as an internal driver that enables an individual to optimize the benefits of their training and intelligence.

The urgency of this research is further strengthened by the dynamics of public organizations such as the police, where accountability and operational effectiveness are key demands. The personnel of the Southeast Sulawesi Regional Police's Directorate of Special Crimes, as the subjects of this research, are in a strategic position in handling specialized crimes that demand speed, precision, and critical thinking skills. Therefore, examining the influence of training and intellectual intelligence on performance, as well as the moderating role of work commitment, is crucial in the context of improving the quality of professional and adaptive police human resources.

Training plays a fundamental role in developing employees' technical and non-technical skills and fostering a productive organizational culture. Yusnita et al. (2018) demonstrated that professional training significantly improves competency and performance. Training also strengthens Organizational Citizenship Behavior (OCB), or voluntary work behavior, which drives organizational success (Huang, 2020). Combs et al. (2006) conducted a meta-analysis that found that high-performance work practices, including comprehensive training, significantly improve organizational performance. Thus, training is not merely a transfer of knowledge but also a strategic tool for fostering loyalty and a spirit of contribution.

Intellectual intelligence, particularly encompassing emotional and cultural intelligence, is increasingly recognized as a crucial determinant of improved work performance. Opatha & Takahashi (2024) stated that emotional intelligence strengthens the effectiveness of communication and leadership, which impacts performance. Miao et al. (2018) demonstrated that high EI in leaders can improve subordinate performance and OCB. This finding is reinforced by Hasan et al. (2024) and Widayati et al. (2020), who confirmed that EI correlates with improved performance and positive work attitudes. Alifuddin & Widodo (2022) even underscored the importance of cultural intelligence in building productivity in diverse environments. Therefore, intellectual intelligence is a crucial dimension in performance improvement strategies through strengthening OCB and work adaptability.

Although the literature has demonstrated a positive relationship between training and performance, as well as between intellectual intelligence and performance, most research focuses solely on the direct effects between these variables. The limited research that incorporates the moderating role

of work commitment in this relationship indicates a theoretical gap that needs to be addressed. Previous studies have often assumed that work commitment is merely a mediating variable or even an independent variable, rather than a strengthening or weakening factor in the relationship between training or intelligence and performance (Guan & Frenkel, 2019; Wright & Bonett, 2002).

Several general solutions have been proposed by previous researchers, such as combining training with transformational leadership (Sungu et al., 2019) or with work motivation (Amir et al., 2023). However, these approaches do not fully explain when and how training or intelligence become more effective in improving performance, especially in the context of public institutions. Therefore, studies that incorporate work commitment as a moderating factor are needed to more comprehensively explain these dynamics.

To address this gap, this study develops a model incorporating work commitment as a moderating variable for the influence of training and intellectual intelligence on performance. Previous research has shown that training is more effective when work commitment is high (Noor et al., 2023; Doan et al., 2024). This approach will empirically answer the question of whether training and intellectual intelligence can truly improve performance if not supported by strong employee commitment. Furthermore, this study also addresses the practical question of how organizations can maximize investments in training and cognitive capacity development. Based on the findings of Dowansiba et al. (2025), it was found that the combination of intellectual intelligence and organizational commitment significantly improves employee performance. Therefore, this framework not only explains the relationship between these variables but also provides practical guidance for law enforcement management in designing more effective HR strategies.

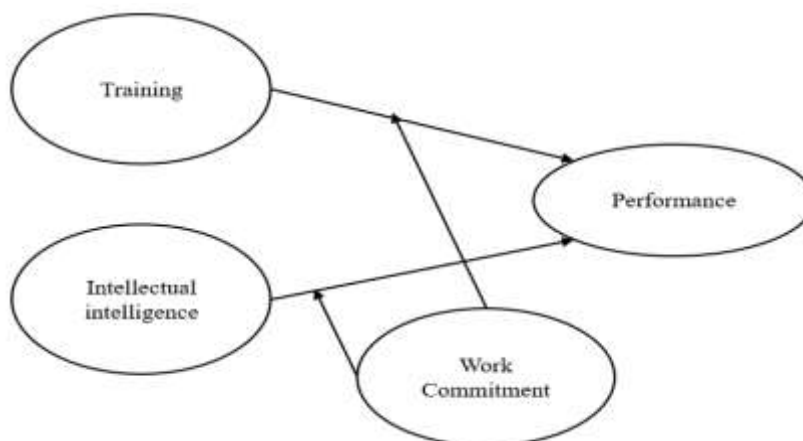
This research was conducted on personnel from the Special Criminal Investigation Directorate (Ditreskrim) of the Southeast Sulawesi Regional Police (Polda Sultra). This unit handles complex, specialized criminal cases, such as corruption, cybercrime, and economic crimes, which require technical capabilities and high levels of intelligence in decision-making. Therefore, improving the performance of Ditreskrim personnel is largely determined by the effectiveness of training, intellectual intelligence, and internal motivation in the form of work commitment. Research in this context will provide specific insights that have not been widely uncovered by previous studies on the police force in eastern Indonesia.

This study aims to analyze the effect of training on the performance of Ditreskrim personnel at the Southeast Sulawesi Regional Police and examine how intellectual intelligence plays a role in influencing this performance. Furthermore, this study aims to explore the role of work commitment as a moderating variable that can strengthen or weaken the influence of training and intellectual intelligence on performance. The contributions of this study cover three main aspects: theoretically, this study fills a gap in the literature regarding the moderating role of work commitment in the relationship between training and intelligence and performance; practically, the results provide an empirical basis for HR management in designing personnel training and development within the police force; and

contextually, this study offers data-based insights from the Southeast Sulawesi region that can be used as a reference in formulating performance improvement policies in similar regions.

## **METHODS**

This study applied a quantitative approach with an explanatory design to examine the effect of training and intellectual intelligence on the performance of personnel at the Southeast Sulawesi Regional Police's Special Criminal Investigation Directorate (Ditreskrimsus Polda Sultra), and to assess the role of work commitment as a moderating variable in both relationships. The researchers selected a sample of 125 personnel who met the research criteria and then collected data through a survey using a closed-ended questionnaire. The researchers measured all items using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) to capture respondents' perceptions measurably. The researchers analyzed the data using SEM PLS because this method tests the relationship between latent variables simultaneously, still works well on data that does not require strict normality, and is suitable for models with relatively few indicators and relationship structures that contain moderating effects. The researchers conducted the analysis with SmartPLS through an outer model evaluation to ensure the validity and reliability of the indicators, then an inner model evaluation to test the strength and significance of the direct influence pathways of training and intellectual intelligence on performance, while also testing whether work commitment strengthens or weakens these influences according to the research hypothesis.



**Figure1.** Research framework

## **RESULTS AND DISCUSSION**

### ***Results***

Respondents in this study amounted to 125 personnel of the Directorate of Special Criminal Investigation of the Southeast Sulawesi Regional Police who filled out a questionnaire to measure training, intellectual intelligence, work commitment, and performance. Based on age, the majority of respondents were in the 31 to 37 year group at 38.40%, followed by the 38 to 44 year group at 30.40%, then the 24 to 30 year group at 22.40%, and the smallest proportion was in the 45 to 51 year group at

8.80%. Based on gender, respondents were predominantly male at 79.20%, while female at 20.80%, so the sample composition reflects the personnel structure of the work unit. Based on education level, the most respondents had a bachelor's degree at 61.60%, followed by a master's degree at 21.60%, and high school or equivalent at 16.80%, which indicates that most respondents have an educational background that supports the demands of work analysis and accuracy. In terms of length of service, the majority of respondents were in the range of 6 to 10 years at 34.40%, followed by 11 to 15 years at 27.20%, then 1 to 5 years at 25.60%, and more than 15 years at 12.80%.

**Table 1.** Measurement items and Constructs

<b>Variables</b>	<b>Item s</b>	<b>Loadin g</b>	<b>Cronbach's alpha</b>	<b>Composite reliability</b>	<b>Average variance extracted</b>
Work Commitment	M.1	0,925	0,930	0,944	0,826
	M.2	0,911			
	M.4	0,884			
	M.5	0,915			
	X1.1	0,943			
Training	X1.2	0,916	0,942	0,943	0,852
	X1.3	0,917			
	X1.4	0,915			
	Y.1	0,937			
Performance	Y.2	0,925	0,962	0,963	0,867
	Y.3	0,907			
	Y.4	0,945			
	Y.5	0,941			
	X2.1	0,918			
Intellectual intelligence	X2.2	0,957	0,956	0,957	0,882
	X2.3	0,937			
	X2.4	0,945			

Table 1 presents the quality of measurement items and constructs for work commitment, training, performance, and intellectual intelligence, allowing you to determine whether the indicators consistently measure the variables. All items exhibit high loading values ranging from 0.884 to 0.957, indicating that each indicator is strongly linked to its construct and worthy of being retained in the measurement model. For work commitment, indicators M1, M2, M4, and M5 have loadings ranging from 0.884 to 0.925, with a Cronbach's alpha of 0.930, a composite reliability of 0.944, and an AVE of 0.826, indicating good internal consistency and that more of the indicator variance is explained by the construct than by error. For training, indicators X1.1 to X1.4 have loadings ranging from 0.915 to 0.943, with a Cronbach's alpha of 0.942, a composite reliability of 0.943, and an AVE of 0.852, indicating that the training measurement is stable and meets convergent validity. In performance, indicators Y.1 to Y.5 have loadings of 0.907 to 0.945, with a Cronbach's alpha of 0.962 and a composite reliability of 0.963, and an AVE of 0.867, so that the measured performance construct is the most consistent and uniform among the tested variables. In intellectual intelligence, indicators X2.1 to X2.4 have loadings of 0.918 to 0.957, supported by a Cronbach's alpha of 0.956 and a composite reliability of 0.957, and an AVE of

0.882, so that intellectual intelligence is also measured as strong and reliable. Overall, high reliability values and AVEs that exceed the general limit indicate that the instrument meets the requirements to continue testing structural relationships at the next stage.

**Table 2.** Discriminant Validity

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Work Commitment	0,909			
Performance	0,370	0,923		
Intellectual intelligence	0,340	0,761	0,931	
Training	0,408	0,807	0,802	0,939

Table 2 presents the results of the discriminant validity test to ensure that work commitment, performance, intellectual intelligence, and training are measured as distinct constructs and do not overlap. The values on the diagonal represent the square root of the AVE, which is 0.909 for work commitment, 0.923 for performance, 0.931 for intellectual intelligence, and 0.939 for training. All diagonal values are higher than the correlations between constructs in the same row and column, thus meeting the Fornell-Larcker criteria and indicating that each variable has clear measurement boundaries. Work commitment has a correlation of 0.370 with performance, 0.340 with intellectual intelligence, and 0.408 with training, all of which are well below 0.909, indicating that work commitment is not mixed with other constructs. Performance correlates 0.761 with intellectual intelligence and 0.807 with training, indicating a strong relationship between the two, but still lower than the square root of the AVE of performance of 0.923, so performance remains a stand-alone construct. Intellectual intelligence also correlated with training at 0.802, but this value remained below the square root of their respective AVEs, which were 0.931 and 0.939, indicating that the two constructs were not measuring the same thing. These results indicate that the instrument was able to differentiate the four constructs well, allowing further testing of the structural model without the problem of overlap between variables.

**Table 3.** R-Square

	<b>R-square</b>
Performance	0,651

Table 3 displays the R-square value for the endogenous performance variable. An R-square value of 0.651 indicates that the model explains 65.1% of the variation in respondent performance through all the predictor variables included in the model, including the direct effects and interaction effects tested. This means that performance changes largely follow the relationship pattern established by the constructs of training, intellectual intelligence, and work commitment, as per the research structure. The remaining 34.9% of performance variation comes from factors outside the model that were not measured in this study. This R-square value indicates the model's strong explanatory power, so the path test results in the structural model have sufficient basis to be interpreted as an empirical explanation of personnel performance in the research context.

**Table 4.** Results of Hypothesis Test

	<b>Original sample</b>	<b>P values</b>
Training -> Performance	0,308	0,010
Intellectual intelligence -> Performance	0,807	0,000
Work Commitment x Training -> Performance	0,473	0,000
Work Commitment x Intellectual intelligence -> Performance	0,147	0,002

The results of the hypothesis test in Table 4 show that the training-to-performance pathway has a coefficient of 0.308 with a p-value of 0.010. A p-value less than 0.05 indicates a significant and positive effect. This means that as training increases, personnel performance also improves. Relevant training helps personnel align work standards, clarify procedures, and accelerate mastery of techniques required for tasks. The practical significance of this finding is seen in the impact of training on work routines. Personnel who receive appropriate training tend to complete tasks more quickly, document more accurately, and follow work steps more consistently. These impacts result in more targeted work results and reduce operational errors. The coefficient of 0.308 indicates a significant contribution, although not the most dominant in the model.

The intellectual intelligence pathway to performance has a coefficient of 0.807 with a p-value of 0.000. This result indicates the strongest and most significant effect. This means that the ability to understand information, analyze situations, and make work decisions is directly related to improved performance. In jobs that require analytical precision, intellectual intelligence helps personnel develop more precise work steps and produce more accurate output. When comparing the direct effects of training and intellectual intelligence, intellectual intelligence makes a significantly greater contribution to performance. This suggests that performance improvements are more sensitive to cognitive abilities than to training. Training remains important because it provides updates on work techniques and rules, but intellectual intelligence is the primary factor driving quality results, speed of problem-solving, and decision-making accuracy.

The first moderation test showed the interaction between work commitment and training on performance with a coefficient of 0.473 with a p-value of 0.000. This result confirms that work commitment strengthens the effect of training on performance. When work commitment is high, personnel tend to consistently apply training material, repeat correct practices, and maintain discipline in implementation, so that the benefits of training more quickly translate into improved performance. The second moderation test showed the interaction between work commitment and intellectual intelligence on performance with a coefficient of 0.147 with a p-value of 0.002. This result indicates that work commitment also strengthens the effect of intellectual intelligence on performance, although its strength is smaller than the moderation effect of training. When commitment is high, personnel more often use their thinking skills to complete tasks thoroughly, follow procedures, and maintain quality results, making the impact of intellectual intelligence on performance more evident.

**Discussion**

The research results indicate that training has a significant impact on the performance of personnel in the Southeast Sulawesi Regional Police's Special Criminal Investigation Directorate. This finding aligns with studies by Yusnita et al. (2018) and Huang (2020), which demonstrate that structured professional training can improve individual competence and performance. In the police context, training not only strengthens technical skills but also enhances preparedness and accuracy in carrying out complex tasks related to handling special criminal cases. This emphasizes the importance of sustainability and the alignment of training materials with operational task requirements.

Furthermore, intellectual intelligence has also been shown to significantly influence performance. These results support the findings of Opatha & Takahashi (2024) and Miao et al. (2018), which show that intellectual intelligence, particularly in the form of emotional and cultural intelligence, positively contributes to work effectiveness and an individual's ability to adapt and make decisions. Within the Special Criminal Investigation Directorate, which requires high analytical skills, personnel with high levels of intellectual intelligence tend to perform better in completing investigative tasks efficiently.

An equally important finding is that work commitment significantly moderates the relationship between training and performance. This suggests that the benefits of training will be more pronounced when personnel have a high level of commitment to the organization. In other words, committed individuals tend to be more serious about absorbing training materials and applying them to their daily work. These results are consistent with research by Guan & Frenkel (2019) and Wright & Bonett (2002), which confirmed that work commitment strengthens the effectiveness of training in improving performance. Work commitment has also been shown to moderate the relationship between intellectual intelligence and performance. Individuals with high intellectual intelligence will achieve optimal performance when accompanied by loyalty and attachment to the organization. These results support the findings of Amin (2025) and Dowansiba et al. (2025), who stated that commitment enhances the utilization of intellectual capacity in the work context. This indicates that intellectual intelligence that is not balanced with commitment may not fully translate into optimal performance.

Overall, these findings suggest that improving the performance of personnel at the Southeast Sulawesi Regional Police's Special Criminal Investigation Directorate (DitreskrimSus) depends not only on training and intellectual intelligence but also greatly on the level of work commitment of the personnel. Therefore, HR management policies within the police force need to pay attention to aspects of continuous training, intellectual development, and the creation of an organizational climate that supports the formation of a strong work commitment.

## **CONCLUSION**

The study's conclusions indicate that training and intellectual intelligence improve the performance of personnel at the Southeast Sulawesi Regional Police's Special Criminal Investigation Directorate, with intellectual intelligence being the most significant determinant of performance achievement. Work commitment also plays a reinforcing role, as it magnifies the impact of training on

performance and also strengthens the influence of intellectual intelligence on performance. Practical implications: leaders need to design training programs that are more focused on task requirements, strengthen post-training evaluations in work units, and provide support to ensure personnel apply training materials in their daily work. Leaders also need to prioritize strengthening work commitment as a management agenda, for example through clear targets, regular feedback, performance recognition, and consistent work rules, as commitment translates training investments and personnel capabilities into higher performance outcomes.

Limitations of the study stem from the use of a questionnaire survey that relies on respondents' perceptions, which can influence responses to self-assessments and the circumstances in which they are completed. This study also employed a cross-sectional design, so the results reflect conditions at a single point in time and do not capture long-term changes in performance following training. Future research should employ a longitudinal design to assess the impact of training before and after the program, and incorporate more objective performance data sources such as supervisor assessments or work achievement records. Future research should also include other relevant variables, such as supervisor support, workload, organizational climate, work facilities, or motivation, and test the model in different units or regions so that the results are more robust and comparable across contexts.

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