

## The Effect of Competency and Certification on Work Productivity: The Mediating Role of Motivation

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### ABSTRACT

This research examines the effect of competency and certification on work productivity, with work motivation as a mediating variable. Focusing on the Bangka Belitung Islands Police Chief, using a quantitative approach with SEM-PLS and bootstrapping for data analysis. This research discusses the importance of increasing human resources through structured training, certification and motivation to optimize police performance at the sectoral level.

Findings show that competency and certification significantly increase productivity, and motivation strengthens this relationship. The integration of these three elements competency, certification, and motivation offers a comprehensive model for human resource development in law enforcement. This study provides a unique perspective by focusing on police leadership at the sectoral level, which is an underexplored area. The results of this research provide empirical support for the development of HR policies that are right on target and based on motivation, so that they can increase police productivity and effectiveness in high-risk environments..

**Keywords:** Competency, Certification, Work Motivation, Work Productivity

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### INTRODUCTION

The success of an organization in achieving its goals is greatly influenced by the quality of its human resources, including in police institutions that play a strategic role in maintaining public security and order. In the context of policing, work productivity is not solely dependent on individual abilities but also on the effectiveness of human resource management systems, which include the enhancement of competency, professional recognition through certification, and the maintenance of high work motivation. These elements are critical to ensuring that police personnel are not only equipped with the necessary skills and qualifications but are also motivated to carry out their duties efficiently and effectively, ultimately contributing to the achievement of organizational goals and the maintenance of public safety. This shows that this element is important for police personnel because it can integrate the three main components of competency, certification and motivation so as to encourage productivity and effectiveness in

high-risk tasks, and can be used as a reference in human resource improvement programs in the Indonesian National Police (Arsyad et al., 2024)

As leaders at the sector level, Police Chiefs are required to possess the necessary competencies to perform operational, managerial, and leadership duties to ensure the effectiveness of police organizational performance. However, challenges in the management system of the head of police sectors are still prevalent, particularly regarding the recruitment mechanisms, competency development, and performance evaluation processes, which have not been standardized optimally. These issues hinder the ability to fully leverage the potential of the head of police sectors in fulfilling their strategic roles, emphasizing the need for a more structured and systematic approach to the development and assessment of their capabilities (Jang & Jeong, 2022).

In recent years, the enhancement of human resource quality within the police force has become a key focus, particularly with the implementation of various reform policies aimed at creating a more professional and accountable institution. Competency and certification have been identified as two key factors that can improve employee performance quality, as both serve as indicators of an individual's ability to perform tasks effectively and efficiently (Akmal, 2025). These efforts are essential in strengthening the professionalism of the police force, ensuring that officers are well-equipped to meet the demands of their duties and contribute to maintaining public safety and order (Ryan & Ollis, 2023). Furthermore, previous research has shown that work motivation plays a crucial role in enhancing job productivity, as individuals with high motivation tend to be more committed to their tasks and more adaptable in facing the dynamics of their work. Motivated employees are more likely to put in the effort required to achieve organizational goals, exhibit resilience in challenging situations, and contribute to overall productivity improvements. Thus, fostering high levels of motivation is essential for organizations aiming to achieve optimal performance (Reniasi et al., 2023). Therefore, in-depth empirical studies are needed to understand how competency and certification influence the work productivity of police chiefs as well as how work motivation acts as a mediating variable. Such research is essential for providing evidence-based insights into the factors that drive productivity in police leadership roles, ultimately supporting the development of policies and strategies to enhance the effectiveness and efficiency of police services.

## **LITERATURE REVIEW**

### **a. Competency**

Competency is the combination of knowledge, skills, and attitudes required by an individual to perform their duties effectively (Bennell et al., 2022). In the context of a police organization, competency is a determining factor in the effectiveness of a Police Chief in managing their unit, enforcing the law, and providing protection and services to the public. A Police Chief with a high level of competency is more likely to be able to face operational challenges with innovative solutions and more effective in carrying out leadership functions within their work environment (Nugraha & Khajar, 2025). Additionally, the enhancement of competency is also associated with an individual's ability to make

decisions in a more objective and professional manner, which ultimately contributes to the improvement of the overall performance of the police organization (Marudin, 2024).

b. Work Productivity

Work productivity is the result of the interaction between individual competency and various organizational supporting factors, such as work systems, organizational culture, and a conducive work environment (Firdaus et al., 2024). Previous studies have shown that individuals with higher levels of competency tend to be more productive in completing their tasks because they possess deeper skills and knowledge related to the work they do (Renati et al., 2023). Therefore, enhancing the competency of police officers through practice-based training and work experience becomes an effective strategy in improving the performance of Police Chiefs and building a more professional and responsive police system to meet public demands.

c. Certification

Certification is a formal process aimed at recognizing an individual's expertise and competency in a specific field based on established standards (Mufti et al., 2021). In the police environment, certification becomes an essential instrument to ensure that personnel in strategic positions have met the qualifications required to perform their duties professionally. Certification not only serves as a performance measurement tool for individuals but also as a mechanism for improving the quality of the workforce in the police force by validating the expertise held by personnel (Renati et al., 2023). Empirical studies show that certified individuals tend to have higher productivity levels compared to those without certification, as certification provides recognition of their competencies and boosts their confidence in performing their duties (Tahir, 2023).

In the context of human resource management in the police force, certification must be integrated with the promotion and career management systems to ensure that individuals in strategic positions have competencies aligned with the demands of their job (Pudiyanto, 2024). Therefore, certification in police organizations should not only be implemented as an administrative requirement but also as part of the mechanism for fostering employee professionalism. With credible certification, police institutions can establish a more transparent and accountable human resource management system, which will ultimately lead to positive impacts on the overall effectiveness and productivity of the police organization.

d. Work Motivation

Work motivation is a psychological factor that plays an important role in enhancing individual performance within an organization (Pancasila et al., 2020). In the context of policing, work motivation can come from two main sources: intrinsic motivation and extrinsic motivation. Intrinsic motivation refers to the satisfaction and internal drive an individual has in performing their tasks, such as a sense of responsibility and pride in their professional (Jeong & Han, 2025). Meanwhile, extrinsic motivation is related to external incentives, such as reward systems, compensation, and career development opportunities (Renati et al., 2023). Previous studies show that employees with higher levels of

motivation tend to be more productive because they are driven to work more optimally and adapt to the dynamic demands of the job (Tang et al., 2024).

In this study, work motivation is positioned as a mediating variable that strengthens the relationship between competency and work productivity, as well as between certification and work productivity. This is based on empirical findings that indicate individuals with high levels of competency and relevant certifications tend to show better productivity if they also have high work motivation (Wijayanto & Riani, 2021). Therefore, the improvement of competency and certification for police personnel should be accompanied by strategies to enhance work motivation to ensure that individuals not only have adequate skills but also possess the internal drive to achieve optimal performance.

e. Work Productivity

Work productivity is a key indicator in assessing an individual's effectiveness in performing their tasks within an organization (Lušňáková et al., 2021). In the context of the police force, work productivity is not only measured by the number of cases resolved but also by the quality of police services provided to the community, effectiveness in maintaining order, and the ability to make sound decisions in complex situations (Ekaabi et al., 2020)(Nepomuceno et al., 2021). Therefore, improving the work productivity of a on the head of police sectors must be supported by a comprehensive strategy, including strengthening competencies, implementing credible certification, and adopting policies aimed at enhancing employee motivation.

Based on the literature review provided, this study aims to analyze the relationship between competency, certification, and work productivity of the Police Chief, with work motivation as a mediating variable. A quantitative approach using Structural Equation Modeling - Partial Least Squares (SEM-PLS) is applied in this research to examine the relationships between variables more comprehensively. The findings of this study are expected to contribute to the development of Human Resource Management (HRM) literature in the police sector and provide strategic recommendations for enhancing the effectiveness of police organizations in Indonesia.

### Hypotheses

- H<sub>1</sub> : Competency has a positive and significant effect on work motivation.
- H<sub>2</sub> : Certification has a positive and significant effect on work motivation.
- H<sub>3</sub> : Competency has a positive and significant effect on work productivity.
- H<sub>4</sub> : Certification has a positive and significant effect on work productivity.
- H<sub>5</sub> : Work motivation has a positive and significant effect on work productivity.
- H<sub>6</sub> : Work motivation mediates the relationship between competency and work
- H<sub>7</sub> : productivity.  
Work motivation mediates the relationship between certification and work productivity.

## METHODS

This approach is chosen for its ability to handle complex models with limited sample sizes, as well as its capability to simultaneously test causal relationships. The research design is explanatory, aiming to explain both direct and indirect effects between the study variables. By employing this approach, the study seeks to provide a deeper understanding of the mechanisms through which competency and certification impact the work productivity of police chiefs in the Bangka Belitung Regional Police, and how work motivation can strengthen these relationships. The population in this study consists of all police chiefs working in the Bangka Belitung Regional Police. Police chiefs were chosen as respondents because they play a strategic role in ensuring the effectiveness of police management at the sector level and are key actors in the application of competency, certification, and work motivation to enhance productivity (Ed D, 2021). The sampling technique used is purposive sampling, with the criteria of having at least two years of work experience and having participated in relevant training and certification programs. Based on these criteria, there are 41 respondents. The use of purposive sampling in this study aims to ensure that the selected sample possesses characteristics that align with the research objectives, so that the results obtained can reflect the actual conditions within the police environment.

The survey instrument was designed based on four main variables, each consisting of several dimensions. In measuring Employee Competency, the researcher used four indicators: knowledge, skills, self-concept, and performance (Kharub et al., 2025). To measure Certification, the researcher used four indicators: leadership ability, mastery of field knowledge, personality traits, and social interaction (Xu et al., 2023). Similarly, to measure Work Productivity, the researcher used four indicators: ability, work quantity, work quality, and timeliness (Thalibana, 2022). To measure Work Motivation, the researcher used five indicators: basic needs, clothing needs, career advancement, employee capability, and self-existence (Goldfarb et al., 2023). The indicators used in this study are presented in Table 1.

Table 1. Operationalization of Research Variables

Concept of Variables	Dimension	Indicator	Code	Measurement Scale
Employee Competency (EC)	1. Knowledge	Responsibility	EC.1	Ordinal scale (1-5)
		Procedure	EC.2	
	2. Skills	Technique	EC.3	
		Emergency	EC.4	
	3. Self-concept	Self-confidence	EC.5	
		Resilience	EC.6	
	4. Performance	Achievement	EC.7	
		Contribution	EC.8	
Sertification (SF)	5. Leadership Ability	Motivation	SF.1	Ordinal scale (1-5)
		Decision-making	SF.2	
	6. Mastery of Field	Understanding	SF.3	

Concept of Variables	Dimension	Indicator	Code	Measurement Scale
Work Motivation (WM)	Knowledge	Development	SF.4	Ordinal scale (1-5)
	7. Personality Traits	Patience	SF.5	
		Professionalism	SF.6	
	8. Social Interaction	Relationships	SF.7	
		Communication	SF.8	
	9. Basic Needs (Food)	Food	WM.1	
		Support	WM.2	
	10. Clothing Needs	Clothing	WM.3	
		Welfare	WM.4	
	11. Career Advancement	Career	WM.5	
		Development	WM.6	
	12. Employee Competency	Competency	WM.7	
		Leadership	WM.8	
	13. Existence	Recognition	WM.9	
		Existence	WM.10	
Work Productivity (WP)	14. Ability	Knowledge	WP.1	Ordinal scale (1-5)
		Analysis	WP.2	
	15. Work Quantity	Target	WP.3	
		Efficiency	WP.4	
	16. Work Quality	Standards	WP.5	
		Quality	WP.6	
	17. Timeliness	Accuracy	WP.7	
		Organization	WP.8	

Sumber: Various Previous Studies Processed by the Researcher (2025)

The statistical tests conducted in this study include instrument testing (convergent validity, discriminant validity, and reliability), coefficient of determination (r-square) and f-square tests, and hypothesis testing through bootstrapping. The research framework is presented in Figure 1.

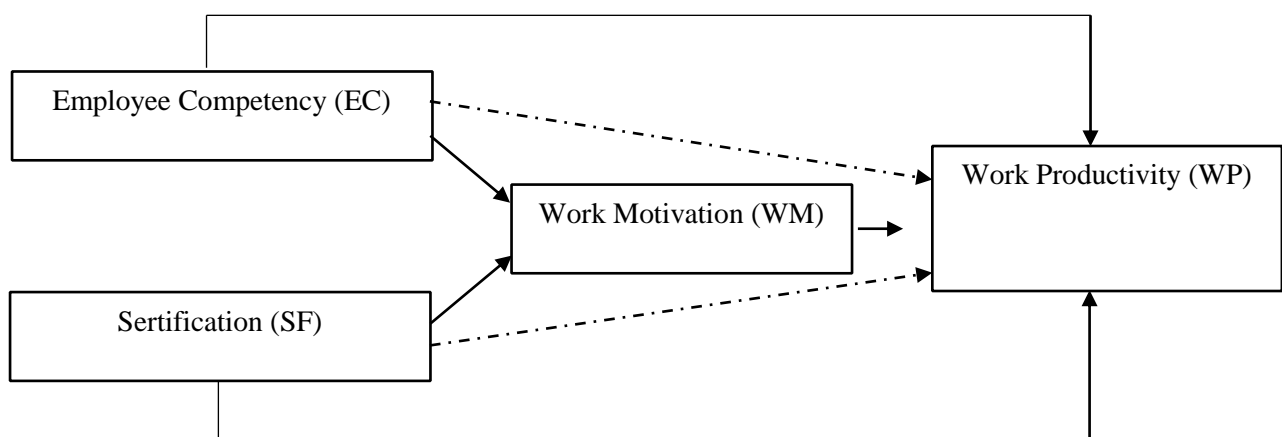


Figure 1. Research Framework

Sumber: Primary data, processed by the researcher (2025)

Data collection was conducted through two main stages: distributing the questionnaire directly to respondents and through an online platform to facilitate access for respondents located in different areas. The data collection process lasted for one month, using a self-



administered questionnaire approach, where respondents filled out the questionnaire independently based on their understanding of the questions provided. To increase respondent participation, coordination was carried out with the police department at the Police Department of the Bangka Belitung Islands level to ensure administrative and logistical support for the study. Additionally, each respondent was informed about the research objectives and assured of the confidentiality of their responses to encourage honesty and accuracy in completing the questionnaire.

The data obtained from the questionnaire were then processed and analyzed using the Structural Equation Modeling - Partial Least Squares (SEM-PLS) technique with SmartPLS software. The analysis was conducted in two main stages. First, validity and reliability tests were performed through outer model testing, which included convergent validity, discriminant validity, and construct reliability tests to ensure that each indicator accurately measures the variables under study. Second, hypothesis testing was conducted through inner model testing, analyzing the path coefficient values, R-Square values, and bootstrapping tests to evaluate the significance of the relationships between the variables. Additionally, mediation testing was performed to analyze the extent to which work motivation strengthens the relationship between competency and certification on the productivity of the on the head of police sectors. With this systematic data processing and analysis method, this study is expected to produce empirically strong findings and contribute to the development of policies in human resource management within the police force.

## RESULTS

This study aims to examine and analyze the impact of competency and certification on work productivity through work motivation as a mediating variable. Therefore, the Chief of Police Sector is selected as the sample for this study. Based on the data collection results, 41 respondents were obtained and subsequently used as the research sample. The demographic characteristics of the study respondents are presented in Table 2.

Table 2. Demographic Characteristics of the Research Respondents

Description	Characteristics	Frequency	Percentage
Work Area	Bangka Regency	8	19.5%
	Belitung Regency	6	14.6%
	Bangka Selatan Regency	5	12.2%
	Bangka Tengah Regency	7	17.1%
	Bangka Barat Regency	6	14.6%
	Belitung Timur Regency	5	12.2%
	Pangkalpinang	4	9.8%
Gender	Male	40	97.6%
	Female	1	2.4%
Last Education	SHS	3	7.3%
	DIV/S1	32	78.1%
	S2	6	14.6%
Certification Held	1-2 certificate	26	63.4%
	3-4 certificate	13	31.7%
	>4 certificate	2	4.9%
Position Rank	Position Rank II	4	9.8%
	Position Rank III	37	90.2%

Description	Characteristics	Frequency	Percentage
Length of Service in the Police Institution	0-5 year	22	53.7%
	11-15 year	1	2.4%
	16-20 year	2	4.9%
	>20 year	16	39.0%

Sumber: Primary data, processed by the researcher (2025)

Based on Table 2, the distribution of respondents in the study based on their work regions within the Police Department of the Bangka Belitung Island is as follows: Kabupaten Bangka (19.5%), Kabupaten Belitung (14.6%), Kabupaten Bangka Selatan (12.2%), Kabupaten Bangka Tengah (17.1%), Kabupaten Bangka Barat (14.6%), Kabupaten Belitung Timur (12.2%), and Kabupaten Pangkalpinang (9.8%). In terms of gender, the majority are male (97.6%), while females make up only 2.4%. Regarding the highest level of education, respondents with a high school diploma or equivalent (7.3%), DIV/S1 (78.1%), and S2 (14.6%) are represented. As for the certifications owned, 1-2 certifications (63.4%), 3-4 certifications (31.7%), and more than 4 certifications (4.9%) were reported. Regarding job classification, Golongan II (9.8%) and Golongan III (90.2%) are found. In terms of years of service in the police force, 0-5 years (53.7%), 11-15 years (2.4%), 16-20 years (4.9%), and more than 20 years (39.0%).

This research uses Structural Equation Modeling (SEM) analysis through the Smart PLS application for processing the research data. Before conducting bootstrapping, the researcher performed tests for convergent validity, discriminant validity, and reliability, the results of which are presented in Tables 3 and 4.

Table 3. The results of the Convergent Validity Test and Reliability Test

Variables	Indicators	Outer Loadings	Average Variance Extracted	Cronbach's Alpha	Composite Reliability
Employee Competency (EC)	EC.1	0.856	0.786	0.961	0.967
	EC.2	0.867			
	EC.3	0.911			
	EC.4	0.939			
	EC.5	0.913			
	EC.6	0.896			
	EC.7	0.895			
	EC.8	0.811			
Sertification (SF)	SF.1	0.852	0.795	0.963	0.969
	SF.2	0.919			
	SF.3	0.857			
	SF.4	0.898			
	SF.5	0.903			
	SF.6	0.916			
	SF.7	0.876			
	SF.8	0.909			
Work Motivation (WM)	WM.1	0.881	0.799	0.972	0.967
	WM.2	0.913			
	WM.3	0.909			
	WM.4	0.857			
	WM.5	0.848			



	WM.6	0.892			
	WM.7	0.892			
	WM.8	0.928			
	WM.9	0.896			
	WM.10	0.918			
Work Productivity (WP)	WP.1	0.763			
	WP.2	0.825			
	WP.3	0.886			
	WP.4	0.872			
	WP.5	0.892	0.693	0.936	0.939
	WP.6	0.701			
	WP.7	0.880			
	WP.8	0.822			

Sumber: Primary data, processed by the researcher (2025)

Based on Table 3, the results show that all indicators in this study have an outer loading value greater than 0.7, and all variables have an Average Variance Extracted (AVE) value greater than 0.5. This indicates that all indicators and variables in this study meet the criteria for convergent validity and can be accepted, thus they are considered valid.

Table 4. Results of Discriminant Validity Test – Fornell-Lacker Criterion

Variables	Employee Competency	Work Motivation	Work Productivity	Certification
Employee Competency	0.971			
Work Motivation	0.962	0.964		
Work Productivity	0.887	0.833	0.972	
Certification	0.963	0.894	0.892	0.974

Sumber: Primary data, processed by the researcher (2025)

Based on the results of the discriminant validity test (Table 4), it can be seen that the Fornell-Larcker criterion value for the employee competency variable (0.971) is greater than that of work motivation (0.962), work productivity (0.887), and certification (0.963). The Fornell-Larcker criterion value for the work motivation variable (0.964) is greater than that of work productivity (0.883) and certification (0.894). The Fornell-Larcker criterion value for the work productivity variable (0.972) is also greater than that of certification (0.892). It can be concluded that the square root of the AVE values is higher than that of other variables, indicating that all variables are free from discriminant validity issues.

In addition to the convergent and discriminant validity tests, the researcher also conducted a reliability check on the study variables. Based on Table 3, all variables have a Cronbach's alpha value  $>0.60$  and a composite reliability value  $>0.70$ , which means that all variables can be considered acceptable and reliable.

Table 5. Results of the Coefficient of Determination Test (R-Square)

Variables	F-Square	R-Square Adjusted
Work Motivation (WM)	0.945	0.942
Work Productivity (WP)	0.970	0.968

Sumber: Primary data, processed by the researcher (2025)

Based on Table 5, the R-Square value for Path Model I is 0.945, indicating that the variables Employee Competency and Certification together explain 94.5% of the variance in the Work Motivation variable. Meanwhile, the R-Square value for Path Model II is 0.970, suggesting that the variables Employee Competency, Certification and Work Motivation collectively account for 97% of the variance in the Work Productivity variables.

Table 6. Results of F-Square test

No	Variables	Work Motivation	Work Productivity
1	Employee Competency (EC)	0.294	0.185
2	Sertification (SF)	0.348	0.246
3	Work Motivation (WM)		0.187

Sumber: Primary data, processed by the researcher (2025)

Based on Table 6, it can be seen that the F-Square values for Employee Competency and Certification are 0.294 and 0.348, indicating that these two variables have a moderate effect on Work Motivation. The F-Square values for Employee Competency and Certification on Work Productivity are 0.185 and 0.246, meaning these variables have a moderate effect on Work Productivity. Meanwhile, the F-Square value for Work Motivation on Work Productivity is 0.187, indicating that this variable has a moderate effect on Work Productivity.

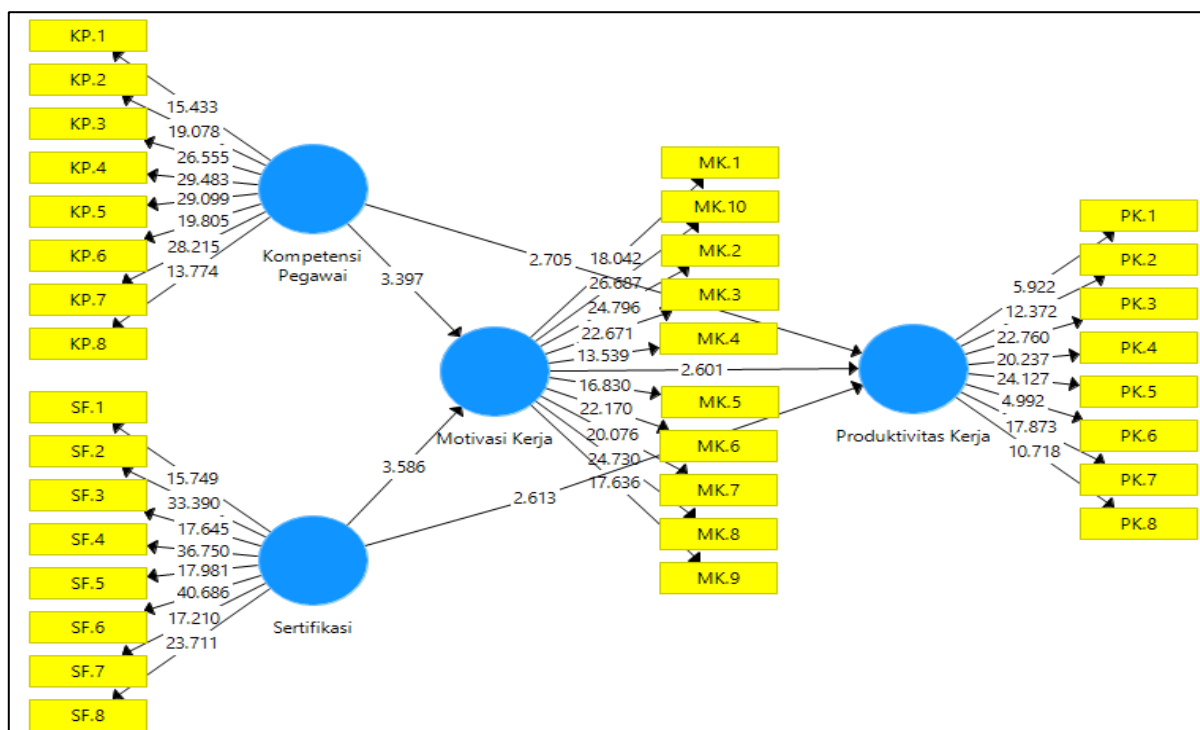


Figure 2. Bootstrapping Results

Sumber: Primary data, processed by the researcher (2025)

In conducting the hypothesis testing, the researcher used the bootstrapping method to obtain the direct and indirect effects of the variables in this study. The bootstrapping results are presented in Figure 2. The direct effect can be determined through the path coefficient analysis, while the indirect effect can be identified through the specific indirect effect analysis, which is presented in Table 7.

Table 7. Path Coefficients &amp; Specific Indirect Effects

Coralation	Original Sample ( $\beta$ )	T-Statistics	P-Values	Decision
EC $\rightarrow$ WM	0.470	3.397	0.001	H1 accepted
SF $\rightarrow$ WM	0.511	3.586	0.000	H2 accepted
EC $\rightarrow$ WP	0.312	2.705	0.007	H3 accepted
SF $\rightarrow$ WP	0.367	0.374	0.009	H4 accepted
WM $\rightarrow$ WP	0.318	2.601	0.010	H5 accepted
EC $\rightarrow$ WM $\rightarrow$ WP	0.150	2.028	0.043	H6 accepted
SF $\rightarrow$ WM $\rightarrow$ WP	0.163	1.991	0.047	H7 accepted

Sumber: Primary data, processed by the researcher (2025)

Based on the path coefficient analysis results, the influence of employee competency and certification on work motivation has  $\beta$  values of 0.470 and 0.511, respectively. The influence of employee competency and certification on work productivity has  $\beta$  values of 0.312 and 0.318, respectively. Meanwhile, the influence of work motivation on work productivity has a  $\beta$  value of 0.318, indicating a positive effect. The p-values for each are less than 0.05, demonstrating that employee competency and certification have a positive and significant impact on work motivation. Furthermore, employee competency and certification also have a positive and significant effect on work productivity, while work motivation has a positive and significant effect on work productivity (Ha1, Ha2, Ha3, Ha4, and Ha5 are accepted).

Meanwhile, the results of the indirect effect test for employee competency and certification on work productivity through work motivation show positive  $\beta$  values, with p-values of 0.043 and 0.047, respectively. This indicates that work motivation plays a mediating role in the effect of employee competency and certification on work productivity (Ha6 and Ha7 are accepted).

## DISCUSSION

### A. *The Influence of Competency on Work Motivation*

Based on the results of statistical tests, the work environment variable shows an average value of 3.73, which falls within the high evaluation scale, indicating that most respondents agree that employee competency in the work environment of the Police Department of the Bangka Belitung Island is good. The path coefficient test results show that competency has a positive effect on work motivation with a  $\beta$  value of 0.470 and an F-Square of 0.294, indicating a significant effect on work motivation. The t-statistic value of 3.397 with a p-value of 0.001 ( $<0.05$ ) indicates a positive and significant effect. Therefore, employee competency has a significant direct impact on work motivation.

High competency plays an important role in supporting the success of the on the head of police sectors duties and responsibilities, and it also influences their level of work motivation. Competency dimensions, such as knowledge, skills, self-concept, and performance, not only help in carrying out tasks but also increase self-confidence and job satisfaction, which ultimately contributes to higher productivity. In the context of the work environment at the Police Department of the Bangka Belitung Island, the positive relationship between competency and work motivation shows that the development of competency not only impacts work results but also the spirit and dedication of individuals in performing their duties.

The findings of this study also confirm the results of previous research conducted by several researchers, whose results similarly show that the competency possessed can enhance work motivation, as found by (Riyanto & Anto, 2022), (Gunawan et al., 2021), (Alkhayyal & Bajaba, 2023) dan (Kurniawan et al., 2023).

#### **B. The Influence of Certification on Work Motivation**

The results of descriptive statistical analysis show that the certification variable has an average value of 3.63, which falls into the high category, indicating that most respondents agree that certification in the work environment of the Police Department of the Bangka Belitung Island is being implemented well. Based on the path coefficient test results, certification has a positive effect on work motivation with a  $\beta$  value of 0.511, supported by an F-Square value of 0.348, indicating a significant impact of certification on work motivation. Additionally, the t-statistic value of 3.586 with a p-value of 0.000 ( $<0.05$ ) confirms that certification has a positive and significant direct effect on work motivation.

Certification not only enhances technical competency but also acts as an intrinsic motivational stimulus for the on the head of police sectors by creating a sense of achievement, recognition, and better career opportunities. Recognition of professional abilities boosts self-confidence and the drive to maintain and improve work quality according to institutional standards. Moreover, certification functions as an external factor that opens up promotion opportunities and institutional recognition, thus enhancing work motivation and fostering a competitive and achievement-oriented organizational culture. Therefore, certification can be seen as a strategic investment in human resource development, which has implications for improving work motivation and work productivity.

The findings of this study are consistent with previous research conducted by (Suheri et al., 2021), (Suratman et al., 2020), (Tyas et al., 2020), (Pertiwi et al., 2024) dan (Juniardi & Yuniati, 2024) all of which state that certified employees show higher levels of motivation compared to those who are not certified.

#### **C. The Influence of Employee Competency on Work Productivity**

The results of the path coefficient test show that employee competency has a positive effect on work productivity with a  $\beta$  value of 0.312. This effect is further supported by an F-Square value of 0.185, indicating that employee competency has a significant impact on work productivity. Additionally, the t-statistic value of 2.705 with a p-value of 0.007 ( $<0.05$ ) indicates

that employee competency has a direct and significant effect on work productivity. The competency of the head of police sectors includes dimensions such as knowledge, skills, self-concept, and performance, which contribute to improving the effectiveness of police duties. The head of police sectors with high competency tends to be able to carry out their responsibilities professionally, complete tasks efficiently, and adapt to the complex dynamics of the work environment.

Dimensions of competency, such as knowledge, technical and managerial skills, and self-concept, play a key role in supporting the work productivity of the head of police sectors. In-depth knowledge of operational procedures and police policies enables the head of police sectors to manage resources more efficiently. Technical skills support the execution of operational tasks, while managerial skills help in coordinating teams effectively. Furthermore, a positive self-concept boosts the head of police sectors confidence and intrinsic motivation in carrying out their duties. Therefore, investment in competency development through training and education is an important strategy in enhancing the work productivity of the head of police sectors, which ultimately supports the achievement of the police institution's strategic goals in maintaining public security and order.

The findings of this study support several previous studies that show a positive and significant relationship, such as research conducted by (Khaeruman et al., 2021), (Kurniawan et al., 2023), (Wahyuni & Budiono, 2022) dan (Pratama & Permatasari, 2021).

#### **D. The Influence of Certification on Work Productivity**

The results of the path coefficient test show that certification has a positive and significant effect on the work productivity of the Head of police sectors at the Police Department of the Bangka Belitung Island, with a  $\beta$  value of 0.367 and an F-Square value of 0.246. The t-statistic value of 2.613 with a p-value of 0.009 ( $<0.05$ ) confirms that certification has a strong impact on improving work productivity. Certification provides formal recognition of an individual's competency, enhancing the professional legitimacy and confidence of the Head of police sectors in carrying out their duties. Moreover, certification ensures that the Head of police sectors possesses technical and managerial skills that align with police operational standards, enabling them to work more effectively and efficiently in completing tasks.

In addition to enhancing skills, certification also opens access to further competency development opportunities, such as ongoing training and education. Certified Head of police sectors are more likely to have the chance to update their knowledge to remain relevant to the evolving demands of police duties. Furthermore, certification contributes to increased work motivation, where the Head of police sectors feels more valued and experiences intrinsic motivation to perform better. This motivation plays a crucial role in fostering more consistent work productivity and a results-oriented approach. Therefore, certification becomes a strategic element in human resource management within the police force, not only improving individual competency but also contributing to the achievement of the overall organizational goals.

The findings of this study also confirm previous research conducted by several researchers, which showed that employees with certifications in their respective fields

demonstrate higher productivity compared to those without certifications, such as (Gil-Ozoudeh et al., 2024), (Suheri et al., 2021), (Suratman et al., 2020) dan (Hernandez-Vivanco & Bernardo, 2023).

#### ***E. The Influence of Work Motivation on Work Productivity***

The results of the path coefficient test show that work motivation has a positive and significant effect on the work productivity of the Head of police sectors at the Police Department of the Bangka Belitung Islands, with a  $\beta$  value of 0.318 and an F-Square value of 0.187. The t-statistic value of 2.601 with a p-value of 0.010 ( $<0.05$ ) indicates that work motivation has a substantial effect in enhancing productivity. High work motivation, both intrinsic and extrinsic, encourages the Head of police sectors to achieve targets and perform police duties optimally. Factors such as recognition, fair compensation, career advancement, and institutional support contribute to the improvement of motivation, which ultimately impacts increased discipline, focus, and dedication in their work.

In addition to improving individual performance, work motivation also plays a role in fostering emotional well-being and creating a more collaborative and competitive work environment. Motivated Head of police sectors tend to have higher job satisfaction, which positively affects task effectiveness and their influence on the team. High motivation enables them to face challenges more effectively and contribute maximally to achieving institutional targets, both in maintaining security and providing public services. Therefore, strategies for enhancing motivation through incentives, training, and recognition of achievements are important steps in supporting work productivity.

The findings of this study also confirm previous research conducted by several researchers, which similarly found that work motivation plays a crucial role in improving work productivity, as shown by (Hartanto et al., 2022), (Kurniawan et al., 2023), (Shahzad et al., 2023) dan (Febrian & Ekowati, 2023).

#### ***F. The Influence of Employee Competency on Work Productivity through Work Motivation***

The bootstrapping analysis results show that work motivation plays a significant mediating role in the relationship between employee competency and work productivity of the Head of police sectors at the Police Department of the Bangka Belitung Islands, with a  $\beta$  value of 0.150, a t-statistic of 2.028, and a p-value of 0.043 ( $<0.05$ ). This indicates that high competency not only contributes directly to work productivity but also enhances work motivation, which in turn strengthens employee productivity. Competency, which includes aspects of knowledge, skills, and self-concept, provides confidence for the Head of police sectors in performing their duties, thereby driving intrinsic motivation to work more effectively and efficiently.

Additionally, work motivation acts as a key driver in optimizing the use of competency to increase work productivity. Head of police sectors with high competency, supported by strong work motivation, are more likely to show dedication, discipline, and initiative in carrying out their duties. High motivation also enhances results orientation, teamwork, and innovation in



solving police tasks. Therefore, investment in competency development through training and education, along with the creation of a motivating work environment, becomes an essential strategy to improve employee productivity within the police environment.

The findings of this study support previous research showing that work motivation can be a strong mediating variable between competency and work productivity, as found in studies by (Manu et al., 2022) dan (Noniulpa & Widigdo, 2023).

#### **G. *The Influence of Certification on Work Productivity through Work Motivation***

The bootstrapping analysis results show that certification has a positive and significant effect on the work productivity of the the head of police sectors in the Police of the Bangka Belitung Islands through the mediation of work motivation ( $\beta = 0.163$ ; t-statistic = 1.991; p-value = 0.047). Certification provides formal recognition of the Head of police sectors 's competency, which not only enhances confidence and professional legitimacy but also contributes to increased work motivation. Work motivation serves as a mediator bridging the relationship between certification and work productivity, where intrinsic motivation arises from achievements gained through certification, while extrinsic motivation comes from better career opportunities and institutional recognition.

Head of police sectors with high work motivation as a result of certification tends to be more productive in performing police duties. Work motivation encourages them to work with dedication, increase initiative, and maintain consistent performance in various situations. With certification supported by strong work motivation, Head of police sectors can optimize their skills and knowledge in facing work challenges, leading to a significant increase in productivity. Therefore, productivity enhancement strategies should not only focus on certification but also on strengthening work motivation as a key driver. In the context of the police force, integrating certification programs with work motivation development is a strategic step in sustainable human resource management.

This study supports various previous studies showing that work motivation has a positive impact on work productivity and mediates the relationship, as demonstrated by research conducted by (Andriani & Rezeki, 2024), (Hanifatunnisa, 2022) dan (Loliyana et al., 2023).

## **CONCLUSION**

The results of this study indicate that both competency and certification have a positive and significant effect on work motivation and work productivity of the head of police sectors in the Police of the Bangka Belitung Islands. Competency, which includes aspects of knowledge, skills, self-concept, and performance, has been shown to enhance work motivation, which ultimately contributes to increased work productivity. Similarly, certification provides formal recognition of the head of police sectors capabilities and expertise, encouraging both intrinsic and extrinsic motivation, as well as improving professional standards in carrying out police duties. Furthermore, path analysis shows that work motivation plays a mediating role in the relationship between competency and certification on work productivity. This means that the



higher the competency and certification of the Head of police sectors, the higher their work motivation, which subsequently leads to increased work productivity. This study provides strong empirical findings, there are several limitations that need to be considered. First, the research focuses solely on the head of police sectors within the Police of the Bangka Belitung Islands, meaning that the generalizability of these results to other police institutions requires further investigation. Second, this study employs a quantitative approach, which, while offering objective results, still has limitations in exploring qualitative aspects, such as in-depth perceptions of how certification impacts work motivation. Additionally, this study does not account for other external variables that may influence work productivity, such as organizational policies or socio-cultural factors, which could impact the effectiveness of competency and certification in enhancing work productivity.

Based on the findings and limitations of this study, several recommendations can be made. Theoretically, this study can serve as a reference for future research that aims to examine other factors that may affect work productivity, such as work environment and leadership style. Future studies are also recommended to use a mixed-methods approach to gain a deeper understanding of how competency and certification impact work productivity through work motivation. Practically, law enforcement institutions are advised to enhance training and certification programs for Police Sector Heads to improve their professionalism and work motivation. Additionally, a performance-based reward system should be strengthened to encourage higher productivity. Lastly, regular evaluations of the effectiveness of certification and employee competency are necessary to ensure their positive impact on the overall performance of the police institution.

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