International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS)

International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS Journal) | ISSN (e): 2808-4713
Volume 6 No. 6 (2026)

COMPETENCE, WORK DISCIPLINE, AND EMPLOYEE PERFORMANCE: THE MEDIATING ROLE OF WORK MOTIVATION IN A PALM OIL PLANTATION

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Received: 04//09/2026 | **Revised:** 15/09/2026 | **Accepted:** 25/10/2026 | **Published:**02/11/2026

Abstract

This study examines the effects of competence and work discipline on employee performance and tests work motivation as a mediating mechanism at the Garden Unit of PT Perkebunan Nusantara IV Regional VI Cot Girek, North Aceh. A quantitative cross-sectional survey was conducted with 200 employees selected from a population of 539 using purposive sampling. Data were collected through a five-point Likert questionnaire and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) in SmartPLS 4. The measurement model satisfied convergent validity, discriminant validity, and internal consistency requirements. Competence had positive effects on work motivation ($\beta = 0.467$, $p < 0.001$) and employee performance ($\beta = 0.286$, $p < 0.001$). Work discipline also positively affected work motivation ($\beta = 0.223$, $p = 0.001$) and performance ($\beta = 0.220$, $p < 0.001$). Work motivation was the strongest direct predictor of performance ($\beta = 0.480$, $p < 0.001$). Indirect effects through work motivation were significant for competence ($\beta = 0.224$) and work discipline ($\beta = 0.107$), indicating partial mediation. The findings show that employee performance in plantation operations improves when ability and disciplined work practices are supported by stronger work motivation.

Keywords: competence; employee performance; palm oil plantation; work discipline; work motivation

INTRODUCTION

Indonesia's palm oil industry depends on the coordinated performance of employees who operate under demanding field conditions, production targets, safety requirements, and standardized operating procedures. In this setting, human resource management is not simply an administrative function. It directly affects the reliability of plantation operations because employees must translate technical knowledge, work rules, and organizational expectations into consistent daily performance. The thesis underlying this article identifies employee performance as a central managerial concern at the Garden Unit of PT Perkebunan Nusantara IV (PTPN IV) Regional VI Cot Girek in North Aceh, where operational work requires accuracy, experience, technical skill, and responsibility (Lestari & Putri, 2024).

Initial observations reported in the study indicated that performance was not fully uniform across employees. Some employees completed work on time and at the expected quality, while others required more time or additional direction when facing operational problems. Differences were also observed in mastery of work, adherence to operating procedures, and initiative in completing tasks. These conditions are consequential for a plantation unit because inconsistency at the individual level can accumulate into lower productivity, uneven work quality, and difficulties in meeting operational targets. The practical problem therefore concerns not only whether employees can perform their tasks, but also which human resource mechanisms most reliably explain differences in performance.

Competence is one plausible mechanism. In plantation work, competence includes the knowledge required to understand procedures, the skill to solve technical problems, and the attitude needed to work responsibly. Competent employees are expected to use training, work experience, and technology more effectively, which should raise both confidence and performance. Prior studies generally report a positive relationship between competence and performance, yet the evidence is not fully consistent. Pakpahan and Aulia (2022) and Faizi et al. (2021) found significant effects, whereas other studies cited in the thesis reported nonsignificant relationships. This inconsistency suggests that competence may not operate through a simple direct pathway in every organizational context.

Work discipline provides a second mechanism. Discipline concerns punctuality, effective use of working time, attendance, compliance with organizational rules, target orientation, and responsibility for routine reporting. These behaviors are especially important in operational environments where tasks are sequential and interdependent. Employees who arrive on time, follow procedures, and complete assigned responsibilities reduce disruptions and support coordination. Empirical studies such as Idris et al. (2021) and Anam and Winarko (2023) generally support the contribution of work discipline to performance, although the strength of the relationship may vary across organizations.

Work motivation may help explain how competence and discipline are converted into performance. Motivation represents the internal and external forces that initiate, direct, and sustain work behavior. Employees can possess adequate knowledge and follow rules, yet still underperform if they are unwilling to exert effort or do not perceive meaningful value in their work. Conversely, capable employees who are motivated are more likely to persist, solve problems, and use their skills productively. The thesis therefore places motivation as an intervening variable rather than only as an additional predictor.

The theoretical logic is grounded in the Ability-Motivation-Opportunity (AMO) framework. Appelbaum et al. (2000) conceptualized performance as a function of ability, motivation, and opportunity. Earlier work by Vroom (1964) emphasized the interaction between ability and motivation, while Blumberg and Pringle (1982) highlighted the often-neglected role of opportunity to perform. In the present model, competence captures the ability component directly, motivation is modeled explicitly, and discipline is treated as a behavioral and organizational mechanism that structures how effort is enacted within the workplace. This framework provides a coherent explanation of why competence and discipline may affect performance both directly and through motivation.

The research problem is therefore twofold. First, the study addresses the empirical need to explain employee performance in a plantation unit where competence, adherence to work rules, and motivation vary among employees. Second, it addresses a conceptual gap by testing whether work motivation transmits the effects of competence and work discipline to performance in a single integrated PLS-SEM model. The study aims to test seven relationships: competence to work motivation, work discipline to work motivation, competence to employee performance, work discipline to employee performance, work motivation to employee performance, and the two indirect effects through work motivation. The resulting evidence is intended to support more targeted human resource policies for technical training, discipline management, incentives, recognition, and employee development.

LITERATURE REVIEW

Ability-Motivation-Opportunity Framework

The AMO framework proposes that superior performance depends on employees having the ability to perform, the motivation to exert effort, and the opportunity to apply their capabilities. Appelbaum et al. (2000) formalized this logic in the high-performance work systems literature and expressed performance as a function of ability, motivation, and opportunity. Boxall and Purcell (2003) further argued that effective performance requires knowledge and skills, sufficient motivation, and an organizational setting that permits employees to use both. Jiang et al. (2012) later demonstrated through meta-analysis that ability-enhancing, motivation-enhancing, and opportunity-enhancing human resource practices affect organizational outcomes through distinct but related mechanisms.

The present study applies this framework to individual employee performance in plantation operations. Competence represents the employee's ability to execute work, while motivation captures the willingness to direct effort toward organizational goals. Work discipline is positioned as a work behavior that reflects self-control, responsibility, compliance, and structured opportunity to perform within established operating rules. This interpretation is particularly relevant in a plantation context because effective work requires technical capability and individual effort to be aligned with schedules, procedures, safety standards, and production targets.

Competence and Employee Outcomes

Competence refers to the underlying capability that enables an employee to meet job demands. The thesis operationalizes competence through three dimensions adapted from Silaen et al. (2021): knowledge, skill, and attitude. Knowledge is represented by participation in training and application of learned theory; skill by problem-solving ability and the application of technology; and attitude by adherence to company ethics and courteous behavior. This configuration is consistent with the view that competence combines what employees know, what they can do, and how they behave while performing work.

From an AMO perspective, competence strengthens ability. Employees who understand work procedures and possess relevant technical skills should be more confident in confronting operational problems and more capable of

translating effort into results. Kurnia and Sutisna (2025) also emphasize the value of aligning employee qualifications and competence with job requirements. The empirical literature summarized in the thesis generally supports positive effects of competence on performance, including findings by Pakpahan and Aulia (2022) and Fauzi (2024), although the presence of nonsignificant findings in some contexts indicates that motivation may be a relevant explanatory mechanism. Competence can also influence motivation. When employees perceive that they possess the knowledge and skills required by their jobs, they are more likely to experience confidence, mastery, and willingness to engage with demanding tasks. Prior studies cited in the thesis, including Rachman et al. (2021), report positive effects of competence on work motivation. These arguments lead to the expectation that competence affects both motivation and employee performance.

Work Discipline and Employee Outcomes

Work discipline is expressed through consistent compliance with organizational rules and the responsible use of work time. Afandi (2021) groups discipline into time obedience and work responsibility. In this study, the six indicators cover punctual attendance, effective use of time, absence without unjustified leave, compliance with company regulations, effort to achieve company targets, and preparation of daily work reports. These indicators capture discipline as observable behavior rather than as an abstract personal trait.

Discipline can improve performance by reducing avoidable delays and uncertainty in the execution of tasks. Employees who follow schedules and procedures allow work units to coordinate more effectively and reduce the risk that one employee's behavior disrupts subsequent operational activities. In addition, consistent rules can create a predictable work environment in which employees understand expectations and consequences. The thesis relates this logic to the AMO framework by treating discipline as a mechanism that supports structured opportunity and the direction of motivated effort.

Empirical studies summarized in the thesis show positive relationships between discipline and both motivation and performance. Makmuroh and Parmin (2021) and Imron Amrulloh et al. (2025) report positive effects of work discipline on motivation, while Anam and Winarko (2023) and Idris et al. (2021) support its relationship with performance. These findings suggest that discipline may affect performance directly and may also operate through employee motivation.

Work Motivation as a Mediating Mechanism

Motivation concerns the forces that initiate, direct, and sustain work behavior. The thesis measures motivation using six dimensions adapted from Xu (2022): intrinsic motivation, identified regulation, instrumental regulation, introjected regulation, external regulation, and amotivation. The selected indicators address satisfaction from work, personal meaning, income stability, family expectations, expected incentives, and the level of drive to work. Together they reflect both intrinsic and extrinsic reasons for exerting effort.

The mediating argument is that competence and discipline can shape employees' willingness to exert effort, and this motivational state in turn affects performance. Competence may generate a sense of mastery that increases willingness to engage, while disciplined routines can reduce ambiguity and help employees direct effort toward clear standards. Motivation then transforms these conditions into persistence, attention, and productive behavior. In statistical terms, mediation is supported when the indirect paths from competence and discipline to performance through motivation are significant.

The model therefore proposes the following hypotheses: H1, competence positively affects work motivation; H2, work discipline positively affects work motivation; H3, competence positively affects employee performance; H4, work discipline positively affects employee performance; H5, work motivation positively affects employee performance; H6, work motivation mediates the effect of competence on performance; and H7, work motivation mediates the effect of work discipline on performance.

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Table 1. Research hypotheses

Code	Hypothesized relationship
H1	Competence → Work Motivation
H2	Work Discipline → Work Motivation
H3	Competence → Employee Performance
H4	Work Discipline → Employee Performance
H5	Work Motivation → Employee Performance
H6	Competence → Work Motivation → Employee Performance
H7	Work Discipline → Work Motivation → Employee Performance

METHOD

Research Design, Population, and Sample

The study used a quantitative explanatory and cross-sectional survey design. The research site was the Garden Unit of PT Perkebunan Nusantara IV Regional VI Cot Girek, North Aceh. The population consisted of 539 employees distributed across the manager's office, nine operational divisions (afdeling), technical functions, and security. The study focused on employees from Afdeling I to Afdeling IX and obtained 200 usable responses.

Purposive sampling was used. The thesis specifies that eligible respondents were employees who used an Android-based smartphone and were willing to complete the questionnaire during the data collection period from 25 June to 20 July 2026. The final sample size of 200 also fell within the range considered adequate in the thesis for the 24-indicator PLS-SEM model. Data were collected online using a structured Google Form distributed to employees through communication channels such as WhatsApp, social media, and e-mail.

Measurement

All constructs were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Competence was measured with six indicators based on Silaen et al. (2021), work discipline with six indicators based on Afandi (2021), work motivation with six indicators adapted from Xu (2022), and employee performance with six indicators based on Robbins and Judge (2022). All constructs were specified as reflective in the PLS-SEM analysis.

Table 2. Constructs, dimensions, and measurement indicators

Construct	Dimensions / indicator focus	Items
Competence	Knowledge, skill, attitude	6
Work Discipline	Time obedience, work responsibility	6
Work Motivation	Intrinsic, identified, instrumental, introjected, external, amotivation	6
Employee Performance	Quality, quantity, timeliness, effectiveness, independence, commitment	6

Data Analysis

Data were analyzed using Partial Least Squares Structural Equation Modeling in SmartPLS 4. The analytical procedure followed two stages. First, the measurement model was evaluated through outer loadings, Average Variance Extracted (AVE), Cronbach's alpha, composite reliability, and discriminant validity. The thesis used HTMT as the primary discriminant validity criterion and also reported the Fornell-Larcker criterion and cross-loadings. Second, the structural model was assessed using collinearity statistics, coefficients of determination (R^2), effect sizes (f^2), predictive relevance (Q^2predict), model fit statistics, and bootstrapped path coefficients.

Hypothesis testing used 5,000 bootstrap subsamples and a 5% significance level. Direct and indirect effects were considered statistically significant when the reported t-statistic exceeded 1.96 and the p-value was below 0.05. The mediation assessment focused on the significance of the indirect effect together with the continued significance of the corresponding direct path, which permits identification of partial mediation.

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RESULTS AND DISCUSSION

Respondent Profile and Descriptive Pattern

All 200 respondents were male because the sampling frame was drawn from operational afdeling positions. The largest age group was 25–35 years (44.0%), followed by 36–45 years (32.0%), meaning that 76.0% of respondents were between 25 and 45 years of age. Most respondents had completed senior high school or vocational high school (52.5%), while 24.0% held diploma qualifications and 8.5% held bachelor's degrees. Permanent employees accounted for 68.5% of the sample. In terms of tenure, 37.5% had worked for 5–10 years and 19.0% for 11–15 years. Operator positions represented the largest job category (42.0%). These characteristics indicate a workforce dominated by operational employees with substantial practical experience.

Table 3. Selected respondent characteristics (n = 200)

Characteristic	Category	n	%
Sex	Male	200	100.0
Age	25–35 years	88	44.0
Age	36–45 years	64	32.0
Education	Senior high school/vocational	105	52.5
Education	Diploma (D1–D3)	48	24.0
Employment status	Permanent employee	137	68.5
Tenure	5–10 years	75	37.5
Position	Operator	84	42.0

The descriptive means were generally high. Competence averaged 3.999, work discipline 4.057, work motivation 4.083, and employee performance 4.011. For competence, participation in company training had the highest mean (4.045), while the item on upholding company ethics had the lowest mean (3.945). For work discipline, effective use of work time produced the highest mean (4.105). Employee performance was strongest on careful work and use of individual ability (4.085), while resource optimization and minimization of waste had the lowest performance mean (3.895). These patterns suggest that employees generally evaluated their competence, discipline, motivation, and performance positively, but they also identify practical areas for improvement, particularly ethics internalization and resource efficiency.

Measurement Model

The measurement model satisfied the validity and reliability criteria reported in the thesis. All 24 indicators had outer loadings above 0.70. AVE values ranged from 0.679 to 0.761, indicating that each construct explained more than half of the variance in its indicators. Cronbach's alpha ranged from 0.905 to 0.937 and composite reliability from 0.927 to 0.950. These values indicate strong internal consistency. The HTMT ratios were all below 0.90, with the largest ratio observed between work motivation and employee performance (0.790), supporting discriminant validity across the four constructs.

Table 4. Measurement model summary

Construct	Outer loading range	AVE	Cronbach α	Composite reliability
Competence	0.795–0.865	0.680	0.906	0.927
Work Discipline	0.855–0.887	0.761	0.937	0.950
Work Motivation	0.768–0.875	0.680	0.905	0.927
Employee Performance	0.797–0.862	0.679	0.905	0.927

The reported Fornell-Larcker matrix and cross-loading analysis provided additional support for discriminant validity. The square root of each construct's AVE exceeded its correlations with other constructs, and every indicator

loaded more strongly on its intended construct than on the alternatives. Taken together, the measurement results indicate that the structural relationships can be interpreted without evidence of major measurement overlap.

Structural Model and Predictive Performance

Collinearity was not a concern in the structural model. Inner VIF values ranged from 1.121 to 1.506, well below the threshold of 5.0 used in the thesis and also below the more conservative value of 3.0. The coefficient of determination for work motivation was $R^2 = 0.336$, indicating that competence and work discipline jointly explained 33.6% of the variance in motivation. Employee performance had $R^2 = 0.629$, meaning that competence, discipline, and motivation explained 62.9% of its variance. Although the thesis categorized both values as moderate, the performance equation clearly has stronger explanatory power than the motivation equation.

Table 5. Structural model quality indicators

Indicator	Work Motivation	Employee Performance	Interpretation
R^2	0.336	0.629	Moderate explanatory power reported in thesis
R^2 adjusted	0.329	0.623	Close to R^2 values
Q^2predict	0.356	0.460	Predictive relevance > 0
RMSE	0.811	0.743	Lower error for performance
MAE	0.633	0.575	Lower error for performance

The effect-size results further clarify the relative contribution of the predictors. Competence had a small effect on work motivation ($f^2 = 0.067$), whereas work discipline had a medium effect ($f^2 = 0.293$). For employee performance, competence had a small effect ($f^2 = 0.109$), discipline had a medium effect ($f^2 = 0.152$), and work motivation had the largest effect ($f^2 = 0.412$). Predictive relevance was also supported because Q^2predict exceeded zero for both endogenous constructs. The reported SRMR of 0.049 and NFI of 0.903 were interpreted in the thesis as evidence of acceptable model fit.

Direct Effects

All five direct hypotheses were supported. Competence positively affected work motivation ($\beta = 0.467$, $t = 8.059$, $p < 0.001$), indicating that employees with stronger knowledge, skills, and work attitudes were more motivated. Work discipline also increased motivation ($\beta = 0.223$, $t = 3.365$, $p = 0.001$). Competence and work discipline each had positive direct effects on employee performance, with coefficients of 0.286 and 0.220, respectively. Work motivation produced the largest direct effect on performance ($\beta = 0.480$, $t = 8.859$, $p < 0.001$).

Table 6. Direct hypothesis testing

Hypothesis	Path	β	t-statistic	p-value	Decision
H1	Competence → Work Motivation	0.467	8.059	<0.001	Supported
H2	Work Discipline → Work Motivation	0.223	3.365	0.001	Supported
H3	Competence → Employee Performance	0.286	6.084	<0.001	Supported
H4	Work Discipline → Employee Performance	0.220	4.550	<0.001	Supported
H5	Work Motivation → Employee Performance	0.480	8.859	<0.001	Supported

Competence, Motivation, and Performance

The positive path from competence to motivation supports the proposition that ability can itself become a motivational resource. Employees who understand procedures and possess relevant technical skills are more likely to feel capable of dealing with operational challenges. In the Cot Girek plantation context, work includes plant maintenance, harvesting, transportation, and the use of operational equipment. The practical value of competence is therefore immediately visible to employees because better mastery of the job reduces uncertainty and increases

confidence. This interpretation is consistent with the AMO logic in which ability and motivation jointly contribute to performance (Appelbaum et al., 2000). The competence-performance relationship also supports the human resource argument that knowledge and skills should translate into better work outcomes. A coefficient of 0.286 indicates a meaningful direct contribution even after motivation and discipline are considered. The finding aligns with Fauzi (2024), Pakpahan and Aulia (2022), and the other positive studies summarized in the thesis. It also helps explain why inconsistent results in prior research do not necessarily invalidate competence as a predictor. Instead, the strength of its direct effect may depend on whether employees are motivated and whether the organizational context allows competence to be expressed.

The practical implication is that training should not be treated as an isolated event. The descriptive results show that employees rated participation in company training highly, but the lowest competence mean concerned company ethics. Training programs should therefore combine technical content with ethical conduct, problem solving, and technology application. This broader approach is likely to strengthen both the ability and motivational components that ultimately influence performance.

Work Discipline, Motivation, and Performance

Work discipline positively influenced both motivation and performance. The direct effect on performance confirms that punctuality, effective use of work time, rule compliance, target orientation, and work responsibility have operational consequences. In plantation activities, delays or noncompliance can affect coordinated tasks and the use of equipment, making discipline a concrete contributor to performance rather than merely a formal organizational requirement.

The positive relationship with motivation can be interpreted through the role of structured expectations. Clear rules and consistent work routines reduce ambiguity about what employees are expected to do. When employees understand schedules, performance targets, and reporting requirements, they can allocate effort more effectively. This interpretation is compatible with the thesis discussion that disciplined working conditions provide a structured opportunity to perform. It also aligns with Makmuroh and Parmin (2021), Imron Amrulloh et al. (2025), and Norawati and Arman (2022), who report links between discipline and work-related motivational outcomes.

However, discipline should not be managed only through sanctions. The study's own managerial recommendations emphasize consistent and fair enforcement, transparent rewards and sanctions, and leadership role modeling. These practices can preserve discipline without undermining motivation. Such an approach is important because the findings indicate that motivation is not peripheral to the model; it is the strongest direct predictor of performance.

The Central Role of Work Motivation

Work motivation had the strongest direct relationship with employee performance and the largest effect size. This result shows that the willingness to exert effort is a central mechanism through which employees convert capability and workplace expectations into actual performance. Within the AMO framework, ability without sufficient motivation cannot fully generate high performance because employees may possess the necessary skills but fail to apply them consistently. The result is also consistent with the motivation-performance evidence cited in the thesis, including Makmuroh and Parmin (2021), Idris et al. (2021), and Praditya et al. (2025).

The finding has direct managerial relevance. The thesis recommends incentives, recognition of achievement, clear career development, and supportive working conditions as practical levers for maintaining motivation. Stability of income and future security are also emphasized. Because the sampled employees were largely experienced operational workers, motivational systems should be connected to visible performance criteria, career progression, safety, and recognition of technical contribution rather than relying on generic motivational programs.

Mediating Effects of Work Motivation

Both indirect effects were statistically significant. Competence affected employee performance through work motivation with an indirect coefficient of 0.224 ($t = 6.068$, $p < 0.001$). Work discipline affected performance through motivation with an indirect coefficient of 0.107 ($t = 3.081$, $p = 0.002$). Because the corresponding direct effects of competence and discipline on performance also remained significant, the results indicate partial mediation. Motivation therefore explains part, but not all, of the way competence and discipline translate into performance.

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Table 7. Indirect effects and mediation results

Hypothesis	Indirect path	β indirect	t-statistic	p-value	Mediation
H6	Competence → Work Motivation → Employee Performance	0.224	6.068	<0.001	Partial
H7	Work Discipline → Work Motivation → Employee Performance	0.107	3.081	0.002	Partial

The stronger indirect coefficient for competence suggests that motivation is particularly important in converting capability into performance. Technical knowledge and skill can raise performance directly, but their effect becomes larger when employees are also willing to apply those capabilities intensively. This finding extends a simple competence-performance view by showing that the psychological readiness to use competence is part of the performance process.

The indirect effect of discipline is smaller but remains significant. Discipline therefore influences performance partly through a motivational route and partly through direct behavioral regularity. This pattern is plausible in an operational workplace. Compliance with schedules and procedures can improve performance immediately, while a predictable and orderly work environment can also strengthen the employee's willingness to work toward organizational goals.

Collectively, the mediation findings reinforce the integrated logic of the research model. Performance improvement is unlikely to be maximized through a single human resource intervention. Competence development should be accompanied by motivational reinforcement, while discipline systems should be implemented in ways that preserve fairness, clarity, and employee commitment. In this sense, the study contributes evidence from a palm oil plantation setting where the interaction between technical ability, disciplined behavior, and motivation is operationally important.

Theoretical Contribution and Contextual Interpretation

The results contribute to the AMO-based explanation of performance by showing that the three constructs do not operate as isolated determinants. Competence is directly associated with performance and also indirectly associated through motivation. This pattern is consistent with the premise that having the capacity to perform is necessary but not always sufficient. An employee may know the correct procedure and possess the relevant technical skill, yet actual performance still depends on the willingness to mobilize that capability. The significant indirect effect therefore gives empirical substance to the interaction between ability and motivation emphasized in the AMO tradition.

The role of work discipline adds a context-specific extension to this logic. Discipline is not one of the three labels in the original AMO formula, but the behaviors measured in this study describe how employees operate within the opportunity structures created by the organization. Punctuality, effective use of time, compliance with rules, target orientation, and daily reporting create predictable conditions for coordinated work. The significant direct and indirect effects indicate that such discipline has a dual function: it improves task execution directly and it is associated with a motivational state that further supports performance.

The relative sizes of the coefficients are also theoretically informative. Competence has the strongest effect on work motivation among the two antecedents, whereas motivation has the strongest direct effect on performance among all predictors. This sequence suggests a capability-to-motivation-to-performance mechanism that is especially relevant for technical plantation work. The employee first needs to feel able to handle the job; this sense of capability is then associated with stronger motivation, which is translated into higher performance. The significant direct competence-performance path shows that this motivational route complements rather than replaces the direct productivity value of competence.

The model also shows that different predictors contribute at different magnitudes. The f^2 results indicate a small competence effect on both motivation and performance, a medium discipline effect on motivation and performance, and a large motivation effect on performance. These findings caution against evaluating predictors only by statistical significance. All paths are significant, but their practical contribution differs. In managerial research, this distinction is useful because it helps prioritize interventions without dismissing variables that have smaller but still meaningful effects. The explanatory and predictive indicators provide additional context for the structural findings. Competence and discipline explain 33.6% of the variance in motivation, while the three predictors explain 62.9% of the variance in performance. Q^2predict values above zero indicate that the model retains predictive relevance for both endogenous

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constructs. The lower predictive error reported for employee performance is consistent with the higher explained variance in that equation. Accordingly, the model is more informative as an explanation of performance than as a complete explanation of what motivates employees, leaving substantial room for other motivational antecedents.

That remaining unexplained variance is substantively important. The thesis proposes that future studies consider leadership, organizational culture, work environment, and compensation. These factors may help explain why employees with similar competence and discipline levels can still differ in motivation. Incorporating such variables would also allow future research to separate motivational influences that arise from individual capability from those generated by supervisors, rewards, social climate, and organizational systems.

The demographic profile should also be considered when interpreting the findings. The sample is entirely male and heavily concentrated in operational positions, with most respondents in productive age groups and many having more than five years of work experience. The results therefore speak most directly to a technically experienced operational workforce rather than to the entire spectrum of employees in the wider company. This contextual specificity is a strength for understanding field operations but also defines the boundary of generalization.

Finally, the study demonstrates the practical value of combining measurement and structural diagnostics in a PLS-SEM analysis. High internal consistency and acceptable discriminant validity show that the constructs are empirically distinguishable, while low inner VIF values reduce concern that the structural estimates are driven by problematic collinearity. The combination of significant paths, moderate-to-strong explanatory performance, positive predictive relevance, and acceptable model-fit indicators provides a coherent basis for interpreting the proposed relationships within the sample studied.

Managerial Implications

Three priorities follow from the findings. First, competency development should be continuous and needs-based. Training should address specific operational tasks, technology use, problem solving, and safety, while also strengthening ethics and interpersonal conduct. Second, discipline should be supported through clear standards, consistent supervision, fair consequences, and leadership example. Third, motivation should be actively managed because it has the strongest direct contribution to performance. Incentives, recognition, career opportunities, stable employment conditions, and constructive performance feedback are practical mechanisms highlighted in the thesis.

The combined strategy is more important than any single intervention. The partial mediation results mean that training and discipline policies have direct value, yet part of their benefit is realized because they increase motivation. Managers should therefore design development and control systems that also strengthen employees' sense of meaning, achievement, fairness, and future opportunity. Periodic performance evaluation can then be used to identify whether improvements in competence and discipline are being translated into measurable work outcomes.

Implementation Priorities for the Plantation Unit

The findings can be translated into a staged implementation agenda. The first stage should focus on diagnosing competency gaps at the level of work units and positions. Because the sample covers nine afdeling and several operational roles, training needs should be mapped against the specific tasks performed by operators, daily workers, foremen, staff, assistant afdeling, and plantation management. The objective is to ensure that training is connected to work requirements rather than delivered uniformly. Training evaluation should then assess whether employees apply the learned procedures, technologies, and problem-solving approaches in their daily tasks.

The second stage should strengthen the behavioral infrastructure of discipline. The descriptive results already indicate relatively high discipline, so the managerial challenge is not simply to add stricter rules. The organization should maintain clear attendance and reporting expectations, communicate targets consistently, and apply rewards and sanctions transparently. Supervisors can reinforce discipline by providing timely feedback and demonstrating the standards expected from employees. This approach is consistent with the thesis recommendation that leadership example and fair enforcement are important for sustaining disciplined behavior.

The third stage should connect competence and discipline programs with motivational outcomes. Employees should be able to see how improved capability and consistent performance relate to recognition, career opportunities, incentives, and greater responsibility. The study shows that motivation is the strongest direct predictor of performance, which means that training and control systems will be less effective if employees perceive no meaningful benefit from applying their capabilities or maintaining disciplined behavior. Recognition and development opportunities can therefore serve as bridges between human resource practices and employee effort.

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The fourth stage should use periodic performance evaluation as a feedback mechanism. The lowest descriptive performance score concerns resource optimization and reduction of waste. This area can be incorporated into performance discussions alongside work quality, target achievement, timeliness, initiative, and commitment. Regular feedback would allow supervisors to identify whether problems arise from limited competence, weak discipline, low motivation, or a combination of factors. The resulting diagnosis can support more precise interventions than a uniform performance-improvement program.

The final stage should monitor whether the integrated approach produces sustained improvements. Because the present study is cross-sectional, it cannot determine how competence, motivation, discipline, and performance change after specific policies are implemented. The plantation unit could therefore track selected performance and human resource indicators over time, compare work units, and evaluate whether training, recognition, and discipline initiatives correspond with better operational outcomes. Such monitoring would also provide stronger evidence for future longitudinal research.

Table 8. Management action priorities derived from the findings

Priority	Evidence from the study	Suggested action	Expected focus
1. Competence	Competence significantly affects motivation and performance	Needs-based technical, technology, problem-solving, and ethics training	Ability and confidence
2. Discipline	Discipline significantly affects motivation and performance	Clear standards, fair enforcement, supervisor role modeling, routine feedback	Consistency and responsibility
3. Motivation	Largest direct effect on performance ($\beta = 0.480$; $f^2 = 0.412$)	Recognition, transparent incentives, career paths, supportive work conditions	Effort and persistence
4. Performance feedback	Resource optimization is the lowest-rated performance indicator	Periodic appraisal focused on efficiency, timeliness, targets, and initiative	Operational improvement
5. Monitoring	Cross-sectional design limits temporal inference	Track HR and performance indicators over time and across work units	Continuous improvement

CONCLUSION

This study demonstrates that competence, work discipline, and work motivation are all significant predictors of employee performance at the Garden Unit of PTPN IV Regional VI Cot Girek, North Aceh. Competence positively affects both work motivation and performance, while work discipline also improves motivation and performance. Work motivation is the strongest direct predictor of performance and significantly mediates both the competence-performance and discipline-performance relationships. Because the direct effects remain significant, the mediation is partial rather than full.

The findings support an AMO-based interpretation of plantation employee performance. Ability in the form of competence contributes to performance, but its value is strengthened when employees are motivated to apply what they know and can do. Discipline also contributes through both direct behavioral consistency and an indirect motivational pathway. For management, the results justify an integrated human resource approach combining technical and ethical competency development, consistent work discipline, and motivational practices such as recognition, transparent incentives, career development, and supportive working conditions.

The study is limited to one plantation unit, uses cross-sectional questionnaire data, and therefore does not capture changes in employee attitudes and performance over time. Future research should include multiple plantation units or firms, use longitudinal designs where feasible, and test additional organizational factors such as leadership, organizational culture, work environment, and compensation. Such extensions would clarify the boundary conditions under which competence, discipline, and motivation jointly shape performance in labor-intensive operational settings.

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