



The Effect of Competence and Training on Employee Performance with Work Motivation as a Mediating Variable in Private Manufacturing Companies in Garut Regency

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Abstract: This study examines the effect of competence and training on employee performance with work motivation as a mediating variable in private manufacturing companies in Garut Regency. Using a quantitative explanatory design, data were collected from 100 permanent employees through structured questionnaires. Structural Equation Modeling based on Partial Least Squares was applied for data analysis. The findings indicate that competence ($\beta = 0.34$, $p = 0.001$) and training ($\beta = 0.28$, $p = 0.003$) significantly affect employee performance. Both competence ($\beta = 0.37$, $p = 0.000$) and training ($\beta = 0.33$, $p = 0.001$) significantly influence work motivation, which in turn significantly affects performance ($\beta = 0.42$, $p = 0.000$). Work motivation partially mediates these relationships. The model demonstrates good fit with SRMR = 0.048 and NFI = 0.93. The study reinforces workplace learning as a practical form of lifelong learning that supports technological adaptation in regional manufacturing industries.

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INTRODUCTION

The Garut manufacturing industry, particularly in the leather and textile sectors, faces challenges such as labor-intensive production processes and limited access to modern technology. The nature of these industries requires technical competence to ensure quality control, meet production targets, and adhere to safety standards. However, in such environments, mere technical knowledge may not be enough. The need for motivated employees becomes crucial, as motivation ensures that employees consistently apply their technical skills, maintain productivity despite challenges, and engage proactively in problem-solving tasks. Without adequate motivation, even highly skilled employees may fail to meet organizational goals.

The manufacturing sector continues to face profound challenges driven by global competition, rapid technological change, and increasing demands for efficiency and quality. At the regional level, these challenges are often intensified by limited access to advanced technology, a reliance on labor-intensive production processes, and variations in workforce capability. Within this context, human resources emerge as a strategic asset that determines organizational resilience and long-term competitiveness.

The manufacturing industry plays a critical role in regional economic development, particularly in areas where industrial activity provides employment opportunities and supports local supply chains. In the context of increasing global competition, manufacturing firms are required to continuously improve productivity, efficiency, and quality in order to remain competitive. These demands place significant pressure on organizations to optimize the performance of their human resources, as employees remain central to production processes despite advances in automation and technology.

Employee performance is widely recognized as a key determinant of organizational success. High levels of employee performance contribute to operational efficiency, product quality, customer satisfaction, and organizational sustainability. Conversely, poor performance can lead to production delays, quality defects, increased operational costs, and reduced competitiveness. For private manufacturing companies operating at the regional level, such as those in Garut Regency, these challenges are particularly salient due to limited resources and intense competition.

Competence represents a fundamental aspect of employee capability. It encompasses knowledge, technical skills, problem-solving abilities, and professional attitudes that enable employees to perform their tasks effectively. In manufacturing environments, competence is closely related to employees' ability to follow standard operating procedures, operate machinery, maintain quality standards, and adapt to production demands. However, competence is not static and must be continuously developed in response to technological change and organizational needs.

Training serves as a primary mechanism for competence development within organizations. Through structured training programs, employees acquire new knowledge, enhance their skills, and update their competencies in line with organizational objectives. Training also functions as a form of workplace learning that supports lifelong learning beyond formal education. In this sense, organizations act as learning environments that contribute to human development throughout an individual's working life.

Despite the importance of competence and training, empirical evidence suggests that improvements in these areas do not automatically translate into enhanced employee performance. Employees with similar levels of competence and training exposure often display varying performance outcomes. This phenomenon indicates that psychological factors play a critical role in shaping how learning outcomes are applied in practice. Among these factors, work motivation has been identified as a key driver of employee behavior and performance.

Work motivation refers to the internal and external forces that initiate, direct, and sustain work-related behavior. Motivated employees are more likely to exert effort, persist in the face of challenges, and apply their competencies effectively. Within the workplace learning framework, motivation functions as a mechanism that activates learning outcomes and transforms them into productive work behavior.

Although numerous studies have examined the relationships between competence, training, motivation, and performance, much of the existing literature focuses on large organizations or public sector institutions. Limited attention has been given to private manufacturing companies operating at the regional level, particularly from a workplace learning and global education perspective. Furthermore, the mediating role of work motivation remains underexplored in such contexts. This study addresses this gap by

analyzing the effect of competence and training on employee performance with work motivation as a mediating variable at a private manufacturing company in Garut Regency.

LITERATURE REVIEW

Lifelong learning is critical in adapting to evolving manufacturing technologies. In sectors such as Garut's leather and textile industries, technological advancements require workers to continuously update their technical skills. Continuous training not only helps employees stay current with industry-specific technologies but also facilitates smoother transitions to more efficient processes, thereby improving overall performance. This connection between lifelong learning and technological adaptation underscores the direct impact that ongoing skill development has on both individual and organizational performance.

Competence as Workplace Learning Capital

Competence represents the accumulation of learning outcomes obtained through education, training, and work experience. Within workplace learning theory, competence serves as learning capital that enables employees to perform tasks effectively and adapt to changing work demands. Competent employees demonstrate higher self-efficacy, problem-solving ability, and task mastery, which positively influence performance.

Training as an Organizational Learning System

Training functions as an organizational learning mechanism that facilitates knowledge transfer, skill acquisition, and behavioral change. Effective training programs enhance employee capability while signaling organizational commitment to human development. In manufacturing contexts, training improves efficiency, reduces errors, and strengthens compliance with quality standards.

Work Motivation as a Learning Activation Mechanism

Work motivation determines whether employees apply their competencies and training outcomes in daily work practices. Motivated employees demonstrate higher effort, persistence, and engagement, enabling learning outcomes to translate into performance improvements. Motivation therefore plays a mediating role between learning inputs and performance outputs.

Employee Performance as an Outcome

Employee performance reflects the observable outcome of workplace learning and motivation. High performance indicates successful integration of competence development, training, and motivational engagement.

Based on the theoretical arguments, the following hypotheses are proposed:

H1 Competence positively affects employee performance

H2 Training positively affects employee performance

H3 Competence positively affects work motivation

H4 Training positively affects work motivation

H5 Work motivation positively affects employee performance

H6 Work motivation mediates the effect of competence on employee performance

H7 Work motivation mediates the effect of training on employee performance

METHODS

The sample for this study consisted of 100 permanent employees with at least one year of experience in Garut-based manufacturing companies. The respondents were employed across various operational units, including production, quality control, and maintenance. Educational backgrounds varied, with most employees holding high school diplomas (45%) or vocational training certifications (40%), while the remaining 15% held university degrees. This diverse profile ensures that the findings are applicable across both managerial and operational levels within the manufacturing industry. This study employed a quantitative explanatory research design to examine causal relationships among competence, training, work motivation, and employee performance. The research was conducted at a private manufacturing company located in Garut Regency, Indonesia. The company operates in a labor-intensive manufacturing sector and relies heavily on employee performance to achieve production targets.

The population of this study consisted of permanent employees working in production and operational units. A purposive sampling technique was applied, with the criterion that respondents must have a minimum of one year of work experience. This criterion was used to ensure that respondents had sufficient exposure to organizational training programs and work processes. A total of 100 employees participated in the study.

Data were collected using a structured questionnaire measured on a five-point Likert scale ranging from strongly disagree to strongly agree. The competence construct was measured using indicators related to job knowledge, technical skills, task completion ability, and professional attitude. Training was measured through indicators reflecting training relevance, frequency, perceived benefits, and application of training outcomes. Work motivation was measured using indicators related to effort, responsibility, enthusiasm, and achievement orientation. Employee performance was measured through indicators of work quality, quantity, timeliness, and teamwork.

Data analysis was conducted using Partial Least Squares Structural Equation Modeling. The analysis involved evaluation of the measurement model through tests of validity and reliability, followed by structural model analysis to test the proposed hypotheses and mediation effects.

RESULTS AND DISCUSSION

The findings reveal that work motivation only partially mediates the relationship between competence, training, and performance. This partial mediation suggests that other variables also play a role in enhancing employee performance. For instance, organizational culture, which shapes employee attitudes toward work and learning, and workplace facilities, such as ergonomic workstations and access to modern equipment, can significantly impact performance outcomes. Future studies could investigate these factors to understand how they interact with competence, training, and motivation in influencing employee behavior.

Garut Regency is known for its leather and textile-based manufacturing industries, which remain largely labor-intensive despite gradual technological modernization. Many production processes still rely on manual precision, machine operation skills, and adherence to quality standards. In such industries, technical competence alone is insufficient to ensure performance consistency. Workers often face repetitive tasks, production pressure, and strict quality control requirements. Under these conditions, motivation becomes essential in sustaining work discipline, productivity, and consistency.

Without strong work motivation, technical competence may not be fully translated into productive behavior. Therefore, in the regional manufacturing context of Garut, competence requires motivational activation to generate stable performance outcomes.

The results of this study provide strong empirical evidence regarding the role of competence and training as key components of workplace learning that influence employee performance, both directly and indirectly through work motivation. The findings confirm that human resource development practices function most effectively when they are embedded within a learning-oriented organizational environment and supported by motivational mechanisms.

The measurement model evaluation indicates that all indicators demonstrate satisfactory convergent validity, with loading factor values exceeding the recommended threshold. The Average Variance Extracted values for all constructs are above the minimum criterion, indicating that the constructs explain a substantial proportion of variance in their indicators. Discriminant validity is also achieved, as each construct is empirically distinct from the others. Reliability testing confirms strong internal consistency for all constructs.

The structural model analysis reveals that competence has a positive and significant effect on employee performance. This finding suggests that employees with higher levels of knowledge, skills, and professional attitudes are better able to meet performance expectations in manufacturing environments. Competent employees are more capable of performing tasks accurately, solving problems efficiently, and maintaining quality standards.

Training also demonstrates a positive and significant effect on employee performance. This result confirms that training functions as an effective workplace learning mechanism that enhances employee capability and supports performance improvement. Training programs enable employees to update their skills, adapt to technological changes, and improve work efficiency.

Furthermore, competence and training both have significant positive effects on work motivation. Employees who perceive themselves as competent and supported through training tend to exhibit higher levels of motivation. This finding highlights the psychological benefits of competence development and training, which extend beyond skill acquisition to influence employee attitudes and motivation.

Work motivation has a positive and significant effect on employee performance, indicating that motivated employees are more likely to exert effort, persist in their work, and achieve performance targets. The mediation analysis shows that work motivation partially mediates the effects of competence and training on employee performance. This result suggests that competence and training influence performance both directly and indirectly through motivational mechanisms.

These findings support workplace learning theory and global education perspectives that emphasize the interaction between learning, motivation, and performance. Learning outcomes must be supported by motivational processes to achieve sustainable performance improvements, particularly in labor-intensive manufacturing contexts.

Measurement Model and Reliability

All indicators meet convergent validity criteria with loading factors above recommended thresholds, and AVE values indicate adequate variance capture by each construct.

Discriminant validity is confirmed using the Fornell Larcker criterion, and all constructs demonstrate strong internal consistency based on Cronbach alpha and composite reliability.

Measurement model statistics are presented in Tabel 1 to Tabel 4

Tabel 1. Convergent Validity Test Results, Loading Factors

Construct	Indicator	Loading Factor	Remark
Competence	C1 Job knowledge	0.78	Valid
	C2 Job skills	0.82	Valid
	C3 Task completion ability	0.80	Valid
	C4 Professional attitude	0.76	Valid
Training	T1 Training content relevance	0.81	Valid
	T2 Training frequency	0.77	Valid
	T3 Training benefits	0.84	Valid
	T4 Application of training results	0.79	Valid
Work Motivation	M1 Achievement motivation	0.83	Valid
	M2 Work responsibility	0.80	Valid
	M3 Work enthusiasm	0.85	Valid
	M4 Target achievement	0.78	Valid
Employee Performance	EP1 Work quality	0.82	Valid
	EP2 Work quantity	0.79	Valid
	EP3 Timeliness	0.81	Valid
	EP4 Teamwork	0.77	Valid

Table 1 reports indicator validity for each construct using loading factor, all indicators show loading factor above 0,70, so each indicator is accepted and supports the measurement model.

Tabel 2. Average Variance Extracted, AVE

Construct	AVE	Criterion	Result
Competence	0.62	> 0.50	Valid
Training	0.64	> 0.50	Valid
Work Motivation	0.66	> 0.50	Valid
Employee Performance	0.63	> 0.50	Valid

Table 2 presents average variance extracted for convergent validity, all constructs have AVE above 0,50, meaning the indicators capture more variance from their construct than error variance.

Tabel 3. Discriminant Validity, Fornell Larcker Criterion

Construct	Competence	Training	Work Motivation	Employee Performance
Competence	0.79			

Training	0.54	0.80		
Work Motivation	0.57	0.55	0.81	
Employee Performance	0.59	0.58	0.61	0.79

Table 3 summarizes discriminant validity using the Fornell Larcker criterion, the diagonal values represent the square root of AVE and they are higher than the correlations in the same row and column, this confirms each construct is empirically distinct.

Tabel 4. Reliability Test Results

Construct	Cronbach's Alpha	Composite Reliability	Criterion	Result
Competence	0.79	0.86	> 0.70	Reliable
Training	0.81	0.87	> 0.70	Reliable
Work Motivation	0.83	0.89	> 0.70	Reliable
Employee Performance	0.80	0.86	> 0.70	Reliable

Table 4 shows internal consistency reliability using Cronbach alpha and composite reliability, all values are above 0,70, so the constructs are reliable and consistent for further structural testing.

Tabel 5. Fit Indices for Structural Model

Fit Index	Value	Threshold/Interpretation	Remarks
SRMR (Standardized Root Mean Square Residual)	0.048	< 0.08 is considered a good fit	SRMR value indicates a very good fit between the model and data.
NFI (Normed Fit Index)	0.93	NFI > 0.90 indicates a good fit	NFI value suggests that the model is a good fit to the data.
CFI (Comparative Fit Index)	0.95	CFI > 0.90 indicates a good fit	The CFI value supports the model fit.
TLI (Tucker-Lewis Index)	0.94	TLI > 0.90 indicates a good fit	TLI value suggests that the model is a good fit to the data.

Tabel ini menunjukkan hasil dari beberapa fit indices yang digunakan untuk menilai kecocokan model struktural yang dikembangkan dalam penelitian ini. Dengan nilai-nilai SRMR, NFI, CFI, dan TLI yang berada di atas ambang batas yang diterima (0.08 untuk SRMR dan 0.90 untuk NFI, CFI, dan TLI), dapat disimpulkan bahwa model ini memiliki kecocokan yang sangat baik dengan data yang ada. Ini memberikan

keyakinan bahwa hubungan yang diusulkan antara kompetensi, pelatihan, motivasi kerja, dan kinerja karyawan dapat dipercaya dan valid dalam konteks penelitian ini.

Description of Validity and Reliability Test Results

Validity and reliability tests were conducted to ensure that the measurement instruments used in this study accurately and consistently captured the constructs of competence, training, work motivation, and employee performance. The evaluation of the measurement model was performed using Partial Least Squares Structural Equation Modeling, focusing on convergent validity, discriminant validity, and construct reliability.

The results of the convergent validity assessment indicate that all indicators associated with each construct exhibit loading factor values exceeding the recommended threshold of 0.70. The indicators measuring competence, training, work motivation, and employee performance demonstrate strong correlations with their respective latent constructs, suggesting that each indicator contributes meaningfully to the measurement of the intended variable. These findings confirm that the measurement model satisfies the criteria for convergent validity.

Furthermore, the Average Variance Extracted values for all constructs are above the minimum acceptable level of 0.50. This indicates that each construct explains more than half of the variance of its indicators, thereby reinforcing the adequacy of convergent validity within the measurement model.

Discriminant validity was evaluated using the Fornell–Larcker criterion. The results show that the square root of the AVE for each construct is greater than the correlations between that construct and all other constructs in the model. This demonstrates that each construct is empirically distinct and captures a unique conceptual domain, thereby confirming that the measurement model meets the requirements for discriminant validity.

Construct reliability was assessed using Cronbach's Alpha and Composite Reliability coefficients. The results reveal that all constructs have Cronbach's Alpha and Composite Reliability values exceeding the threshold of 0.70, indicating strong internal consistency among the indicators. These findings suggest that the measurement instruments are reliable and capable of producing consistent results across repeated measurements.

Overall, the results of the validity and reliability tests confirm that the measurement model is both valid and reliable. Therefore, the model is deemed suitable for further analysis of the structural relationships among competence, training, work motivation, and employee performance in this study.

Structural Relationships and Discussion

The Effect of Competence on Employee Performance

The results indicate that competence has a positive and significant effect on employee performance at private manufacturing companies in Garut regency. This finding reinforces the perspective that competence represents accumulated learning capital derived from formal education, on-the-job experience, and continuous skill development. In labor-intensive manufacturing environments, such as garment production, individual competence plays a decisive role in determining task accuracy, work efficiency, and adherence to quality standards.

From a workplace learning standpoint, competence reflects not only technical proficiency but also cognitive understanding and professional attitudes that shape work behavior. Employees who possess adequate knowledge and skills are better equipped to manage work demands, adapt to production targets, and minimize operational errors. This finding is consistent with international studies that emphasize competence as a critical determinant of employee performance in manufacturing and operational settings.

Furthermore, competence enhances employee self-efficacy, which influences how employees perceive their ability to perform tasks successfully. Higher self-efficacy encourages proactive problem-solving and greater responsibility in task execution. In the context of private manufacturing companies in Garut regency, where production quality and timeliness are essential, competent employees contribute directly to organizational stability and productivity.

The Effect of Training on Employee Performance

Training was found to have a positive and significant effect on employee performance, indicating that structured learning interventions contribute meaningfully to performance outcomes. Training serves as an organizational learning system that enables employees to acquire new skills, update existing competencies, and align their work practices with organizational standards.

In manufacturing organizations, training is particularly important due to frequent changes in production techniques, quality requirements, and operational procedures. Effective training programs reduce skill gaps, enhance work consistency, and support compliance with safety and quality regulations. The findings of this study suggest that employees who participate in relevant and well-designed training programs demonstrate higher levels of productivity and work quality.

Beyond skill enhancement, training also conveys organizational commitment to employee development. This perception fosters a sense of psychological attachment and encourages employees to reciprocate through improved performance. From a global education perspective, training can be viewed as a form of adult learning that extends beyond formal schooling, reinforcing the role of organizations as learning institutions that support lifelong learning.

The Effect of Competence on Work Motivation

The results demonstrate that competence has a significant positive effect on work motivation. Employees who perceive themselves as competent are more confident in their ability to meet job demands and achieve performance targets. This confidence enhances intrinsic motivation by fostering a sense of mastery and achievement.

Competence also influences motivation by reducing work-related anxiety and uncertainty. Employees who understand their tasks and possess the necessary skills are less likely to experience frustration and more likely to engage actively in their work. In the workplace learning framework, competence serves as a foundation that enables employees to fully engage with learning opportunities and apply new knowledge effectively.

This finding aligns with motivational theories that emphasize the role of perceived competence in sustaining motivation. In manufacturing environments, where repetitive tasks and production pressures are common, maintaining employee motivation through competence development is essential for preventing performance stagnation and disengagement.

The Effect of Training on Work Motivation

Training was also found to significantly influence work motivation. This result highlights that training functions not only as a skill development tool but also as a motivational mechanism. Employees who receive training perceive that the organization values their growth and invests in their future, which enhances their sense of belonging and commitment.

Training can increase motivation by providing employees with opportunities for learning, career development, and skill enhancement. These opportunities contribute to both intrinsic and extrinsic motivation by satisfying employees' needs for growth and recognition. In the context of private manufacturing companies in Garut regency, training programs signal organizational support and encourage employees to contribute more actively to organizational goals.

From a workplace learning perspective, training creates a learning climate that promotes continuous improvement and engagement. Employees who view training as relevant and beneficial are more likely to internalize learning outcomes and apply them in their daily work practices.

The Effect of Work Motivation on Employee Performance

Work motivation was found to have a positive and significant effect on employee performance, confirming its role as a key behavioral driver. Motivation determines the intensity, direction, and persistence of employee effort. Motivated employees are more willing to exert additional effort, maintain focus under pressure, and consistently meet performance standards.

In manufacturing settings, where production targets and quality requirements are stringent, motivation plays a critical role in sustaining performance levels. Employees with high motivation demonstrate greater commitment to task completion, adherence to procedures, and cooperation with colleagues. This finding supports the view that motivation is essential for translating competence and training into observable performance outcomes.

The Mediating Role of Work Motivation

The mediation analysis reveals that work motivation partially mediates the relationship between competence and employee performance as well as between training and employee performance. This result indicates that competence and training influence performance both directly and indirectly through motivational processes.

From a theoretical perspective, this finding supports workplace learning theory, which posits that learning inputs such as competence development and training require activation mechanisms to produce behavioral change. Motivation serves as this activation mechanism by determining whether employees apply their learning outcomes in practice.

The partial mediation effect suggests that while competence and training can directly enhance performance, their impact is significantly strengthened when employees are motivated. This highlights the importance of integrating motivational strategies into human resource development programs. Organizations that focus solely on skill development without addressing motivation may fail to achieve the full potential of their learning investments.

Implications for Global Education and Lifelong Learning

The findings of this study contribute to global education discourse by reinforcing the concept of lifelong learning as a continuous process that extends beyond formal

educational institutions into the workplace. Competence development and training in organizational settings represent practical manifestations of adult learning that support human development throughout the working life. This study highlights that workplaces, particularly in manufacturing sectors, function as informal learning environments where individuals acquire, apply, and refine skills essential for economic participation.

Educational policymakers and institutions should recognize the growing importance of workplace learning in shaping human capital. Curricula in vocational and higher education should be designed to equip learners not only with technical knowledge but also with learning competencies that enable continuous adaptation in dynamic work environments. Stronger collaboration between educational institutions and industry is necessary to align learning outcomes with workplace demands.

Implications for Human Resource Development Practice

For organizational practitioners, the results underscore the importance of adopting an integrated human resource development strategy that aligns competence development, training systems, and motivational mechanisms. Organizations should move beyond fragmented training initiatives and design learning systems that support continuous skill enhancement and employee engagement.

Competence development programs should be linked to clear performance expectations and career pathways to enhance employee motivation. Training initiatives should be perceived not merely as compliance requirements but as opportunities for personal and professional growth. Additionally, motivational strategies such as recognition, feedback, and performance-based incentives should be integrated with learning interventions to maximize their impact on performance.

Implications for Manufacturing Organizations in Regional Contexts

For manufacturing firms in Garut Regency, this study provides practical guidance on how to optimize human capital in resource-constrained environments. Investments in competence development and training can yield significant performance benefits when accompanied by efforts to enhance employee motivation. Creating a learning-oriented organizational culture that values development and engagement can help firms in the region improve productivity, reduce turnover, and strengthen competitiveness.

CONCLUSION

Based on the study's findings, it is recommended that manufacturing companies design training programs that focus not only on hard skills but also on enhancing employees' sense of belonging and engagement. Motivated employees are more likely to apply the skills they learn during training, leading to improved performance. By incorporating motivational strategies, such as recognition programs and career development opportunities, companies can ensure that employees remain committed to both personal and organizational growth.

This study concludes that competence and training have positive and significant effects on employee performance, both directly and indirectly through work motivation. Work motivation plays a crucial role in transforming learning outcomes into sustainable performance. The findings underscore the importance of integrating learning and motivational mechanisms within human resource development strategies. Future research is encouraged to explore additional mediating and moderating variables across different organizational contexts to further enhance understanding of employee performance dynamics.

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