

## THE EFFECT OF TRAINING AND HUMAN RESOURCE DEVELOPMENT ON EMPLOYEE PERFORMANCE MEDIATED BY INTRINSIC MOTIVATION: EVIDENCE FROM KARIANGAU FERRY PORT BALIKPAPAN, INDONESIA

**Heriyawan<sup>1</sup>, Sukisno Selamet Riadi<sup>2</sup>, Siti Maria<sup>3</sup>**

<sup>1,2,3</sup> Department of Management, Faculty of Economics and Business, Mulawarman University, Indonesia

<sup>1</sup>email: [heriyawam23@gmail.com](mailto:heriyawam23@gmail.com)

<sup>2</sup>email: [sukisno.selamet.riadi@feb.unmul.ac.id](mailto:sukisno.selamet.riadi@feb.unmul.ac.id)

<sup>3</sup>email: [siti.maria@feb.unmul.ac.id](mailto:siti.maria@feb.unmul.ac.id)

Received : 01 October 2025

Published : 16 November 2025

Revised : 10 October 2025

DOI : <https://doi.org/10.54443/ijset.v4i11.1300>

Accepted : 05 November 2025

Link Publish : <https://www.ijset.org/index.php/ijset/index>

### Abstract

This study investigates the influence of training and human resource development (HRD) on employee performance, with intrinsic motivation acting as a mediating variable. The research focuses on Kariangau Ferry Port Balikpapan, a public sector organization that plays a strategic role in regional logistics and maritime connectivity in Indonesia. Utilizing a quantitative methodology, data were collected from 41 employees, encompassing both operational and administrative staff. The analytical method employed was Partial Least Squares – Structural Equation Modeling (PLS-SEM) via SmartPLS 4. The findings indicate that both training and HRD significantly enhance employee performance. Intrinsic motivation partially mediates the relationship between training, HRD, and performance, highlighting its crucial role in strengthening employees' internal drive to perform effectively. These results align with Self-Determination Theory, which posits that intrinsic motivation is shaped by autonomy, competence, and relatedness—is vital in sustaining performance improvement. Theoretically, this study contributes to the expansion of HRD and motivation literature within the context of public sector organizations, particularly in developing economies. Practically, the results offer managerial insights for designing targeted training and continuous development programs that foster intrinsic motivation and enhance the sustainability of employee performance in public service institutions.

**Keywords:** *Training, Human Resource Development, Intrinsic Motivation, Employee Performance, Public Sector.*

### INTRODUCTION

Public sector organizations are integral to the provision of essential services that significantly impact economic stability and welfare. Within this context, the transportation sector functions as the foundation of national logistics and regional connectivity, especially in archipelagic nations such as Indonesia. The Kariangau Ferry Port in Balikpapan represents a vital component of the country's maritime transport infrastructure, facilitating the government's sea toll initiative and interregional connectivity strategies. As a conduit for passengers, goods, and vehicles throughout East Kalimantan, the port's operational efficiency is predominantly reliant on the competence, motivation, and adaptability of its human resources. Employee performance has long been recognized as a key determinant of organizational success, especially in public institutions, where service quality and citizen satisfaction are critical outcomes. In this context, performance reflects not only task completion but also the ability of employees to uphold service standards and demonstrate accountability. Research in public management has shown that high employee performance directly contributes to service efficiency, user satisfaction, and the overall credibility of government institutions (Alshurideh et al., 2021). However, achieving optimal performance requires more than compliance with procedures; it necessitates continuous learning, skill enhancement, and intrinsic motivation to maintain excellence in service delivery. Training and human resource development (HRD) are essential strategic instruments for enhancing employee performance. Training is primarily concerned with improving job-related skills and technical competencies, whereas HRD encompasses broader dimensions such as career advancement, leadership development, and organizational learning. Research conducted by Hosen et al. (2023) and Ramayah et al. (2022) indicates that structured training and well-designed development programs significantly enhance individual

competence, innovation capacity, and adaptability to organizational change. These aspects are particularly crucial for the Kariangau Ferry Port, where employees are required to manage complex operational challenges, ensure safety compliance, and respond promptly to service demands. Another critical factor influencing performance is intrinsic motivation, which refers to the internal drive that motivates individuals to perform tasks for inherent satisfaction rather than external rewards. According to Self-Determination Theory (Ryan & Deci, 2020), intrinsic motivation emerges when individuals experience autonomy, competence, and relatedness within their work environment. Employees who are intrinsically motivated tend to exhibit higher levels of commitment, creativity, and persistence in fulfilling their responsibilities. Recent studies have confirmed that intrinsic motivation enhances proactive behavior, engagement, and resilience among public servants (Hoxha & Ramadani, 2024; Chen & Zhang, 2024). In operational contexts such as Kariangau Port, these attributes are indispensable for maintaining service quality amid dynamic logistical demands.

Although the significance of training, Human Resource Development (HRD), and motivation is well-established, empirical investigations into their interrelationships within Indonesia's public transportation sector remain scarce. The extant literature predominantly addresses the manufacturing or private service sectors, thereby creating a research gap in understanding the impact of HRD initiatives on intrinsic motivation and, consequently, performance within public institutions. This gap is particularly pertinent to ferry operations, where the diversity of tasks and levels of responsibility necessitate that employees sustain consistent motivation and adaptability. Consequently, this study aims to address the following research questions: (1) In what ways do training and HRD influence employee performance in public transportation services? (2) Does intrinsic motivation serve as a mediating factor in the relationship between training, HRD, and performance?

This research endeavors to make both theoretical and practical contributions. Theoretically, it advances Self-Determination Theory and Human Capital Development models by empirically validating the mediating role of intrinsic motivation in the relationship between training, Human Resource Development (HRD), and performance within the public sector. Practically, it offers insights for policymakers and managers to design employee development programs that not only enhance technical skills but also cultivate intrinsic motivation, thereby reinforcing performance sustainability. Additionally, it underscores the importance of aligning HRD strategies with the distinctive cultural and structural characteristics of Indonesian public organizations, where collectivism and hierarchical respect frequently influence motivational dynamics. In conclusion, this study identifies intrinsic motivation as a pivotal psychological mechanism through which training and Human Resource Development (HRD) impact employee performance. By examining this mechanism within the context of the Kariangau Ferry Port, the study provides a nuanced understanding of how competence enhancement and motivational design can collaboratively promote more efficient, responsive, and human-centered public service organizations.

## **LITERATURE REVIEW**

### **2.1 Training and Employee Performance**

Training constitutes a fundamental human resource practice that enhances employees' technical skills, knowledge, and behaviors necessary for the effective execution of specific tasks. It equips employees with the ability to adapt to organizational changes, improve service delivery, and mitigate performance gaps. As articulated by Noe (2021), training is a systematic process aimed at enhancing individual performance through learning experiences that result in desired behavioral changes. Within public service organizations, training assumes a strategic role in ensuring operational efficiency and service quality (Hosen et al., 2023).

Numerous empirical studies have underscored that well-structured training exerts a positive influence on employee performance by fostering competence and productivity. Fan et al. (2023) demonstrated that the effectiveness of training significantly enhances job satisfaction and task efficiency among employees in the public logistics sector. Similarly, Rahim and Hamid (2023) identified that targeted training programs augment employee productivity and diminish operational errors. In public organizations such as Kariangau Ferry Port, training is crucial for enhancing employees' technical knowledge related to safety, operational procedures, and customer service—elements that directly impact service reliability and public trust.

Hypothesis 1 (H1): Training positively and significantly affects employee performance.

### **2.2 Human Resource Development and Employee Performance**

Human resource development (HRD) extends beyond the immediate purpose of training and encompasses a broader framework for nurturing employees' potential through continuous learning, career progression, and leadership development. HRD aims to align individual capabilities with organizational goals by integrating

education, mentoring, and performance feedback mechanisms (Swanson & Holton, 2019). In the public sector, HRD initiatives are crucial to maintaining service excellence, especially in dynamic environments where technological advancements and policy shifts demand adaptability. Recent studies demonstrate that HRD has a strong impact on job performance and overall organizational success. Farooq et al. (2023) emphasized that HRD programs enhance employees' adaptability and innovative capacity, which in turn drive sustainable performance. Similarly, Kang et al. (2023) found that human capital development contributes significantly to job satisfaction, engagement, and long-term productivity. For Kariangau Ferry Port, HRD is vital in preparing employees for more complex tasks and future leadership roles, ensuring that human capital remains a competitive advantage for service excellence.

Hypothesis 2 (H2): Human resource development positively and significantly affects employee performance.

### **2.3 Training and HRD on Intrinsic Motivation**

While training and HRD are primarily designed to enhance competence, they also play a critical role in fostering intrinsic motivation. According to Self-Determination Theory (Ryan & Deci, 2020), intrinsic motivation arises when individuals perceive autonomy, mastery, and purpose in their work. Training that emphasizes experiential learning and self-efficacy enhances these perceptions, making employees feel more capable and autonomous in their roles. Similarly, HRD programs that support personal growth and career development stimulate internal satisfaction and engagement. Empirical findings support this argument. Chen et al. (2023) and Arshad et al. (2023) found that training and HRD programs improve intrinsic motivation by increasing employees' confidence and sense of accomplishment. Liu et al. (2023) reported that HRD efforts focusing on mentorship and continuous learning foster a deeper emotional connection to work, thereby strengthening intrinsic motivation. In public institutions, where external rewards are often limited, intrinsic motivation becomes a vital psychological resource that sustains performance and commitment.

Hypothesis 3 (H3): Training positively and significantly affects intrinsic motivation.

Hypothesis 4 (H4): Human resource development positively and significantly affects intrinsic motivation.

### **2.4 Intrinsic Motivation and Employee Performance**

Intrinsic motivation has been widely recognized as a central predictor of performance across different organizational settings. It reflects an individual's internal drive to perform tasks due to inherent enjoyment or satisfaction, rather than external incentives. Employees who are intrinsically motivated tend to demonstrate greater creativity, persistence, and initiative in their work (Ryan & Deci, 2020). This form of motivation encourages proactive problem-solving and higher quality outcomes, especially in service-oriented environments. Several studies confirm that intrinsic motivation is a critical determinant of job performance. Yang and Sun (2023) found that intrinsic motivation significantly enhances performance in the transportation industry, while Kim et al. (2023) showed that intrinsically motivated employees exhibit superior quality of service and customer orientation. Within Kariangau Ferry Port, intrinsic motivation is essential for maintaining consistent performance under operational pressure, as it drives employees to fulfill their duties beyond formal requirements.

Hypothesis 5 (H5): Intrinsic motivation positively and significantly affects employee performance.

### **2.5 Mediation Role of Intrinsic Motivation**

The mediating role of intrinsic motivation bridges the link between HR interventions (such as training and HRD) and performance outcomes. When employees participate in well-designed training and development programs, they not only gain new skills but also experience psychological satisfaction that reinforces their intrinsic motivation. This motivational boost encourages them to apply the acquired knowledge more effectively, leading to higher performance levels. In other words, training and HRD enhance performance indirectly by nurturing intrinsic motivation as a psychological mechanism. Empirical evidence supports this mediating effect. Kang et al. (2023) demonstrated that intrinsic motivation mediates the relationship between HRD and job performance in logistics organizations. Similarly, Fan et al. (2023) and Fakhri et al. (2023) confirmed that employees who undergo training programs experience heightened intrinsic motivation, which translates into better task outcomes and engagement. In public institutions, this mediation effect is especially relevant since intrinsic motivation compensates for the limited extrinsic rewards typical of government structures.

Hypothesis 6 (H6): Intrinsic motivation mediates the relationship between training and employee performance.

Hypothesis 7 (H7): Intrinsic motivation mediates the relationship between human resource development and employee performance.

This conceptual model integrates training, HRD, and intrinsic motivation within the broader framework of Self-Determination Theory and Human Capital Development. It positions intrinsic motivation as a key psychological link through which HR practices influence performance, especially in the public sector. The framework also highlights the importance of aligning technical competence development with motivational enhancement to sustain long-term employee effectiveness.

## METHOD

### 3.1 Research Design

This study employs a quantitative research design using a survey method to examine the causal relationships between training, human resource development (HRD), intrinsic motivation, and employee performance at Kariangau Ferry Port in Balikpapan, Indonesia. The quantitative approach enables an objective measurement of associations among variables using numerical data, while the survey technique facilitates data collection from respondents through structured questionnaires that had undergone validity and reliability testing prior to distribution. This design is appropriate for analyzing structural relationships among latent variables using Structural Equation Modeling–Partial Least Squares (SEM-PLS), as it allows simultaneous evaluation of both measurement and structural models (Hair et al., 2021). The choice of SEM-PLS was based on its suitability for studies involving mediating variables and relatively small sample sizes. It is also robust against violations of multivariate normality assumptions and supports predictive model evaluation (Ramayah et al., 2022). This approach enables comprehensive assessment of both direct and indirect effects between HR practices and employee outcomes within a single analytical framework.

### 3.2 Population and Sampling

The study's population consisted of all operational and administrative employees of Kariangau Ferry Port. Given the manageable population size, a census approach was employed, involving the entire population of 41 employees as respondents. This sampling method was chosen to capture the full variation of employee experiences and to ensure the representativeness of findings for the institution. The respondents included staff members responsible for ticketing, logistics coordination, safety, and administration, reflecting diverse roles within the organization's service operations.

### 3.3 Measurement and Instruments

Data were collected using a structured questionnaire, which was divided into four primary constructs: training, Human Resource Development (HRD), intrinsic motivation, and employee performance. Each construct was assessed using established scales adapted from previously validated instruments, with all items rated on a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The training indicators were adapted from the studies of Fan et al. (2023) and Rahim & Hamid (2023), focusing on skill acquisition, relevance, and practical application. HRD items were derived from Kang et al. (2023) and Farooq et al. (2023), capturing aspects of career development, mentoring, and learning opportunities. Intrinsic motivation was measured using indicators aligned with Self-Determination Theory (Ryan & Deci, 2020), reflecting autonomy, competence, and the meaningfulness of work. Employee performance items were adapted from Yang & Sun (2023), concentrating on task completion, quality, and service effectiveness. Prior to full deployment, a pilot test was conducted to ensure content clarity and measurement consistency. Validity was assessed through item-total correlations, while reliability was verified using Cronbach's alpha, which met the acceptable threshold (>0.7).

### 3.4 Data Collection Procedures

Data collection was conducted through direct distribution of questionnaires to employees at the port. This on-site approach minimized data loss and allowed the researcher to clarify any ambiguous items for respondents. All participation was voluntary, and respondents were assured of confidentiality and anonymity. Ethical compliance was maintained following academic research standards. The collected data were then coded and processed for statistical analysis.

### 3.5 Data Analysis Technique

Data were analyzed utilizing Structural Equation Modeling–Partial Least Squares (SEM-PLS) through SmartPLS 4. SEM-PLS was chosen due to its capability to manage complex models with multiple dependent and

mediating relationships, such as the role of intrinsic motivation between HR interventions and performance outcomes. The analysis was conducted in two primary stages:

Measurement Model Evaluation (Outer Model) - This stage involved assessing the validity and reliability of the constructs. Convergent validity was examined using factor loadings and Average Variance Extracted (AVE), while discriminant validity was evaluated through the Fornell-Larcker criterion. Reliability was measured using Composite Reliability (CR) and Cronbach's alpha to ensure internal consistency (Sarstedt et al., 2021). Structural Model Evaluation (Inner Model) - This stage tested the hypothesized relationships among latent variables by estimating path coefficients, t-statistics, and p-values obtained through bootstrapping. The coefficient of determination ( $R^2$ ) and predictive relevance ( $Q^2$ ) were employed to evaluate the model's explanatory power and predictive accuracy. Additionally, the  $f^2$  effect size was examined to assess the contribution of each exogenous construct to the endogenous variable. Through these stages, the analysis identified both the direct and mediated effects of training and HRD on employee performance via intrinsic motivation, providing a comprehensive understanding of performance dynamics within a public service context.

## RESULTS AND DISCUSSION

### 4.1 Respondents' Demographic Profile

A total of 41 valid responses were obtained from employees of Kariangau Ferry Port, comprising both operational and administrative staff. The demographic characteristics are summarized in Table 1.

**Table 1. Respondents' Demographic Profile**

Demographic Variable	Category	Frequency	Percentage (%)
<b>Gender</b>	Male	29	70.7
	Female	12	29.3
<b>Age</b>	20–30 years	10	24.4
	31–40 years	16	39.0
	41–50 years	11	26.8
	>50 years	4	9.8
<b>Education</b>	High School	8	19.5
	Diploma	11	26.8
	Bachelor	19	46.3
	Postgraduate	3	7.3
<b>Work Tenure</b>	<5 years	9	22.0
	5–10 years	15	36.6
	11–15 years	11	26.8
	>15 years	6	14.6

The demographic profile indicates that most respondents are male, aged between 31 and 40 years, and possess a bachelor's degree. The majority have been employed for more than five years, suggesting substantial experience in port operations and administrative services. This demographic structure enhances the reliability of data interpretation, as it reflects diverse perspectives from employees with varying tenure and educational backgrounds.

### 4.2 Measurement Model Evaluation

The outer model evaluation aimed to test the validity and reliability of the measurement constructs: training, human resource development (HRD), intrinsic motivation, and employee performance. The results indicate that all item loadings exceed the threshold value of 0.70, confirming that each indicator appropriately represents its respective construct. Furthermore, the Average Variance Extracted (AVE) values for all constructs were above 0.50, demonstrating satisfactory convergent validity. Composite Reliability (CR) values ranged between 0.87 and 0.94, indicating excellent internal consistency across constructs. The Fornell–Larcker criterion was applied to ensure that each construct was distinct from the others. The square root of the AVE for each variable was greater than the correlations with other constructs, confirming discriminant validity. These findings suggest that the model's indicators reliably measure distinct theoretical dimensions, minimizing the risk of multicollinearity.

#### 4.3 Structural Model Evaluation

The evaluation of the inner model concentrated on examining the hypothesized relationships among the constructs. The model's fitness and predictive capability were assessed using  $R^2$ ,  $f^2$ , and  $Q^2$  values. Coefficient of Determination ( $R^2$ ): The  $R^2$  for intrinsic motivation was 0.67, indicating that training and Human Resource Development (HRD) collectively accounted for 67% of the variance in intrinsic motivation. Similarly, the  $R^2$  for employee performance was 0.71, suggesting that training, HRD, and intrinsic motivation together explained 71% of the variance in performance. Effect Size ( $f^2$ ): The  $f^2$  values for training and HRD on performance were 0.21 and 0.19, respectively, indicating moderate effect sizes. The  $f^2$  of intrinsic motivation on performance was 0.32, which is categorized as large, underscoring its significant influence. Predictive Relevance ( $Q^2$ ): Both endogenous variables produced  $Q^2$  values greater than 0 ( $Q^2 > 0.35$ ), affirming the model's predictive accuracy.

#### 4.4 Hypotheses Testing

Bootstrapping with 5,000 subsamples was conducted to test the significance of path coefficients. Table 2 summarizes the results.

Table 2. Hypotheses Testing Results

Hypothesis	Path	Path Coefficient ( $\beta$ )	t-value	p-value	Decision
<b>H1</b>	Training → Employee Performance	0.312	3.94	0.000	Supported
<b>H2</b>	HRD → Employee Performance	0.276	3.21	0.001	Supported
<b>H3</b>	Training → Intrinsic Motivation	0.428	4.18	0.000	Supported
<b>H4</b>	HRD → Intrinsic Motivation	0.392	3.77	0.000	Supported
<b>H5</b>	Intrinsic Motivation → Employee Performance	0.447	4.63	0.000	Supported
<b>H6</b>	Training → Intrinsic Motivation → Performance	0.191	3.42	0.001	Supported (Mediated)
<b>H7</b>	HRD → Intrinsic Motivation → Performance	0.175	3.16	0.002	Supported (Mediated)

All hypothesized relationships were significant at  $p < 0.05$ . Training and HRD have both direct and indirect effects on employee performance, confirming the mediating role of intrinsic motivation.

#### 4.5 Mediation Analysis

The mediation test confirmed that intrinsic motivation acts as a partial mediator in the relationship between HR interventions (training and HRD) and employee performance. Specifically, the indirect effect of training on performance through intrinsic motivation was significant ( $\beta = 0.191$ ,  $p = 0.001$ ), as was the indirect effect of HRD on performance ( $\beta = 0.175$ ,  $p = 0.002$ ). These results indicate that while training and HRD directly enhance performance, their influence is amplified when employees experience a sense of intrinsic motivation. This finding aligns with Self-Determination Theory, which suggests that individuals who feel competent and autonomous in their roles exhibit stronger commitment and effort, leading to superior performance outcomes (Ryan & Deci, 2020). Therefore, intrinsic motivation not only sustains but also magnifies the impact of HRD strategies in public service contexts.

#### 4.6 Model Fit Summary

The overall model demonstrated satisfactory fit indices. The Standardized Root Mean Square Residual (SRMR) was below 0.08, and the Normed Fit Index (NFI) exceeded 0.90, indicating acceptable model fit. Collectively, these results validate the robustness of the proposed model in explaining the causal pathways linking training, HRD, intrinsic motivation, and employee performance at Kariangau Ferry Port.

## DISCUSSION

The results of this study provide strong empirical evidence supporting the theoretical proposition that effective training and human resource development (HRD) significantly improve employee performance, both directly and indirectly through intrinsic motivation. This finding strengthens the application of Self-Determination Theory (SDT) and Human Capital Development Theory in the context of public sector organizations in developing economies such as Indonesia.

## 5.1 The Effect of Training on Employee Performance

The finding that training has a significant positive effect on employee performance (H1 supported) reinforces the idea that competence-building activities directly translate into higher task efficiency, service quality, and organizational productivity. This aligns with the results of Fan et al. (2023), who observed that continuous and relevant training enhances employees' ability to execute complex operational tasks. Similarly, Rahim and Hamid (2023) demonstrated that employees who perceive training as meaningful exhibit stronger motivation and job performance. At Kariangau Ferry Port, training not only improved technical knowledge but also strengthened employees' adaptability to changing operational demands, such as safety protocols and digitalization in ticketing systems. The result confirms that training functions as both a capability enhancer and a performance catalyst, particularly in public services where task precision and citizen satisfaction are paramount. From a theoretical perspective, this finding substantiates Human Capital Development Theory, which posits that investment in employee competencies yields higher organizational returns. Practically, it emphasizes that structured, context-specific training should be embedded within public organizations' strategic frameworks to ensure continuity of service excellence.

## 5.2 The Effect of HRD on Employee Performance

The positive and significant relationship between HRD and employee performance (H2 supported) suggests that HRD plays an essential role in fostering long-term performance improvement. This finding resonates with Farooq et al. (2023), who found that HRD initiatives - such as mentoring, career development, and learning programs - enhance employees' capability to innovate and sustain productivity. Similarly, Kang et al. (2023) highlighted that continuous HRD strengthens employees' self-efficacy and alignment with organizational goals. In the case of Kariangau Ferry Port, HRD contributed to performance through both structural and psychological mechanisms. Structurally, HRD improved the alignment between job requirements and employee competencies. Psychologically, it increased employees' sense of belonging and growth, leading to greater engagement in their roles. These findings extend Swanson and Holton's (2019) view that HRD should be positioned as a strategic system within organizational learning frameworks rather than as a reactive function. This outcome also underscores the significance of HRD as a mechanism for institutional resilience in public organizations, particularly when responding to modernization initiatives and changes in service models. For public managers, investing in HRD translates into more agile and innovative human resources capable of sustaining performance amidst administrative reform pressures.

## 5.3 The Effect of Training and HRD on Intrinsic Motivation

The study also confirmed that both training and HRD significantly enhance intrinsic motivation (H3 and H4 supported). This relationship is consistent with Self-Determination Theory, which posits that intrinsic motivation flourishes when individuals experience autonomy, competence, and relatedness (Ryan & Deci, 2020). Training programs that emphasize mastery and experiential learning empower employees to feel more competent and autonomous in performing their duties. Likewise, HRD initiatives that include mentoring and career planning foster a sense of connectedness and personal growth, key elements of intrinsic motivation. Empirical studies have reinforced these findings. Chen et al. (2023) found that training enhances intrinsic motivation through increased self-efficacy and task confidence. Similarly, Liu et al. (2023) demonstrated that HRD interventions emphasizing feedback and development foster deeper intrinsic satisfaction and engagement. In the context of Kariangau Ferry Port, employees who perceive HRD and training as opportunities for personal growth are more likely to approach their tasks with enthusiasm and purpose, transcending mere compliance. The implication is that HR systems must go beyond technical skill development to intentionally cultivate psychological empowerment. This shift requires managers to design HRD programs that integrate learning autonomy, reflective practices, and recognition mechanisms, thereby fostering sustainable motivation.

## 5.4 The Effect of Intrinsic Motivation on Employee Performance

Intrinsic motivation emerged as a strong predictor of employee performance (H5 supported). This result validates prior research showing that employees driven by internal satisfaction demonstrate higher levels of creativity, perseverance, and quality output (Yang & Sun, 2023; Kim et al., 2023). Intrinsic motivation acts as a self-regulatory mechanism that sustains performance even when external rewards are limited - a condition common in public sector organizations. At Kariangau Ferry Port, intrinsic motivation was observed to enhance employees' commitment to operational excellence, teamwork, and service responsiveness. Employees who felt competent and valued showed greater initiative in problem-solving and decision-making, which contributed directly to the port's

service efficiency. This reflects what Deci and Ryan (2020) describe as autonomous motivation, where individuals perform optimally because they find meaning and satisfaction in their work itself. Theoretically, this reinforces the psychological foundations of performance models by integrating motivational variables into human capital frameworks. It implies that in public organizations, motivation-based HR policies can serve as strategic levers for sustaining service quality and innovation.

### **5.5 The Mediating Role of Intrinsic Motivation**

A key contribution of this study is the validation of intrinsic motivation as a partial mediator between HR interventions (training and HRD) and employee performance (H6 and H7 supported). The mediation analysis revealed that training and HRD not only influence performance directly but also enhance it indirectly through motivational mechanisms. These findings align with Kang et al. (2023), who noted that motivation bridges the cognitive (learning) and behavioral (performance) outcomes of HRD. In practical terms, this mediation implies that the success of training and HRD programs depends on their ability to generate intrinsic drive among employees. When development initiatives cultivate feelings of competence, autonomy, and connection, employees internalize organizational goals as their own. This internalization process amplifies the impact of HR interventions, leading to sustained behavioral improvements. For public institutions such as Kariangau Ferry Port, this result underscores the need to balance technical and psychological dimensions of HR management. Performance enhancement strategies should not only train employees what to do but also inspire why to do it, transforming motivation into a continuous energy source for public service excellence.

### **5.6 Theoretical Implications**

This research contributes to Self-Determination Theory by empirically validating the mediating role of intrinsic motivation in linking HRD practices with performance outcomes in a public sector context. It also expands Human Capital Development Theory by demonstrating that the value of training and HRD investments depends on psychological mechanisms that sustain their effects. By integrating motivational constructs into the HRD–performance framework, this study provides a more holistic understanding of how employees convert organizational investments into behavioral outcomes. Furthermore, it offers a contextual contribution by situating the model within Indonesia's public service environment, where collectivist culture and hierarchical structures influence motivational dynamics. Unlike in Western models where autonomy dominates, this study shows that relatedness - the sense of social connection and belonging - plays an equally vital role in driving intrinsic motivation among Indonesian employees. Thus, the findings extend theoretical boundaries by proposing a culturally responsive model of HRD and motivation that can inform future cross-cultural research on public employee performance.

### **5.7 Managerial Implications**

From a managerial perspective, the findings indicate that enhancing employee performance necessitates a dual emphasis on the development of technical skills and the psychological empowerment of employees. Leaders in the public sector should design training and human resource development (HRD) programs that: 1. Incorporate autonomy-supportive learning environments, enabling employees to make decisions and engage in problem-solving experimentation. 2. Integrate recognition and feedback mechanisms that reinforce employees' sense of competence and progress. 3. Foster relational trust and collaboration, ensuring that HRD practices promote connectedness and a shared purpose across departments. 4. Link HRD outcomes to performance evaluations, ensuring that learning experiences translate into measurable behavioral and service improvements. At Kariangau Ferry Port, such approaches can enhance operational agility, safety compliance, and employee engagement - key outcomes for public service institutions facing digital transformation and performance accountability pressures.

### **5.8 Cultural and Contextual Reflections**

The Indonesian public sector presents unique cultural dynamics that shape the expression of intrinsic motivation. The collectivist culture emphasizes group harmony, loyalty, and respect for authority, which can both support and constrain intrinsic motivation. In environments such as Kariangau Ferry Port, motivation is often reinforced through interpersonal recognition and communal identity rather than purely individual autonomy. Therefore, motivation-based HRD strategies must align with these cultural realities. Programs emphasizing teamwork, mutual respect, and moral obligation toward public service can effectively cultivate intrinsic motivation within the Indonesian bureaucratic context. This interpretation bridges Western motivational theories with local management practices, enriching the discourse on context-sensitive human capital development.

## 5.9 Practical Contributions

This study provides actionable insights for policymakers and HR practitioners in the public sector. Investing in employee development is not merely a financial commitment but a strategic mechanism for achieving organizational sustainability. The integration of motivational psychology into HRD policies ensures that employees' learning translates into meaningful behavioral change. In particular, for agencies such as the Kariangau Ferry Port Authority, embedding motivation-oriented HRD into leadership development, safety culture, and digital upskilling programs can elevate both service performance and employee well-being. By focusing on the intrinsic value of work rather than external control, organizations can cultivate a more resilient and self-driven workforce capable of delivering consistent public value.

## CONCLUSION

This study examined the effects of training and human resource development (HRD) on employee performance, with intrinsic motivation as a mediating variable, using empirical evidence from Kariangau Ferry Port, Balikpapan. The analysis using SEM-PLS confirmed that both training and HRD significantly enhance employee performance. Furthermore, intrinsic motivation partially mediates these relationships, revealing that the effectiveness of HRD and training interventions depends not only on technical skill improvement but also on the psychological mechanisms that sustain employees' internal drive. These findings reinforce the principles of Self-Determination Theory and Human Capital Development Theory, emphasizing that intrinsic motivation is a central link between organizational development initiatives and performance outcomes. By fostering autonomy, competence, and relatedness, organizations can ensure that training and HRD investments produce sustainable behavioral changes and long-term performance enhancement. In the context of public service organizations such as Kariangau Ferry Port, the results demonstrate that performance improvement is not merely a matter of procedural compliance or external incentives but is rooted in employees' internal satisfaction and sense of purpose. Strengthening this motivational dimension represents a key step toward achieving consistent service quality and institutional excellence.

## 6.2 Theoretical Implications

Theoretically, this study contributes to the growing body of literature on human capital and motivation by integrating Self-Determination Theory within the HRD–performance framework. The results empirically validate intrinsic motivation as a mediating construct that transforms HRD inputs into observable performance outcomes. This extends existing theories by demonstrating that HR interventions can activate psychological mechanisms that amplify their impact on employee behavior. Moreover, the study advances the discourse on HRD in public sector contexts of developing economies, where intrinsic motivation is often shaped by cultural values such as collectivism and respect for hierarchy. It suggests that the relatedness dimension of motivation, often underexplored in Western literature, plays a particularly important role in sustaining employee commitment and engagement in Indonesian public organizations. Thus, this study broadens the applicability of motivational theories across cultural settings.

## 6.3 Managerial Implications

From a managerial perspective, the findings highlight the critical importance of designing Human Resource Development (HRD) and training programs that effectively balance the enhancement of technical skills with motivational reinforcement. Leaders within public institutions should consider the following strategies: 1. Implement training programs that prioritize mastery and autonomy to bolster employees' self-confidence and sense of competence. 2. Develop HRD strategies that incorporate mentoring, participative feedback, and recognition systems to cultivate intrinsic motivation. 3. Foster a work environment that values learning, collaboration, and mutual respect, which are essential for sustaining high levels of intrinsic motivation among employees. 4. Integrate motivation-oriented metrics into performance appraisals to ensure that developmental efforts lead to behavioral and attitudinal improvements. For Kariangau Ferry Port, the adoption of these strategies could enhance operational reliability, employee engagement, and organizational adaptability. More broadly, this model may serve as a benchmark for HRD reforms across Indonesia's public transportation sector, supporting the government's push toward efficiency and service excellence.

## 6.4 Limitations and Future Research

While this study offers valuable insights, it is not without limitations. Firstly, the sample size was restricted to 41 employees from a single public port, which may limit the generalizability of the findings. Future research could broaden the sample to encompass multiple ports or other public service agencies to enhance external validity.

Secondly, the cross-sectional design limits the ability to infer causality. Longitudinal studies could provide a more comprehensive understanding of how training and human resource development (HRD) influence motivation and performance over time. Thirdly, the study exclusively examined intrinsic motivation as a mediator. Future research could investigate additional psychological variables, such as organizational commitment, job satisfaction, or work engagement, which might account for further variance in performance outcomes. Finally, incorporating qualitative methodologies could offer a richer contextual understanding of how motivational processes unfold within the everyday dynamics of public sector work. In conclusion, this study underscores that human capital investments reach their full potential only when coupled with motivational empowerment. By recognizing the intrinsic aspects of work, public sector organizations can not only enhance efficiency but also foster a more engaged, resilient, and purpose-driven workforce, which are essential foundations for sustainable institutional performance.

## REFERENCES

- Alshurideh, M. T., Alzoubi, H. M., & Al Kurdi, B. (2021). The effect of employee performance appraisal on organizational performance. *Journal of Management and Strategy*, 12(2), 1–14. <https://doi.org/10.5430/jms.v12n2p1>
- Arshad, M., Nisar, Q. A., & Anwar, F. (2023). The impact of human resource development practices on employees' intrinsic motivation and innovative behavior. *Asia-Pacific Journal of Business Administration*, 15(4), 523–541. <https://doi.org/10.1108/APJBA-03-2022-0123>
- Chen, W., & Zhang, Z. (2024). Linking intrinsic motivation to job performance: The mediating role of psychological empowerment in the public sector. *Public Personnel Management*, 53(1), 35–54. <https://doi.org/10.1177/00910260231122124>
- Chen, X., Sun, L., & Wang, H. (2023). Training satisfaction and employee engagement: The role of intrinsic motivation and self-efficacy. *Human Resource Development International*, 26(2), 115–131. <https://doi.org/10.1080/13678868.2022.2154267>
- Deci, E. L., & Ryan, R. M. (2020). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press.
- Fan, Y., Zhao, J., & Li, L. (2023). Training effectiveness and job performance: The mediating role of work motivation in logistics service organizations. *International Journal of Productivity and Performance Management*, 72(6), 1547–1563. <https://doi.org/10.1108/IJPPM-03-2022-0149>
- Farooq, M., Hassan, M., & Ahmad, N. (2023). Human resource development and organizational performance: Evidence from public service organizations in South Asia. *Employee Relations*, 45(3), 674–693. <https://doi.org/10.1108/ER-10-2021-0460>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Sage Publications.
- Hosen, M., Rahman, M., & Alam, M. (2023). Assessing the impact of training and development on public sector employee performance. *Journal of Public Affairs*, 23(4), e2894. <https://doi.org/10.1002/pa.2894>
- Hoxha, E., & Ramadani, V. (2024). Intrinsic motivation, job satisfaction, and employee engagement in the public sector. *Sustainability*, 16(3), 1175. <https://doi.org/10.3390/su16031175>
- Kang, J., Lee, H., & Park, J. (2023). Human capital development and employee engagement: Exploring the mediating role of intrinsic motivation. *European Journal of Training and Development*, 47(2/3), 243–261. <https://doi.org/10.1108/EJTD-06-2022-0094>
- Kim, S., Choi, Y., & Park, H. (2023). The role of intrinsic motivation in improving service performance: Evidence from government employees. *Public Management Review*, 25(10), 1954–1972. <https://doi.org/10.1080/14719037.2022.2084436>
- Liu, Z., Wang, C., & Wu, H. (2023). Mentoring and intrinsic motivation: The mediating role of psychological meaningfulness. *Journal of Organizational Effectiveness: People and Performance*, 10(2), 220–239. <https://doi.org/10.1108/JOEPP-07-2022-0152>
- Mehner, M., Ng, K. Y., & Ramayah, T. (2024). Employee learning behavior, training design, and motivation: An integrated model. *Human Resource Development Quarterly*, 35(1), 44–68. <https://doi.org/10.1002/hrdq.21478>
- Noe, R. A. (2021). *Employee training and development* (8th ed.). McGraw-Hill Education.

**THE EFFECT OF TRAINING AND HUMAN RESOURCE DEVELOPMENT ON EMPLOYEE PERFORMANCE  
MEDIATED BY INTRINSIC MOTIVATION: EVIDENCE FROM KARIANGAU FERRY PORT BALIKPAPAN,  
INDONESIA**

Heriyawan et al

- 
- Rahim, A., & Hamid, M. (2023). The influence of training design and trainer competence on public sector employee performance. *International Journal of Human Resource Studies*, 13(1), 51–69. <https://doi.org/10.5296/ijhrs.v13i1.20245>
- Ramayah, T., Mahmood, R., & Ooi, K. B. (2022). The role of human resource development and digital readiness on service performance in government agencies. *International Journal of Public Administration*, 45(11), 870–883. <https://doi.org/10.1080/01900692.2021.1911773>
- Ryan, R. M., & Deci, E. L. (2020). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychological Association. <https://doi.org/10.1037/0000168-000>
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. In H. N. Sykes (Ed.), *Handbook of Market Research* (pp. 1–47). Springer. [https://doi.org/10.1007/978-3-030-16573-3\\_15](https://doi.org/10.1007/978-3-030-16573-3_15)
- Swanson, R. A., & Holton, E. F. (2019). *Foundations of human resource development* (3rd ed.). Berrett-Koehler Publishers.
- Tamirat, T. (2024). Linking employee training, motivation, and sustainable performance: Evidence from the transport service sector. *Journal of Applied Research in Human Resource Management*, 6(2), 133–150. <https://doi.org/10.1108/JARHRM-02-2024-0039>
- Yang, L., & Sun, H. (2023). The influence of intrinsic motivation on performance in logistics service organizations: A structural equation approach. *Journal of Industrial Engineering and Management*, 16(1), 84–101. <https://doi.org/10.3926/jiem.4107>