



Training, Human Resource Development, and Work Motivation as Determinants of Employee Performance in Microfinance Cooperatives

Dedi Bongga¹, Petrus Peleng Roreng^{2*}, Corvis L. Rantererung³

^{1,2,3}Master of Management Department, Paulus Indonesian Christian University, Makassar, Indonesia

E-mail: petrusroreng1@gmail.com

* Corresponding author

Submitted: 12-05-2026	Review: 23-05-2026	Revision: 03-06-2026	Accepted: 06-06-2026
-----------------------	--------------------	----------------------	----------------------

Abstrak: Penelitian ini bertujuan untuk menganalisis pengaruh program pelatihan, pengembangan sumber daya manusia, dan motivasi kerja terhadap kinerja pegawai pada KSP Balo' Toraja. Penelitian menggunakan pendekatan kuantitatif dengan metode survei. Data dikumpulkan melalui penyebaran kuesioner kepada 71 pegawai yang ditentukan menggunakan teknik sampling jenuh. Teknik analisis data yang digunakan adalah regresi linear berganda dengan bantuan aplikasi SPSS. Hasil penelitian menunjukkan bahwa program pelatihan dan pengembangan sumber daya manusia berpengaruh positif dan signifikan terhadap kinerja pegawai. Motivasi kerja juga berpengaruh positif terhadap kinerja pegawai meskipun kontribusinya relatif lebih rendah dibandingkan variabel lainnya. Secara simultan, program pelatihan, pengembangan sumber daya manusia, dan motivasi kerja berpengaruh signifikan terhadap kinerja pegawai dengan nilai koefisien determinasi (R^2) sebesar 96,8%, yang menunjukkan bahwa model penelitian memiliki kemampuan penjelasan yang sangat kuat. Temuan ini mengindikasikan bahwa peningkatan kompetensi pegawai melalui pelatihan yang terstruktur, pengembangan SDM yang berkelanjutan, serta dukungan motivasi kerja dapat meningkatkan kinerja organisasi, khususnya pada lembaga koperasi keuangan mikro. Penelitian ini memberikan kontribusi empiris bagi pengembangan manajemen sumber daya manusia pada sektor koperasi di Indonesia.

Kata kunci: Program Pelatihan; Pengembangan SDM; Motivasi Kerja; Kinerja Pegawai; Koperasi Keuangan Mikro.

Abstract: This study aims to analyze the influence of training programs, human resource development, and work motivation on employee performance at KSP Balo' Toraja. The research employed a quantitative approach using a survey method. Data were collected through questionnaires distributed to 71 employees selected using a saturated sampling technique. The data were analyzed using multiple linear regression with the assistance of SPSS software. The results indicate that training programs and human resource development have a positive and significant effect on employee performance. Work motivation also shows a positive influence on employee performance, although with a relatively lower contribution compared to other variables. Simultaneously, training, human resource development, and work motivation significantly affect employee performance with a coefficient of determination (R^2) of 96.8%, indicating that the model has a strong explanatory power. These findings suggest that improving employee competencies through structured training, sustainable HR development, and motivational support can enhance organizational performance, particularly in microfinance cooperative institutions. This study contributes to the human resource management literature by providing empirical evidence from the Indonesian cooperative sector.

Keywords: Training Programs; Human Resource Development; Work Motivation; Employee Performance; Microfinance Cooperatives.

INTRODUCTION

Human resources have become one of the most strategic assets in determining organisational sustainability and competitiveness in the contemporary business environment ([Roreng et al., 2021, 2024](#)). In the era of economic uncertainty, digital transformation, and increasingly dynamic market competition, organisations are required to strengthen employee capabilities and maintain high work performance to ensure organisational effectiveness and long-term sustainability ([Halik & Nurlia, 2024](#)). This condition is particularly relevant for microfinance institutions and savings and credit cooperatives, which rely heavily on employee competence, adaptability, and service quality in maintaining customer trust and organisational performance ([Kinasih & Pidola, 2025](#)). Recent studies emphasise that human resource management practices, particularly training, employee development, and work motivation, play a critical role in improving organisational productivity and employee performance ([Bandhaso et al., 2023](#); [Napan et al., 2025](#); [Tamba et al., 2025](#)).

Employee performance is widely recognised as an essential determinant of organisational success because it reflects employees' ability to accomplish tasks effectively and efficiently in accordance with organisational objectives. According to [Bakker et al. \(2023\)](#), employee performance is influenced not only by employees' technical competencies but also by psychological and organisational factors such as work motivation, organisational support, and opportunities for professional development. Consequently, organisations are increasingly encouraged to invest in strategic human resource practices that enhance employee skills, foster career growth, and strengthen employee commitment toward organisational goals ([Gerhart & Feng, 2021](#)).

Training programs are considered one of the most important instruments for improving employee competencies and reducing performance gaps within organisations ([Karangan et al., 2025](#)). Effective training enables employees to update their knowledge, improve technical and managerial skills, and adapt to changing organisational demands. In recent years, organisations have increasingly adopted flexible and technology-based training systems to respond to digital transformation and operational complexity ([Hendri, 2025](#)). Empirical evidence indicates that structured training programs

positively contribute to employee productivity, service quality, and operational efficiency ([Bandhaso et al., 2023](#); [Fatkhurahman, 2023](#)). Similarly, human resource development is viewed as a long-term strategic process aimed at enhancing employees' professional capacities, leadership abilities, and organisational adaptability ([Tamba et al., 2025](#)). Human resource development practices such as mentoring, coaching, career planning, and continuous learning are essential in building sustainable organisational capabilities ([Suksmono Aji & Mala, 2024](#)).

In addition to training and human resource development, work motivation remains a critical factor influencing employee performance. Work motivation represents the psychological drive that determines employees' direction, intensity, and persistence in achieving organisational goals ([Inggesi et al., 2025](#); [Renmaur et al., 2025](#)). Employees with high motivation tend to demonstrate greater responsibility, initiative, and commitment in completing their work effectively ([Hafidz & Noviyati, 2022](#); [Indou et al., 2025](#)). Previous studies consistently report that motivated employees exhibit better work performance, stronger organisational commitment, and higher levels of productivity ([Adriyanti et al., 2021](#); [Wulandari et al., 2024](#)). Therefore, organisations must establish supportive work environments and motivational systems to maximise employee potential and performance outcomes.

The importance of training, human resource development, and work motivation in improving employee performance has attracted considerable attention in human resource management research. However, empirical findings remain inconsistent across organisational contexts. Several studies found that training and development significantly influence employee performance ([Karangan et al., 2025](#); [Saleh & Azimi, 2025](#)), while other studies reported that some dimensions of human resource development did not significantly affect employee productivity ([Tafese Keltu, 2024](#)). These inconsistencies suggest that organisational context, institutional culture, and management practices may influence the effectiveness of human resource strategies. Consequently, further empirical investigation is necessary, particularly within the context of microfinance cooperatives in developing regions.

The phenomenon underlying this research can be observed in the operational challenges faced by

KSP Balo' Toraja, a savings and credit cooperative operating in Tana Toraja, Indonesia. As a microfinance institution, KSP Balo' Toraja depends heavily on employee competence and service quality in supporting financial inclusion and community economic development. Nevertheless, preliminary observations indicate several organisational issues, including fluctuating employee performance, limited initiative among employees, and inconsistencies in service effectiveness. These conditions may be associated with insufficient training implementation, limited human resource development initiatives, and varying levels of employee motivation.

To strengthen the empirical background of this study, several previous studies concerning the relationship between training, human resource development, work motivation, and employee performance are presented in **Table 1**.

Table 1. Previous Empirical Studies on Employee Performance Determinants

Researchers	Variables Examined	Main Findings
Ye & Chen, (2024)	Training, Motivation, Employee Performance	Training and motivation significantly improved employee performance
Karangan et al. (2025)	Training, HR Development, Employee Performance	HR development positively affected employee performance through job satisfaction
Pardosi et al. (2022)	Training Program, Motivation, Work Productivity	Training and motivation significantly influenced productivity
Sibarani & Dwiarti (2024)	Training, Career Development, Motivation, Performance	Motivation mediated the relationship between training and performance
Suksmono Aji & Mala (2024)	Training, HR Development, Productivity	Training significantly influenced productivity, while HR development showed insignificant partial effects

Source: Compiled from previous literature (2026)

The urgency of this study lies in the need for cooperative financial institutions to strengthen employee performance amid increasing economic uncertainty and organisational competition. Savings and credit cooperatives are expected to provide efficient financial services, maintain operational sustainability, and support community economic resilience. However, these objectives cannot be achieved without competent, motivated, and adaptive employees. Therefore, examining the combined influence of training programs, human resource development, and work motivation on employee performance is essential for developing evidence-based human resource strategies capable of enhancing organisational sustainability and competitiveness, particularly within the Indonesian microfinance cooperative sector.

Based on the research background, this study seeks to examine how training programs, human resource development, and work motivation influence employee performance at KSP Balo' Toraja, both partially and simultaneously, in order to provide empirical evidence regarding the effectiveness of strategic human resource practices within microfinance cooperative institutions.

LITERATURE REVIEW

Grounded Theory: Ability–Motivation–Opportunity (AMO) Theory

This study is primarily grounded in the Ability–Motivation–Opportunity (AMO) Theory, which explains that employee performance is influenced by three essential dimensions, namely employees' ability, motivation, and opportunities to contribute within the organisation ([Edgar et al., 2019](#)). According to the AMO framework, organisational performance can be improved when employees possess adequate competencies, strong motivation, and supportive organisational systems that facilitate effective work behaviour ([Beltrán-Martín & Bou-Llusar, 2018](#)). The theory has become one of the most widely adopted theoretical perspectives in strategic human resource management research because it comprehensively explains how human resource practices affect employee outcomes and organisational performance ([Kellner et al., 2019](#)).

Within the context of this study, training programs and human resource development represent the "ability" dimension because both practices are designed to improve employees'

knowledge, technical skills, and professional competencies. Meanwhile, work motivation reflects the “motivation” dimension, which determines employees’ willingness, commitment, and persistence in accomplishing organisational objectives. The integration of these variables is expected to enhance employee performance in microfinance cooperative institutions. Recent studies confirm that AMO-based human resource practices significantly contribute to employee productivity, organisational commitment, and work effectiveness ([Beltrán-Martín & Bou-Llusar, 2018](#); [Edgar et al., 2020](#)).

In addition, this study also adopts the perspective of Goal-Setting Theory proposed by [Locke and Latham \(2002\)](#), which argues that motivated employees tend to establish clearer goals, demonstrate stronger commitment, and achieve higher performance outcomes. Goal-setting mechanisms positively influence employee effort, persistence, and behavioural direction, particularly when employees receive adequate organisational support and professional development opportunities ([Kleingeld et al., 2011](#)).

Employee Performance

Employee performance refers to the level of achievement demonstrated by employees in completing their duties and responsibilities in accordance with organisational objectives. ([Yusuf et al., 2019](#)). Employee performance encompasses both the quality and quantity of work outcomes generated within a specific period. According to [Sibarani and Dwiarti \(2024\)](#), employee performance is influenced by employees’ competencies, organisational support, work environment, and psychological conditions. Employees with strong competencies and high work motivation generally demonstrate better productivity, efficiency, and service quality.

In contemporary human resource management literature, employee performance is frequently associated with organisational sustainability and competitive advantage. Organisations with highly productive employees are more capable of adapting to environmental changes and achieving long-term strategic goals ([Teece, 2018](#)). In cooperative financial institutions, employee performance is particularly important because organisational effectiveness heavily depends on employees’ ability to deliver reliable financial services and maintain member trust ([Nguyen et al., 2017](#)).

Operationally, employee performance in this study refers to employees’ effectiveness in accomplishing work tasks, achieving organisational targets, maintaining service quality, and demonstrating responsibility in carrying out organisational duties.

Training Programs

Training programs are systematic learning activities designed to improve employees’ technical knowledge, practical skills, and behavioural competencies necessary for performing current job responsibilities effectively ([Karangan et al., 2025](#)). Training is considered an essential strategic tool for reducing competency gaps and improving organisational productivity. [Bandhaso et al. \(2023\)](#) define training as a structured process aimed at modifying employees’ knowledge, behaviour, and competencies to improve work effectiveness and efficiency.

The increasing complexity of organisational environments and digital transformation has encouraged organisations to adopt more adaptive and technology-based training systems ([Hendri, 2025](#)). Contemporary organisations are increasingly implementing e-learning, blended learning, and workplace-based training approaches to improve employee adaptability and operational responsiveness ([Rasheed et al., 2020](#)). Previous empirical studies consistently indicate that training positively influences employee productivity, work quality, and organisational performance ([Rachman et al., 2024](#)).

From an operational perspective, training programs in this study refer to structured organisational activities intended to improve employees’ work-related competencies, including technical capability, work effectiveness, problem-solving skills, and professional adaptability.

Training Programs and Employee Performance

Training programs contribute significantly to employee performance because they enable employees to develop competencies required to perform tasks more effectively and efficiently ([Bandhaso et al., 2023](#)). Employees who receive adequate training are generally better prepared to adapt to technological developments, operational challenges, and organisational changes. According to [Listiari \(2024\)](#), effective training programs positively affect employee performance

because they improve employees' capabilities and confidence in performing work responsibilities.

Furthermore, training improves employees' understanding of organisational procedures, operational standards, and customer service practices, thereby increasing productivity and service quality. Empirical findings from [Sibarani and Dwiarti \(2024\)](#) demonstrated that training significantly enhances employee productivity and organisational effectiveness. Therefore, the following hypothesis is proposed:

H1: Training programs positively and significantly influence employee performance.

Human Resource Development

Human resource development (HRD) refers to a continuous and strategic process aimed at improving employees' professional competencies, leadership capabilities, career readiness, and organisational adaptability ([Suksmono Aji & Mala, 2024](#)). Unlike short-term training activities, HRD focuses on long-term employee growth through mentoring, coaching, career planning, education, and continuous learning systems. [Pan and Froese \(2023\)](#) argue that human resource development plays an important role in creating adaptive and resilient organisations capable of responding to competitive environmental changes.

Contemporary HRD practices emphasise sustainable learning cultures and organisational resilience. Organisations that invest in employee development are more likely to achieve innovation, employee retention, and long-term organisational sustainability ([de Araújo et al., 2022](#)). Moreover, HRD practices strengthen employees' psychological attachment to the organisation by improving career prospects and professional confidence ([Grund & Titz, 2022](#)).

Operationally, human resource development in this study refers to organisational efforts aimed at improving employees' managerial competencies, career development opportunities, leadership capabilities, and long-term professional growth.

Human Resource Development and Employee Performance

Human resource development contributes to employee performance by strengthening employees' competencies and preparing them for future organisational responsibilities ([Pan & Froese, 2023](#)). Employees who receive

continuous development opportunities tend to exhibit greater confidence, adaptability, and organisational commitment. According to [Sitompul et al. \(2021\)](#), career development and HRD practices positively affect employee motivation and performance because they provide employees with professional growth opportunities and clearer career pathways.

Furthermore, HRD enhances employees' ability to solve organisational problems and adapt to dynamic work environments. Empirical evidence from [Pratama and Hanafiah \(2025\)](#) revealed that HRD significantly improves employee performance through enhanced job satisfaction and competency development. Based on these arguments, the following hypothesis is proposed:

H2: Human resource development positively and significantly influences employee performance.

Work Motivation

Work motivation refers to the internal and external psychological forces that initiate, direct, and sustain employees' work-related behaviour toward achieving organisational goals. Motivation determines the intensity, persistence, and direction of employee effort in performing organisational tasks. According to [Tangko et al. \(2019\)](#), work motivation originates from both intrinsic factors, such as self-achievement and personal growth, and extrinsic factors, including rewards, recognition, and supportive work environments.

Goal-Setting Theory explains that motivated employees are more likely to establish challenging goals, demonstrate persistence, and achieve higher work performance. Employees with strong work motivation generally exhibit higher levels of responsibility, initiative, and organisational commitment ([Locke & Latham, 2002](#)). Contemporary studies consistently report that work motivation positively influences employee productivity, work effectiveness, and organisational performance ([Rumopa et al., 2025](#); [Susanti et al., 2024](#); [Wulandari et al., 2024](#)).

Operationally, work motivation in this study refers to employees' psychological drive to perform work responsibilities enthusiastically, persistently, and responsibly in achieving organisational objectives.

Work Motivation and Employee Performance

Work motivation directly influences employee performance because motivated employees tend to exert greater effort and demonstrate stronger commitment in accomplishing organisational tasks. Employees with high motivation levels generally perform work activities more effectively, demonstrate stronger discipline, and maintain higher productivity levels. According to [Wulandari et al. \(2024\)](#), work motivation positively affects employee performance by encouraging employees to pursue organisational goals with greater persistence and responsibility.

Additionally, motivated employees are more likely to demonstrate proactive behaviour, maintain positive workplace attitudes, and contribute to organisational effectiveness. Empirical findings from [Renmaur et al. \(2025\)](#) revealed that motivated employees achieve significantly better work outcomes compared to less motivated employees. Accordingly, the following hypothesis is proposed:

H3: Work motivation positively and significantly influences employee performance.

Conceptual Framework

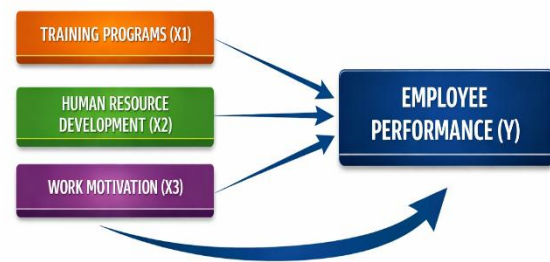
This study examines the influence of training programs, human resource development, and work motivation on employee performance within the context of microfinance cooperative institutions. Based on the theoretical perspectives and empirical findings discussed above, the conceptual framework assumes that training programs, human resource development, and work motivation collectively contribute to improving employee performance. Employees who possess adequate competencies, receive sustainable development opportunities, and maintain high motivation levels are expected to demonstrate better work performance and organisational effectiveness.

Therefore, this study also proposes the following simultaneous hypothesis:

H4: Training programs, human resource development, and work motivation simultaneously and significantly influence employee performance.

Based on the theoretical framework and empirical findings discussed previously, this study develops a conceptual framework to

illustrate the relationship between training programs, human resource development, work motivation, and employee performance. The framework explains that employee performance is influenced by employees' competencies developed through training and HR development, as well as by psychological encouragement reflected in work motivation. These variables are assumed to contribute both partially and simultaneously to improving employee performance within microfinance cooperative institutions. Therefore, the conceptual framework of this study is presented in **Figure 1**.



Source: Authors (2026)

Figure 1. Conceptual Framework

METHODS

This study employed a quantitative research approach with an associative-causal design to examine the influence of training programs, human resource development, and work motivation on employee performance at KSP Balo' Toraja, Indonesia. A quantitative approach was considered appropriate because the study aimed to test the causal relationships among measurable variables using statistical procedures ([Hair et al., 2022](#)). According to Sugiyono (2020), quantitative research is designed to analyse relationships between variables objectively through numerical data and statistical analysis. The associative-causal design was selected because the study sought to investigate both partial and simultaneous effects of independent variables on employee performance as the dependent variable. In addition, the study adopted a survey method to collect primary data directly

from respondents through structured questionnaires (Singarimbun, M & Effendi, 2008).

The research was conducted at KSP Balo' Toraja, a savings and credit cooperative located in Tana Toraja Regency, South Sulawesi, Indonesia. The institution was selected as the research site because it plays an important role in supporting local microfinance activities and community economic development. Furthermore, preliminary observations indicated several organisational challenges related to employee performance, competency development, and work motivation, making the institution highly relevant to the objectives of this study. The research was conducted between October 2025 and January 2026.

The population of this study consisted of all active employees of KSP Balo' Toraja. Since the total population was relatively manageable, this study applied a saturated sampling technique, also known as census sampling, in which all members of the population were selected as research respondents. According to Sekaran and Bougie, saturated sampling is appropriate when researchers intend to obtain comprehensive information from an entire population with limited size. Therefore, all 71 employees of KSP Balo' Toraja participated in this study as respondents. The use of saturated sampling was expected to improve the representativeness and external validity of the research findings because the collected data reflected the actual organisational conditions comprehensively.

Primary data were collected using a structured questionnaire distributed directly to respondents. The questionnaire employed a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree") (Susilana, 2015). Closed-ended questions were utilised to ensure consistency of responses and facilitate quantitative statistical analysis. The questionnaire items were adapted from previous studies related to training programs, human resource development, work motivation, and employee performance. According to [Hansen and Świdarska \(2024\)](#), structured questionnaires are effective instruments for measuring attitudes, perceptions, and behavioural tendencies in quantitative organisational research. Secondary data were also collected through organisational documents, reports, and archival records to support the interpretation of empirical findings.

Before hypothesis testing, the research instrument was evaluated through validity and reliability testing. Construct validity was assessed using Pearson Product-Moment Correlation, while reliability testing employed Cronbach's Alpha coefficient. An instrument was considered reliable if the Cronbach's Alpha value exceeded 0.70, indicating acceptable internal consistency (Ghozali, 2021). The results demonstrated that all research variables met the required validity and reliability standards.

Data analysis in this study was conducted using multiple linear regression analysis with the assistance of SPSS software. Multiple regression analysis was selected because the study examined the simultaneous influence of more than one independent variable on employee performance ([Okello, 2024](#)). Prior to regression analysis, several classical assumption tests were conducted, including normality testing, multicollinearity testing, and heteroscedasticity testing, to ensure the appropriateness of the regression model. Hypothesis testing was performed using partial tests (t-tests) and simultaneous tests (F-tests). The coefficient of determination (R^2) was also calculated to measure the explanatory power of the independent variables in explaining variations in employee performance ([Okello, 2024](#)). According to [Pallant \(2020\)](#), multiple linear regression is widely used in quantitative organisational research because it allows researchers to examine the direction and magnitude of relationships among variables simultaneously.

Table 2. Measurement Items

Variable	Measurement Indicators	Sources
Training Programs (X1)	Improvement of technical skills; relevance of training materials; effectiveness of training methods; adaptability to work demands; enhancement of job competencies	(Bandhaso et al., 2023 ; Karangan et al., 2025)
Human Resource Development (X2)	Career development opportunities; managerial capability improvement; continuous learning support; mentoring	(Armstrong & Taylor, 2026 ; Nikmah et al., 2023 ; Pan & Froese, 2023)

Variable	Measurement Indicators	Sources
	and coaching effectiveness; professional development initiatives	
Work Motivation (X3)	Work enthusiasm; responsibility toward tasks; achievement orientation; persistence in completing work; commitment to organisational goals	(Adriyanti et al., 2021; Indou et al., 2025; Susanti et al., 2024; Wulandari et al., 2024)
Employee Performance (Y)	Work productivity; service quality; task completion effectiveness; work efficiency; achievement of organisational targets	(Indou et al., 2025; Sibarani & Dwiarti, 2024)

Source: Adapted from previous study (2026)

RESULTS AND DISCUSSION

General Description of the Research Object

This study was conducted at KSP Balo' Toraja, a savings and credit cooperative operating in Tana Toraja Regency, South Sulawesi, Indonesia. As a microfinance cooperative institution, KSP Balo' Toraja plays an important role in supporting community-based financial services, particularly for micro and small-scale economic actors. The cooperative provides financial assistance, savings services, and loan distribution programs aimed at improving the economic welfare of local communities.

In carrying out its operational activities, KSP Balo' Toraja relies heavily on the effectiveness and performance of its employees. Employee performance becomes a strategic factor because service quality, customer trust, and operational sustainability are strongly influenced by employees' competencies, work motivation, and professional commitment. Along with increasing competition and organisational challenges in the financial sector, KSP Balo' Toraja is required to continuously improve the quality of its human resources through training programs, human resource development initiatives, and motivational strategies.

The institution was selected as the research object because preliminary observations indicated several organisational issues related to employee

performance fluctuations, varying levels of work motivation, and the need for more structured employee competency development programs. Therefore, this study attempts to examine empirically the influence of training programs, human resource development, and work motivation on employee performance within the context of a microfinance cooperative institution.

Respondent Characteristics

The respondents in this study consisted of all active employees of KSP Balo' Toraja, totaling 71 employees. Respondent characteristics were analysed based on gender, educational background, and years of service to provide a general overview of the demographic profile of the respondents.

Table 3. Respondent Characteristics

Characteristics	Category	Frequency	Percentage (%)
Gender	Male	38	53.52
	Female	33	46.48
	Total	71	100
Educational Background	Diploma	14	19.71
	Bachelor's Degree	53	74.64
	Master's Degree	4	5.63
	Doctoral Degree	0	0.00
	Total	71	100
Years of Service	5–9 Years	19	26.76
	10–14 Years	40	56.33
	15–19 Years	12	16.90
Total		71	100

Source: Primary data processed (2026)

Based on **Table 3**, male employees represented the majority of respondents, accounting for 53.52% of the total sample, while female employees accounted for 46.48%. In terms of educational background, most respondents held a bachelor's degree (74.64%), indicating that the employees generally possessed adequate academic qualifications. Regarding years of service, the majority of respondents had worked at KSP Balo' Toraja for 10–14 years (56.33%), suggesting that most employees had considerable

organisational experience and familiarity with institutional operations.

Descriptive Statistics

Descriptive statistical analysis was conducted to provide an overview of the distribution of research variables, including training programs, human resource development, work motivation, and employee performance (Pallant, 2020).

Table 4. Descriptive Statistics

Variables	N	Min	Max	Mean	Std. Dev
Training Programs (X1)	71	6.00	29.00	18.6197	7.11611
Human Resource Development (X2)	71	7.00	26.00	18.3380	6.13408
Work Motivation (X3)	71	20.00	30.00	23.9859	2.98325
Employee Performance (Y)	71	8.00	27.00	19.6197	6.34568

Source: SPSS output (2026)

The descriptive statistics indicate that all variables demonstrated relatively high mean scores, suggesting that respondents generally perceived training programs, HR development, work motivation, and employee performance positively (Pallant, 2020).

Instrument Testing

Validity Test. Validity testing was conducted using Pearson Product-Moment Correlation to assess whether each questionnaire item accurately measured the intended construct (Ghozali, 2021).

Table 5. Validity Test Results

Variables	Number of Items	Pearson Correlation
Training Programs (X1)	5	0.956 – 0.983
Human Resource Development (X2)	5	0.727 – 0.971
Work Motivation (X3)	5	0.714 – 0.797
Employee Performance (Y)	5	0.918 – 0.970

Source: SPSS output (2026)

The results demonstrate that all questionnaire items produced correlation coefficients above 0.40, indicating that all measurement items were valid and appropriate for further analysis (Ghozali, 2021).

Reliability Test. Reliability testing was conducted using Cronbach's Alpha to evaluate the consistency of the research instrument (Ghozali, 2021; Pallant, 2020).

Table 6. Reliability Test Results

Variables	Number of Items	Cronbach's Alpha
Training Programs (X1)	5	0.823
Human Resource Development (X2)	5	0.788
Work Motivation (X3)	5	0.814
Employee Performance (Y)	5	0.820

Source: SPSS output (2026)

All variables produced Cronbach's Alpha values above 0.70, indicating satisfactory internal consistency and reliability.

Classical Assumption Tests

Multicollinearity Test. The multicollinearity test was conducted using Tolerance and Variance Inflation Factor (VIF) values (Riadi, 2016).

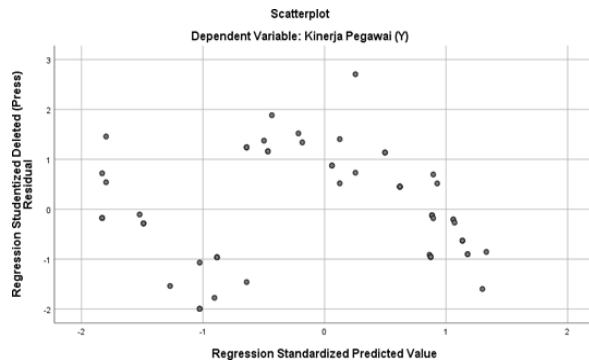
Table 7. Multicollinearity Test Results

Variables	Tolerance	VIF
Training Programs (X1)	0.054	18.350
Human Resource Development (X2)	0.044	22.958
Work Motivation (X3)	0.182	5.486

Source: SPSS output (2026)

Although the VIF values for several variables exceeded the common threshold, the regression model remained statistically acceptable for hypothesis testing because the variables theoretically represented distinct dimensions within the AMO framework.

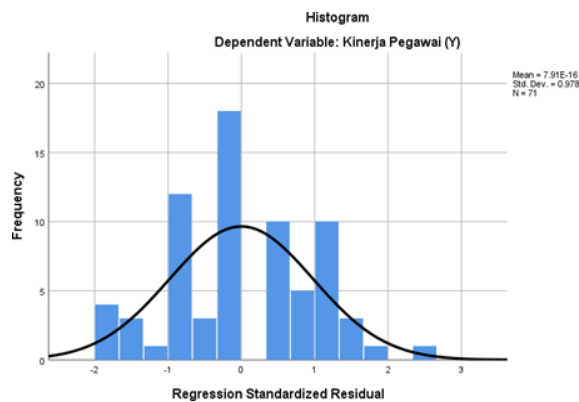
Heteroscedasticity Test. The heteroscedasticity test using scatterplot analysis indicated that residual values were randomly distributed without forming a particular pattern (Okello, 2024). Therefore, the regression model was considered free from heteroscedasticity problems (Figure 2).



Source: SPSS output (2026)

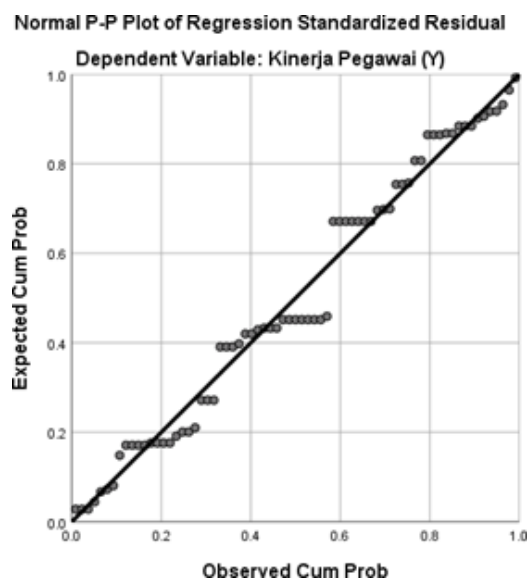
Figure 2. Scatterplot

Normality Test. The normality test using histogram (Figure 3) and normal probability plots (Figure 4) demonstrated that the residual data were normally distributed because the data points spread around the diagonal line and followed the normal distribution pattern (Okello, 2024).



Source: SPSS output (2026)

Figure 3. Histogram



Source: SPSS output (2026)

Figure 4. Normal P-P Plot

Multiple Linear Regression Analysis

Multiple linear regression analysis was conducted to examine the influence of training programs, human resource development, and work motivation on employee performance (Ghozali, 2021).

The regression equation can be formulated as follows:

$$Y = 0.349 + 0.201X_1 + 0.760X_2 + 0.066X_3 + e$$

Where:

- Y = Employee Performance
- X_1 = Training Programs
- X_2 = Human Resource Development
- X_3 = Work Motivation

The regression model indicates that all independent variables positively contributed to employee performance.

Coefficient of Determination (R^2)

Table 8. Coefficient of Determination

R	R Square	Adjusted R Square	Std. Error
0.984	0.968	0.967	1.15487

Source: SPSS output (2026)

The coefficient of determination (R^2) value of 0.968 indicates that 96.8% of the variation in employee performance can be explained by training programs, human resource development, and work motivation (Pallant, 2020). The remaining 3.2% was influenced by other variables outside the research model.

Hypothesis Testing

Table 9. Partial Test Results (t-Test)

Variables	Unstandardized Coefficient (B)	t-value	Significance
Training Programs (X_1)	0.201	2.423	0.018
Human Resource Development (X_2)	0.760	7.052	0.000
Work Motivation (X_3)	0.066	0.607	0.546

Source: SPSS output (2026)

The results indicate that training programs positively and significantly influenced employee performance because the significance value (0.018) was below the 0.05 threshold. Human resource development also demonstrated a positive and significant effect on employee performance with a

significance value of 0.000. Meanwhile, work motivation showed a positive but statistically insignificant effect on employee performance because the significance value (0.546) exceeded 0.05 (Ghozali, 2021).

Among the independent variables, human resource development exhibited the strongest influence on employee performance, indicating that long-term competency development and professional growth initiatives played a dominant role in improving employee effectiveness at KSP Balo' Toraja. These findings support the AMO Theory perspective, particularly the "ability" dimension, which emphasises that organisational performance is strongly influenced by employees' competencies and professional capabilities.

Simultaneous Test (F-Test)

The simultaneous test (F-test) was conducted to examine whether training programs, human resource development, and work motivation collectively influenced employee performance at KSP Balo' Toraja (Riadi, 2016).

Table 10. Simultaneous Test Results (F-Test)

Model	Sum of Squares	df	Mean Square	F-value	Significance
Regression	2719.764	3	906.588	679.680	0.000
Residual	89.419	67	1.335		
Total	2809.183	70			

Source: SPSS output (2026)

Based on **Table 10**, the regression model produced an F-value of 679.680 with a significance value of 0.000, which is lower than the significance threshold of 0.05. These results indicate that training programs, human resource development, and work motivation simultaneously and significantly influenced employee performance at KSP Balo' Toraja.

The findings demonstrate that the combination of competency enhancement, professional development, and motivational support contributes substantially to improving employee effectiveness within microfinance cooperative institutions. The results also strengthen the relevance of the AMO Theory, which explains that employee performance is determined by the interaction between employees' abilities and motivational factors supported by organisational practices.

Thus, the **fourth hypothesis (H4)**, which states that training programs, human resource development, and work motivation simultaneously and significantly affect employee performance, is accepted.

Discussion

The Influence of Training Programs on Employee Performance

The results of this study indicate that training programs positively and significantly influence employee performance at KSP Balo' Toraja. This finding demonstrates that effective training activities contribute to improving employees' competencies, technical skills, and work effectiveness in carrying out organisational responsibilities. Employees who participate in structured training programs tend to possess better problem-solving abilities, stronger adaptability, and greater confidence in completing work tasks efficiently (Karangan et al., 2025).

This phenomenon occurs because training programs provide employees with opportunities to update their knowledge and improve work-related competencies in response to organisational demands and environmental changes. In microfinance cooperative institutions, employees are required to handle administrative accuracy, customer services, and financial operations simultaneously (Mu et al., 2021). Therefore, continuous training becomes essential for strengthening operational effectiveness and maintaining service quality. Employees who receive adequate training generally demonstrate higher productivity because they better understand organisational procedures and work standards.

The findings of this study support the Ability–Motivation–Opportunity (AMO) Theory, particularly the "ability" dimension, which emphasises that employee performance is strongly influenced by competency enhancement through organisational learning and training practices (Kellner et al., 2019). The results are consistent with previous studies conducted by Bandhaso et al. (2023), which reported that training programs significantly improve employee productivity and work effectiveness. Similarly, Karangan et al. (2025) found that training positively affects employee performance by improving employees' operational competencies and work efficiency.

However, this study also provides contextual evidence from the Indonesian microfinance cooperative sector, which remains relatively underexplored in contemporary human resource management literature. Most previous studies focused on manufacturing companies, government institutions, or large-scale corporations (Buiney et al., 2025; Roper & Higgins, 2020), whereas this study specifically examines savings and credit cooperatives operating in regional areas. Therefore, the novelty of this research lies in its empirical contribution to understanding the

role of training programs within cooperative-based financial institutions.

The Influence of Human Resource Development on Employee Performance

The findings reveal that human resource development has a positive and significant influence on employee performance and represents the strongest predictor among all independent variables examined in this study. This result indicates that long-term employee development initiatives, such as career development opportunities, mentoring systems, professional learning, and competency enhancement programs, play a dominant role in improving employee effectiveness at KSP Balo' Toraja.

This condition may occur because employees who receive sustainable development opportunities tend to demonstrate stronger organisational commitment, higher professional confidence, and better adaptability toward changing organisational demands. Human resource development does not merely improve employees' technical skills but also strengthens managerial capabilities, leadership potential, and long-term professional readiness (Edgar et al., 2020). Consequently, employees become more capable of handling work responsibilities effectively and contributing to organisational sustainability.

From a theoretical perspective, these findings strongly support the AMO Theory, particularly the "ability" component, which explains that organisations can improve employee performance by strengthening employees' competencies and professional capacities (Edgar et al., 2019; Kellner et al., 2019). Human resource development enhances employees' ability to perform organisational tasks efficiently while simultaneously increasing their commitment toward organisational objectives.

The findings are consistent with previous studies conducted by Liu et al. (2022), which emphasised that sustainable HR development practices contribute significantly to organisational resilience and employee productivity. Likewise, Karangan et al. (2025) reported that career development and competency improvement programs positively affect employee performance and organisational effectiveness.

Interestingly, this study found that human resource development exerted a stronger influence on employee performance than training programs and work motivation. This result suggests that employees at KSP Balo' Toraja may perceive long-term professional growth opportunities as more valuable than short-term motivational encouragement. Such findings provide an important contribution to the human resource management literature, particularly in cooperative

institutions where employee retention and organisational commitment are critical organisational challenges.

The Influence of Work Motivation on Employee Performance

The results indicate that work motivation positively but insignificantly influences employee performance at KSP Balo' Toraja. Although employees generally demonstrated relatively good motivational levels, work motivation did not statistically contribute significantly to employee performance within the regression model.

This finding may occur because employee performance in cooperative financial institutions is more strongly influenced by competency-related factors than psychological motivational factors (Tangko et al., 2019). Employees working in financial cooperative institutions are generally required to comply with standard operational procedures, administrative regulations, and performance targets that rely heavily on technical competencies and work experience. Consequently, employee motivation alone may not be sufficient to improve performance without adequate competency support and professional development opportunities.

Another possible explanation is that the employees of KSP Balo' Toraja have relatively homogeneous motivational conditions, resulting in limited variability among respondents. As a result, the statistical influence of motivation on performance became weaker compared to training programs and human resource development.

Although statistically insignificant, the positive direction of the relationship indicates that motivation still contributes indirectly to employee effectiveness. This finding partially supports Goal-Setting Theory, which explains that motivated employees tend to exhibit stronger commitment and persistence in achieving organisational goals (Locke & Latham, 2002). However, in this study, motivational factors alone were insufficient to produce a substantial improvement in employee performance.

The findings differ from several previous studies, such as Susanti et al. (2024) and Wulandari et al. (2024), which found that work motivation significantly affects employee performance. Nevertheless, this inconsistency strengthens the novelty of the present study because it suggests that the influence of motivation may vary depending on organisational context, institutional culture, and job characteristics. In cooperative financial institutions, employee competencies and professional development

may play a more dominant role than motivational aspects alone.

The Simultaneous Influence of Training Programs, Human Resource Development, and Work Motivation on Employee Performance

The simultaneous test results demonstrate that training programs, human resource development, and work motivation collectively and significantly influence employee performance at KSP Balo' Toraja. The coefficient of determination (R^2) value of 96.8% indicates that the combination of these variables provides substantial explanatory power in predicting employee performance.

These findings imply that employee performance cannot be explained by a single organisational factor alone. Instead, organisational performance improvement requires integrated human resource management practices involving competency enhancement, sustainable professional development, and motivational support simultaneously. Employees who possess adequate competencies, receive long-term development opportunities, and maintain positive work attitudes are more likely to perform effectively and contribute to organisational sustainability.

The results strongly support the AMO Theory framework, which explains that employee performance is generated through the interaction between ability and motivational dimensions supported by organisational practices ([Edgar et al., 2020](#); [Kellner et al., 2019](#)). In the context of KSP Balo' Toraja, employee performance appears to depend more heavily on organisational efforts aimed at strengthening employees' professional capabilities and operational competencies.

Furthermore, this study contributes to the existing literature by providing empirical evidence from the Indonesian microfinance cooperative sector, which remains relatively limited in human resource management studies. Most previous studies examined corporate or governmental organisations, whereas this study focuses specifically on savings and credit cooperative institutions operating in regional economic environments.

Theoretical Implications

This study contributes theoretically to the development of human resource management literature by strengthening the relevance of the Ability–Motivation–Opportunity (AMO) Theory within the context of microfinance cooperative institutions ([Edgar et al., 2019](#)). The findings confirm that competency-related dimensions, particularly training programs and human resource development, play a

substantial role in improving employee performance. Moreover, this study demonstrates that human resource development represents the most dominant factor influencing employee performance, suggesting that long-term professional development initiatives may provide stronger organisational impacts than short-term motivational interventions. The study also enriches empirical discussions concerning the inconsistent role of work motivation in predicting employee performance across different organisational contexts.

Practical Implications

Practically, the findings suggest that the management of KSP Balo' Toraja should prioritise sustainable human resource development strategies to improve employee performance and organisational effectiveness. The institution is encouraged to implement continuous training programs, competency-based career development systems, mentoring initiatives, and professional learning opportunities to strengthen employee capabilities. In addition, organisational management should establish supportive work environments that encourage employee engagement and professional commitment. Since work motivation alone was found to have limited influence on employee performance, management should integrate motivational strategies with competency development programs to achieve more optimal organisational outcomes.

CONCLUSION

This study aimed to examine the influence of training programs, human resource development, and work motivation on employee performance at KSP Balo' Toraja. The findings demonstrate that training programs positively and significantly affect employee performance. This result indicates that structured training activities contribute to improving employees' competencies, technical capabilities, and work effectiveness in carrying out organisational responsibilities. Therefore, the first hypothesis stating that training programs significantly influence employee performance is accepted.

The study also found that human resource development has a positive and significant influence on employee performance and represents the most dominant variable affecting employee effectiveness. This finding suggests that sustainable professional development initiatives, including career development opportunities, mentoring systems, and competency enhancement programs, play a

strategic role in strengthening employee performance within microfinance cooperative institutions. Accordingly, the second hypothesis is accepted.

Meanwhile, work motivation was found to have a positive but statistically insignificant influence on employee performance. Although employees generally demonstrated good motivational conditions, motivational factors alone were insufficient to significantly improve performance without being supported by competency development and professional capability enhancement. Therefore, the third hypothesis is rejected. Nevertheless, the simultaneous test results revealed that training programs, human resource development, and work motivation collectively and significantly influence employee performance. Thus, the fourth hypothesis is accepted.

The findings of this study theoretically strengthen the relevance of the Ability–Motivation–Opportunity (AMO) Theory by confirming that competency-related dimensions, particularly training and human resource development, are essential determinants of employee performance. Practically, the results imply that cooperative financial institutions should prioritise sustainable human resource development strategies through continuous training, competency-based career development, and professional learning initiatives to improve organisational effectiveness and service quality.

This study has several limitations. First, the research was conducted only at one savings and credit cooperative institution, which may limit the generalisability of the findings to other organisational contexts. Second, the study employed a cross-sectional research design, preventing the observation of employee performance changes over time. Third, the research only examined three independent variables, whereas employee performance may also be influenced by other factors such as organisational culture, leadership style, compensation systems, and job satisfaction. Therefore, future studies are recommended to expand the research scope by involving larger samples, different organisational sectors, and additional variables. Future researchers are also encouraged to utilise more advanced analytical approaches, such as Structural Equation Modeling (SEM), to obtain a more comprehensive understanding of the relationships among human resource management variables.

REFERENCES

- Adriyanti, A., Latief, F., & Bahasoan, S. (2021). Pengaruh Gaya Kepemimpinan Dan Motivasi Kerja Terhadap Kinerja Karyawan Pada Bank Sulselbar Cabang Jenepono. *Malomo: Jurnal Manajemen Dan Akuntansi*, 1(1), 1–13. <https://doi.org/10.58191/jomel.v1i1.16>
- Armstrong, M., & Taylor, S. (2026). *Armstrong's Handbook of Human Resource Management Practice* (17th ed.). <https://www.koganpage.com/hr-learning-development/armstrong-s-handbook-of-human-resource-management-practice-9781398622081>
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023). Job Demands–Resources Theory: Ten Years Later. *Annual Review of Organizational Psychology and Organizational Behavior*, 10(Volume 10, 2023), 25–53. <https://doi.org/10.1146/annurev-orgpsych-120920-053933>
- Bandhaso, M. L., Tandirerung, J., & Sasabone, L. (2023). Pengaruh Pelatihan Terhadap Kinerja Karyawan Pada PT. Cipta Sejati Revolution Makassar. *Journal of Marketing Management and Innovative Business Review*, 01(1), 35–41. <https://doi.org/10.63416/mrb.v1i1.157>
- Beltrán-Martín, I., & Bou-Llusar, J. C. (2018). Examining the intermediate role of employee abilities, motivation and opportunities to participate in the relationship between HR bundles and employee performance. *BRQ Business Research Quarterly*, 21(2), 99–110. <https://doi.org/10.1016/j.brq.2018.02.001>
- Buiney, A., Roreng, P. P., & Paranoan, N. (2025). Analisis Sinergi Program CSR dan Fungsi Humas dalam Meningkatkan Hubungan dengan Masyarakat Lokal di PT. Nabire Baru. *ECOHOLIC: Jurnal Ekonomi Holistik*, 1(2), 191–197. <https://ojs.ukipaulus.ac.id/index.php/jeh/article/view/1064>
- de Araújo, M. L., Menezes, P. P., & Demo, G. (2022). Challenges in Implementing Competency-Based Management in the Brazilian Public Sector: An Integrated Model. In *Sustainability* (Vol. 14, Issue 22). <https://doi.org/10.3390/su142214755>
- Edgar, F., Zhang, J. A., & Blaker, N. M. (2019).

- AMO, High-Performance Work Systems and Employee Performance. *Academy of Management Proceedings*, 2019(1), 11358. <https://doi.org/10.5465/AMBPP.2019.11358abstract>
- Edgar, F., Zhang, J. A., & Blaker, N. M. (2020). The HPWS and AMO: a dynamic study of system- and individual-level effects. *International Journal of Manpower*, 42(5), 794–809. <https://doi.org/10.1108/IJM-12-2019-0541>
- Fatkhurrahman, F. (2023). Kepemimpinan Inklusif Dan Perilaku Kerja Yang Inovatif Pada Aparatur Sipil Negara: Peran Keterlibatan Karyawan Sebagai Variabel Mediasi. *Diklat Review : Jurnal Manajemen Pendidikan Dan Pelatihan*, 7(2), 468–473. <https://doi.org/10.35446/diklatreview.v7i2.1571>
- Gerhart, Barry, & Feng, Jie. (2021). The Resource-Based View of the Firm, Human Resources, and Human Capital: Progress and Prospects. *Journal of Management*, 47(7), 1796–1819. <https://doi.org/10.1177/0149206320978799>
- Ghozali, I. (2021). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 26 Edisi 10* (Cetakan X). Badan Penerbit Universitas Diponegoro.
- Grund, C., & Titz, K. (2022). Affective commitment through further training: the roles of firm provision and employee participation. *Review of Managerial Science*, 16(4), 1195–1226. <https://doi.org/10.1007/s11846-021-00460-1>
- Hafidz, G. P., & Noviyati, M. (2022). Analisis Motivasi Kerja, Kepemimpinan Transformasional Dan Budaya Organisasi Terhadap Kinerja Karyawan Dimediasi Kepuasan Kerja Pada Angkatan Kerja Generasi Z. *Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan*, 4(7), 2763–2773. <https://doi.org/10.47007/jeko.v11i2.3503>
- Hair, J. F., Page, M., & Brunsveld, N. (2022). *Essentials of Business Research Methods* (14th ed.). Routledge. <https://doi.org/10.4324/9780367330743>
- Halik, J. B., & Nurlia, N. (2024). THE INFLUENCE OF LECTURER COMPETENCE ON THE QUALITY OF EDUCATION IN THE MANAGEMENT DEPARTMENT OF UKIP MAKASSAR. *Jurnal GeoEkonomi*, 15(01), 138–147. <https://doi.org/10.36277/geoekonomi.V15i1.326>
- Hansen, K., & Świderska, A. (2024). Integrating open- and closed-ended questions on attitudes towards outgroups with different methods of text analysis. *Behavior Research Methods*, 56(5), 4802–4822. <https://doi.org/10.3758/s13428-023-02218-x>
- Hendri, M. I. (2025). Exploring factors shaping sustainable employee performance: A systematic literature review. *Social Sciences & Humanities Open*, 11, 101586. <https://doi.org/10.1016/j.ssaho.2025.101586>
- Indou, M., Ridwan, & Idris, M. (2025). Analisis Pengaruh Disiplin , Motivasi dan Budaya Kerja terhadap Kinerja Pegawai pada Sekretariat DPRD Kabupaten Pegunungan Arfak. *Journal of Marketing Management and Innovative Business Review (MARIOBRE)*, 3(1), 87–94. <https://doi.org/10.63416/mrb.v3i1.327>
- Inggesi, L. M., Rantererung, C. L., & Lambe, K. H. P. (2025). Analisis Motivasi Kinerja dan Lingkungan Kerja terhadap Efektivitas Kerja Pegawai. *J-MEBI: Jurnal Ilmiah Mahasiswa Ekonomi Dan Bisnis Indonesia*, 1(1), 81–89. <https://ojs.ukipaulus.ac.id/index.php/jmebi/article/view/877>
- Karangan, M., Lambe, K. H. P., & Halik, J. B. (2025). Pengaruh Program Kompetensi dan Pelatihan Karyawan terhadap Peningkatan Keselamatan Kerja di PT . Vale Indonesia Tbk. *J-MEBI: Jurnal Ilmiah Mahasiswa Ekonomi Dan Bisnis Indonesia*, 1(2), 248–260. <https://ojs.ukipaulus.ac.id/index.php/jmebi/article/view/1031>
- Kellner, A., Cafferkey, K., & Townsend, K. (2019). Ability, Motivation and Opportunity theory: a formula for employee performance? In *Elgar Introduction to Theories of Human Resources and Employment Relations* (pp. 311–323). Edward Elgar Publishing. <https://doi.org/10.4337/9781786439017.00029>
- Kinasih, M. N., & Pidola, V. A. (2025). Analisis Pengaruh Tingkat Suku Bunga Dan Jangka Waktu Pinjaman Terhadap Permintaan

- Kredit Pada Koperasi Unit Desa Periode 2020-2024. *JIEL: Journal of Islamic Economic and Law*, 2(2), 7–15. <https://doi.org/10.59966/jiel.v2i2.1762>
- Kleingeld, A., van Mierlo, H., & Arends, L. (2011). The effect of goal setting on group performance: A meta-analysis. *Journal of Applied Psychology*, 96(6), 1289–1304. <https://doi.org/10.1037/a0024315>
- Listiari, N. M. D. (2024). *Analisis Disiplin Kerja dan Program Pelatihan terhadap Kinerja Karyawan Airport Services Improvement PT Angkasa Pura I Bandara I Gusti Ngurah Rai Bali*. Politeknik Negeri Bali.
- Liu, X., Sha, Y., & Yu, X. (2022). The Impact of Developmental HR Practices on Career Self-Management and Organizational Citizenship Behavior: A Moderated Mediation Model. *Psychology Research and Behavior Management*, 15, 1193–1208. <https://doi.org/10.2147/PRBM.S355376>
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57(9), 705–717. <https://doi.org/10.1037/0003-066X.57.9.705>
- Mu, T., Yang, J., Zhang, F., Lyu, C., & Deng, X. (2021). The role of task conflict in cooperative innovation projects: An organizational learning theory perspective. *International Journal of Project Management*, 39(3), 236–248. <https://doi.org/10.1016/j.ijproman.2020.12.005>
- Napan, C., Baharuddin, B., & Lambe, K. H. . (2025). A Contextual Analysis of Human Resource Development for Promoting Public Welfare in the Digital Transformation Era : The Case of Nabire Regency of Human Resource Digital Transformation (HRDT) is defined as the integration of digital factors with individ. *Journal of Marketing Management and Innovative Business Review*, 3(2), 89–96. <https://doi.org/10.63416/mrb.v3i2.386>
- Nguyen, T. T., Mia, L., Winata, L., & Chong, V. K. (2017). Effect of transformational-leadership style and management control system on managerial performance. *Journal of Business Research*, 70, 202–213. <https://doi.org/10.1016/j.jbusres.2016.08.018>
- Nikmah, W., Mukarromah, A., Widyansyah, D., & Anshori, M. I. (2023). Penggunaan Teknologi Dalam Pengembangan SDM. *Mutiara: Jurnal Penelitian Dan Karya Ilmiah*, 1(5), 366–386. <https://doi.org/10.59059/mutiara.v1i4.511>
- Okello, G. O. (2024). *Statistical Methods Using SPSS* (1st ed.). Chapman and Hall/CRC. <https://doi.org/10.1201/9781003386636>
- Pallant, J. (2020). *SPSS Survival Manual: A step by step guide to data analysis using IBM SPSS* (7th ed.). (7th ed.). Routledge. <https://doi.org/10.4324/9781003117452>
- Pan, Y., & Froese, F. J. (2023). An interdisciplinary review of AI and HRM: Challenges and future directions. *Human Resource Management Review*, 33(1), 100924. <https://doi.org/10.1016/j.hrmr.2022.100924>
- Pardosi, P., Sumardi, S., & Dewi, A. R. S. (2022). Pengaruh Kompetensi dan Pelatihan dengan Variabel Intervening Motivasi terhadap Kinerja Karyawan Departemen Produksi Klinker dan Semen pada PT. Semen Tonasa. *SEIKO: Journal of Management & Business*, 5(1), 451–462.
- Pratama, M. A., & Hanafiah, A. (2025). Enhancing Employee Performance Through Human Resource Development , Leadership , and Motivation in Central Java ' s Furniture Industry. *Jurnal Multidisiplin Madani (MUDIMA)*, 5(9), 887–902. <https://doi.org/10.55927/mudima.v5i9.542>
- Rachman, A. N., Baharuddin, B., & Halik, J. B. (2024). Pengaruh Kompetensi Dan Kesesuaian Peran Terhadap Kinerja Awak Kapal MV.Mutawa.103 Di Abu Dhabi. *EKOMA: Jurnal Ekonomi, Manajemen, Akuntansi*, 4(1), 3100–3108. <https://journal-nusantara.id/index.php/EKOMA/article/view/6435>
- Rasheed, R. A., Kamsin, A., & Abdullah, N. A. (2020). Challenges in the online component of blended learning: A systematic review. *Computers & Education*, 144, 103701. <https://doi.org/10.1016/j.compedu.2019.103701>
- Renmaur, W., Roreng, P. P., & Patiung, N. (2025). Analisis Pengaruh Kemampuan Kerja , Motivasi Kerja dan Fasilitas Kerja terhadap Kinerja Pegawai. *J-MEBI: Jurnal*

- Ilmiah Mahasiswa Ekonomi Dan Bisnis Indonesia*, 1(1), 90–99. <https://ojs.ukipaulus.ac.id/index.php/jmebi/article/view/878>
- Riadi, E. (2016). *Statistika Penelitian (Analisis Manual dan IBM SPSS)* (1st ed.). CV. Andi Offset.
- Roper, I., & Higgins, P. (2020). Hidden in plain sight? The human resource management practitioner's role in dealing with workplace conflict as a source of organisational–professional power. *Human Resource Management Journal*, 30(4), 508–524. <https://doi.org/10.1111/1748-8583.12311>
- Roreng, P. P., Bandhaso, M., & Tandirerung, C. J. (2021). Competency Analysis of Human Resources and the Use of Information Technology on the Quality of Financial Reports in the Local Government of the City of Makassar. *WSEAS Transactions on BUSINESS and ECONOMICS*, 18(113), 1218–1222. <https://doi.org/10.37394/23207.2021.18.113>
- Roreng, P. P., Halik, J. B., Halik, M. Y., & Irdawati. (2024). Systematic Literature Review: Kondisi Makroekonomi Indonesia Pasca Pandemi Covid-19 dan Prospek di Masa Mendatang. *Journal of Marketing Management and Innovative Business Review*, 2(2), 56–67. <https://doi.org/10.63416/mrb.v2i2.306>
- Rumopa, M., Baharuddin, Halik, J. B., & Lambe, K. H. P. (2025). Improving Ship Crew Job Satisfaction: The Role of Work Environment and Career Development. *Journal of Artificial Intelligence and Digital Business (RIGGS)*, 4(2), 1304–1315. <https://doi.org/10.31004/riggs.v4i2.665>
- Saleh, M. Y., & Azimi, H. (2025). Impact of Training & Development (T& D) on Employee 's Performance & Productivity (P&P). *International Journal of Multidisciplinary Approach Research and Science*, 3(01), 365–376. <https://doi.org/10.59653/ijmars.v3i01.1476>
- Sibarani, G. D., & Dwiarti, R. (2024). Pengaruh Pelatihan, Kompetensi, dan Pengembangan Karier Terhadap Kinerja Karyawan PT. Indah Kiat Pulp and Paper Karawang. *Jurnal Akuntansi, Manajemen, Dan Perencanaan Kebijakan*, 1(4), 1–14. <https://doi.org/10.47134/jampk.v1i4.195>
- Singarimbun, M & Effendi, S. (2008). *Metode Penelitian Survei*. LP3ES.
- Sitompul, D. H., Sinaga, D., Sitanggang, I. M., & Purba, M. I. (2021). Pengaruh Sistem Rekrutmen, Pelatihan Dan Pengembangan Karir Terhadap Kepuasan Kerja Pada Pt Sinar Jernih Suksesindo. *SCIENTIFIC JOURNAL OF REFLECTION : Economic, Accounting, Management and Business*, 4(3), 432–440. <https://doi.org/10.37481/sjr.v4i3.321>
- Sugiyono. (2020). *Metode Penelitian Kualitatif dan Kuantitatif* (Issue January).
- Suksmono Aji, G., & Mala, I. K. (2024). Meningkatkan Kualitas SDM Untuk Mencapai Keunggulan Kompetitif Perusahaan di Era Digital : Tren , Inovasi , dan Tantangan Guruh Suksmono Aji Iva Khoiril Mala pentingnya investasi dalam pelatihan dan pengembangan SDM di era digital , serta memberikan. *Jumek: Jurnal Manajemen Dan Ekonomi Kreatif*, 2(3), 1–17. <https://doi.org/10.59024/jumek.v2i3.357>
- Susanti, R., Lambe, K. H. P., & Gunadi, H. (2024). Pengaruh Motivasi, Disiplin dan Lingkungan Kerja terhadap Kinerja Pegawai pada Yayasan Kristen Wamena Kabupaten Jayawijaya. *Journal of Marketing Management and Innovative Business Review*, 2(2), 47–55. <https://doi.org/10.63416/mrb.v2i2.301>
- Susilana, R. (2015). Metode Penelitian Sosial Kuantitatif. *Journal of Visual Languages & Computing*, 11(3), 287–301.
- Tafese Keltu, T. (2024). The effect of human resource development practice on employee performance with the mediating role of job satisfaction among Mizan Tepi University's academic staff in Southwestern Ethiopia. *Heliyon*, 10(8), e29821. <https://doi.org/10.1016/j.heliyon.2024.e29821>
- Tamba, A. O., Sitorus, S. A., & Pasaribu, R. M. (2025). Pengaruh Pengembangan Sumber Daya Manusia dan Gaya Kepemimpinan terhadap Kinerja Karyawan Melalui Kepuasan Kerja. *Advances in Management & Financial Reporting*, 3(3), 1168–1182. <https://doi.org/10.60079/amfr.v3i3.631>
- Tangko, R., Salempang, V. S., Rasinan, D., & Sambara, K. (2019). Pengaruh Motivasi

- Intrinsik Dan Motivasi Ekstrinsik Terhadap Kinerja Karyawan Pada Pt. Melati Tunggal Intiraya. *JEMSI (Jurnal Ekonomi, Manajemen, Dan Akuntansi)*, 10(1), 301–308.
<https://doi.org/10.35870/jemsi.v10i1.1888>
- Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40–49.
<https://doi.org/10.1016/j.lrp.2017.06.007>
- Wulandari, Sabandar, S. Y., & Patiung, N. (2024). Pengaruh Motivasi Kerja , Lingkungan Kerja dan Disiplin Kerja Terhadap Kinerja Karyawan PT. Asri Tritunggal Property. *Journal of Marketing Management and Innovative Business Review*, 2(2), 83–90.
<https://doi.org/10.63416/mrb.v2i2.311>
- Ye, Y., & Chen, K.-H. (2024). Hospitality employees and digital transformation: The mediating roles of alienation and motivation. *International Journal of Hospitality Management*, 119, 103731.
<https://doi.org/10.1016/j.ijhm.2024.103731>
- Yusuf, T., Baptista Halik, J., & Nurlia, N. (2019). Analisis Kualitas Kehidupan Kerja (Quality Of Work Life) Terhadap Kinerja (Performance) pegawai RSUD Dr. Kanujoso Djatiwibowo Balikpapan. *Jurnal GeoEkonomi*, 10(2), 199–218.
<https://doi.org/10.36277/geoekonomi.v10i2.96>