International Journal of Management and Business Applied

Vol.4 No.2 (2025) ISSN 2961-7367 pp. 109-122



https://journal.adpebi.com/index.php/IJAMB

The Influence of Job Characteristics and Empowerment on Employee Performance: The Role of Work Motivation as an Intervening

Riza Aditriawan Anggorodi¹, Hari Gursida², Widodo Sunaryo³

1,2,3 Pakuan University, Indonesia

Email: ¹riza.anggorodi@rdareindo.co.id, ²hg.gursida@unpak.ac.id, ³widodosunaryo20@gmail.com

ARTICLE INFO

Research Paper

Article history:

Received: 29 July 2025 Revised: 15 August 2025 Accepted: 30 September 2025

Keywords: Employee Performance, Job Characteristics, Empowerment, Work Motivation

DOI:

https://doi.org/10.54099/ijmba.v4i2.1487

ABSTRACT

Purpose – Finding strategies and ways to improve employee performance through identification of factors that are suspected of influencing employee performance, job characteristics, empowerment and work motivation as an interverning variable in chemical industry companies.

Methodology/approach – The population used came from the Production Division of a Chemical Industry Company in Bogor Regency with a total of 548 employees. The sampling technique used was purposive sampling. By using the Slovin formula, the total sample was 232 employees with a margin of error of 5%. Quantitative data were analyzed using Structural Equation Model (SEM) analysis and qualitative data were analyzed using the Delphi technique.

Findings – There is a significant positive direct effect between job characteristics and empowerment on employee performance. There is a positive direct effect between job characteristics and empowerment on work motivation. There is a positive direct effect between work motivation and employee performance.

This work is licensed under a Creative Commons Attribution-Non Commercial 4.0 International License.

INTRODUCTION

Every organization have goals or targets to be achieved. These goals can be achieved by utilizing various resources in the organization, including human resources (HR) because it is the key to maintaining the survival and growth of the organization in the future. Employee performance measurement is an important element in HR management. Performance measurement helps companies and organizations to assess the extent to which employees are able to achieve the targets that have been set and identify areas that require further improvement or development. Employee performance is a picture of what individuals have achieved in measuring success or failure in achieving achievements. In achieving company or organizational goals, employee performance is very important to know the abilities, skills, quality of work and time of employees.

In the context of the chemical industry, employee performance has a direct impact on the quality and

operational efficiency of the chemical industry which includes sub-sectors such as petrochemicals, agrochemicals, pharmaceuticals, and polymers. Therefore, employee performance management in the chemical industry is very important to ensure that the products produced meet quality and efficiency standards. The main challenges faced in managing employee performance in the chemical industry include developing technical skills, increasing productivity, and managing workloads and material support. Moreover, material support is also an important factor in improving employee performance. This support not only enhances individual performance but also creates a positive and productive work environment.

Based on initial observations (preliminary survey) in chemical industry companies, it was found that problems still exist in almost all employee assessment indicators. The rate of issues occurring is quite high, exceeding 50%. Many factors significantly influence employee performance, one of which is proper human resource management. Good human resource management is essential to ensure that employees can contribute effectively to their assigned tasks and deliver their best performance for the company. Another factor that can affect employee performance is work motivation, which includes both physical and mental motivation. If the work motivation burden on employees is too heavy, it can create obstacles in their work. In the chemical industry, work motivation is closely related to achieving high company targets, requiring employees to dedicate more time to meet targets and complete tasks on time. However, high work motivation also comes with consequences, as it places additional pressure on employees.

The issues identified in this study include job characteristics, empowerment, and work motivation. An organization with a strong culture will influence employee behavior and performance effectiveness. Employee performance quality is proportional to the quality of the organizational culture; if the organizational culture is strong, employee performance will also be strong, and vice versa (Kuswati, 2020). Leadership is the key to an organization's sustainability because leaders are responsible for setting organizational goals, planning, organizing, and mobilizing all available resources to achieve the desired objectives. Good leadership will make good impact to organizations (Bajrami et al., 2024). Cavazotte et al. (2012) stated that a leader in an organization must be able to create harmonious integration with his subordinates, including fostering cooperation, directing and encouraging the work passion of his subordinates so that positive motivation is created which will give rise to maximum work intentions and efforts, and is also supported by motivation in this case giving rewards to employees who excel, the way and pattern of leader behavior is interpreted by subordinates as cooperation in completing work. One of the factors indicated to influence performance is interpersonal communication. A study Amalia et al. (2023) shows that interpersonal communication has a significant effect on employee performance. Poor or suboptimal interpersonal communication is caused by employees who have not been able to control their emotions well. Interpersonal communication is between communication media and technology on one side and nonverbal communication.

Luthans (2007) states that interpersonal communication is the transfer of information from one person to another. Meanwhile, Mheidly et al. (2020) states that interpersonal communication is part of the interaction between several people. In other words, interpersonal communication is part of more personal communication between individuals. In this study, the researcher limits the problems to be discussed. There are four categories discussed in this problem including independent variables, intervening variables and dependent variables. The independent variables include Job Characteristics (X1) and Empowerment (X2), the intervening variable is Work Motivation (Y) and the dependent variable is Employee Performance (Z). The unit of analysis studied was the executive level employees (non-managerial) of the Chemical Industry Company in Bogor Regency. This study aims to find strategies and ways to improve employee performance by identifying factors that are suspected of influencing employee performance.

LITERATURE REVIEW

Job Characteristics

Job characteristics refer to the inherent attributes of a job that influence how employees perceive, view, and/or perform their work, first introduced by Hackman and Oldham (1980) through Job Characteristics Model (JCM). It can be said that job characteristics are an approach to job design that describes how a job is defined through five core dimensions: skill variety, task identity, task significance, autonomy, and feedback (Adiarani, 2019). JCM emphasizes that jobs with certain characteristics can increase employee work motivation, job satisfaction, and performance (Kamani, 2020; Nelson et al., 2019). The job characteristics approach, which is a follow-up to the job design process, aims to explain situations and design effective jobs for individuals using a contingency approach (Kreitner & Kinicki, 2008).

Empowerment

According to Thomas and Velthouse (Rani et al., 2021), empowerment is defined as the process of enhancing the sense of self-efficacy among organizational members by identifying conditions that lead to powerlessness and implementing intervention strategies by management to strengthen employees' confidence in their ability to accomplish assigned tasks. The concept of empowerment has become a key concept in modern management reflecting a paradigm shift from hierarchical organizational structures to a more participatory model (Gharib et al., 2023; Sequeira et al., 2023). Empowerment plays a crucial role in improving employee performance by increasing engagement, motivation, and a sense of responsibility, all of which contribute to operational efficiency and job satisfaction (Sequeira et al., 2023). According to Colquitt et al. (2023) empowerment presents a form of institutional motivation where the implementation of work tasks itself basically contains rewards and satisfaction. There are four dimensions of empowerment; meaning, competence, self-determination, and impact.

Employee Performance

Employee performance is the individual's ability to fulfil his responsibilities and duties which assigned to his role. In general, employee performance can be defined as the work results achieved by an employee in carrying out the tasks assigned to him, accordance with established standards or criteria (Song, 2024). Meanwhile, according to Mangkunegara (Silalahi & Sembiring, 2020), employee performance is the work results in terms of quality and quantity achieved by an employee in carrying out his duties in accordance with the responsibilities given. Expectancy Theory (Vroom & Deci, 1989) states that employee performance is determined by the expectation that a particular effort will produce the desired performance (expectancy), the belief that this performance will produce the desired results (instrumentality), and the value of these results for the employee (valence). In the other context, concept of employee performance can vary depending on characteristics and specific needs of industry (Hariyana et al., 2024).

Work Motivation

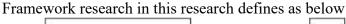
Work motivation is one of the important concept in human resource management, which functions as the main booster to employees to achieve optimal performance. In organizations, work motivation refers to internal and external boosters that influence employee enthusiasm, dedication, and productivity in completing their tasks. Siswadi & Lestari (2021) define work motivation as a person's energy force that can cause a level of persistence and enthusiasm in carrying out an activity, both from within the individual himself (intrinsic motivation) and from outside the individual (extrinsic motivation). High motivation can increase productivity, work quality, and employee loyalty, which in turn contributes to the achievement of overall organizational goals (Sukma et al., 2023).

METHOD

Research method used for collecting data is quantitative research using survey method approach and qualitative research. Survey research is research that take a sample from one population and use questionnaire as a tool for collecting data (Sugiyono, 2016). According to Abu-Bader (2021), hypothesis test aims for testing statement using statistics and explain relationship each variable.

Survey method used for testing hypothesis and analysis the relationship between variables and measure its influence. Qualitative analysis is carried out to see whether results of analysis have similarity or differences with result of quantitative analysis. Tools used to this research is *Structural Equation Model* (SEM) based on *covariant*. Research was carried out on October 2023 – December 2024 at PT. RDA Reindo Dinamika located in Bogor Regency.

The population of this study were Staff Production Division at PT. RDA Reindo Dinamika, totaling 548 people. By using Slovin formula, total sample used is 232 people. The measurement scale used in this study is the linkert and interval scale. The first linkert scale used can be grouped into Strongly Disagree, Disagree, Quite Agree, Agree, and Strongly Agree and the second linkert scale can be grouped into never, ever, sometimes, often, and always.



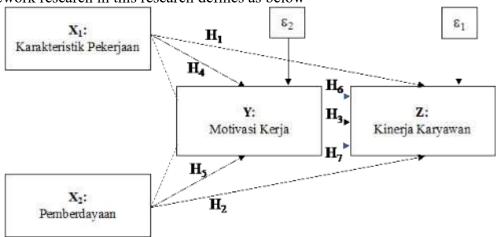


Figure 1. Research Framework

Caption on the picture as below:

: Line of Direct Influence

X₁ dan X₂ : Exogenous Independent Variable

Y : Intervening Variable

Z : Endogenous Dependent Variable
 ε_i : Variabel Lain yang Tidak Diteliti ke-i

H_i : Hypothesis of i

Instrument Test

Validity Test

Validity test are conducted on each statement item to measure an instrument accurately performs measurement. The validity of the instrument used in this study is determined by the magnitude of the Pearson product moment correlation coefficient. The formula used to find the correlation coefficient is as follows:

$$r_{xy} = \frac{N(\Sigma XY) - (\Sigma X)(\Sigma Y)}{\sqrt{\left(N(\Sigma X^2) - (\Sigma X))(N(\Sigma Y^2) - (\Sigma Y)^2)\right)}}$$
(1)

Description of formula:

 r_{xy} : Correlation coefficient between Y Variable and X

N : Total of respondent

X : Respondent answer Score for statement item

Y : Total score of respondent answer

Reliability Test

Reliability is an index that shows the measuring instrument can be trusted or relied (Singarimbun & Effendi, 1995). The purpose of the reliability test is to determine the reliability of an instrument in making measurements. It is declared reliable if the Cronbach alpha value is greater than 0.7 (Sekaran, 2003). The research instrument uses the Cronbach Alpha formula, as follows:

$$r = \left[\frac{k}{k-1}\right] \left[\frac{St^2 - \Sigma Si^2}{St^2}\right] \tag{2}$$

Description of formula:

r: reliability coefficient k: number of questions S_i : standard deviation of item i S_t : standard deviation of all items

Sampling Techniques

The sampling technique used in this study is purposive sampling. This technique takes samples based on certain criteria with the aim of obtaining samples that match the specified criteria. Determination of the sample in this study used the Slovin or Taro Yamane formula (Sugiyono, 2016), as follows:

$$n = \frac{N}{1 + N. e^2} \tag{3}$$

Description of formula:

n =sample needed

N = population

e = margin of error (5% or 0.05)

RESULT AND DISCUSSION

Descriptive Statistics

Descriptive Statistics of Job characteristics (X1), Empowerment (X2), Work Motivation (Y) and Employee Performance (Z)

Table 1. Descriptive Statistics

No	Statistics		Var	iable	
	Measurement	X1	X2	Y	Z
1	Total Data	232	232	232	232
2	Mean	158,43	146,78	117,03	181,37
3	Median	152	148,00	120	184
4	Mode	166	148,00	117	190
5	Std. Deviation	16,40	15,10	13,19	17,12
6	Variance	269,06	227,90	174,01	293,26
7	Range	105,00	87,00	84,00	107,00
8	Minimum Score	81,00	86,00	60	109,00
9	Maksimum Score	186,00	173,00	144	216,00
10	Total Score	36755	34053,00	27150	42077

Quantitative Data Analysis

Analysis method used for analysing quantitative data is path analysis model. Path analysis used to analyze the relationship patterns between variables with the aim of determining the direct or indirect influence of a set independent/exogenous variables on dependent/endogenous variables (Harris & Gleason, 2022). The tool used in this analysis is SPSS software version 29. The significance level used in this study is $\alpha = 5\%$ or a confidence level of 95%. Before hypotesis testing, it is necessary to check the requirements that must be fulfill. The testing consist of normality tests, variance homogeneity tests, and linearity tests.

Normality Test

In this study, the normality test was conducted using the Kolmogorov Smirnov (K-S) test. This normality test aims to determine whether the data is normally distributed or not.

Table 2. Summary of Normality Test

			Kolmogorov-Sr	nirnov Test		
			Employee Performance	Work Motivation	Job Characteristic	Empowerment
N			232	232	232	232
Normal	Mean		117,0259	181,3664	158,4267	146,7802
Parameters ^{a,b}	Std. Deviation		13,19121	17,12494	16,40303	15,09648
Most	Absolute		0,064	0,178	0,234	0,122
Extreme	Positive		0,044	0,094	0,153	0,064
Differences	Negative		-0,064	-0,178	-0,234	-0,122
Test Statistic			0,014	0,051	0,034	0,022
Asymp. Sig. (2-tailed) ^c		0,053	0,063	0,072	0,061
Monte Carlo	Sig.		0,022	0,089	0,091	0,040
Sig. (2-tailed) ^d	99% Confidence	Lower Bound	0,018	0.080	0,081	0,031
	Interval	Upper Bound	0,025	0,107	0,112	0,095

a. Test distribution is Normal.

Table 2 shows the results of normality test from variables of employee performance, work motivation, job characteristics, and empowerment. Variable will have normal distribution if the value of Asymp. Sig. $\geq \alpha(0.05)$. Employee Performance has Asymp. Sig. 0.053 which means bigger than $\alpha=0.05$ (Asymp. Sig. 0.053 \geq 0.05). So, it can be concluded that Employee Performance is normally distributed. The Asymp. Sig. of work motivation, job characteristics and empowerment are 0.063, 0.072 and 0.061. So it can be concluded that these variables have normal distribution cause the asymp. Sig $\geq \alpha(0.05)$.

Variance Homogeneity Test

Homogenity Test Job Caracteristics (X₁) with Employee Performance (Z)

Table 3. Result of Testing Variable X_1 with Z

		ANOVA		
Job Characteristics				
Sum of Squares	Df	Mean Square	F-hitung	F-tabel (0.05)

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 743671174.

Between	16026,309	50	320,526	1,258	3.04	_
Groups						
Within	46126,446	181	254,842			
Groups						
Total	62152,754	231				

Based on Table 3, the results of the homogeneity test on ANOVA show that the F-count value (1.258) is smaller than the F-table value (3.04) at a significance level of 0.05. It means that the data X1 and Z have the same variation, meaning homogeneous. In other words, the variance between groups is considered homogeneous, and the null hypothesis stating that there is no difference between groups is accepted.

Homogenity Test Empowerment (X₂) with Employee Performance (Z)

Tabel 4. Result of Test Variable X2 with Z

	ANOVA				
	Empowerment				
	Sum of Squares	df	Mean Square	F-hitung	F-tabel (0.05)
Between	11366,026	50	227,321	0,997	3,04
Groups					
Within	41279,763	181	228,065		
Groups					
Total	52645,789	231			

Based on Table 4, the results of the homogeneity test on ANOVA show that the F-count value (0.997) is smaller than the F-table value (3.04) at a significance level of 0.05. It means that the data X2 and Z have the same variation, meaning homogeneous. In other words, the variance between groups is considered homogeneous, and the null hypothesis stating that there is no difference between groups is accepted.

Tabel 5. Result of Test Variable Y dengan Z

	ANOVA				
	Work Motivation				
	Sum of Squares	df	Mean Square	F-hitung	F-tabel (0.05)
Between	17642,886	50	352,858	1,275	3,04
Groups					
Within	50100,972	181	276,801		
Groups					
Total	67743,858	231			

Based on Table 5, the results of the homogeneity test on ANOVA show that the F-count value (1.275) is smaller than the F-table value (3.04) at a significance level of 0.05. It means that the data Y and Z have the same variation, meaning homogeneous. In other words, the variance between groups is considered homogeneous, and the null hypothesis stating that there is no difference between groups is accepted.

Linearity Test

The Influence of Job Characteristics and Empowerment on Employee Performance: The Role of Work Motivation as an Intervening Variable

Linearity test is conducted to test regression equation model of a variable Y on variable X. The result of linearity test job characteristics as follows

Table 6. Test Results of Variable X1 with Z

			ANOVA Tab	le			
			Sum of		Mean		
			Squares	df	Square	F	Sig.
Employee	Between	(Combined)	6629600,397	12	552466,700	85101,083	0,000
Performance	Groups	Linearity	6628088,798	1	6628088,798	1020980,152	0,000
Job		Deviation	1511,599	11	137,418	21,168	0,000
Characteristics		from					
		Linearity					
	Within G	roups	1421,723	219	6,492		
	Total	_	6631022,121	231			

Table 7. Test Results of Variable X2 with Z

			Sum of		Mean		
			Squares	df	Square	F	Sig.
Employee	Between	(Combined)	6629500,699	12	552458,392	79523,247	0,000
Performace	Groups	Linearity	6628082,276	1	6628082,276	954074,785	0,000
Empowerment		Deviation	1418,423	11	128,948	18,561	0,000
		from					•
		Linearity					
	Within Gr	oups	1521,422	219	6,947		
	Total		6631022,121	231			

Table 8. Test Results of Variable Y with Z

			Sum of		Mean		
			Squares	df	Square	F	Sig.
Employee	Betwee	(Combined	6629606,09	12	552467,175	85443,856	0,000
Performac	n)	9				
e Work	Groups	Linearity	6628078,57	1	6628078,575	1025090,02	0,000
Motivatio	_		5			8	
n		Deviation	1527,524	11	138,866	21,477	0,000
		from					
		Linearity					
	Within C	Groups	1416,021	219	6,466		
	Total		6631022,12	231			
			1				

Based on table 8, it shows the results of linearity testing Job Characteristics variable on job performance. The value of Sig = 0.000 that means smaller than 0.05, it implies that there is significant relationship between this variable. It also can be seen on the other table, the results of linearity testing job characteristics variable on empowerment and job performance on work motivation, the value of Sig=0.00 that means smaller than 0.05, it implies that there is significant relationship between this variable.

Variable Analysis

Variable analysis aims to identify relationships between independent variables with dependent variables and intervening variables. It can be seen in the following table

Table 9. Analysis Variable

Independent Variable	Dependent Variable	Dependent Variable
independent variable	Employee Performance (Z)	Work Motivation (Y)
Job Characteristics (X1)	0,832	0,457
Empowerment (X2)	0,761	1,000
Work Motivation (Y)	1,000	

TD 1.1	10	a	1 4.	\sim	CC	• ,
Table	10.	Corre	lation	Coe	tt1	cient

Coefficient Correlation	Relationship Level
0.00 - 0.199	Very Low
0.20 - 0.399	Low
0.40 - 0.599	Medium
0.60 - 0.799	Strong
0.80 - 1.000	Very Strong

Table 10 shows the meaning of the level of correlation. If the value is getting closer to 1, the correlation will be stronger. Based on Table 9 shows the relationship between independent variables and dependent variables. Job characteristics (X1) have a correlation of 0.832 and Empowerment (X2) of 0.761 on employee performance, both are at a strong relationship level. Meanwhile, Work Motivation (Y) has a correlation of 1.000, indicating a very strong relationship with employee performance. There is also very strong relationship level in Empowerment on Work Motivation (Y). Meanwhile, medium relationships level between job characteristics and work motivation.

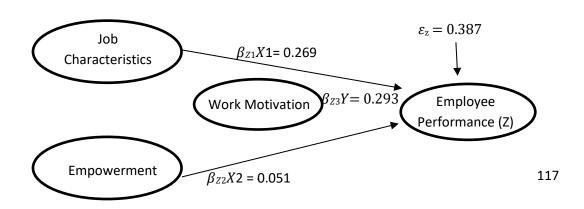
Path Analysis Relationship Model Between Variables in Substructure-1

The relationship model between variables in substructure-1 consists of one endogenous variable, namely Employee Performance (Z) and three exogenous variables, Job Characteristics (X1), Empowerment (X2), and Work Motivation (Y) as well as one residual variable, namely ε_{τ}

$$\begin{split} Z &= \beta_{Z1} X 1 + \beta_{Z2} X 2 + \beta_{Z3} Y + \epsilon_z. \\ Z &= 98.963 + 0.269 X 1 + 0.051 X 2 + 0.293 Y + 0.387 \end{split}$$

Explanation of the equation as follows:

- 1. Coefficient X1 is 0.269, show that job characteristics have positive relationship on job performance. It means, each increase in Job Characteristics by 1 unit will increase employee performance by 0.269 units, assuming other variables remain constant.
- 2. Coefficient X2 is 0.051, show that empowerment have positive relationship on empowerment. It means, each increase in empowerment by 1 unit will increase employee performance by 0.051 units, assuming other variables remain constant.
- 3. Coefficient Y is 0.293, show that work motivation have positive relationship on employee performance. It means each increase in work motivation by 1 unit will increase employee performance by 0.051 units, assuming other variables remain constants.



The Influence of Job Characteristics and Empowerment on Employee Performance: The Role of Work Motivation as an Intervening Variable

Figure 2. Empirical Causal Relationship Model Between Variables in Substructure-1

Path Analysis Relationship Model Between Variables in Substructure-2

The relationship model between variables in substructure-2 consists of one endogenous variable, namely Employee Performance (Y) and two exogenous variables, Job Characteristics (X1) and Empowerment (X2). Model in substructure 2 as follows

Y=
$$\beta_{Y1}X1+\beta_{Y2}X2+\epsilon_{y}$$
.
Y = 0.620X1+ 0.330X2 + 0.05

Explanation of the equation as follows:

- 1. Coefficient X1 is 0.620, show that job characteristics have positive relationship on Employee Performance. It means, each increase in Job Characteristics by 1 unit will increase employee performance by 0.620 units, assuming other variables remain constant.
- 2. Coefficient X2 is 0.330, show that empowerment have positive relationship on Employee Performance. It means, each increase in empowerment by 1 unit will increase employee performance by 0.330 units, assuming other variables remain constant.

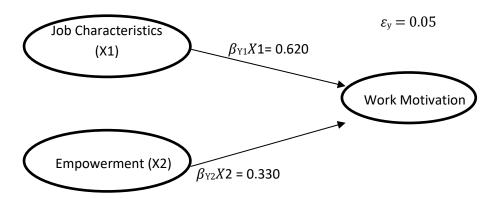


Figure 3. Empirical Causal Relationship Model Between Variables in

Substructure-2

Table 11. Summary of Direct and Indirect Effect

No.	Jalur	PL β	PTL	Sobel (z) & Pr	Conclusion
1	X1> Z	0.269			There is direct effect X1 on Z
2	X2> Z	0.051		0.126 > 0.05	There is no direct effect X2 on Z

3	Y> Z	0.293		0.002 < 0.05	There is direct effectt X1 on Z
4	X1> Y	0.620		0.000 < 0.05	There is direct effect X1 on Y
5	X2> Y	0.330		0.000 < 0.05	There is direct effect X1 on Y
6	$X1 \longrightarrow Y \longrightarrow Z$ $(\beta x_1 y)(\beta y z)$		(0.62)(0.293) = 0.181	1.739 > 1.65	There is indirect effect X1 on Z through Y
7	$X2 \longrightarrow Y \longrightarrow Z$ $(\beta x_2 y)(\beta y z)$		(0.33)(0.293) = 0.097		There is indirect effect X2 on Z through Y

Qualitative Data Analysis

Table 12. Summary of average Quantitative and Qualitative Analysis

No.	Variable	Quantitative Analysis		Qualitative Analysis
		Score	Level	Average
1	Employee Performance	4.21	Good	Good
2	Work Motivation	4.25	Good	Good
3	Job Characteristics	4.21	Good	Good
4	Empowerment	4.22	Good	Good

Based on Table 12, It contains summary of research result at PT. RDA Reindo Dinamika, a company in chemistry industry at Bogor Regency. Quantitative analysis and quantitative analysis shows consistent and positive results related to several variables studied. The average results obtained from both analyses indicate that the company has succeeded in creating conditions that support good employee performance and development.

DISCUSSION

The findings of this study indicate that job characteristics have a significant direct effect on employee performance with a coefficient value of 0.269 (see Table 11). This suggests that job design encompassing skill variety, task identity, and adequate feedback contributes to improved employee

performance outcomes. These findings are consistent with Pramezwary et al. (2022), who found that job characteristics influence work engagement, which in turn strengthens performance.

Empowerment, although having a relatively small direct effect on performance (β = 0.051), shows a strong indirect influence through work motivation (see Table 11). This indicates that empowerment is more effective when it stimulates employee motivation rather than directly influencing performance. Such results are in line with Sequeira et al. (2023), who highlighted that empowerment contributes to employee performance via enhanced motivation in public service institutions. Likewise, Andika & Darmanto (2020) also found that empowerment significantly affects employee performance both directly and indirectly through organizational commitment, emphasizing that empowerment not only strengthens employee motivation but also fosters stronger commitment to the organization.

Work motivation itself has been proven to significantly influence employee performance with a coefficient of 0.293 (Table 11). This supports the Expectancy Theory (Vroom, 1995) which states that motivation drives individuals to achieve better performance. Similar findings were also reported by Nasution & Priangkatara (2022), who reported that work motivation has a substantial impact on employee performance at the Regional Financial and Asset Management Agency of Langkat Regency. Their study emphasized that continuous improvement of work motivation will directly enhance employee performance. Similarly, Maryani et al. (2021) found a positive and significant relationship between work motivation and employee performance among civil servants at the Regional Secretariat of Bogor City, where motivation contributed 28.2% to employee performance. These results reinforce the conclusion that work motivation is a key determinant of performance, particularly in public sector organizations.

When combining quantitative and qualitative analyses (Table 12), both show consistency where employee performance, job characteristics, empowerment, and motivation are perceived as being in the "good" category. This reinforces the robustness of the findings, suggesting that the company has succeeded in creating supportive conditions for employees. In comparison, Song (2024) also found that multidimensional factors such as motivation and empowerment are essential determinants of job performance in diverse industries. Thus, this study adds empirical evidence that in the chemical industry, the synergy of job characteristics, empowerment, and work motivation is crucial to sustain high levels of employee performance.

From a practical perspective, these findings highlight the importance for chemical industry companies to design jobs that provide clear task identity, meaningful feedback, and opportunities for skill development. Strengthening empowerment programs, such as delegating authority and increasing trust from management, can stimulate employees' intrinsic motivation, which subsequently enhances performance. Moreover, providing motivation-based incentives, career development opportunities, and recognition of employee achievements can further strengthen the positive effects of job characteristics and empowerment on performance. These practical implications suggest that human resource managers should integrate job design, empowerment strategies, and motivational systems into a comprehensive policy framework to sustain high employee performance in highly competitive industrial environments.

CONCLUSION

There is significant direct effect between job characteristics on employee performance with coefficient value 0.269. Empowerment has significant direct effect on job performance with coefficient value 0.051. Job characteristics has significant direct effect on work motivation with coefficient value 0.457. Empowerment has very strong significant direct effect on work motivation with coefficient value 1. Work motivation has significant effect on job performance with coefficient value 0.293. There is indirect effect from job characteristics on job performance through work motivation with coefficient value 0.134. Empowerment shows very significant indirect effect on job performance through work motivation with coefficient value 0.293.

Align with the relationship between variables that affect employee performance, both direct and indirect influences, these variables need to be optimized by strengthening indicators that still need to be improved. In job characteristics, there needs to be an increase in skill variation, task identity, and job feedback. This can be done through more specific training and increasing opportunities for employees to develop their skills. In empowerment, there needs to be an increase in management trust in employees, work independence, and the impact of employee work contributions to the organization.

Regular training and empowerment programs must be implemented to encourage employee creativity and initiative. In work motivation, there needs to be an increase in indicators, namely the provision of performance-based rewards, career development, and recognition of work achievements. This is expected to improve overall performance.

In further research, researchers are advised to expand the scope of the population by involving more companies from various industrial sectors and covering a wider geographic area, consider using the latest or most recent theoretical approaches that cover more sophisticated aspects related to HR management, digitalization developments, and the influence of the external environment on employee performance, and using additional variables or control variables such as leadership style, organizational culture, or employee welfare, to clarify the causal relationship between variables and provide more indepth and applicable research results for companies and human resource management practitioners.

REFERENCES

- Abu-Bader, S. H. (2021). Using statistical methods in social science research: With a complete SPSS guide. Oxford University Press.
- Adiarani, P. G. (2019). The effects of job characteristics on work engagement. *Russian Journal of Agricultural and Socio-Economic Sciences*, 85(1), 475–479.
- Amalia, N. R., Karuppaiah, S., Hassan, Z., & Patak, A. A. (2023). The impact of interpersonal communication on employee performance during work from home. *International Journal of Humanities and Innovation (IJHI)*, 6(1), 15–19.
- Andika, R., & Darmanto, S. (2020). The effect of employee empowerment and intrinsic motivation on organizational commitment and employee performance. *Jurnal Aplikasi Manajemen*, 18(2), 241–251.
- Bajrami, H., Lekaj, F., Shala, V., Bajrami, B., & Bytyqi, S. (2024). Enhancing organizational performance through effective leadership and communication. *Edelweiss Applied Science and Technology*, 8(4), 1810–1821.
- Cavazotte, F., Moreno, V., & Hickmann, M. (2012). Effects of leader intelligence, personality and emotional intelligence on transformational leadership and managerial performance. *The Leadership Quarterly*, 23(3), 443–455.
- Colquitt, J. A., Lepine, J. A., & Wesson, M. J. (2023). *Organizational behavior: Improving performance and commitment* (eight). McGraw Hill.
- Gharib, M., Jamali, N., Chamanabad, S., & Goharimanesh, M. (2023). Examining the role of empowerment criteria on employee performance: a quantitative analysis in the oil industry. *Journal of Engineering Management and Systems Engineering*, 2(2), 96–107.
- Hariyana, H., Asriati, A., & Sulaiman, S. (2024). The Influence of Work Motivation and Work on Employee Performance in Offices Trade and Industry Gowa District. *International Journal of Economic Research and Financial Accounting*, 2(3).
- Harris, J. E., & Gleason, P. M. (2022). Application of path analysis and structural equation modeling in nutrition and dietetics. *Journal of the Academy of Nutrition and Dietetics*, *122*(11), 2023–2035.
- Kreitner, R., & Kinicki, A. (2008). Organizational Behavior. McGraw Hill.
- Kuswati, Y. (2020). The influence of organizational culture on employee performance. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 3(1), 296–302.
- Luthans, F. (2007). Organizational Behavior. McGraw-Hill.
- Maryani, Y., Entang, M., & Tukiran, M. (2021). The relationship between work motivation, work discipline and employee performance at the Regional Secretariat of Bogor City. *International Journal of Social and Management Studies*, 2(2), 1–16.
- Mheidly, N., Fares, M. Y., Zalzale, H., & Fares, J. (2020). Effect of face masks on interpersonal communication during the COVID-19 pandemic. *Frontiers in Public Health*, 8.
- Nasution, M. I., & Priangkatara, N. (2022). Work discipline and work motivation on employee performance. *International Journal of Economics, Social Science, Entrepreneurship and*

The Influence of Job Characteristics and Empowerment on Employee Performance: The Role of Work Motivation as an Intervening Variable

- *Technology (IJESET)*, *1*(1), 50–64.
- Pramezwary, A., Lemy, D. M., Djakasaputra, A., Situmorang, J. M. H., Maleachi, S., & Others. (2022). The role of job characteristics, organizational citizenship behavior, self-efficacy in the relationship to employee performance. *International Journal of Social Science and Business*, 6(4), 486–495.
- Rani, R. M., Rahman, N., & Yusak, N. (2021). The effect of psychological empowerment on employee performance. *International Journal of Innovation, Creativity and Change*, 15(6), 881–899.
- Sekaran, U. (2003). Research methods for business: A skill building approach. John Wiley & Sons.
- Sequeira, I., Kellen, P., & da Conceição Soaresc Soaresc, A. (2023). Influence of the employee empowerment towards the employee performance through working motivation in the Office of Komisaun Funsaun Públika, Dili Timor-Leste. *Journal of Digitainability, Realism and Mastery*, 2(1), 11–19.
- Silalahi, E. M., & Sembiring, H. S. (2020). The Influence of Empowerment, Interpersonal Communication and Job Involvement Toward Employee Performance Through Work Motivation. *Sosiohumaniora*, 22(2), 190–197.
- Singarimbun, M., & Effendi, S. (1995). Metode penelitian survei. PT. Pustaka LP3ES.
- Siswadi, Y., & Lestari, D. (2021). Effect of work motivation, emotional intelligence and work discipline on employee performance. *International Journal of Economic, Technology and Social Sciences (Injects)*, 2(1), 227–237.
- Song, J. (2024). A study of multidimensional influences on employee job performance. *Lecture Notes in Education Psychology and Public Media*, *37*(1), 121–130.
- Sugiyono. (2016). Metode Penelitian Kuantitatif, Kualitatif dan R&D. Alfabeta.
- Sukma, M. I., Sukaris, S., Dewantoro, A. Q., & Baskoro, H. (2023). The Influence Of Individual Characteristics, Work Motivation And Organizational Support On Employee Performance. *Innovation Research Journal*, 4(1), 51–57.
- Vroom, V. H. (1995). Work and Motivation. Willey.
- Vroom, V. H., & Deci, E. L. (1989). Management and motivation. Penguin.