

The Effect of Performance Appraisal on Work Motivation of Employees at the Department of Public Works and Spatial Planning of North Sumatra Province

Sri Irianti Ulina Pinem, Kiki Farida Ferine

Abstract

This study aims to examine the effect of performance appraisal on employee work motivation at the Department of Public Works and Spatial Planning of North Sumatra Province. A quantitative approach was employed, involving a total population of 70 employees, all of whom were included as respondents using a census (total sampling) technique. Data were analyzed using descriptive statistics, validity and reliability testing, and simple linear regression analysis with SPSS version 25. The descriptive results indicated that performance appraisal ($M = 4.68$, $SD = 0.48$) and work motivation ($M = 4.81$, $SD = 0.45$) were perceived at high levels, reflecting structured evaluation practices and strong motivational outcomes among employees. Regression analysis demonstrated that performance appraisal has a significant positive effect on work motivation, with a regression coefficient of 1.217, a standardized Beta of 0.762, and a t-value of 9.842 ($p < 0.05$). The coefficient of determination ($R^2 = 0.580$, Adjusted $R^2 = 0.695$) indicates that 58% of the variance in work motivation is explained by performance appraisal, while the remaining 42% is influenced by other factors not examined in this study. These findings suggest that employees who perceive performance appraisal as fair, constructive, and transparent exhibit higher levels of motivation. The study highlights performance appraisal as a dominant predictor of work motivation in public sector organizations, emphasizing the importance of systematic evaluation practices to enhance employee engagement, satisfaction, and organizational effectiveness in government institutions.

Keywords: *Performance Appraisal, Work Motivation, Public Sector, Employee Engagement*

Sri Irianti Ulina Pinem¹

¹Management, Universitas Pembangunan Panca Budi, Indonesia e-mail:
sriiriantiulina@gmail.com¹

Kiki Farida Ferine²

²Management, Universitas Pembangunan Panca Budi, Indonesia e-mail:
kikifaridaferine@dosen.pancabudi.ac.id²

2nd International Conference on Islamic Community Studies (ICICS)

Theme: History of Malay Civilisation and Islamic Human Capacity and Halal Hub in the Globalization Era
<https://proceeding.pancabudi.ac.id/index.php/ICIE/index>

Introduction

Employee work motivation is a critical factor in determining the effectiveness and success of public sector organizations, particularly technical agencies such as the Department of Public Works and Spatial Planning (PUPR) of North Sumatra Province. Motivated employees are more likely to perform their duties efficiently, maintain high standards of service, and contribute to the achievement of organizational goals. In the context of public administration, motivation is influenced by both intrinsic factors, such as personal satisfaction and career growth, and extrinsic factors, including supervision, recognition, and structured performance evaluation systems [1]. Therefore, understanding the determinants of work motivation is essential for enhancing institutional effectiveness and ensuring the delivery of high-quality public services.

One of the key mechanisms to influence employee motivation is the performance appraisal system. Performance appraisal involves the systematic evaluation of an employee's work performance, often linked to feedback, rewards, and career development opportunities. Well-designed performance appraisal systems can provide clear performance expectations, recognize achievements, identify areas for improvement, and foster professional growth, all of which contribute to higher motivation levels. In public sector organizations, such as PUPR, performance appraisal not only helps align individual goals with organizational objectives but also serves as a tool for promoting accountability, transparency, and continuous improvement in service delivery [2].

Despite the recognized importance of performance appraisal, many public sector organizations still face challenges in its implementation. Appraisal systems may be perceived as subjective, inconsistent, or poorly communicated, which can undermine their effectiveness in motivating employees [3]. Empirical evidence suggests that when employees perceive appraisal processes as fair, transparent, and linked to meaningful rewards or developmental opportunities, their motivation increases significantly [4]. Conversely, weak or inconsistent appraisal practices can reduce employee engagement, lower productivity, and hinder organizational performance [5].

In the context of the Department of Public Works and Spatial Planning of North Sumatra Province, employee motivation is essential for the successful planning, implementation, and maintenance of regional infrastructure projects. Motivated employees are more likely to demonstrate initiative, maintain work quality, comply with regulations, and contribute to the timely completion of programs [6]. Therefore, examining the effect of performance appraisal on employee work motivation becomes highly relevant, both theoretically and practically. This study seeks to provide empirical evidence regarding how structured and transparent performance evaluation influences employee motivation, offering insights for policymakers and human resource managers to optimize employee engagement and organizational effectiveness in public sector institutions [7].

Literature Review

Performance appraisal is widely acknowledged as a crucial tool in human resource management for enhancing employee motivation and organizational effectiveness. It refers to the systematic evaluation of employees' job performance against predetermined standards and objectives, providing feedback on strengths, weaknesses, and development opportunities. Performance appraisal serves multiple functions in public sector organizations, including clarifying expectations, guiding professional development, rewarding achievements, and identifying training needs. In this way, appraisal systems not only measure outcomes but also shape employee attitudes, behavior, and motivation. Effective performance appraisal process is characterized by transparency, fairness, consistency, and alignment with organizational goals, which collectively reinforce employees' intrinsic and extrinsic motivation [8].

Employee motivation, on the other hand, represents the internal drive that directs and sustains work-related behavior to achieve organizational and personal objectives. Motivation is influenced by both internal factors, such as personal ambition, professional growth, and job

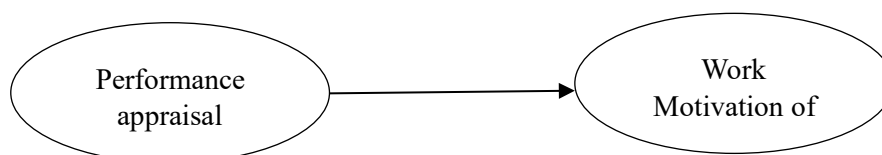
satisfaction, and external factors, including recognition, rewards, and structured appraisal mechanisms [9]. High levels of motivation have been consistently linked to improved job performance, higher engagement, reduced absenteeism, and greater organizational commitment [10]. Within public sector institutions, where tasks are often regulated and standardized, motivation plays a pivotal role in ensuring that employees execute their responsibilities efficiently, adhere to quality standards, and respond effectively to public needs.

The relationship between performance appraisal and employee motivation is strongly supported by expectancy theory and human resource development literature. Individual are motivated when they believe that their effort will lead to desired performance outcomes, which are in turn linked to valued rewards. Performance appraisal systems operationalize this principle by providing clear performance expectations, structured feedback, and opportunities for recognition and reward. Recent empirical studies confirm that well-designed appraisal systems positively influence employee motivation in both private and public sector contexts. Employees who perceive that performance evaluations are fair, objective, and aligned with career advancement opportunities demonstrate higher levels of motivation, commitment, and productivity.

Specifically, in technical agencies such as the Department of Public Works and Spatial Planning, performance appraisal is essential because the nature of work requires precision, adherence to standards, and accountability. Appraisal systems enable supervisors to monitor progress, provide corrective feedback, and encourage continuous professional development, all of which strengthen employees' intrinsic and extrinsic motivation. Empirical evidence from Indonesian public sector organizations suggests that structured performance evaluation is a dominant predictor of employee motivation, with significant implications for work quality, efficiency, and service delivery [11].

Based on the theoretical and empirical foundations, performance appraisal can be understood as a critical organizational practice that directly influences employee motivation. By providing feedback, guidance, recognition, and opportunities for professional growth, performance appraisal strengthens employees' drive to perform effectively and align their work with institutional objectives [12]. Therefore, examining the effect of performance appraisal on employee motivation in the Department of Public Works and Spatial Planning of North Sumatra Province is both theoretically relevant and practically significant, offering actionable insights for human resource policy and management in public sector institutions [13].

In the Indonesian context, empirical studies on performance appraisal and work motivation of employees are still limited, especially within regional government institutions. Most prior research has focused either on performance appraisal and performance or on general aspects of job satisfaction without directly addressing loyalty. Therefore, this study offers a novel contribution by specifically examining how performance appraisal influences loyalty among public sector employees. This study conceptualized Performance appraisal as the independent variable (X) and Work motivation of employees as the dependent variable (Y) as shown on the following figure.



The hypothesis is:

H_a : Performance appraisal positively influences work motivation of employees at the Department of Public Works and Spatial Planning of North Sumatra Province.

H_o : Performance appraisal does not positively influence work motivation of employees at the Department of Public Works and Spatial Planning of North Sumatra Province.

Research Methodology

This study employs a quantitative associative-causal research design, which aims to analyze the pattern of relationships between variables in order to determine the influence of two independent (exogenous) variables on a dependent (endogenous) variable. The research was conducted at the Department of Public Works and Spatial Planning of North Sumatra Province. The data collection process was carried out from March to August 2025.

According to Sugiyono, a population is defined as the generalization area consisting of objects or subjects that possess specific qualities and characteristics established by the researcher to be studied and from which conclusions are drawn. In this study, the population comprises the entire workforce of the Agency, totaling 70 employees, with the following distribution:

Table 1. Population Size

No.	Status	Number of Employees
1.	Civil Servants (ASN)	70
Total		70

Source: Department of Public Works and Spatial Planning of North Sumatra Province

The sampling technique employed in this study was purposive sampling. According to Sugiyono, purposive sampling is a technique for determining samples based on specific considerations. The rationale for using purposive sampling is that it is appropriate for quantitative research, particularly studies that do not aim for broad generalization. Based on this approach, the research sample consisted solely of civil servants (ASN) [14], with a total of 70 employees [15]. The data utilized in this research were obtained from questionnaires distributed to respondents across all divisions of the Agency. The analytical method applied was quantitative data analysis using SPSS version 25.0. The data collected using structured questionnaires distributed to all employees across divisions within the office. The data will be analyzed using quantitative statistical methods with SPSS version 25.0. Several steps will be performed.

Validity testing ensures that questionnaire items accurately measure the intended variables. An item is valid if the correlation coefficient (*r-count*) exceeds the critical value (*rtable*). Reliability testing will use Cronbach's alpha, where a value greater than the critical value indicates reliability.

The regression model applied in this study was formulated as follows:

$Y = a + bX$ Where:

Y = Work motivation of employees

X = Performance appraisal a =

Constant

b = Regression Coefficient

The t-test was conducted to determine the significance of the influence of the independent variable on the dependent variable. Furthermore, the coefficient of determination (R^2) was used to measure the extent of the effect of the independent variable on the dependent variable. In

other words, the coefficient of determination was applied to evaluate how strongly the independent variable, namely Performance appraisal (X), influences the dependent variable, Work motivation of employees (Y). The value of R^2 ranges between 0 and 1 ($0 < R^2 < 1$), indicating that when $R^2 = 0$, there is no influence between X and Y, while the closer R^2 approaches 1, the stronger the relationship between X and Y. The determination test was conducted using SPSS version 25.0.

Results a. Research Findings

1. Descriptive Analysis

Descriptive analysis in this test was employed to identify the minimum and maximum scores, mean scores, and standard deviations of each variable. The results are as follows: The table title is at the top, while the image title is written below. If tables and figures can be included in a single column, then the writing example is as follows:

Table 2. Descriptive Statistics

Variable	N		Mean		Std. Deviation	
	Minimum	Maximum				
Performance appraisal	70	3.72	5.00	4.62	0.52	
Work motivation of employees	70	3.54	5.00	4.77	0.43	

Source: SPSS output, version 25.0

The descriptive statistical analysis of this study involved 70 employees at the Department of Public Works and Spatial Planning of North Sumatra Province. The results show that performance appraisal has a minimum value of 3.72 and a maximum value of 5.00, with a mean score of 4.62 and a standard deviation of 0.52. These findings indicate that employees perceive the performance appraisal process at a high level, reflecting that evaluations are generally considered fair, structured, and consistent across the organization. Employee work motivation ranges from a minimum of 3.54 to a maximum of 5.00, with a mean of 4.77 and a standard deviation of 0.43, suggesting that overall motivation levels are high and relatively homogeneous among the employees. Collectively, these descriptive results provide an initial indication of a positive relationship between performance appraisal and employee work motivation, highlighting the potential impact of systematic evaluation processes on enhancing motivation in a public sector setting.

Validity and Reliability Tests

The validity test was conducted using the Corrected Item-Total Correlation. Results showed that all items of both variables had correlation coefficients above the threshold value (0.2387) with significance levels below 0.05. Thus, all items were considered valid.

Reliability was tested using Cronbach's Alpha. The values for both variables were above 0.60, indicating strong internal consistency:

1. Performance appraisal : $\alpha = 0.661$ (5 items)
2. Work motivation of employees : $\alpha = 0.668$ (5 items)

This confirms that the research instrument was reliable.

Regression Analysis Simple Linear Regression

A regression analysis was conducted to evaluate the effect of Performance appraisal on work motivation of employees.

Table 3. Regression Results

Model	B		Beta		t
	Std. Error				
(Constant)	9.865	2.258	—		4.102
Performance	1.189	0.145	0.767	9.566	appraisal

Dependent Variable: Work motivation of employees

The results of the regression analysis examining the effect of Performance Appraisal on Work Motivation of Employees indicate a strong and significant positive relationship between the two variables. The constant value of 9.865 with a t-value of 4.102 suggests that even in the absence of performance appraisal, employees maintain a positive baseline level of motivation. The regression coefficient ($B = 1.189$) demonstrates that each one-unit increase in performance appraisal corresponds to a 1.189-unit increase in employee motivation. The standardized Beta value of 0.767 and t-value of 9.566 confirm that performance appraisal is a dominant factor in influencing work motivation. These findings imply that systematic, fair, and constructive performance evaluations significantly enhance employees' willingness and enthusiasm to perform their duties, reinforcing the importance of appraisal systems in sustaining high motivation within public sector organizations.

Coefficient of Determination (R^2)

The coefficient of determination (R^2) was calculated to measure the proportion of variance in work motivation of employees explained by Performance appraisal.

Table 4. Coefficient of Determination

Model	R	R^2	Adjusted R^2
1	0.771	0.588	0.691

Source: SPSS output, version 25.0

The model summary from the regression analysis shows a strong positive relationship between Performance Appraisal and Work Motivation of Employees. The correlation coefficient (R) is 0.771, indicating a substantial association between the independent and dependent variables. The coefficient of determination (R^2) is 0.588, which means that 58.8% of the variance in employee work motivation can be explained by performance appraisal, while the remaining 41.2% is influenced by other factors not examined in this study. The Adjusted R^2 value of 0.691 confirms that the model has strong explanatory power, accounting for both sample size and model complexity. Overall, these results highlight that performance appraisal plays a dominant role in enhancing employee motivation within the Department of Public Works and Spatial Planning of North Sumatra Province.

Hypothesis Testing (t-Test)

The hypothesis testing was carried out using the t-test.

H_0 : Performance appraisal does not positively influence work motivation of employees.

H_a : Performance appraisal positively influenced work motivation of employees.

Table 5. t- Test Result

Model	B	Std. Error	Beta	t
Model	B	Std. Error	Beta	t
(Constant)	9.681	2.452	—	4.133

Performance appraisal	1.189	0.173	0.767	9.566
-----------------------	-------	-------	-------	-------

Dependent Variable: Work motivation of employees

The results of the t-test analysis indicate that performance appraisal has a significant positive effect on the work motivation of employees at the Department of Public Works and Spatial Planning of North Sumatra Province. The constant value of 9.681 with a t-value of 4.133 suggests that employees maintain a positive baseline level of motivation even in the absence of performance appraisal influence. The regression coefficient (B) for performance appraisal is 1.189, with a standard error of 0.173 and a standardized Beta of 0.767. The t-value of 9.566 confirms that this effect is statistically significant ($p < 0.05$). These findings demonstrate that for every one-unit increase in performance appraisal, employee work motivation increases by 1.189 units, highlighting performance appraisal as a dominant factor in enhancing motivation. Overall, the results suggest that systematic and fair evaluation of employee performance is crucial for fostering higher levels of motivation, which can translate into improved productivity and organizational effectiveness within the public sector.

Conclusion

Based on the results of this study, it can be concluded that performance appraisal has a significant and positive effect on the work motivation of employees at the Department of Public Works and Spatial Planning of North Sumatra Province. The descriptive analysis indicated that employees perceive both the performance appraisal process ($M = 4.62$, $SD = 0.52$) and their own work motivation ($M = 4.77$, $SD = 0.43$) at high levels, reflecting an organizational environment that values structured evaluations and motivates employees to perform effectively.

The regression analysis further confirmed that performance appraisal is a dominant predictor of employee motivation, with a coefficient of 1.189, a standardized Beta of 0.767, and a t-value of 9.566 ($p < 0.05$). These findings indicate that for every one-unit improvement in the performance appraisal system, employee motivation increases by 1.189 units. The coefficient of determination ($R^2 = 0.588$, Adjusted $R^2 = 0.691$) demonstrates that performance appraisal accounts for 58.8% of the variance in work motivation, while the remaining variance is influenced by other factors outside the scope of this study.

The study highlights the critical role of systematic, fair, and transparent performance appraisal systems in enhancing employee motivation in public sector organizations. By providing feedback, recognition, and guidance for professional development, performance appraisal strengthens employees' drive to perform, fosters engagement, and supports the achievement of institutional goals. These results suggest that human resource policies emphasizing structured evaluation processes can significantly improve motivation and, consequently, organizational effectiveness in government agencies.

References

- [1] Hidayatullah, A., & Tjahjawati, S. S. (2018). Pengaruh Keselamatan dan Kesehatan Kerja Terhadap Produktivitas Kerja Karyawan. *Jurnal Riset Bisnis Dan Investasi*, 3(2), 104. <https://doi.org/10.70697/jrbi.v3i2.938>
- [2] Sekaran, U., Lai, L., Ussiri, D. A. N., Kumar, S., & Clay, S. (2021). Role of integrated crop-livestock systems in improving agriculture production and addressing food security – A review. *Journal of Agriculture and Food Research*, 5, 100190. <https://doi.org/10.1016/j.jafr.2021.100190>

- [3] Ferine, K. F. (2025). Optimizing the Performance Of MSME Actors Through Creativity. In *Proceedings of International Conference on Islamic Community Studies* (pp. 1853-1866).
- [4] Mueller, D. S., Wise, K. A., Sisson, A. J., Allen, T. W., Bergstrom, G. C., Bissonnette, K. M., Bradley, C. A., Byamukama, E., Chilvers, M. I., Collins, A. A., Esker, P. D., Faske, T. R., Friskop, A. J., Hagan, A. K., Heiniger, R. W., Hollier, C. A., Isakeit, T., JacksonZiems, T. A., Jardine, D. J., ... Wiebold, W. J. (2020). Corn yield loss estimates due to diseases in the United States and Ontario, Canada, from 2016 to 2019. *Plant Health Progress*, 21(4), 238–247. <https://doi.org/10.1094/PHP-05-20-0038-RS>
- [5] TEMA 11. (2018). Covariance Structure Analysis of Health-Related Indicators among Home-Dwelling Elderly People Focusing on Subjective Health Perception. Title. *Journal of Materials Processing Technology*, 1(1), 1–8.
<http://dx.doi.org/10.1016/j.cirp.2016.06.001><http://dx.doi.org/10.1016/j.powtec.2016.12.055><https://doi.org/10.1016/j.ijfatigue.2019.02.006><https://doi.org/10.1016/j.matlet.2019.04.024><https://doi.org/10.1016/j.matlet.2019.127252><http://dx.doi.org/10.1016/j.cirp.2016.06.001>
- [6] Mesra, B., & Ferine, K. F. (2025, October). The Role of Human Capital in Enhancing Organizational Effectiveness. In *Proceedings of International Conference on Islamic Community Studies* (pp. 4966-4977).
- [7] Dağtan, E., & Cabaroğlu, N. (2021). Status of english speaking skills in turkish ELT departments: A nationwide survey. *Eurasian Journal of Applied Linguistics*, 7(1), 709–382. <https://doi.org/10.32601/ejal.911454>
- [8] Agustina, G., & Febrian, F. (2022). Peran Manajemen Konflik terhadap Performansi Kerja dan Produktivitas Organisasi pada Dinas Pariwisata dan Kebudayaan Provinsi Jawa Barat. *Organum: Jurnal Saintifik Manajemen Dan Akuntansi*, 5(1), 96–106.
- [9] Rahmat, A. (2015). Pengaruh Kepuasan Kerja Dan Komitmen Organisasi Terhadap Turnover Intentions Karyawan (Survey Pada PT. Telesindo Shop Cabang Pekanbaru). *Jurnal Daya Saing*, 1(3), 203–213. <https://doi.org/10.70446/dayasaing.v1i3.28>
- [10] Sari, M. I., & Pratama, V. Y. (2023). Analisis Relationship Marketing dan Kualitas Pelayanan Terhadap Loyalitas Nasabah Bank BTN melalui Corporate Social Responsibility Sebagai Variabel Intervening. *Jurnal Ekonomi Bisnis Dan Kewirausahaan*, 12(2), 26–36.
- [11] Hendrawijaya, A. T. (2020). Human resource management in improving students' academic achievement mediated by teacher's performance. *Problems and Perspectives in Management*, 18(1), 242–253. [https://doi.org/10.21511/ppm.18\(1\).2020.21](https://doi.org/10.21511/ppm.18(1).2020.21)
- [13] Sugiyono, S. (2021). The evaluation of facilities and infrastructure standards achievement of vocational high school in the Special Region of Yogyakarta. *Jurnal Penelitian Dan Evaluasi Pendidikan*, 25(2), 207–217. <https://doi.org/10.21831/pep.v25i2.46002>
- [14] Rahmawati, E., & Nurhadian, A. F. (2023). The Effect of Work Discipline and Organizational Culture on Employee Performance. *Majalah Bisnis & IPTEK*, 16(2), 230–239. <https://doi.org/10.55208/3hbm9n20>
- [15] Sugiarto A, Kamakaula Y, Susanty L, Periansya. Metodologi Penelitian. Teori & Praktik. Karawang: Saba Jaya Press; 2024.