Impact of Motivation on Compensation and Discipline at Musi Rawas Public Works

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ABSTRACT

This study examines the effects of work discipline and compensation on employee performance, with work motivation as a moderating factor. Addressing critical challenges in public sector HR management, this research aims to understand how these variables interact to influence performance. A quantitative approach was adopted, with data collected from 62 respondents using observation, questionnaires, interviews, and documentation. **The analysis methods** included simple linear regression, correlation coefficients, t-tests, determination tests, and Moderated Regression Analysis (MRA). **The findings** reveal significant positive relationships between compensation and employee performance ($t_{\text{calculate}} = 3.636 \geq t_{\text{table}} = 1.670$) and between work discipline and employee performance ($t_{\text{calculate}} = 4.722 \geq t_{\text{table}} = 1.670$, $R = 0.521$). Furthermore, work motivation strengthens these relationships, amplifying their overall impact on performance. **These results highlight** the importance of timely compensation, robust disciplinary practices, and effective motivational strategies. Practical recommendations are provided for HR improvements within the Musi Rawas Public Works Department, and future research is encouraged to explore additional factors such as leadership and organizational culture.

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1. INTRODUCTION

Public organizations are under increasing pressure to deliver efficient and effective services despite numerous resource and workforce constraints. Among the critical drivers of organizational success, human resources (HR) are pivotal in ensuring productivity and operational efficiency [1, 2]. To achieve organizational goals, building strong relationships with employees through well-designed motivational strategies is imperative, including fair and timely compensation [3, 4]. Compensation, encompassing financial and non-financial rewards, serves as a key mechanism to recognize and encourage employee contributions [5, 6]. For instance, the Additional Income for Employees (*Tambahan Penghasilan Pegawai*, TPP) incentive provided to Civil Servants (*Pegawai Negeri Sipil*, PNS) within the Musi Rawas Regency Government reflects an organizational effort to enhance employee motivation and retention [7, 8].

Beyond compensation, work discipline plays a crucial role in fostering employee performance. Effective discipline ensures adherence to organizational policies and enhances accountability, which in turn drives goal achievement [9]. A researcher highlights, "The better someone works discipline, the higher the per-

formance achievement that will be reached." This underscores the interconnectedness of discipline and performance, emphasizing the importance of cultivating an environment that promotes accountability and compliance with organizational norms [10, 11].

Equally significant is work motivation, which serves as the driving force behind employee engagement and commitment. Motivation inspires individuals to approach tasks with diligence and enthusiasm, enhancing collaboration and alignment with organizational vision and mission [12]. A supportive work environment where employees feel valued and their contributions are recognized is crucial to sustaining high motivation.

However, initial observations at the Department of Public Works for Spatial Planning and Irrigation in Musi Rawas Regency reveal critical challenges that impede employee performance [13]. Frequent delays in TPP payments over three months undermine employee morale and motivation. Additionally, inadequate recognition for overtime contributions, poorly managed employee placements, tardiness, early departures, absenteeism, and task incompletion reflect systemic discipline problems [14]. A lack of effective teamwork and mismatched job placements further exacerbate these issues, resulting in the organization's failure to meet key performance targets.

While extensive research exists on compensation, discipline, and motivation, studies examining their combined effects on employee performance in public sector organizations remain limited. Most existing research explores these factors independently, leaving significant gaps in understanding their interplay, particularly within regional government agencies. Furthermore, the moderating role of motivation in these relationships is underexplored, especially in the context of bureaucratic constraints and delayed compensation characteristic of public sector organizations [15].

This study seeks to address these gaps by investigating the combined influence of compensation and work discipline on employee performance, with work motivation as a moderating factor. By focusing on the Musi Rawas Regency Public Works Department, the study provides critical insights into HR management practices. It offers actionable strategies to address performance challenges in the public sector [16]. The findings have broader relevance, offering lessons that can be applied to other public organizations grappling with similar HR issues worldwide.

2.   LITERATURE REVIEW

This section explores the theoretical and empirical foundations of the key variables analyzed in this study: Employee Performance, Compensation, Work Discipline, and Motivation. By examining previous studies and relevant frameworks, the literature review provides a comprehensive understanding of how these variables interact and influence organizational outcomes. The insights derived from this review form the basis for the hypotheses and research framework.

2.1.   Employee Performance and Quality of Work

Employee performance is the quantity and quality of work produced by individuals or groups by organizational objectives. According to a researcher, performance results from employees completing their designated tasks per established guidelines [17]. Performance is shaped by employee commitment, accountability, and consistency in fulfilling responsibilities [10]. It can be measured by completing tasks and duties within a specific timeframe, reflecting the organization's success [6, 18]. Effective employee performance is thus a critical indicator of an organization's ability to achieve its objectives.

2.2.   Compensation

Compensation is widely recognized as one of the most significant factors in motivating employees and driving their performance. Research defines compensation as the remuneration provided for an employee's contributions to the organization [19]. Some elaborate that compensation represents a fair exchange of money or goods, either directly or indirectly, to acknowledge employee efforts while fostering motivation [20, 21]. Compensation systems encompass financial rewards, such as salaries, bonuses, incentives, and non-financial benefits, including recognition and career development opportunities [22]. Transparent and equitable compensation management is critical in sustaining high employee morale, enhancing satisfaction, and improving productivity.

2.3.   Work Discipline

Work discipline is essential for maintaining organizational order and achieving efficiency. Discipline can be defined as adherence to organizational rules and norms, whether written or unwritten, without risking

penalties [23, 24]. It reflects an employee's willingness to comply with organizational standards and contribute to shared goals [10]. Leaders play a critical role in consistently enforcing discipline to ensure high performance [25, 26]. When disciplined, employees are more likely to remain aligned with organizational objectives, ultimately leading to improved productivity [9, 27].

2.4. Work Motivation

One crucial element affecting worker engagement and output is motivation. It can be characterized as the internal and external factors that motivate people to work hard and enthusiastically toward their goals. Motivation often arises from internal desires, such as aspirations, recognition, and a conducive work environment [10, 28]. Motivated employees are willing to perform tasks and take actions that contribute to organizational success, mainly when supported by growth opportunities [9, 29]. By fostering motivation, organizations can align individual efforts with their broader vision, ensuring employees remain committed to organizational goals.

2.5. Conceptual Framework

This study uses work motivation as a moderating variable to examine the relationship between employee performance, work discipline, and compensation. Performance is the dependent variable; motivation is a moderator, and discipline and compensation are independent variables [30]. The framework for this study is grounded in the following hypotheses:
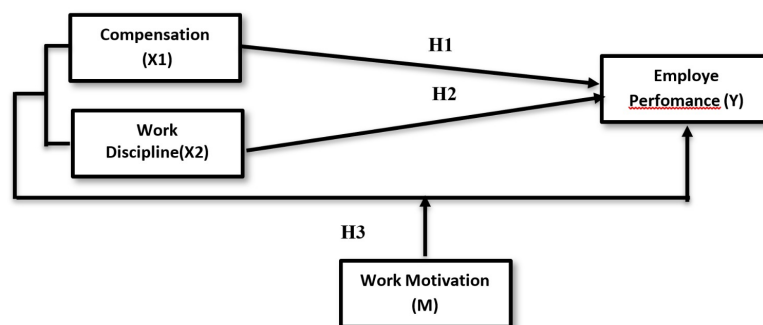

Figure 1. Conceptual Framework

The conceptual structure of this study is depicted in Figure 1, which also shows the proposed links between employee performance (*Y*), work discipline (*X2*), and compensation (*X1*). The moderating effect of work motivation strengthens or influences the association between these factors. The framework's theoretical underpinnings come from current literature, which shows that discipline and compensation are essential performance drivers and that motivation greatly amplifies these effects.

- **H1:** Compensation significantly influences employee performance.

- **H2:** Work discipline significantly influences employee performance.

- **H3:** Compensation and work discipline significantly influence employee performance, moderated by work motivation.

While prior studies have examined the independent effects of compensation, discipline, and motivation on employee performance, there is limited research on their combined influence in the public sector [31, 32]. Moreover, the moderating role of motivation remains underexplored, particularly in contexts characterized by bureaucratic constraints and delayed compensation, such as regional government organizations. This study addresses these gaps by investigating the interplay between these variables, offering novel insights into public sector HR management and providing actionable strategies for improving employee performance.

3.   RESEARCH METHODS

This study employs a mixed method approach to assess the impact of ML algorithms on enhancing predictive models in system development [17, 33]. The quantitative analysis focuses on evaluating the performance of various ML-enhanced models through predefined metrics. At the same time, the qualitative aspect addresses the challenges and benefits encountered during the implementation process [25, 34, 35].

Data used in this study consists of both historical and real-time datasets. Historical data was sourced from previous system performance logs, while real-time data was gathered from ongoing system processes. Data preparation included cleaning, handling missing values, normalizing datasets, and performing feature selection to ensure the relevance and quality of inputs for model training [23, 36].

Several supervised learning techniques were used in the study, including decision trees, random forest, gradient boosting, and linear regression [20, 37]. Where applicable, unsupervised learning techniques like clustering were also explored to uncover hidden patterns in the data [38, 39]. These algorithms were selected based on their applicability to system development and their proven success in predictive modelling [9]. Several metrics, such as accuracy, precision, recall, and the F1 score for classification models, were employed to assess the performance of the ML-improved models. Root Mean Square Error (RMSE) was used to quantify prediction error for regression-based models. Area Under the Curve (AUC) was utilized in classification tasks to evaluate the model's capacity to differentiate between various outcomes [10, 40].

The study results are presented in this section, along with their implications in light of the goals of the investigation. The findings, interpreted to evaluate the relationship between the variables of compensation, work discipline, motivation, and employee performance, are produced from statistical analyses, including basic linear regression. Through an analysis of these connections, the conversation emphasizes the importance and usefulness of the results for enhancing organizations.

3.1.   Result

3.1.1. Simple Linear Regression

To find the equation between dependent and independent variables, regression analysis is needed first, using SPSS software. The result is also as follows.

Table 1. Simple linear regression result X1 to Y

Model	Unstandardized coefficients	Standardized coefficients	
	B	Std. error	Beta
(Constant)	56.324	4.160	
Compensation	0.324	0.089	0.425

Source: Results of data processing using SPSS Version 25 of 2024

The constant value (a) = 56.324 and the value of the coefficient (b) = 0.324 serve as the foundation for the findings in Table 1 above. The following formula represents a basic linear regression model based on the table results:

$$Y = a + bX_1$$

Substituting the values:

$$Y = 56.324 + 0.324 \cdot \text{Compensation (X1)}$$

Where:

1. The constant value of 56.324 indicates that if the independent variable Compensation (X_1) is zero, the expected value of Employee Performance (Y) is 56.324.

2. For the Compensation variable (X_1), the regression coefficient is positive (0.324). This means that if Compensation (X_1) increases by 1 unit (e.g., on the response scale), Employee Performance (Y) will increase by 0.324 units.

Table 2. Simple linear regression result X2 to Y

Model	Unstandardized coefficients	Standardized coefficients	
	B	Std. error	Beta
(Constant)	39.533	6.751	
Work Discipline	0.647	0.137	0.521

Source: Results of data processing using SPSS Version 25 of 2024

From the results of the Table 2 above, a constant value (a) = 39.533 is obtained, while the coefficient value (b) = 0.647. These values are entered into a simple linear regression equation as follows:

$$Y = a + bX_2$$

Substituting the values:

$$Y = 39.533 + 0.647 \cdot \text{Work Discipline (X2)}$$

Where:

1. The constant value of 39.533 means that if the independent variable Work Discipline (X_2) is zero, the expected value of Employee Performance (Y) is 39.533%.

2. For the Work Discipline variable (X_2), the regression coefficient is positive (0.647). This indicates that if Work Discipline (X_2) increases by 1 unit (e.g., on the response scale), Employee Performance (Y) will increase by 0.647%.

3.1.2. Correlation Coefficient
The correlation coefficient test proves the relationship between one variable and another.

Table 3. Compensation Correlation Test Results (X1)

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	0.425[a]	0.181	0.167	4.248

Source: Results of data processing using SPSS Version 25 of 2024

The Table 3 above is based on the results of each Compensation (X_1) and Employee Performance (Y) variable. The correlation value (R) is 0.425 and falls within the range of coefficients 0.41-0.70. The relationship between the Compensation variable and Employee Performance indicates a moderate relationship with a positive correlation, showing that Compensation and Employee Performance move in the same direction.

Table 4. Work Discipline Correlation Test Results (X2)

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	0.521[a]	0.271	0.259	4.007

Source: Results of data processing using SPSS Version 25 of 2024

Based on Table 4 above, the results of each variable of Work Discipline (X_2) and Employee Performance (Y) indicate that the correlation coefficient (R) is 0.521. This value falls within the coefficient interval 0.41–0.70, demonstrating a moderate relationship between Work Discipline and Employee Performance variables. The correlation coefficient also shows a positive relationship, indicating that Work Discipline and Employee Performance are positively and unidirectionally related.

3.1.3. Partial Test (Test-t)
To test the partial effect between each independent variable on the dependent variable, the t-test presented in Table 5 below is used:

Table 5. Compensation t-Test Results (X1) on Employee Performance (Y)

Model	t	Sig.
(Constant)	13.540	0.000
Compensation	3.636	0.001

Source: Results of data processing using SPSS Version 25 of 2024

Based on the results of the t-test Table 5 above, the Compensation variable (X_1) on Employee Performance (Y) has a calculated t-value of 3.636, which is greater than the t-table value ($df = 62 - 2 = 60$) of 1.670, with a significance level of $0.001 < \alpha = 0.05$. Thus, partially, the Compensation variable (X_1) has a significant influence on Employee Performance.

Table 6. Work Discipline t-Test Results (X2) on Employee Performance (Y)

Model	t	Sig.
(Constant)	5.856	0.000
Work Discipline	4.722	0.000

Source: Results of data processing using SPSS Version 25 of 2024

According to the results of the t-test table 6 above, the variable of Work Discipline (X_2) on Employee Performance (Y) resulted in a calculated t-value of 4.722, which is higher than the t-table value ($df = 62 - 2 = 60$) of 1.670, with a significance level of $0.000 < \alpha = 0.05$. Thus, the Work Discipline variable (X_2) significantly affects Employee Performance.

3.1.4. Coefficient of Determinant

To analyze how strong the relationship between the independent variable and the dependent variable is together, a determinant test is performed with the results shown in the following Table 7 below:

Table 7. Correlation Coefficient Test Results

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	0.612^a	0.374	0.353	3.744

Predictors: (Constant), Work Discipline, Compensation
Source: Results of data processing using SPSS Version 25 of 2024

According to the coefficient of determination, which is based on R^2 (R-Square) = 0.374 (37.4%), Compensation and Work Discipline contribute to the work of the Public Works Creation Office of Spatial Planning and Musi Rawas Regency. After adjusting the system value, 100% – 37.4% = 62.6% is influenced by other variables not included in this study.

3.1.5. Moderated Regression Analysis (MRAL) Interaction Test

Moderated Regression Analysis, or Interaction test, is an independent variable that strengthens or weakens the relationship between other independent and dependent variables 8.

Table 8. Moderated Regression Analysis (MRA) Test Results

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	0.626^a	0.392	0.349	3.754

Source: Results of data processing using SPSS Version 25 of 2024

Based on the Moderated Regression Analysis (MRA) results from the table 8, the changes in Compensation and Work Discipline variables after the moderation variable of Work Motivation show an R^2 value of 0.392 or 39.2%. This indicates that the R^2 value of the Compensation and Work Discipline variables is higher than the R^2 value before moderation, which was approximately 0.374 or 37.4%. Therefore, the moderation variable of Work Motivation can strengthen the influence of Compensation and Work Discipline variables on Employee Performance by around 1.8%.

The effect of moderation that strengthens the Compensation and Work Discipline variables is related to the performance of employees at the Musi Rawas Regency Spatial Planning and Irrigation Public Works

Office. After adjusting for the remainder, 100% - 39.2% = 60.8% is influenced by other variables not studied in this research, such as organizational leadership, supervision, and other factors.

3.2. Discussion

This study aimed to determine the effects of salary and work discipline on employee performance at the Musi Rawas Regency Spatial Planning and Irrigation Public Works Office, with work motivation as a moderating variable. The following is a summary of the research findings derived from the completed analysis:

3.2.1. Effect of Compensation on Employee Performance (H1)

According to the study's primary hypothesis, "compensation significantly affects employee performance." This study's results show that salary significantly impacts employee performance. The t-test findings confirm this conclusion, showing that the Compensation variable yields degrees of freedom $(df) = n - k$ (62-2 = 60) and a computed t-value of 3.636 at a significance level of 0.05. It is found that the t-table value is 1.670. Since the computed t-value $\geq$ is the t-table value, H_0 is rejected, and H_a is accepted in light of the test results significance.

There is a moderate association between employee performance and Compensation, as indicated by the correlation coefficient (R), which is 0.425 and falls between 0.41 and -0.70. The correlation coefficient's high value indicates a positive correlation, a movement in the same direction between employee performance and Compensation. Thus, it can be said that the first hypothesis, "Compensation Significantly Affects Employee Performance at the Musi Rawas Regency Spatial Planning and Irrigation Public Works Office," is successfully validated by this study.

The findings of this study are consistent with pertinent studies by Hidayati, Candradewi and Dewi, and Indripriarko and Aima, which demonstrate that pay significantly and favourably affects employee performance [37, 39]. It is clear from several indicators that have been tested on workers that they are competent, understand the value of remuneration in carrying out tasks, and have met the organization's goals. Employee compensation is reasonable, but this component needs to be continuously monitored and enhanced to boost employee performance.

3.2.2. Effect of Work Discipline on Employee Performance (H2)

According to the study's second hypothesis, "work discipline significantly affects employee performance." The results show that employee performance is significantly impacted by work discipline. The t-test results for the work discipline variable support this, with degrees of freedom $(df) = n - k$ (62-2 = 60) and a computed t-value of 4.722 at a significance level of 0.05. It is found that the t-table value is 1.670. Given that the computed t-value $\geq$ is the t-table value, H_0 is rejected, and H_a is accepted based on the test's significance.

A moderate association between work discipline and employee performance is indicated by the correlation coefficient (R), which is 0.521 and falls between 0.41 and -0.70. Work discipline and employee performance are positively associated, meaning they move in the same direction, as indicated by the positive correlation value. The second hypothesis, "Work Discipline Significantly Affects Employee Performance at the Public Works Creation Office of Spatial Planning and Musi Rawas Regency," is thus successfully validated by this study. Furthermore, the work discipline variable's coefficient of determination (R) (0.521) is higher than that of the compensation variable (0.425), indicating that work discipline is more prevalent and has a more significant influence on employee performance at the Musi Rawas Regency Public Works Office and Spatial Planning.

When paired with pertinent research, the findings of this study are consistent with studies by Parwansah and Aprianto and Arifien et al., which demonstrate that work discipline significantly and favourably affects employee performance [23, 26]. This indicates that workers can carry out and accomplish tasks that the business has set as a goal and are aware of the value of discipline in their work. Employee discipline at Musi Rawas Regency's Public Works, Spatial Planning, and Irrigation Service is good, but it needs to be considered and enhanced constantly to boost worker performance.

3.2.3. Effect of Compensation and Work Discipline on Employee Performance Moderated by Work Motivation (H3)

As stated in the third hypothesis, "Compensation and work discipline significantly influence employee performance, with work motivation as a moderating variable." According to this study, the association between pay, work discipline, and employee performance is strengthened by the moderating effect of the work incentive

variable. This is demonstrated by the fact that the R^2 value after moderation rises to 0.392, or 39.2%, while the R^2 value before moderation was 0.374, or 37.4%.

At the Musi Rawas Regency Spatial Planning and Irrigation Public Works Office, the moderating effect of work motivation reinforces the impact of pay and work discipline on employee performance. This leaves 100% - 39.2% = 60.8% to be explained by other factors not covered in this study, such as organizational leadership, supervision, and other variables. Consequently, the third hypothesis (H_3) put forth in this investigation is validated.

When paired with pertinent research, the findings of this study are consistent with studies by Isvandiari, Fuadah, and Jufrizen, which demonstrate that while work motivation does not moderate the relationship between work discipline and employee performance, it does influence the relationship between Compensation and employee performance [9, 40].

4.   MANAGERIAL IMPLICATIONS

Managers can enhance employee performance by focusing on three key areas: discipline, Compensation, and motivation. Establishing clear and consistently enforced policies fosters a culture of accountability and ensures employees adhere to organizational standards. Timely and fair Compensation motivates employees and strengthens trust in the organization, directly contributing to improved performance. Additionally, managers should implement strategies to create a motivating work environment, such as recognizing achievements, offering career development opportunities, and facilitating knowledge sharing through effective systems. Organizations can address performance challenges and build a sustainable, high-performing workforce by integrating these approaches.

5.   CONCLUSION

At the Musi Rawas Regency Spatial Planning and Irrigation Public Works Office, this study examined the impacts of pay and work discipline on employee performance, using work motivation as a moderating variable. The results showed that employee performance is significantly improved by remuneration. Fair and timely Compensation motivates employees, which leads to increased performance, according to the t-test results ($t_{\text{calculate}} = 3.636$, $t_{\text{table}} = 1.670$, $p < 0.05$) and a moderate correlation coefficient ($R = 0.425$). This demonstrates that paying employees well increases productivity and accomplishes company objectives.

Work discipline also demonstrated a significant positive impact on employee performance. With a more substantial correlation coefficient ($R = 0.521$) than Compensation, and t-test results ($t_{\text{calculate}} = 4.722$, $t_{\text{table}} = 1.670$, $p < 0.05$), work discipline emerged as a more dominant factor influencing performance. Employees who adhere to organizational rules and standards are likelier to meet or exceed performance expectations. These findings highlight the importance of fostering a culture of discipline to drive consistent productivity within the organization.

Furthermore, work motivation significantly strengthened the relationship between Compensation, work discipline, and employee performance. The Moderated Regression Analysis (MRA) results showed an increase in R^2 from 0.374 to 0.392 after the inclusion of motivation as a moderating variable, accounting for an additional 1.8% of the variance in performance. This underscores the role of motivation as a catalyst, amplifying the positive effects of Compensation and discipline. Future studies are encouraged to explore additional factors, such as leadership and organizational culture, to gain a more comprehensive understanding of performance drivers.

6.   DECLARATIONS

6.1.   About Authors

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6.2. Author Contributions

Conceptualization: SW; Methodology: II; Software: HM; Validation: EA and DP; Formal Analysis: SW and II; Investigation: HM; Resources: DP; Data Curation: DP and EA; Writing Original Draft Preparation: SW and EA; Writing Review and Editing: HM and DP; Visualization: SW; All authors, SW, II, HM, DP, EA have read and agreed to the published version of the manuscript.

6.3. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

6.4. Funding

6.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

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