

The Influence of Motivation, Discipline, and Job Satisfaction on the Work Performance of Employees at the Secretariat of State for Transport, Equipment, and Communications in Dili, Timor-Leste

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Abstract. *The aim of the research was to observe the extent to which motivation, discipline, and job satisfaction affect employee job performance at the Secretariat of State for Transport, Equipment, and Communications in Dili. Data was collected using a questionnaire distributed to 50 respondents, with 45 respondents from the Secretariat of State for Transport, Equipment, and Communications in Dili obtained through saturation sampling, in which all elements of the population became the sample. Data were processed using multiple regression. The results showed a positive and significant effect of motivation on job performance, while the discipline variable did not have a significant effect on job performance because employees' job discipline tended to be more rule-based than awareness-based. Furthermore, the researcher examined the hypothesis that job satisfaction has a positive effect on employee performance. The determination coefficient (R^2) indicates a significant contribution to job performance, while factors influencing job performance apart from the studied variables account for one-third of total job performance. The results indicate that Fcount and Ftable show an acceptable effect among the variables of motivation, discipline, and job satisfaction on job performance. According to the research limitations, future researchers conducting similar studies should use larger samples and define performance criteria that align with organizational standards.*

Keywords: *Discipline; employee performance; job satisfaction; motivation; public sector; Timor-Leste.*

INTRODUCTION

Timor-Leste has experienced difficulties since officially gaining independence from Indonesia in 2002 (Wee & Cheong, 2021). However, as a newly independent country, these difficulties can be overcome and Timor-Leste can become more advanced if the Timor-Leste government focuses its attention on human resource development (Cook et al., 2019; R. A. Gomes, 2025). Human resources (HR) are often one of the most critical aspects of governance, in terms of readiness, the number of skilled human resources, education, and professionalism in good governance (Alamsyah et al., 2023; Paroli, 2025; Rismayadi, 2024).

The above is one of the national problems faced by the current government of Timor-Leste (Croissant, 2022; de Araújo Sarmiento & Tilman, 2025). Another problem is addressing the low quality of human resources and the large number of human resources that can be utilized effectively, efficiently, and beneficially to support the pace of sustainable national development (Cong, 2025; Mishra, 2017; Ngoc & Tien, 2023).

According to previous research conducted by Marra (2018), improving employee performance is important given the change in government policy direction as desired by the spirit of reform to provide more space and a greater role for the community in government and development activities, where the government and its apparatus play more of a facilitating role. This change in policy direction has implications for the professionalism of employees in responding to the challenges of globalization in the face of intense competition with other countries in the world (Boussebaa & Faulconbridge, 2019; Hill, 2019). Based on this thinking, improving the performance of the apparatus is an urgent matter that must be implemented today

(Chukwunweike et al., 2024; Ullah et al., 2023; Vlasov et al., 2018).

Gerhart (2021) explains that the abundance of human resources available today requires careful thought on how to optimally utilize human resources so that the community has reliable human resources. This requires quality education, the provision of various social facilities, and adequate employment opportunities (Chepkonga, 2017; Ndaguba et al., 2018).

According to previous research conducted by Basalamah (2021), motivation is a condition that encourages or causes a person to carry out an activity consciously. This refers to the idea that motivation is necessary to increase support for the progress and success of the program being implemented (Kanfer et al., 2017; Werdhiastutie et al., 2020).

This study shows that disciplinary regulations are regulations that govern the obligations, prohibitions, and sanctions for employees or civil servants if their obligations are not obeyed or violated (Hugo et al., 2017; Ibrahim et al., 2020; Mulhayat et al., 2019; Ratnasari et al., 2023). The above explanation shows that employees can control themselves (Zeshan et al., 2024). This is what needs to be considered by management, especially institutional leaders, to prevent problems as early as possible and strive to improve the quality of existing human resource management (Qutni et al., 2021).

Riyanto (2021) states that employee satisfaction is determined by the difference between what is achieved and what is expected. If what employees achieve is lower than what is expected, it will cause them to be dissatisfied (Halkos & Bousinakis, 2017; Miklosevic et al., 2022). Previous studies have shown that this will affect a person's work ethic (Zhang & Chen, 2022). Work enthusiasm is a potential, where a person is not necessarily willing to exert all of their potential to achieve optimal results, so encouragement is still needed for members to use their full potential (Sætersdal & Johannessen, 2019; Sufriadi, 2024). Of course, there are many factors that cause an institution/agency to strive hard to provide solutions to existing shortcomings. The above conditions create problems for leaders in providing motivation and discipline for employees to be able to carry out their work optimally (Aeni & Kuswanto, 2021; Nurhuda et al., 2019; Razak et al., 2018). Referring to the previous research above, it shows that performance issues are an important factor because they are one of the successes of government management, especially for the government of Timor-Leste (de Jesus Maia et al., 2025). As is well known, the government of Timor-Leste has obtained regional management authority for the benefit of the region and its people, so consequently, the government of Timor-Leste must be able to meet the interests of the community through better development and services. It is also necessary to create conditions that can satisfy the needs of employees, considering that the motivation and work discipline of the employees in question are not yet optimal in achieving the expected performance (Gandung, 2024; Maryani et al., 2021; Sitopu et al., 2021). Therefore, it is necessary to determine the influence of motivation, work discipline, and job satisfaction on the work performance of employees at the Secretariat of State for Transport, Equipment, and Communications in Dili, Timor-Leste (L. Gomes et al., 2024; Pinto, 2025).

The urgency of this research is driven by several critical factors within Timor-Leste's public sector (da Silva Pereira, 2025). As a nation that gained independence in 2002, Timor-Leste faces significant challenges in building effective governance, a situation underscored by its low ranking of 140th out of 190 countries on the Government Effectiveness Index. This is

compounded by observable performance issues at the Secretariat of State for Transport, Equipment, and Communications in Dili, where projects are frequently delayed and service delivery remains suboptimal, directly hindering national development.

Furthermore, a clear research gap exists, as there is a lack of empirical studies examining the relationship between key factors like motivation, work discipline, and job satisfaction on employee performance within the unique socio-cultural and institutional context of Timor-Leste. This investigation is particularly crucial for the strategic transport, equipment, and communications sector, which serves as the backbone for economic activity and national connectivity, meaning employee performance here has multiplier effects across the entire economy (Annamalah & Paraman, 2023; Cigu et al., 2018).

Therefore, this study is necessary to determine the individual and combined influence of motivation, work discipline, and job satisfaction on employee performance at the aforementioned Secretariat. It aims to provide evidence-based insights to help transition from coercive, compliance-based management to more effective, commitment-based human resource practices. The research will specifically examine the effect of motivation on employee performance, analyze the influence of work discipline, and investigate the impact of job satisfaction. Finally, it seeks to determine the combined effect of these three factors to contribute to policy formulation aimed at enhancing public sector performance and supporting Timor-Leste's broader development objectives.

MATERIALS AND METHODS

The study used explanatory research to test hypotheses regarding the effects of motivation, discipline, and job satisfaction on employee performance. It sought to determine whether motivation, discipline, and job satisfaction individually and collectively had a significant impact on employee performance.

The population consisted of 50 employees working at the Secretariat of State for Transport, Equipment, and Communications in Dili. Due to the small population size, saturated sampling was employed, including all employees in the study (Sugiyono).

The variables studied focused on the key factors of motivation, discipline, and job satisfaction as they related to employee performance at the Secretariat.

Table 1. The variables, concepts, and research indicators raised in this study

Variable	Indicators
Work performance: the work results of an individual or group of individuals who complete their work with good results, on time, creating breakthroughs or innovations and being creative. (Ria Hermiati, MM Thesis, Semarang University)	a. Work is completed correctly b. Many tasks can be completed c. Creates breakthroughs/innovations d. creative e. external environment
According to Abraham Maslow, motivation is a very significant contribution. So his theory of motivation is based on levels of need arranged according to priority. (Moekijat)	a. Psychological needs Basic human needs b. Security needs Safety at work c. Social needs

	<p>Humans are essentially social creatures who cannot fulfill their own needs and inevitably require the help of others</p> <p>d. The need for self-esteem Recognition of one's status by others</p> <p>e. The need for self-actualization Within each person lies the potential that needs to be developed</p>
<p>Discipline is an attitude of obedience to norms, rules, and regulations that apply within an organization consciously without coercion. Apnamilsah.</p>	<p>a. Punctuality Employees arrive at the office on time, in an orderly and organized manner</p> <p>b. High sense of responsibility Always complete assigned tasks according to procedures and take responsibility for the results of their work.</p> <p>c. Utilization of office facilities Careful use of office equipment</p> <p>d. Compliance with office rules Employees wear office uniforms, use identification cards, and obtain permission when absent from the office.</p>
<p>Job satisfaction is the result of employees' perceptions of how well their work provides what they consider important. Luthan</p>	<p>a. Work conditions: A reflection of employees'/staff's feelings towards the work assigned to them.</p> <p>b. Leadership behavior: Reflection of employees' feelings toward their superiors' behavior at work</p> <p>c. Interaction with coworkers: a reflection of employees'/staff's feelings toward relationships with fellow coworkers.</p>

Data collection in this study was conducted using a questionnaire technique, namely data collection using a structured list of questions arranged in a Likert scale, which was given to all employees at the Secretariat of State for Transport, Equipment, and Communications in Dili. Through this data collection technique, primary data will be obtained, namely data obtained directly from data sources that have a direct relationship with the research problem regarding motivation, discipline, and job satisfaction in relation to employee performance.

The data analysis employed quantitative methods using multiple linear regression equations. The analytical procedure included: (a) instrument validity and reliability testing using Pearson's correlation and Cronbach's Alpha ($\alpha > 0.60$); (b) classical assumption testing (heteroscedasticity and normality tests); (c) descriptive statistics; (d) multiple linear regression with the equation $\hat{Y} = a + b_1X_1 + b_2X_2 + b_3X_3$; (e) hypothesis testing using t-test ($\alpha = 0.05$, $df = n-3$); (f) coefficient of determination (R^2) analysis; and (g) F-test to examine combined effects. The Park test was used for heteroscedasticity detection, while the Kolmogorov-Smirnov test assessed normality. All analyses were conducted using statistical software to ensure accuracy and reliability of results.

RESULTS AND DISCUSSION

General description of the research object

The object of this study was 45 employees of the Secretariat of State for Transport,

Equipment, and Communications out of a total of 50 employees. The Dili Secretariat of State for Transport, Equipment, and Communications was established in 2002 when the Timor-Leste government was formed, and at that time, the Timor-Leste government was still implementing the system applied by the United Nations in accordance with the needs of the new country. Transportation and communication are means of shortening the distance between one region and another.

The arrival of the UN in Timor-Leste to develop all sectors, including the Secretariat of State for Transport, Equipment, and Communications in Dili. The activities carried out by the Secretariat of State for Transport, Equipment, and Communications in Dili are very complex, such as land, sea, and air transportation, as well as communication facilities that influence the flow of communication for individuals, community groups, government agencies, and private institutions.

Respondent characteristics

Based on primary data obtained through 50 questionnaires distributed, only 45 respondents were obtained and then analyzed through tabulation based on gender, education level, and age.

Table 1. Gender of respondents
Secretariat of State for Transport, Equipment, and Communications

No.	Description	Number	Percentage (%)
1.	Male	30	66.7
2.	Female	15	33.3
	Number	45	100

Source: processed primary data (2010)

Based on Table 1, it appears that of the 45 respondents, the number of male respondents was much higher than the number of female respondents, at 66.7% and 33.3%, respectively. This data shows that male employees still dominate the Secretariat of State for Transport, Equipment, and Communications.

Respondent age

The age of employees indicates their level of productivity; in general, the older a person is, the lower their level of productivity. This is due to declining physical condition, but on the other hand, with age comes greater maturity in thinking and emotional stability. Therefore, the more senior an employee is, the more management expects them to be efficient and effective in performing their work. Based on the results of the age study at the *Secretariat of State for Transport, Equipment, and Communications*, see Table 2.

Table 1. Respondent age *Secretariat of State for Transport Equipamentos e Comunicações*

No.	Age (Years)	Number	Percentage
1.	26 years	2	4.44
2.	27-30 years	5	11.11
3.	31-35 years	12	26.67
4.	36-40 years	12	26.67
5.	41-45	2	4.44
6.	46-50 years	8	17.78
7.	Over 50 years old	4	8.89
	Total	45	100

Source: Processed primary data (2010)

Table 2 above shows that the largest number of respondents were in the 31-35 age group, namely 26.67%, and in the 36-40 age group, namely 26.67%, followed by the 46-50 age group, namely 17.78%, the 27-30 age group, namely 11.11%, the age group >50 years old at 8.89%, the age group 46-45 years old at 4.44%, and the age group 26 years old at 4.44%.

Respondents' education

One of the factors that determines the level of employee productivity is the level of significance with employee skills. However, on the other hand, the increase in the level of employee education is also balanced with adequate demands. Based on the results of the study, the level of education of respondents at the Secretariat of State for Transport, Equipment and Communications is shown in Table 3.

Table 2. Respondents' education levels
Secretariat of State for Transport, Equipment, and Communications

No.	Education	Number	Percentage
1.	High School	8	17.78
2.	Diploma	9	20.00
3.	Bachelor's Degree	27	60.00
4.	Master's Degree	1	2.22
	Total	45	100

Source: Processed primary data (2010)

Based on the highest level of education, 27 respondents or 60% had a bachelor's degree (S1). This data shows that the quality of human resources at the Secretariat of State for Transport, Equipment, and Communications is high in terms of education level.

Validity and reliability test

1. Motivation

The validity of the items in the motivation questionnaire was measured using *Pearson's Product Moment* correlation, which produced the following correlation coefficients and probabilities:

Table 4. Validity of Work Motivation Questionnaire Items

Item No.	r	p	Description	Item No.	R	P	Description
M_1	0.340	0.022	Valid	M_6	0.539	0.000	Valid
M_2	0.589	0.000	Valid	M_7	0.693	0.000	Valid
M_3	0.575	0.000	Valid	M_8	0.565	0.000	Valid
M_4	0.500	0.000	Valid	M_9	0.305	0.042	Valid
M_5	0.466	0.001	Valid	M_10	0.473	0.001	Valid

The correlation coefficient (r) between the items and the total score ranged from 0.340 to 0.693 with a probability (p) of less than 0.05. This indicates that the correlation between the items and the total score is valid. Thus, all items on the work motivation questionnaire are valid. After testing the validity of the questionnaire items, it was necessary to test the reliability of the questionnaire using Cronbach's Alpha method with the following results:

Table 3. Reliability of the Work Motivation Questionnaire

Cronbach's Alpha	Number of Items
0.666	10

The table above shows a Cronbach's Alpha value of 0.666. This means that the reliability of the work motivation questionnaire is quite reliable. Thus, the results obtained from the work motivation questionnaire can be used for data analysis.

2. Discipline

The correlation test of the items on the discipline questionnaire with the total score can be seen in the following table:

Table 4. Item Validity Analysis for Discipline

Item No.	r	p	Description	Item No.	R	P	Description
D_1	0.618	0.000	Valid	D_6	0.335	0.025	Valid
D_2	0.291	0.053	Not valid	D_7	0.502	0.000	Valid
D_3	0.155	0.309	Invalid	D_8	0.348	0.019	Valid
D_4	0.498	0.000	Valid	D_9	0.655	0.000	Valid
D_5	0.441	0.002	Valid	D_10	0.416	0.005	Valid

Table 6 shows the results of the validity analysis of the discipline items. Items 2 and 3 have correlation coefficients of 0.291 and 0.155 with a probability of more than 0.05, which means that the correlation between these two items and the total score is not significant. These analysis results indicate that items 2 and 3 are invalid. Meanwhile, the other items have p values < 0.05. Therefore, only 8 items will be used in the data analysis. After the invalid items were removed from the data, the reliability of the questionnaire was tested, with the results shown below:

Table 5. Reliability of the Discipline Questionnaire

Cronbach's Alpha	Number of items
0.575	8

The table above shows a Cronbach's Alpha coefficient of 0.575 from 8 valid items. This indicates that the discipline questionnaire is sufficiently reliable. Thus, the results obtained from the discipline questionnaire can be used further in data analysis.

3. Job Satisfaction

The results of the correlation test between job satisfaction items and their total scores to determine the validity of the items in the job satisfaction questionnaire are as follows:

Table 6. Validity of Job Satisfaction Questionnaire Items

Item No.	R	P	Description
K_1	0.800	0.000	Valid
K_2	0.786	0.000	Valid
K_3	0.662	0.000	Valid
K_4	0.678	0.000	Valid
K_5	0.503	0.000	Valid

Five items in the job satisfaction questionnaire showed relatively high correlation

coefficients ranging from 0.503 to 0.800 with a probability value of $p < 0.05$. This means that all items on the job satisfaction questionnaire are valid. Next is the reliability analysis of the questionnaire, the results of which can be seen in the following table:

Table 7. Reliability of the Job Satisfaction Questionnaire

Cronbach's Alpha	Number of items
0.725	5

The table above shows a Cronbach's Alpha coefficient of 0.725. This means that the job satisfaction questionnaire is reliable or trustworthy in data collection.

4. Work performance

The results of the item validity test on the performance questionnaire can be seen in the following table:

Table 8. Item Validity of Performance

Item No.	R	p	Description
Kin_1	0.764	0.000	Valid
Kin_2	0.690	0.000	Valid
Kin_3	0.665	0.000	Valid
Kin_4	0.754	0.000	Valid
Kin_5	0.610	0.000	Valid

The table above shows that all items on the performance questionnaire are valid with correlation coefficients ranging from 0.610 to 0.764 and a probability of 0.000. This means that all items on this questionnaire can be used in data analysis. Next is the questionnaire reliability analysis, the results of which can be seen as follows:

Table 9. Reliability of the Work Performance Questionnaire

Cronbach's Alpha	Number of Items
0.716	5

The Cronbach's Alpha coefficient for the performance questionnaire is 0.716. This means that the performance questionnaire is reliable in data collection. Thus, the questionnaire results can be analyzed further.

Descriptive Statistics

Descriptive statistics provide an overview of the variables to be tested in this study. The overview of variables includes minimum and maximum values, means, standard deviations, and categorization of variables into certain levels to show the distribution of research respondents.

1. Motivation

The motivation variable measures employees' perceptions of how much effort they put into performing their jobs at the Secretariat of State for Transport, Equipment, and Communications.

Table 10. Descriptive Statistics

N	Minimum	Maximum	Mean	Standard Deviation
45	27	49	39.47	4.49

Table 12 above shows that the lowest employee motivation score is 27 and the highest is 49, with an average of 39.48 and a standard deviation of 4.490. These values indicate that the average motivation of employees at the Secretariat of State for Transport, Equipment, and Communications is high. Employees can be grouped based on their motivation level by arranging intervals using the following formula:

$$\text{Interval} = \frac{\text{Highest score-lowest score}}{\text{Number of Categories}}$$

$$\text{Interval} = \frac{(5 \times 10) - (1 \times 10)}{5} = \frac{40}{5} = 8$$

Using an interval of 8, as count above, the categories of employee motivation levels at the Secretariat of State for Transport Equipment and Communications can be arranged as follows:

Table 11. Motivation Distribution

Category	Interval Range	Number	Percentage (%)
Very low	10 - 18	0	0
Low	18.1 - 26.1	0	0
Moderate	26.2 - 34.2	5	11.1
Height	34.3 - 42.3	29	64.4
Very high	42.4 - 50	11	24.4
Total		45	100

Based on Table 13 above, it can be seen that the largest number is employees with high motivation levels, namely 64.4%, followed by employees with very high motivation levels, namely 24.4%, and employees with moderate motivation levels, namely 11.1%. This means that the average employee motivation score of 39.48 falls into the high category. Thus, it can be said that on average, employees of the Secretariat of State for Transport, Equipment, and Communications perceive themselves as having high work motivation.

2. Discipline

The work discipline variable measures employees' perceptions of their attitude of consciously obeying the norms, rules, and regulations that apply in the organization without coercion. The description of the work discipline variable can be illustrated as follows:

Table 12. Descriptive Statistics

N	Minimum	Maximum	Mean	Std. Deviation
45	30	46	39.84	3.643

The table above shows that the sample size for this study was 45 people. The lowest score obtained from the questionnaire completed by employees of *the Secretariat of State for Transport, Equipment, and Communications* was 30, with the highest score being 46. The average work discipline score was 39.84 with a standard deviation of 3.643. Employee work

discipline can be classified into categories ranging from very low to very high using the following intervals:

$$\text{Interval} = \frac{\text{Highest score-lowest score}}{\text{Number of Categories}}$$

$$\text{Interval} = \frac{(5 \times 10) - (1 \times 10)}{5} = \frac{40}{5} = 8$$

Based on the above intervals, the work discipline categories can be arranged as follows:

Table 13. Distribution of Employee Work Discipline

Category	Interval Range	Amount	Percentage (%)
Very low	10 - 18	0	0
Low	18.1 - 26.1	0	0
Moderate	26.2 - 34.2	4	8.9
Height	34.3 - 42.3	31	68.9
Very high	42.4 - 50	10	22.2
Total		45	100

Based on Table 15 above, it can be explained that the largest number is employees with a high level of work discipline, namely 68.9%, followed by employees with a very high level of discipline, namely 22.2%, and employees with a moderate level of work discipline, namely 8.9%. The average work discipline score of employees is 39.84, which falls into the high category, while the lowest score falls into the moderate category. This shows that the employees of the Secretariat of State for Transport, Equipment, and Communications have good work discipline.

3. Job satisfaction

The job satisfaction variable measures the results of employees' perceptions of how well their jobs provide what they consider important. The distribution of employee job satisfaction can be seen in Table 16 below:

Table 14. Descriptive Statistics

N	Minimum	Maximum	Mean	Std. Deviation
45	7	25	19.51	3.507

Table 16 shows that the minimum job satisfaction score is 7 with the highest score being 25. The average job satisfaction score is 19.51 with a standard deviation of 3.507. Employee job satisfaction scores can be grouped using the following interval calculation:

$$\text{Interval} = \frac{\text{Highest score-lowest score}}{\text{Number of Categories}}$$

$$\text{Interval} = \frac{(5 \times 5) - (1 \times 5)}{5} = \frac{20}{5} = 4$$

Using an interval of 4, based on the above calculations, the following categorization of job satisfaction can be established:

Table 15. Distribution of Employee Job Satisfaction

Category	Interval Range	Number	Percentage (%)
Very low	5 - 9	1	2.2
Low	9.1 - 13.1	1	2.2
Moderate	13.2 - 17.2	8	17.8
Height	17.3 - 21.3	25	55.6
Very high	21.4 - 25	10	22.2
Total		45	100

Table 17 shows that most employees are in the high job satisfaction category or are satisfied with their jobs, namely 55.6%. The percentage of employees who feel very high job satisfaction is 22.2% and those who are moderately or fairly satisfied is 17.8%. Of the entire sample, only 2.2% of employees feel low and very low job satisfaction. The average employee score of 19.1 is at a high level, which means that the average employee of *the Secretariat of State for Transport, Equipment, and Communications* has a high level of job satisfaction in their work.

4. Employee Performance

The employee performance variable is a measurement of the work results of an individual or group of individuals who complete their work with good results, on time, creating breakthroughs or innovations and creativity. An overview of the work performance of employees at the Secretariat of State for Transport Equipment and Communications can be seen in Table 18 below:

Table 16. Descriptive Statistics

N	Minimum	Maximum	Mean	Std. Deviation
45	16	25	21.24	2.577

Table 18 shows that the minimum employee performance score is 16, while the highest score is 21.24 with a standard deviation of 2.577. Employee performance levels can be categorized using the following intervals:

$$\text{Interval} = \frac{\text{Highest score} - \text{lowest score}}{\text{Number of Categories}}$$

$$\text{Interval} = \frac{(5 \times 5) - (1 \times 5)}{5} = \frac{20}{5} = 4$$

Using the above interval values, the categorization of employee performance at the Secretariat of State for Transport, Equipment, and Communications can be arranged as follows:

Table 17. Employee Performance Distribution

Category	Interval Range	Number	Percentage (%)
Very low	5 - 9	0	0
Low	9.1 - 13.1	0	0
Moderate	13.2 - 17.2	3	6.7
Height	17.3 - 21.3	23	51.1
Very high	21.4 - 25	19	42.2
Total		45	100

Table 19 above shows that the largest number of employees have high performance, namely 51.1%, followed by employees with very high performance, namely 42.2%, and the

remaining 6.7% are employees with moderate performance. The average performance score of 19.1 falls into the high category, which tends to be very high. This means that the average employee of the Secretariat of State for Transport, Equipment, and Communications has high performance.

Assumption Test

Before conducting further analysis, the data must first be verified for validity through assumption testing. The assumption tests used in this data analysis are normality and heteroscedasticity.

1. Normality

The normality test aims to determine whether the disturbance variable or residual has a normal distribution. This is based on the assumption that the t-test and F-test assume that the residual values follow a normal distribution. If this assumption is violated, the regression model is considered invalid with the existing sample size. The normality test was performed using the one-sample Kolmogorov-Smirnov Test, which showed the following results:

Table 20. One-Sample Kolmogorov-Smirnov Test

		Work Motivation	Work Discipline	Job Satisfaction	Performance
N		45	45	45	45
Normal Parameters (a,b)	Mean	39.47	39.84	19.51	21.24
	Standard Deviation	4.490	3.643	3.507	2.577
Most Extreme Differences	Absolute	.123	.117	.153	.152
	Positive	.082	.064	.113	.116
	Negative	-.123	-.117	-.153	-.152
Kolmogorov-Smirnov Z		.822	.785	1.028	1.020
Asymp. Sig. (2-tailed)		.509	.569	.242	.249

a. Test distribution is Normal.

b. Count from data.

The table above shows that all variables, namely motivation, discipline, job satisfaction, and performance, have probability values of 0.509, 0.569, 0.242, and 0.249, respectively. This means that for all variables, the probability value (p) is greater than the specified α of 0.05 with a 95% confidence level. This means that the hypothesis stating that the data distribution is normal can be accepted for the variables of work motivation, work discipline, job satisfaction, and performance.

2. Heteroscedasticity

The heteroscedasticity test is used to test whether in a linear regression model the disturbance error (ϵ) has the same variance from one observation to another. To test for heteroscedasticity, the significance value of the data distribution pattern can be determined using a scatter plot. Graphs a, b, and c above do not show a consistent pattern. This can be interpreted as meaning that there is no heteroscedasticity in the data on work motivation, work discipline, and job satisfaction. Therefore, the data can be used in further analysis.

Hypothesis Testing

This study aims to determine whether there is an effect of work motivation, work discipline, and job satisfaction variables on employee performance at the Secretariat of State for Transport, Equipment, and Communications. The significance of each variable of motivation, discipline, and job satisfaction in influencing performance can be seen from the regression coefficients of each variable as follows:

Table 21. Regression Coefficients for Motivation, Discipline, and Job Satisfaction Variables^a

Model		Unstandardized Coefficients		Standardized Coefficients	T _{count}	Sig.	t _{table}
		B	Std. Error	Beta			
1	(Constant)	1.219	2.823		.432	.668	
	Work Motivation	.289	.060	.504	4,814	.000	3,182
	Work Discipline	.076	.067	.107	1.132	.264	3,182
	Job Satisfaction	.286	.077	.390	3,697	.001	3,182

a. Dependent Variable: Performance

Table 21 can be used to make a decision on accepting the hypothesis as follows:

a. Hypothesis I

H₀ : $\beta = 0$ Work motivation does not significantly affect employee performance

H₁ : $\beta \neq 0$ Work motivation has a significant effect on employee performance. With the acceptance criteria H_1 is $T_{count} > T_{table}$

From Table 21, it is known that the T_{count} value for the work motivation variable is 4.814. The critical point ($T_{(table)}$) for a degree of freedom of 3 and a significance level (α) of 0.05 is 3.182, so it can be written that $4.814 > 3.182$ or $T_{(count)} > T_{(table)}$. Thus, $H_{(1)}$ can be accepted, namely that work motivation has a significant effect on the performance of employees at the Secretariat of State for Transport, Equipment, and Communications in Dili.

b. Hypothesis II

H₀ : $\beta = 0$; work discipline does not significantly affect employee performance

H₁ : $\beta \neq 0$; work discipline has a significant effect on employee performance, With the acceptance criterion H_1 is $T_{count} > T_{table}$

The value of T_{count} obtained from the regression analysis results is 1.132 with T_{table} 3.182. This means that $1.313 < 3.182$ or $T_{count} < T_{table}$. The decision taken from the comparison of the $T_{(count)}$ and $T_{(table)}$ values is to reject $H_{(1)}$ and accept $H_{(0)}$, namely that work discipline does not have a significant effect on employee performance at the Secretariat of State for Transport, Equipment and Communications in Dili.

c. Hypothesis III

H₀ : $\beta = 0$ job satisfaction does not significantly affect employee performance

H₁ : $\beta \neq 0$ job satisfaction has a significant effect on employee performance, With the acceptance criteria H_1 is $T_{count} > T_{table}$

The value of T_{count} obtained from the calculation is 3.697 with a T_{table} T-value of 3.182. This means that $3.697 > 3.182$ or $T_{(count)} > T_{(table)}$. Hence, the accepted hypothesis is $H_{(1)}$, namely that job satisfaction has a significant effect on the performance of employees at the Secretariat

of State for Transport, Equipment and Communications in Dili. The results show that individually, the variables of work motivation and job satisfaction affect employee performance, but the variable of work discipline does not have a significant effect. The equation derived from the coefficient table above is as follows:

$$Y = 1.219 + 0.289X_1 + 0.286X_3$$

Where,

Y = performance

X₍₁₎ = work motivation

X₃ = job satisfaction

Coefficient of Determination

Hypothesis testing to examine the combined effect of work motivation, work discipline, and job satisfaction on performance was conducted using multiple regression analysis. The magnitude of the coefficient of determination or the strength of the independent variables' effect on the dependent variable can be seen in the following table:

Table 22. Summary of Regression Model Results

Model	R	R Square	Adjusted R-Square	Standard Error of the Estimate
1	.825 ^a	.680	.657	1.510

a. Predictors: (Constant), Job Satisfaction, Work Discipline, Work Motivation

b. Dependent Variable: Performance

Table 22 above shows that the coefficient of determination, which indicates the effective contribution of the three independent variables (motivation, discipline, and job satisfaction), can be seen in the *R square* (R^2) value of 0.680. This means that 68% of employee work performance can be explained by the variables of work motivation, work discipline, and job satisfaction. Meanwhile, the remaining 32% of employee work performance is explained by other variables that cannot be examined in this study.

The effective contribution of each variable of motivation, discipline, and job satisfaction to performance is as follows:

Table 23. Determination Coefficient

Determination Coefficient (%)	Variable	Effective contribution (%)
68	Work motivation	34.2
	Work discipline	7.27
	Job satisfaction	26.49

From the table above, it can be seen that the most significant effective contribution is made by the work motivation variable. The contribution made by work discipline is small, at 7.27%, and therefore insignificant. Job satisfaction contributes 26.49% to employee performance.

Count F test

The suitability of the regression model in explaining the influence of motivation, discipline, and job satisfaction on performance can be seen from the F test (ANOVA) results in the following table:

Table 24. F test
ANOVA^b

Model		Sum of Squares	df	Mean Square	F _{count}	Sig.	F _{table}
1	Regression	198.833	3	66,278	29,070	.000 ^a	2.83
	Residual	93,478	41	2.280			
	Total	292,311	44				

a. Predictors: (Constant), Job Satisfaction, Work Discipline, Work Motivation

b. Dependent Variable: Performance

The F_{count} value in the table above is 29.070 with F_{table} of 2.83 and a significant probability of 0.000. This means that $p < 0.05$ and $F_{\text{count}} > F_{\text{table}}$, indicating that the resulting regression model can adequately explain the variance in performance.

Discussion

The analysis shows that the effective contribution of work motivation, work discipline, and job satisfaction together is 68%. This indicates that these three variables together contribute significantly to the performance of employees at the Secretariat of State for Transport, Equipment, and Communications. Employee performance influenced by other variables is only 32% or one-third of total employee performance. When viewed individually, work motivation contributes the largest proportion to performance at 34.24%, while job satisfaction contributes 26.49%. The contribution of work discipline to performance is 7.27%, which is statistically insignificant and can therefore be ignored.

Research results showing that work motivation has a positive and significant effect on employee performance mean that the higher the employee's work motivation, the higher their performance, and conversely, the lower their work motivation, the lower their performance. The positive and significant influence of work motivation is due to the employee's internal drive to carry out their duties, which is a major factor in achieving the targets expected by the organization.

Work motivation is described by Dwipuspita as something that arises within an individual, causing them to want to carry out certain activities. In this case, the employees of the Dili Secretariat of State for Transport, Equipment, and Communications have a high to very high level of motivation, so it can be expected that their performance will be high. Motivation encourages employees of the Secretariat of State for Transport, Equipment and Communications in Dili to work and carry out specific activities in accordance with their respective departments. The results of this study are in line with Robbins' thinking, which defines performance as a function of the interaction between motivation and obsession or performance.

In addition to motivation, another variable that also influences performance in this study is job satisfaction. Martoyo explains that one of the important tools in human resource management in an organization is the creation of employee or worker job satisfaction. This means that job satisfaction is one of the pillars for achieving optimal organizational performance.

Handoko defines job satisfaction as a pleasant or unpleasant emotional state with which employees view their work. The high level of job satisfaction among employees at the

Secretariat of State for Transport, Equipment, and Communications in Dili shows that employees have positive emotions about their work environment. High job satisfaction makes employees more likely to work enthusiastically, which can be a driving factor for morale, discipline, and employee performance to achieve the expected organizational performance.

Hasibuan explains that a person tends to work enthusiastically when they derive satisfaction from their work. This means that motivation and job satisfaction are two interrelated and inseparable variables. Employee job satisfaction is the key driver of morale, discipline, and work performance in supporting the achievement of company goals.

Work discipline in this study was found to not contribute significantly to the performance of employees at the Secretariat of State for Transport, Equipment, and Communications in Dili. This is because employee work discipline tends to be more about following rules than about employees' awareness of their duties.

Handoko explains that there are three types of disciplinary activities, namely: preventive, corrective, and progressive discipline. Employees of the Secretariat of State for Transport, Equipment, and Communications in Dili tend to carry out their duties as a form of preventive discipline, namely performing activities due to the standards and rules applied in the office. It can be said that the work discipline of employees is a form of coercion, thus not contributing significantly to the performance of employees of the Secretariat of State for Transport, Equipment, and Communications in Dili.

CONCLUSION

The study concluded that work motivation and job satisfaction both have a positive and significant effect on employee performance at the Secretariat of State for Transport, Equipment, and Communications in Dili, with motivated and satisfied employees showing better work performance. However, work discipline did not have a significant positive effect, as employees tended to follow rules more out of fear than conscious commitment. Collectively, motivation, discipline, and job satisfaction were found to significantly influence work performance. For future research, it is suggested to explore the underlying reasons for the ineffectiveness of discipline in this context and investigate strategies to foster intrinsic commitment to discipline, as well as to examine other potential factors influencing employee performance in the public sector of Timor-Leste.

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