

The Influence of Motivation, Work Discipline, and Work Environment on Job Satisfaction of Employees at the Port Authority and Harbor Office (KSOP) Class I, Balikpapan City

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Abstract. This study was conducted to examine the influence of motivation, work discipline, and work environment on employee job satisfaction at the Port Authority and Harbor Office (KSOP) Class I, Balikpapan City. The study employs a quantitative approach with a survey method. Data were collected by distributing questionnaires to all employees serving as research respondents, using a *non-probability sampling* technique with a *purposive sampling* method. The sample size for this study was 100 employees. Data analysis was conducted using the *Partial Least Squares* (PLS) method with the assistance of SmartPLS software. The results indicate that motivation has a positive and significant influence on employee job satisfaction. Work discipline was also found to have a positive and significant influence on employee job satisfaction. Furthermore, the work environment demonstrated a positive and significant influence on employee job satisfaction. These results suggest that enhanced motivation, consistent implementation of work discipline, and the creation of a conducive work environment are capable of increasing employee job satisfaction at the KSOP Class I, Balikpapan City. The findings of this study emphasize that, partially, all three independent variables have a positive and significant effect on job satisfaction, with motivation making the greatest contribution, followed by work discipline and work environment. Consequently, optimal management of these three aspects is key to enhancing employee job satisfaction within the KSOP Class I Balikpapan City organizational environment.

Keywords: Motivation, Work Discipline, Work Environment

INTRODUCTION

The city of Balikpapan, as one of the main port cities in East Kalimantan Province, has a strategic role in the national sea transportation and logistics system. Located on the edge of the Makassar Strait, the port of Semayang is the connecting door between Balikpapan and various regions in Eastern Indonesia and other islands, both for goods and passengers (Ministry of Transportation of the Republic of Indonesia, 2024; Daniswari et al., 2023; Notteboom & Rodrigue, 2019; UNCTAD, 2022; Wiegman et al., 2018).

Kurniawan et al. (2025) states that ports not only function as a docking place for ships but also become an important element in shipping safety and support connectivity between regions, both domestic and international (Acciaro et al., 2020; Lam & Notteboom, 2019; Tijan et al., 2021). Weda Iwan (2023) stated that shipping safety and security is greatly influenced by supervision, port authority responsibility, and the feasibility of operating fleets (Psaraftis, 2019; Cariou et al., 2019). Thus, the existence of institutions that have authority at the port, namely the Municipal Affairs and Port Authority (KSOP) office, also plays an important role in ensuring smooth shipping activities. KSOP Responsible for carrying out supervision, law enforcement in the field of shipping safety and security, and regulating activities in port waters (Ministry of Transportation of the Republic of Indonesia, 2023; Tijan et al., 2021).

In supporting the smooth running of sea transportation and shipping services, the role of human resources is an important element (Rulianti et al., 2023; Armstrong & Taylor, 2020; Dessler, 2020; Noe et al., 2020). Human resources (HR) are very important in a company so that every company strives to have quality human resources because without good human resources the company will not run optimally (Putri et al., 2025; Becker & Huselid, 2017; Robbins & Judge, 2019). Human resources are a vital element in the organization because they are the main drivers of all operational activities (Colquitt et al., 2021; Luthans, 2019).

The quality of human resources can be achieved if a company pays attention to the job satisfaction of its employees, which will ultimately foster commitment from employees (Alam et al., 2021; Judge et al., 2017; Spector, 2017). Job satisfaction is a pleasant mental state that employees feel when they are at work, because of their role in the organization and the achievement of their needs (Alice et al., 2022; Locke, 2018). Job satisfaction is the feeling of happiness that employees have related to their work and the position they run in the company (Syafrin et al., 2023; Greenberg & Baron, 2018). High job satisfaction can be achieved if the factors that cause job satisfaction are present (Colquitt et al., 2021).

One of the factors that affect employee job satisfaction is motivation (Puri et al., 2020; Ryan & Deci, 2020; Deci et al., 2017). Motivation is a person's encouragement and determination in trying to achieve the desired goal. Work motivation plays a role in encouraging employees to have a greater sense of responsibility in carrying out their duties (Sentosa, 2024; Luthans, 2019). Motivation, both intrinsic and extrinsic, encourages employees to be more productive and feel satisfied with their work (Fatoroni et al., 2025; Herzberg, 2017). Employees tend to be more satisfied at work because they feel valued and have a clear goal. But this is inversely proportional to the research conducted by (Adam et al., 2021) which states that motivation has a negative and significant effect on job satisfaction.

In addition to motivational factors, work discipline plays an important role in shaping job satisfaction (Azhar et al., 2020; Mangkunegara, 2017; Sutrisno, 2019). Work discipline is a form of awareness and willingness of individuals to comply with all applicable Company regulations and social norms. Work discipline shows how well employees follow the rules in the workplace and carry out their duties according to standards (Lisnawaty et al., 2024; Hasibuan, 2017). Good discipline can be seen from the extent to which a person has a sense of responsibility for the work given by his superior. Work discipline reflects an obedient attitude and awareness to obey the rules and regulations that apply in the implementation of duties (Sutrisno, 2019). Therefore, a manager needs to provide understanding to his subordinates so that they have high responsibility, so that they can show good discipline.

This is in line with research conducted by (Ulkarima et al., 2024) which shows that work discipline has a positive effect on job satisfaction, but this is contrary to research conducted (Pebriana et al., n.d.) which states that work discipline has a negative effect and does not have a significant influence on employee job satisfaction. Job satisfaction will appear in employees if they get support from the work environment (Rulianti et al., 2023; Sedarmayanti, 2017; Chandrasekar, 2018). The work environment is everything that is around the employee at work, which can affect him (Runtu et al., 2022; Leblebici, 2019). If the work environment is supportive, employees will feel safe and comfortable. On the other hand, if the work environment is less supportive, employees will feel unsafe and comfortable.

The results of the study (Krismawati et al., 2022) confirm that a good work environment

has an effect on job satisfaction (Almakkah et al., 2025; Leblebici, 2019). The results of research conducted by (Almakkah et al., 2025) show that the work environment has a positive and significant effect on job satisfaction. If the company can create a good work environment, employees will feel happy while working. However, this is contrary to the research (Pradana et al., 2022) Where the work environment does not have a positive and significant effect on job satisfaction. Seeing the difference in the results of previous research that produced different findings, the researcher feels it is important to re-examine to provide more empirical evidence with the title "The Influence of Motivation, Work Discipline, and Work Environment on Employee Job Satisfaction at the City Municipal Office and the City Class 1 Port Authority Balikpapan".

Based on the background and formulation of the problem, this study was conducted with the aim of determining the influence of motivation, work discipline, and work environment on employee job satisfaction at the KSOP Class I Office in Balikpapan City. As for the expected benefits of this research for academics, the results of this research are expected to be a useful reference for the next author who is interested in studying topics related to human resources. For companies, this research is expected to be a guide for management to evaluate and improve motivation, discipline, and quality of work environment strategies so that employees feel more satisfied with their work. For the author, this study provides a deeper understanding of the factors that affect job satisfaction, as well as a means to gain hands-on experience in applying the theories gained during lectures to real practice in the world of work.

MATERIALS AND METHODS

This study aimed to analyze the influence of Motivation (X1), Work Discipline (X2), and Work Environment (X3) on Employee Job Satisfaction (Y) in KSOP Class I Balikpapan City using a quantitative approach. Job satisfaction is defined as an employee's feelings toward work, working conditions, and employment relationships, which are measured through indicators of salary, employment, supervision, promotion, and co-workers, while motivation is measured based on needs according to Maslow's theory, work discipline through attendance, compliance, and responsibility, and non-physical work environment through employment relationships. The research population amounted to 122 employees, with a sample of 100 civil servants selected using purposive sampling techniques.

An operational definition of variables is needed to provide clear boundaries regarding the concepts used in this study. Through operational definitions, each variable is explained in detail in the form of measurable indicators that make it easier for researchers in the process of collecting and analyzing data. (Ariani et al., 2023, p. 74) Stating that research variables are basically everything in the form of anything that is determined by the researcher to be studied so that information about it is obtained, then conclusions are drawn. The variables used in this study accompanied by indicators are Motivation (X1), Work Discipline (X2), and Work Environment (X3) have an influence on Job Satisfaction (Y) of KSOP Class I Employees of Balikpapan City.

Data were collected through five-point Likert scale questionnaires, interviews, and observations as primary data, and literature studies as secondary data. Data analysis was carried out using Structural Equation Model (SEM) with a Partial Least Square (PLS) approach through Smart PLS software, which included testing the outer model for convergent and

discriminant validity as well as construct reliability, and the inner model to assess the structural relationships between variables through R-square values, effect size (F^2), and fit models (SRMR and NFI). This method was chosen to obtain accurate analysis results and be able to empirically describe the influence of motivation, work discipline, and work environment on employee job satisfaction as the basis for decision-making and organizational policy development.

RESULTS AND DISCUSSION

Respondent Characteristics

Based on the results of primary data analysis processed in 2026, the characteristics of respondents in this study are classified based on four main categories, namely gender, age, working period, and last education. In terms of gender, out of a total of 100 respondents, the majority were men as many as 82 people (82%), while women amounted to 18 people (18%). Based on age, respondents had a diverse age range with the largest group being at 41-50 years old as many as 38 people (38%), followed by over 50 years old as many as 29 people (29%), 31-40 years old as many as 20 people (20%), and 21-30 years old as many as 13 people (13%), which shows that most of the respondents are mature with extensive work experience. Judging from the working period, the group with a working period of more than 10 years dominated as many as 75 people (75%), followed by a 6-10 year working period of 16 people (16%), and a working period of 1-5 years as many as 9 people, reflecting the variation of work experience that can affect the perception of the work environment. Meanwhile, based on the latest education, respondents with a high school/vocational/high school background became the largest group, namely 41 people (41%), followed by S1 education as many as 31 people (31%), D3 as many as 15 people (15%), and S2 as many as 13 people (13%), which overall shows that the majority of respondents have a relatively high level of education so that it has the potential to affect their perspective in assessing working conditions in the KSOP Class I Balikpapan environment.

Data Analysis

1. Outer Measurement Model Construct Reflection Indicator

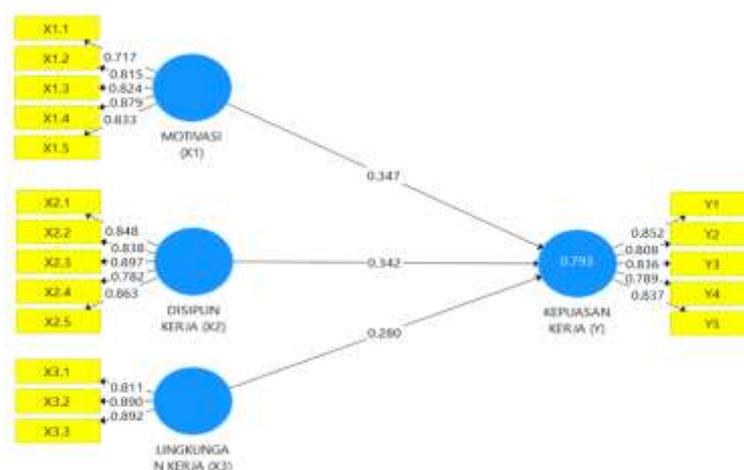


Figure 2. Outer Model

Source: Results of Smart PLS analysis data (2026)

Based on the results of the outer model test on reflective constructs, all indicators in the variables Motivation (X1), Work Discipline (X2), and Work Environment (X3), and Job Satisfaction (Y) showed an outer loading value above 0.50. This indicates that each indicator has adequate ability to reflect the latent construct it is measuring. The outer loading value of each indicator is in the range of values that meet the convergent validity criteria, so that all indicators are declared valid and suitable for use in the measurement model. In addition, the relationship between constructs in the inner model is shown through the Path Coefficient value, which shows that the variables Motivation, Work Discipline, and Work Environment have a positive effect on Job Satisfaction. The R-Square value in the work satisfaction variable is 0.793, which means that 79.3% of the variation in job satisfaction can be explained simultaneously by the variables of motivation, work discipline, and work environment. Thus, the measurement model used has met good quality criteria and is feasible to proceed to the structural analysis stage.

a. Validity Test

1) Convergent Validity

Table 1. Value (Outer Loading)

	Work Discipline X2	Job Satisfaction Y	Work Environment X3	Work Environment X1
X1.1				0.717
X1.2				0.815
X1.3				0.824
X1.4				0.879
X1.5				0.833
X2.1	0.848			
X2.2	0.838			
X2.3	0.897			
X2.4	0.782			
X2.5	0.863			
X3.1			0.811	
X3.2			0.890	
X3.3			0.892	
Y1		0.852		
Y2		0.808		
Y3		0.836		
Y4		0.789		
Y5		0.837		

Sumber : *Output SmartPLS dan Data Diolah (2026)*

Based on the results of the convergent validity test presented in table 1, it is known that all indicators in the variables Motivation (X1), Work Discipline (X2), Work Environment (X3), and Job Satisfaction (Y) have an outer loading value above 0.60, this indicates that each indicator has met the criteria for convergent validity. With the fulfillment of these criteria, it can be concluded that all indicators in this study are suitable for use at the next stage of analysis because they can reflect latent variables consistently and reliably.

2) Discriminant Validity

Table 2. Convergent Validity Value (Cross Loading)

	Work Discipline X2	Job Satisfaction Y	Work Environment X3	Work Environment X1
X1.1	0.656	0.690	0.478	0.717
X1.2	0.641	0.634	0.604	0.815
X1.3	0.555	0.593	0.565	0.824
X1.4	0.678	0.731	0.662	0.879
X1.5	0.730	0.732	0.761	0.833
X2.1	0.848	0.678	0.512	0.706
X2.2	0.838	0.713	0.508	0.669
X2.3	0.897	0.779	0.593	0.717
X2.4	0.782	0.624	0.744	0.653
X2.5	0.863	0.676	0.703	0.666
X3.1	0.705	0.646	0.811	0.660
X3.2	0.552	0.698	0.890	0.648
X3.3	0.612	0.703	0.892	0.664
Y1	0.694	0.852	0.688	0.726
Y2	0.680	0.808	0.640	0.724
Y3	0.632	0.836	0.752	0.688
Y4	0.628	0.789	0.515	0.657
Y5	0.756	0.837	0.643	0.649

Source : SmartPLS Output and Processed Data (2026)

Based on the results of the cross loading test in table 2, it is known that each indicator has the highest loading value in the construct it represents. This shows that all indicators are able to accurately reflect the research construct. The X1.1 to X1.5 indicator shows the highest loading value in the Motivation construct (X1). Furthermore, the X2.1 to X2.5 indicators show the largest loading value in the Work Discipline construct (X2). Indicators X3.1 to X3.3 also have the highest loading values in the Work Environment construct (X3), while indicators Y1 to Y5 show the highest loading value in the Job Satisfaction construct (Y). Thus, it can be concluded that the results of the cross loading test show that all indicators have met the criteria for convergent validity, so that it is declared valid and suitable for use as a measuring tool in this study.

Table 3. Discriminant Validity Value (Fornel Lecker)

Variable	Work Discipline (X ₂)	Job Satisfaction (Y)	Work environment (X ₃)	Motivation (X ₁)
Work Discipline	0.847			
Job Satisfaction	0.823	0.825		
Work environment	0.717	0.789	0.865	
Motivation	0.806	0.836	0.759	0.815

Source : SmartPLS Output and Processed Data (2026)

Based on the results in table 3, it can be seen that the square root value of Average Variance Extracted (AVE) in each construct is higher than the correlation value between other constants.

Thus, all constructs in this study are declared to have met the criteria for discriminant validity, so it can be concluded that each construct has good discriminant validity.

b. Reliability Test

Table 4. Construct Values Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
MOTIVASI (X1)	0.873	0.876	0.908	0.665
LINGKUNGAN KERJA (X3)	0.831	0.834	0.899	0.749
KEPUASAN KERJA (Y)	0.882	0.884	0.914	0.680
DISIPLIN KERJA (X2)	0.901	0.906	0.927	0.717

Source : SmartPLS Output and Processed Data (2026)

Based on table 4, the test results show that all variables in this study have met the reliability and validity requirements. This can be seen from the values of Cronbach's Alpha, Composite Reliability (CR), and AVE obtained by each construct. Cronbach's Alpha values on the variables Motivation (X1), Work Environment (X3), Job Satisfaction (Y), and Work Discipline (X2) were all above 0.70. This shows that the indicators used have a good level of consistency in measuring each variable. Furthermore, the Composite Reliability (CR) value of all variables shows a number above 0.70 which means that each construct can be reliably measured. Meanwhile, the AVE value on all variables has exceeded 0.50 which indicates that the indicator is able to explain the variables it measures well. Thus, it can be concluded that all variables in this study have met the criteria of reliability and validity, so that the data used is feasible to proceed to the next stage of analysis.

2. Inner Measurement of Formative Indicator Construct Model

a. Multicollinearity Test

Table 5. Variance Inflation Factor Value

	Work Discipline (X₂)	Job Satisfaction (Y)	Work environment (X₃)	Motivation (X₁)
Work Discipline		3.086		
Job Satisfaction				
Work environment		2.551		
Motivation			3.534	

Source : SmartPLS Output and Processed Data (2026)

Based on the results of the multicollinearity test presented in Table 5, it is known that the Work Discipline variable has a VIF value of 3.086, the Work Environment variable of 2.551, and the Motivation variable of 3.534. All VIF values are below the predetermined limit (VIF <10). Thus, it can be concluded that this research model does not occur multicollinearity. This shows that the independent variables do not have a high correlation, so the structural model used is declared worthy of further analysis.

Structural Measurement Model (Inner Model)

R-Square (R2)

Table 6. R-Square Value

	R Square	R Square Adjusted
JOB SATISFACTION (Y)	0.793	0.786

Source : SmartPLS Output and Processed Data (2026)

Based on table 6, the R-Square (R2) value for the Job Satisfaction (Y) variable is 0.793, while the R-Square (R2) adjusted value is 0.786. This value explains that the variables of motivation, work discipline, and work environment were able to explain the variation of the employee satisfaction variable by 79.3% while the remaining 20.7% was influenced by other variables outside this study. The R-Square (R2) value is quite high indicating that the model is built quite well. This explains that motivation, work discipline, and work environment affect employee job satisfaction. Thus, it can be said that the R-Square value of the work satisfaction variable is good.

Effect size (F2)

Effect size (F2) testing is used to assess the magnitude of the influence of each latent variable in the structural model. An effect size value of 0.02 indicates a latent variable has a weak influence, a value of 0.15 indicates a moderate influence, and a value of 0.35 indicates a strong influence. The results of the effect size test are presented in the following table.

Table 7. Effect Size (F2)

	Work Discipline (X2)	Job Satisfaction (Y)	Work environment (X3)	Motivation (X1)
Motivation (X1)		0.165		
Work Environment (X3)		0.148		
Job Satisfaction (Y)				
Work Discipline (X2)		0.183		

Source : SmartPLS Output and Processed Data (2026)

Based on table 7, it can be seen that the effect size (F2) for each independent variable on job satisfaction (Y) is in the small to medium category. For the motivation variable (X1) which affects employee job satisfaction, as evidenced by the results of the calculation in table 7, for the motivation variable in a value of 0.165 which indicates that motivation has a moderate effect on job satisfaction. This can be interpreted as motivation has a significant contribution in explaining the variables of employee job satisfaction. Furthermore, the work environment variable (X3) obtained an effect size value of 0.148 which indicates that the work environment has a small effect close to medium, so it can be interpreted that the environment has an effect on job satisfaction, but the contribution is not dominant. Meanwhile, the work discipline

variable (X2) has an effect size value of 0.183 which is categorized as having a moderate effect and is the largest influence on the domain. Thus, it can be concluded that although all independent variables have an effect on job satisfaction, the level of contribution is still in the small to medium category, with work discipline as a variable that has a considerable influence in explaining changes in employee job satisfaction.

Model FIT

To ensure that the structural model used in this study has met the feasibility and suitability criteria, a fit model test was carried out. This test aims to find out the extent to which the model is able to accurately describe the relationships between variables. Indicators used in fit model testing include SRMR, d_ ULS, d-G, Chi-Square, and NFI. The test results are presented in the following table.

Table 8. Fit Model Value

	Saturated Model	Estimated Model
SRMR	0.092	0.092
d_ ULS	1.442	1.442
d_ G	1.259	1.259
Chi-Square	604.860	604.860
NFI	0.660	0.660

Source : SmartPLS Output and Processed Data (2026)

Based on table 8, the SRMR value in the saturated model and the estimated model are 0.092 each. For SRMR, a good value should be below 0.08. Thus, the SRMR value of 0.092 is still at an acceptable number which means the model has a good fit. Meanwhile, the NFI value obtained was 0.660 in both the saturated model and the estimated model. The NFI value ranges from 0 to 1, where a value close to 1 indicates a better level of model suitability. Overall, the results of the fit model test show that the structural model in this study has sufficient suitability and is suitable for further analysis.

Based on the results of the calculation in Table 4.24, the coefficient of the Work Discipline (X2) parameter was 0.342, the Work Environment (X3) was 0.280, and the Motivation (X1) was 0.347, so that the structural equation model formed was. The results of the analysis showed that the three independent variables had a positive effect on job satisfaction, where motivation had the greatest influence, followed by work discipline and work environment. These findings indicate that increasing employee motivation, implementing good work discipline, and simultaneously creating a conducive and comfortable work environment can increase employee job satisfaction.

Hypothesis Testing (Resampling Bootstrapping)

Hypothesis testing was carried out by comparing the t-statistical value with the t-table value to find out whether or not there was an influence between the study variables. This test is based on the path coefficient value obtained from the inner model test. With a significance level of 0.05 (5%), the t-statistical value must be greater than the t-table value of 1.96. The t-statistic value was obtained from the results of bootstrapping using the SmartPLS program. The test criteria state that if the p-value ≤ 0.05 and the t-statistical value > 1.96 , then the

variables X1, X2, and X3 have a partial effect on the Y variable, while if the p-value > 0.05 and the t-statistical value < 1.96, then the variables X1, X2, and X3 are declared to have no partial effect on the Y variable.

Table 9. Test Scores Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
WORK DISCIPLINE (X2) -> JOB SATISFACTION (Y)	0.342	0.321	0.147	2.327	0.020
WORK ENVIRONMENT (X3) -> JOB SATISFACTION (Y)	0.280	0.299	0.108	2.585	0.010
MOTIVATION (X1) -> JOB SATISFACTION (Y)	0.347	0.352	0.087	4.001	0.000

Source : SmartPLS Output and Processed Data (2026)

Based on the results of the hypothesis test presented in table 9, the test results showed that work discipline (X2) had a positive and significant effect on job satisfaction (Y). This is shown by a t-statistic value of 2.327 which is greater than 1.96 and a p-value of 0.020 which is smaller than 0.05. The path coefficient value of 0.342 illustrates that an increase in work discipline will be followed by an increase in employee job satisfaction. Furthermore, the work environment (X3) also has a positive and significant effect on job satisfaction (Y). This is shown by a t-statistic value of 2.585 which exceeds the t-table value and a p-value of 0.010 which is smaller than 0.05. The path coefficient value of 0.280 shows that a conducive work environment can increase employee job satisfaction.

In addition, motivation (X1) also has a positive and significant influence on job satisfaction (Y). This is evidenced by the test results of a p-value of 0.000 or less than 0.05. As well as the t-statistic value obtained was 4,001. The path coefficient of 0.347 shows that motivation has a partial influence on the variable job satisfaction (Y). Thus, it can be concluded that the variables of motivation, work discipline, and work environment partially have a positive and significant effect on employee job satisfaction, so that all research hypotheses are declared accepted.

The Effect of Motivation on Job Satisfaction

Based on the results of the hypothesis test, it is known that the motivation variable (X1) has a positive and significant effect on job satisfaction (Y) of employees at the municipal office and port authority class I of Balikpapan city. The results showed that the path coefficient in the p values section showed a number of $0.000 < 0.05$ and a T-statistic of $4.001 > 1.96$.

This positive influence shows that increasing employee motivation will be followed by increasing employee job satisfaction. Motivation is an internal and external drive that

encourages employees to work optimally in achieving organizational goals. Employees who are highly motivated tend to feel that their work is meaningful, receive rewards for their efforts, and have the drive to achieve work goals. This condition can cause feelings of pleasure, pride, and satisfaction with the work undertaken. In addition, both intrinsic and extrinsic motivations, such as recognition, opportunities, career development, and appropriate rewards, can create positive feelings for employees towards the organization. Therefore, the higher the level of motivation, the higher the level of job satisfaction felt by employees.

The results of this study are supported by (Sidabutar et al., 2022) who states that motivation has a positive and significant effect on employee job satisfaction. However, the results of the study are proportional to the results of research conducted by (Adam et al., 2021) which states that motivation has a negative effect on job satisfaction.

The Effect of Work Discipline on Job Satisfaction

Based on the results of the analysis, it was shown that the work discipline variable (X2) had a t-statistical value of $2.327 > 1.96$ and a p-value of $0.020 < 0.05$. Thus, work discipline has a positive and significant effect on employee job satisfaction at the municipal office and port authority class I of Balikpapan city. Work discipline reflects the level of employee compliance with the rules, procedures, and responsibilities that apply within the organization. When work discipline is applied consistently and fairly, employees will feel that the work environment becomes more orderly, clear and orderly. This condition provides a sense of security and justice for employees, because every employee understands their rights and obligations. This condition will cause feelings of comfort and satisfaction at work, thereby increasing employee job satisfaction.

This is in line with research conducted by (Sudarsono et al.2024) which states that work discipline has a positive and significant effect on job satisfaction. Employees who have good work discipline will show a punctual attitude, obey the rules, and be able to carry out their duties in accordance with the stipulated provisions, thus creating an orderly and conducive work atmosphere. But the study (Pebriana et al.2024) states that work discipline has a negative effect and does not have a significant influence on job satisfaction.

The Influence of the Work Environment on Employee Job Satisfaction

Based on the results of the analysis, it was shown that the Work Environment variable (X3) had a t-statistic value of $2.585 > 1.96$ and a p-value of $0.010 < 0.05$. This shows that the Work Environment variable (X3) has a positive and significant effect on employee job satisfaction at the municipal office and port authority class I of Balikpapan city. The work environment is the overall condition around employees, both physical and non-physical work environments that can affect employee comfort. The physical work environment includes lighting, room temperature, spatial planning and workplace safety. Meanwhile, the non-physical environment includes relationships between employees, communication with superiors, cooperation between employees, and a conducive work atmosphere. A safe, comfortable and harmonious work environment allows employees to work optimally without excessive pressure. Good working relationships also create a sense of community and social support in the workplace. This condition makes employees feel valued and cared for by the organization, so that it can increase employee job satisfaction.

The results of this study are in line with research (Sari et al., 2024) which states that the work environment has a positive and significant influence on employee job satisfaction. A good

work environment is able to create a sense of security and comfort for employees in carrying out their duties. This condition makes employees feel cared for by their organization, thus fostering a feeling of satisfaction with the work they do. On the other hand, if the employee's work environment is not conducive, it can cause discomfort so as to reduce the employee's job satisfaction level. Meanwhile, the study (Pradana et al., 2022) stated that the work environment does not have a significant effect on job satisfaction.

CONCLUSIONS

Based on the results of the data analysis and discussion that has been described, it can be concluded that motivation, work discipline, and work environment partially have a positive and significant effect on the job satisfaction of employees at the Balikpapan City Municipal and Port Authority Class I Office and Authority. Motivation (X1) showed a positive and significant influence with a t-statistic value of $4.001 > 1.96$ and a p-value of $0.000 < 0.05$, so that the first hypothesis was accepted. Work discipline (X2) also had a positive and significant effect with a t-statistic value of $2.327 > 1.96$ and a p-value of $0.020 < 0.05$, so that the second hypothesis was accepted. The work environment (X3) also had a positive and significant effect with a t-statistic value of $2.585 > 1.96$ and a p-value of $0.010 < 0.05$, so that the third hypothesis was accepted. Overall, these three variables contribute positively to increasing employee job satisfaction. Based on these results, the researcher suggested that the Balikpapan City Municipal and Port Authority Office and Class I Port Authority continue to pay attention to meeting the needs of employees through the provision of transparent and fair incentives, rewards for work achievements, and sustainable career development to maintain work motivation. In addition, management needs to strengthen a culture of discipline through clear regulations, the application of sanctions and rewards fairly, and consistent supervision to maintain and improve employee discipline. Regarding the work environment, agencies are advised to continue to improve the quality of the physical and non-physical environment, create a safe, comfortable, and conducive work atmosphere, and build harmonious working relationships and effective communication between leaders and employees to minimize work obstacles and increase solidarity, which is ultimately expected to increase employee job satisfaction and overall agency productivity.

REFERENCES

- Acciaro, M., Vanelslander, T., Sys, C., Ferrari, C., Roumboutsos, A., Giuliano, G., & Lam, J. S. L. (2020). Environmental sustainability in seaports: A framework for successful innovation. *Maritime Policy & Management*, 47(3), 283–300. <https://doi.org/10.1080/03088839.2019.1654571>
- Adam, A., Machasin, & Efni, Y. (2021). The Influence of Motivation and Leadership on Job Satisfaction and Employee Performance at PT. Primalayan Citra Mandiri (Datascrip Service Center) in Indonesia. [https://doi.org/https://doi.org/10.25299/kiat.2021.vol32\(1\).7407](https://doi.org/https://doi.org/10.25299/kiat.2021.vol32(1).7407)
- Alam, I. K., & Wanialisa, M. (2021). The Influence of Work Discipline, Organizational Commitment and Work Environment on Employee Job Satisfaction at CV Pintu Mas Bogor. <https://doi.org/https://doi.org/10.37817/ikraith-ekonomika.v4i2.1031>
- Alice, and Nora. (2022). The Influence of Work Discipline, Work Motivation and Work

- Environment on Job Satisfaction at PT Tirta Putra Malindo Sejati in Batam City.
- Almakkah, D., Hasan, S., & Yuliani, T. (2025). The influence of work discipline, motivation, and work environment on employee job satisfaction at the Balikpapan City Environmental Office. <https://doi.org/https://doi.org/10.36277/edueco.v8i1.254>
- Ariani, M., Hadiyatno, D., & Anam, H. (2023). Research Methodology Young Steps Writing a thesis and thesis.
- Armstrong, M., & Taylor, S. (2020). *Armstrong's handbook of human resource management practice* (15th ed.). Kogan Page.
- Azhar, M. E., Nurdin, D. U., & Siswadi, Y. (2020). The effect of work discipline and compensation on employee job satisfaction. *Journal of Humanities: Journal of Social Sciences, Economics and Law*, 4(1), 46–60.
- Becker, B. E., & Huselid, M. A. (2017). Strategic human resource management: Where do we go from here? *Journal of Management*, 43(1), 1–19. <https://doi.org/10.1177/0149206317691577>
- Cariou, P., Parola, F., & Notteboom, T. (2019). Towards a new generation of port governance. *Transport Policy*, 82, 25–34. <https://doi.org/10.1016/j.tranpol.2019.07.008>
- Chandrasekar, K. (2018). Workplace environment and its impact on organisational performance. *International Journal of Enterprise Computing and Business Systems*, 7(1), 1–19.
- Colquitt, J. A., LePine, J. A., & Wesson, M. J. (2021). *Organizational behavior: Improving performance and commitment in the workplace* (6th ed.). McGraw-Hill.
- Daniswari, A. M., Agustin, I. W., & Hariyani, S. (2023). Operational Performance of Semayang Port of Balikpapan. In *Planning for Urban Region and Environment* (Vol. 12, Issue 3).
- Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 19–43. <https://doi.org/10.1146/annurev-orgpsych-032516-113108>
- Dessler, G. (2020). *Human resource management* (16th ed.). Pearson.
- Fatoroni, E., Hasan, S., & Yuliani, T. (2025). The Effect of Compensation, Motivation, and Work Discipline on Employee Job Satisfaction of PT. Abadi Raya Commerce Balikpapan. <https://doi.org/https://doi.org/10.47467/elmal.v6i3.6775>
- Greenberg, J., & Baron, R. A. (2018). *Behavior in organizations* (10th ed.). Pearson.
- Isna, J., Ariani, M., & Arrywibowo, I. (2025). The Influence of Communication, Motivation, and Work Environment on Employee Satisfaction of the Paser Regency Fire Service. <https://doi.org/https://doi.org/10.47467/elmal.v6i3.6753>
- Judge, T. A., Weiss, H. M., Kammeyer-Mueller, J. D., & Hulin, C. L. (2017). Job attitudes, job satisfaction, and job affect. *Annual Review of Psychology*, 68, 341–367. <https://doi.org/10.1146/annurev-psych-122414-033858>
- Krismawati, N. K. A., & Manuaba, I. B. S. (2022). Contribution of Work Environment and Work Motivation to Teacher Job Satisfaction. *Indonesian Journal of Instruction*, 3(2), 92–104. <https://doi.org/10.23887/iji.v3i2.44517>
- Kurniawan, J., Arianti, N. D., & Dzirrusydi, Z. (2025). Analysis of the Role of the Tanjung Balai Karimun Class I Port Authority Office in Improving the Safety of Passenger Ships at Domestic and International Ports. *RIGGS: Journal of Artificial Intelligence and*

- Digital Business, 4(3), 2497–2502. <https://doi.org/10.31004/riggs.v4i3.2326>
- Lam, J. S. L., & Notteboom, T. (2019). The greening of ports: A comparison of port management tools. *Maritime Policy & Management*, 46(2), 213–233. <https://doi.org/10.1080/03088839.2018.1505887>
- Leblebici, D. (2019). Impact of workplace quality on employee productivity. *Procedia Economics and Finance*, 15, 130–137. [https://doi.org/10.1016/S2212-5671\(14\)00493-0](https://doi.org/10.1016/S2212-5671(14)00493-0)
- Locke, E. A. (2018). The nature and causes of job satisfaction. In *Handbook of industrial and organizational psychology*.
- Luthans, F. (2019). *Organizational behavior* (13th ed.). McGraw-Hill.
- Mangkunegara, A. A. A. P. (2017). *Manajemen sumber daya manusia perusahaan*. Remaja Rosdakarya.
- Ministry of Transportation of the Republic of Indonesia. (2023). Office of Municipal Affairs and Class I Port Authority of Balikpapan City. Dephub.Go.Id.
- Ministry of Transportation of the Republic of Indonesia. (2024). Semayang Port. Nusantara.Kemenhub.Go.Id.
- Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2020). *Fundamentals of human resource management* (8th ed.). McGraw-Hill.
- Notteboom, T., & Rodrigue, J. P. (2019). Port regionalization: Towards a new phase in port development. *Journal of Transport Geography*, 75, 16–27. <https://doi.org/10.1016/j.jtrangeo.2019.01.003>
- Pebriana, W., Hadiyatno, D., Cahyaning Putri Cipto, R., Economics and Business, F., & Balikpapan, U. (n.d.). Job satisfaction is influenced by work motivation, work discipline, and work environment in employees of the Balikpapan City Population and Civil Registration Office (Disdukcapil). <http://ojs.pnb.ac.id/index.php/GBK>
- Pradana, R. A., & Santoso, B. (2022). The Influence of Leadership Style, Work Environment, and Work Motivation on Employee Job Satisfaction in the Production Department of PT Harapan Sejahtera Karya Utama Sidoarjo. *Al-Kharaj : Journal of Sharia Economics, Finance & Business*, 4(3), 686–699. <https://doi.org/10.47467/alkharaj.v4i3.714>
- Psaraftis, H. N. (2019). Decarbonization of maritime transport: Is it possible? *Transport Reviews*, 39(1), 3–5. <https://doi.org/10.1080/01441647.2018.1547726>
- Puri, W., Wisnu, S., Economics, F., Pgri, B.-U., Surabaya, A. B., & Id, A. (2020). The Effect of Mutation, Work Environment, and Work Motivation on Employee Job Satisfaction at Pt. Cipta Aneka Selera Indonesia. <https://doi.org/https://doi.org/10.36456/majeko.vol25.no1.a2447>
- Putri, R., Hadiyatno, D., & Putri, R. (2025). Job satisfaction is influenced by work discipline, motivation, and communication at the Balikpapan Personnel and Human Resources Development Agency (BKPSDM).
- Robbins, S. P., & Judge, T. A. (2019). *Organizational behavior* (18th ed.). Pearson.
- Rulianti, E., & Nurpriadi, G. (2023). The Influence of Work Motivation, Work Environment and Career Development on Employee Job Satisfaction. *Jessica*, 6(1), 849–858. <https://doi.org/10.36778/jesya.v6i1.1011>
- Runtu, R., Pio, R., & Asaloei, S. (2022). The Influence of Work Environment and Work Life Balance on Job Satisfaction at the Manado Main Branch Post Office (Vol. 3, Issue 4).

- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation. *Contemporary Educational Psychology*, 61, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Sedarmayanti. (2017). *Manajemen sumber daya manusia: Reformasi birokrasi dan manajemen pegawai negeri sipil*. Refika Aditama.
- Sentosa, E. (2024). The Effect of Work Motivation and Job Satisfaction on Career Performance with Work Discipline as an Intervening Variable of PT Putra Rasya Mandiri.
- Sidabutar, S., Saragih, J., Nanda, F., & Lubis, M. (2022). The Influence of Communication, Motivation and Work Environment on Job Satisfaction of Employees of the Tebing Tinggi City Transportation Agency (Case Study on Employees of the Pematang Siantar City Transportation Office). <https://proceeding.unefaconference.org/index.php/TAMPAN>
- Spector, P. E. (2017). *Job satisfaction: Application, assessment, causes, and consequences*. Sage.
- Sumanti, V., & Firmansyah. (2021). The Influence of Non-Physical Work Environment and Work Discipline on Employee Job Satisfaction at the Palibelo Sub-district Office, Bima Regency. In *Journal of Management and Business* (Vol. 3, Issue 1).
- Sutrisno, E. (2019). *Manajemen sumber daya manusia*. Kencana.
- Sutrisno, edy. (2023). *Human Resource Management*. Jakarta:Kencana
- Syafrin, I., & Angraini, Y. (2023). The Effect of Career Development of Work Compensation on Job Satisfaction through Employee Engagement as an Intervening Variable in Teachers of SMAN 8 Merangin Fasridon UPI YPTK PADANG. 3(1).
- Syahrani, W., Ariani, M., & Arrywiwowo, I. (2024). The Influence of Motivation, Communication, and Work Discipline on Employee Satisfaction of the Balikpapan Transportation Office. *Journal of GeoEconomics*, 15(1.2024), 461–470. <https://doi.org/10.36277/geoekonomi.v15i1.2024.509>
- Tan Maya, Ariani Misna, & Arrywiwowo Imam. (2019). The Influence of Motivation, Work Discipline and Work Environment on Employee Job Satisfaction at Pt. Mitra Sehat Utama in Balikpapan.
- Tijan, E., Jović, M., Aksentijević, S., & Pucihar, A. (2021). Digital transformation in the maritime transport sector. *Sustainability*, 13(6), 3378. <https://doi.org/10.3390/su13063378>
- Ulkarima, N., Hadiyatno, D., Yuliani, T., Management, P., & Balikpapan, U. (2024). The Influence of Work Environment, Work Discipline and Motivation on Job Satisfaction of Teachers of SMK Negeri 2 Balikpapan. 5, 3790.
- UNCTAD. (2022). *Review of maritime transport 2022*. United Nations. <https://unctad.org/publication/review-maritime-transport-2022>
- Weda Iwan. (2023). Analysis of the influence of supervision, responsibility of KSOP shipworthiness and navigation on shipping safety at the port of Tanjung Intan Cilacap.
- Wiegman, B., Witte, P., Spit, T., & Louw, E. (2018). The rise of the container port. *Transport Reviews*, 38(4), 1–19. <https://doi.org/10.1080/01441647.2018.1457076>



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