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The Influence of Occupational Health and Safety and Employee Competence on Risk Mitigation Affecting the Operational Performance of the Port at PT Pelindo IV Pare Pare Port

Ardiansyah Ardiansyah[1], Bambang Sumali[2]
[1]Sekolah Tinggi Ilmu Pelayaran, Jakarta Utara, Indonesia, email. Rockets2801@gmail.com
[2]Sekolah Tinggi Ilmu Pelayaran, Jakarta Utara, Indonesia, email. bambs511@gmail.com

Corresponding Author: Rockets2801@gmail.com[1]

Abstract: This study aims to analyze the impact of occupational health and safety and employee competence on risk mitigation that affects the operational performance of the port at PT Pelindo IV Pare Pare Port. The issues addressed concern how these two factors can influence risk mitigation and operational performance. The study population consisted of 168 employees, with a sample taken using purposive sampling and simple random sampling methods, resulting in 118 respondents. The research employs a quantitative descriptive approach with a cross-sectional design. Data were collected through questionnaires and analyzed using SmartPLS. The findings indicate that occupational health and safety and employee competence have a positive and significant impact on risk mitigation, and both directly contribute to improving the port's operational performance. Furthermore, risk mitigation is shown to function as a mediator in this relationship. The conclusion emphasizes the importance of enhancing safety measures and employee competence to promote better operational performance at the port.

Keyword: Occupational Health and Safety, Employee Competence, Risk Mitigation, Operational Performance, Port

INTRODUCTION

Ports as a gateway to trade and the economy have a very important role in the movement of the economy, that public service providers have a very significant role in the economy. The role of seaports is optimized as a node in the national transportation network, in addition to other roles, namely as a gateway to economic activities, supporting industrial and/or trade activities, distribution, production and consolidation of cargo/goods, realizing the archipelago insight, Seaports are one of the very important links in the entire domestic and foreign trade process, seaports are not just places for loading and unloading goods or boarding and disembarking passengers but also

Parepare Port is one of the ports in South Sulawesi which is located in the working area of PT. Pelabuhan Indonesia IV. Parepare Port serves ships that ship export and import goods

and is also a fairly strategic port for the development of sea transportation services in South Sulawesi (Figure 1).

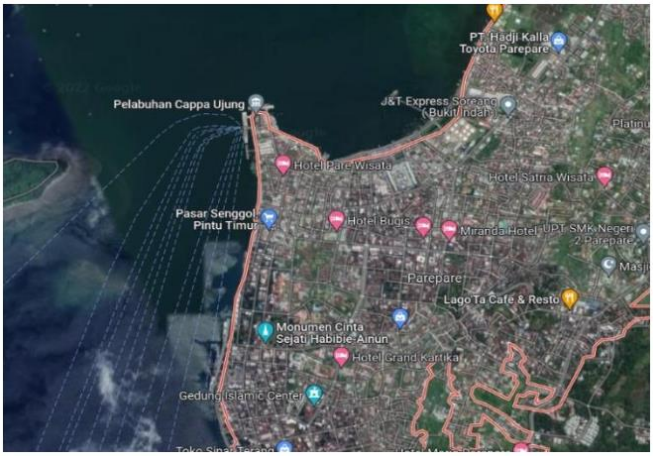


Figure 1. Location of Pare-pare Port

PT. Pelabuhan Indonesia IV (Persero) Parepare Branch has four bases including Cappa Ujung Base, Nusantara Base, Longtange Base and Pertamina Extraordinary Base. Services to ships such as pilotage, tug and mooring services are very important because they must serve the four bases. Pilotage and tug services are also useful for maintaining the safety and security of ships when entering or leaving the port.

Environmental factors that affect pilotage and towing services at Parepare Port are bad weather that causes high tides and high waves that greatly hinder the process of ships entering and mooring at the port pier. This can also affect the length of time for ships to moor at the pier so that it can affect the pilotage service time or ship approach time.

In the observation conducted on the Port of Pare-pare's Loading and Unloading Workers (TKBM) on the condition of loading and unloading tools and equipment, where the condition of the loading and unloading tools and equipment can affect occupational health and safety (K3) and risk mitigation for workers when they use them. So the observation was conducted for a period of 4 days and the data obtained in the form of the following table:

Table 1. Condition of Personal Protective Equipment (PPE) and Loading and Unloading Work Tools

No	Tool Name	Condition		
		SaRemember Good	Baik	Not good
1.	Safety helmet			√
2.	Seeprotective shoe			√
3.	Face mask			√
4.	Sahand ring			√
5.	PeLampung			√
6.	Drugs			√
7.	Medical team			√
8.	Reach stacker		√	
9.	Frocklift		√	
10.	Crane	√		
11.	Wheelbarrow			√
12.	Yeshull net			√
13.	Steel rope		√	
14.	Manila hemp rope		√	
15.	Yessteel mesh	√		
16.	Yesmanila rope net		√	
17.	Dadlet			√

Source: Pare-pare Harbor (2023)

DadTable 1 above shows that there are tools that are in poor condition in the reach stacker, froklit, steel rope, manila hemp rope, manila rope nets, wheelbarrows, ship hull nets and pallets because the tools are old and unsafe to use. While the Personal Protective Equipment (PPE) available in poor condition are protective helmets that do not have hooks, worn-out protective shoes that cause discomfort when used, gloves that are holed and no longer fit for use, masks and life jackets provided do not match the many needs of the workers, medicines and medical teams that are very inadequate. The lack of awareness of the Stevedoring Workers Cooperative (TKBM) in providing Personal Protective Equipment (PPE) and loading and unloading tools that meet standards, the Stevedoring Workers Cooperative (TKBM) needs to supervise the use of tools, check tools periodically and replace tools if there are tools that are not in good condition which can minimize the high risk of work accidents at the port.

Occupational health and safety (K3) is an effort to guarantee and maintain the health and physical and spiritual integrity of workers, especially humans, to achieve a just and prosperous society. Maslow's theory of needs explains that in every human being there are five hierarchies of needs, namely physiological needs or physical needs, security needs, social needs, appreciation needs, and self-actualization needs which are the drive to become someone according to their abilities. Of the five needs mentioned above, one of them is the need for security, which includes the desire to be protected from physical and emotional dangers, this can be associated as risk mitigation.

Based on the research gap conducted by Ayu et al (2019), there is an influence between the K3 program and work productivity of heavy equipment operators at PT BJTI, because workers who have high work productivity are workers who assume that the K3 program at PT BJTI has been well socialized to workers. Roharto & Kasmir (2017), based on the test results, it was obtained that occupational safety and health had a significant effect on the performance of the company PT Pelabuhan Indonesia II (Persero) on the TPK Kalibaru Dredging Project. The work environment had a significant effect on the performance of the company PT Pelabuhan Indonesia II (Persero) on the TPK Kalibaru Dredging Project. Training had a significant effect on the performance of the company PT Pelabuhan Indonesia II (Persero) on the TPK Kalibaru Dredging Project.

Based on the explanation of the research background above, the researcher is interested in conducting research and compiling a thesis entitled "THE INFLUENCE OF OCCUPATIONAL HEALTH SAFETY AND EMPLOYEE COMPETENCE ON RISK MITIGATION THAT IMPACT PORT OPERATIONAL PERFORMANCE AT PT PELINDO IV PARE PARE PORT"

From the identification and limitations of the problem, the author formulates the problem as follows:

1. Is there a direct influence of Occupational Health and Safety on Risk Mitigation?
2. Is there a direct influence of employee competence on risk mitigation?
3. Is there a direct influence of Occupational Health and Safety on port operational performance?
4. Is there a direct influence of employee competence on port operational performance?
5. Is there a direct impact of risk mitigation on port operational performance?
6. Is there an indirect influence of Occupational Health and Safety on Port Operational Performance through Risk Mitigation?
7. Is there an indirect influence of employee competence on port operational performance through risk mitigation?

METHOD

The research strategy used in this study is quantitative with an explanatory research approach. According to Sugiyono (2017) explanatory research is research that intends to explain the position of the variables studied and the relationship between one variable and another. While quantitative research according to Sugiyono (2017) quantitative research methods are research methods based on the philosophy of Positivism, used to research certain populations or samples. Sampling techniques are generally carried out randomly, data collection uses research instruments, data analysis is quantitative or statistical in nature with the aim of testing the established hypothesis. This research design uses a cross-sectional design. Cross Sectional is a study of independent and dependent variables measured at the same time. The purpose of this study is to determine the effect of Occupational Health and Safety (X_1), employee competence (X_2) and risk mitigation (Y) on port operational performance (Z)

Sugiyono (2017) Population can be divided into two types, namely sampling population or research population and target population or target population, where the target population has a larger size than the sampling population. Sampling population is a unit of analysis that provides information or data needed by a study or research. While the target population is all units of analysis in the research area. The population in this study were employees working at Pare-pare Port as many as 168 employees

Sample is an element selected to be a research participant (Lasse, 2018). This study uses purposive sampling, which is a sample selection strategy based on criteria set by the researcher. This study also uses a simple random sampling approach. Sugiyono (2017) defines simple random sampling as the selection of sample members from a population at random, without considering the strata in the population. Sampling uses the Taro Yamane formula as explained by Ridwan and Engkos Achmad Kuncoro (2010) with details as explained below.

$$n = \frac{N}{N(d)^2 + 1}$$

Explanation:
n = Number of samples
N = Population size
d = Defined population (5% = 0.05)
Based on this formula, the number of samples obtained is:

$$n = \frac{198}{1 + 168(5\%)^2} = \frac{198}{1 + 0{,}42} = \frac{198}{1{,}42} = 118{,}31 = 118$$

The data obtained is then processed using SmartPLS 4. The software is used to facilitate data processing, so that the results are faster and more precise. Where editing and coding are carried out. Editing is the first stage in processing data obtained by researchers from the field by checking the possibility of errors in respondent answers and the uncertainty of respondent answers. Coding is giving or certain signs or codes to similar alternative answers or classifying them so that it can facilitate researchers regarding tabulation.

In this study, the data collected is presented in the form of a table to make it easier to analyze and understand the data so that the data presented is more systematic. Where tabulation is done. Tabulation is the calculation of data that has been collected in each category until it is arranged in a table that is easy to understand.

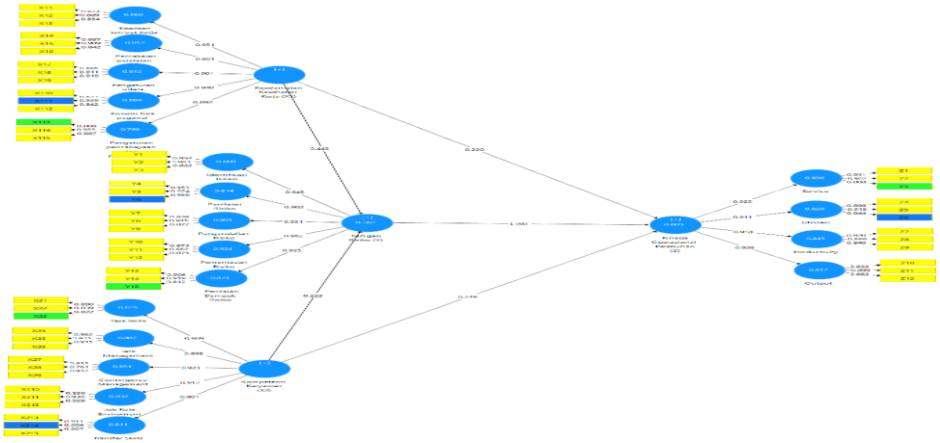
RESULTS AND DISCUSSION

In this study, inferential analysis was carried out using multivariate statistical methods, through the Partial Least Square - Structural Equation Model (PLS-SEM) approach. In the analysis with PLS-SEM, the calculation of the structural equation is based on the variance

value of the input data. This inferential statistical analysis is carried out in 2 main stages, first by assessing the results of the outer model or measurement model to test the reliability and validity of the indicators in a model. After this stage is carried out, the second stage is continued, namely by assessing the inner model or structural model to test the explanatory and predictive capabilities of the model, and then testing the significance of the influence between the variables in the research model.

Outer Model Results

The results of data processing with the PLS Algorithm get an outer model image as below.



Source: SEMPLS Processing (2024)

Figure 1 Outer Model Structural Model

From Figure 3 above in the outer model, it can be seen that all 42 indicators are reliable in measuring their constructs according to the required Outer loading value (Hair et al, 2019).

Reliability Indicator

Table 2. Validity Testing

Variables	Dimensions	loading factor Second order	Indicator	loading factor first order	Information
Occupational Health and Safety ($x1$)	The condition of the work environment	0.931	X11	0.924	Valid
			X12	0.889	Valid
			X13	0.854	Valid
	Use of work equipment	0.901	X14	0.887	Valid
			X15	0.909	Valid
			X16	0.842	Valid
	Air conditioning	0.901	X17	0.905	Valid
			X18	0.911	Valid
			X19	0.919	Valid
	Physical condition of employees	0.892	X110	0.877	Valid
			X111	0.939	Valid
			X112	0.842	Valid
	Lighting and illumination settings	0.909	X113	0.954	Valid
			X114	0.923	Valid
			X115	0.822	Valid
Employee Competence (X_2)	Task Skills	0.909	X21	0.953	Valid
			X22	0.924	Valid
			X23	0.966	Valid

Variables	Dimensions	loading factor Second order	Indicator	loading factor first order	Information
	Task Management Skills	0.898	X24	0.929	Valid
			X25	0.945	Valid
			X26	0.827	Valid
	Contingency Management Skills	0.923	X27	0.875	Valid
			X28	0.887	Valid
			X29	0.875	Valid
	Job Role Environment Skills	0.901	X210	0.904	Valid
			X211	0.919	Valid
			X212	0.812	Valid
	Transfer Skills	0.811	X213	0.890	Valid
			X214	0.839	Valid
			X215	0.822	Valid
Risk Mitigation (Y)	Risk Identification	0.943	Y1	0.962	Valid
			Y2	0.971	Valid
			Y3	0.915	Valid
	Risk Assessment	0.902	Y4	0.835	Valid
			Y5	0.761	Valid
			Y6	0.912	Valid
	Risk Control	0.951	Y7	0.836	Valid
			Y8	0.930	Valid
			Y9	0.928	Valid
	Risk Monitoring	0.962	Y10	0.911	Valid
			Y11	0.954	Valid
			Y12	0.927	Valid
	Risk Impact Assessment	0.935	Y13	0.931	Valid
			Y14	0.907	Valid
			Y15	0.808	Valid
Port Operational Performance (Z)	Service	0.925	Z1	0.898	Valid
			Z2	0.918	Valid
			Z3	0.944	Valid
	Utilization	0.911	Z4	0.920	Valid
			Z5	0.890	Valid
			Z6	0.846	Valid
	Productivity	0.918	Z7	0.822	Valid
			Z8	0.899	Valid
			Z9	0.882	Valid
	Output	0.926	Z10	0.822	Valid
			Z11	0.899	Valid
			Z12	0.882	Valid

Source: SEMPLS Processing (2024)

For the Occupational Health and Safety variable (X1), the dimension with the highest loading factor is the condition of the work environment with a value of 0.931, while the dimension with the lowest loading factor is the physical condition of employees with a value of 0.892. In its indicator, the highest loading factor is in X11 (Condition of the work environment) with a value of 0.924, while the lowest loading factor is in X16 (Use of work equipment) with a value of 0.842. This shows that the dimension of the condition of the work environment provides the strongest contribution, while the dimension of the physical condition of employees is slightly lower in influencing the Occupational Health and Safety variable.

For the Employee Competence variable (X2), the highest dimension is Contingency Management Skills with a value of 0.923, while the lowest dimension is Transfer Skills with a value of 0.811. In its indicators, the highest loading factor is in X23 (Task Skills) with a value

of 0.966, while the lowest loading factor is in X26 (Task Management Skills) with a value of 0.827. This shows that the Contingency Management Skills dimension is more influential overall, although other dimensions also make significant contributions.

For the Risk Mitigation variable (Y), the highest dimension is Risk Control with a value of 0.951, while the lowest dimension is Risk Assessment with a value of 0.902. In its indicator, the highest loading factor is in Y2 (Risk Identification) with a value of 0.971, while the lowest loading factor is in Y5 (Risk Assessment) with a value of 0.761. This shows that the Risk Control dimension is the most dominant in influencing the Risk Mitigation variable, while the Risk Assessment dimension has a slightly lower contribution.

For the Port Operational Performance variable (Z), the dimension with the highest loading factor is Output with a value of 0.926, while the lowest dimension is Utilization with a value of 0.911. In its indicators, the highest loading factor is in Z1 (Service) with a value of 0.944, while the lowest loading factor is in Z7 (Productivity) with a value of 0.822. This shows that the Output dimension plays an important role in influencing Port Operational Performance, with the Utilization dimension also making a large contribution although slightly lower in some indicators.

The results of processing using SmartPLS can be seen in the table above. The outer model value or correlation between constructs and variables shows that overall the loading factor value is greater than 0.7, so the constructs for all variables are valid from the model.

Discriminant Validity Testing

Table 3. Discriminant Validity Testing

Variables	Average Variance Extracted (AVE)
Occupational Health and Safety (X1)	0.659
Employee Competence (X2)	0.657
Risk Mitigation (Y)	0.720
Port Operational Performance (Z)	0.670

Source: SEMPLS Processing (2024)

This test is conducted to see how big the difference is between variables. The value seen in this test is the value of the average variance extracted (AVE) overall all variables have an AVE value > 0.5 so that they are declared valid.

Table. 4 Fornell-Larcker Criterion between Variables

	Occupational Health and Safety (X1)	Port Operational Performance (Z)	Employee Competence (X2)	Risk Mitigation (Y)
Occupational Health and Safety (X1)	0.812			
Port Operational Performance (Z)	0.658	0.818		
Employee Competence (X2)	0.580	0.605	0.811	
Risk Mitigation (Y)	0.574	0.676	0.481	0.848

Source: SEMPLS Processing (2024)

Table 5. Cross Loadingbetween Latent Variables and Indicators

	Occupational Health and Safety (X1)	Employee Competence (X2)	Risk Mitigation (Y)	Port Operational Performance (Z)
X11	0.871	0.533	0.514	0.604
X12	0.757	0.450	0.452	0.567

	Occupational Health and Safety (X1)	Employee Competence (X2)	Risk Mitigation (Y)	Port Operational Performance (Z)
X13	0.855	0.451	0.494	0.524
X14	0.773	0.355	0.404	0.444
X15	0.830	0.429	0.457	0.518
X16	0.773	0.427	0.451	0.493
X17	0.792	0.495	0.440	0.543
X18	0.789	0.579	0.475	0.594
X19	0.871	0.489	0.550	0.629
X110	0.818	0.579	0.486	0.643
X111	0.896	0.531	0.510	0.582
X112	0.785	0.384	0.427	0.484
X113	0.741	0.452	0.338	0.451
X114	0.826	0.481	0.515	0.479
X115	0.779	0.409	0.444	0.436
X21	0.482	0.756	0.365	0.496
X22	0.450	0.726	0.348	0.478
X23	0.469	0.827	0.393	0.451
X24	0.482	0.835	0.384	0.488
X25	0.483	0.857	0.412	0.484
X26	0.476	0.865	0.441	0.538
X27	0.452	0.780	0.331	0.424
X28	0.437	0.739	0.421	0.508
X29	0.453	0.797	0.298	0.428
X210	0.520	0.873	0.429	0.587
X211	0.417	0.765	0.317	0.391
X212	0.432	0.805	0.340	0.402
X213	0.467	0.819	0.469	0.577
X214	0.505	0.872	0.466	0.537
X215	0.519	0.822	0.411	0.545
Y1	0.511	0.417	0.868	0.606
Y2	0.517	0.405	0.884	0.591
Y3	0.459	0.391	0.833	0.512
Y4	0.518	0.410	0.845	0.547
Y5	0.527	0.460	0.850	0.613
Y6	0.498	0.473	0.870	0.585
Y7	0.452	0.442	0.858	0.584
Y8	0.455	0.428	0.882	0.589
Y9	0.453	0.330	0.830	0.497
Y10	0.409	0.363	0.868	0.532
Y11	0.452	0.366	0.812	0.531
Y12	0.540	0.399	0.852	0.647
Y13	0.498	0.392	0.832	0.639
Y14	0.539	0.445	0.855	0.597
Y15	0.471	0.388	0.779	0.524

	Occupational Health and Safety (X1)	Employee Competence (X2)	Risk Mitigation (Y)	Port Operational Performance (Z)
Z1	0.555	0.578	0.547	0.821
Z2	0.582	0.574	0.502	0.803
Z3	0.594	0.502	0.552	0.823
Z4	0.582	0.528	0.519	0.785
Z5	0.561	0.555	0.558	0.843
Z6	0.617	0.504	0.565	0.882
Z7	0.512	0.461	0.558	0.834
Z8	0.502	0.563	0.540	0.833
Z9	0.426	0.394	0.565	0.780
Z10	0.486	0.384	0.605	0.785
Z11	0.524	0.477	0.574	0.813
Z12	0.516	0.409	0.557	0.812

Source: SEMPLS Processing (2024)

The results of the Fornell-Larcker Criterion and cross loading between all latent variables with indicator variables that have been shown in the table above that the value of an indicator is greater in calculating variables from other constructs. Based on these results, it can be stated that each indicator used has good discriminant validity to form its respective variables.

Reliability Testing

Table 6. Reliability Testing

Variables	Cronbach's Alpha	Composite Reliability	Rule of Thumb	Results
Occupational Health and Safety (X1)	0.963	0.967	>0.70	Reliable
Employee Competence (X2)	0.962	0.966		Reliable
Risk Mitigation (Y)	0.972	0.975		Reliable
Port Operational Performance (Z)	0.955	0.960		Reliable

Source: SEMPLS Processing (2024)

Based on the table above, it can be concluded that the constructs for all variables meet the reliable criteria. This is indicated by the Cronbach's Alpha and composite reliability values obtained from the SmartPLS estimation results. The resulting value is > 0.70 as recommended criteria.

Inner Model Results (Structural Model)
R-Square (Coefficient of Determination)

Table 7. R-Square (R^2) Test Results

	R Square	R Square Adjusted
Risk Mitigation (Y)	0.362	0.351
Port Operational Performance (Z)	0.605	0.595

Source: SEMPLS processed data (2024)

From the table above, it can be seen that the ship's officer performance variable has a large R2 value, the R2 value is 0.362 with an Adjusted R2 value of 0.351, indicating that the contribution of the Occupational Health Safety and Employee Competence variables to Risk Mitigation is 36.2%, while the remaining 63.8% is the influence of other variables not used in this study. Port Operational Performance has a large R2 value, the R2 value is 0.605 with an Adjusted R2 value of 0.595 indicating that the variables of Occupational Health and Safety, Employee Competence and Risk Mitigation againstPort Operational Performancesolarge 60.5% while the remaining 39.5% is the influence of other variables not used in this study.

Q-Square

Table 8. Q-Squared Value

	Q Square	Results
Risk Mitigation (Y)	0.638	Large Predictive Relevance
Port Operational Performance (Z)	0.395	Medium Predictive Relevance

Source: SEMPLS processed data (2024)

The table above shows the value of Q-Square. The Q-Square value for risk mitigation is 0.638, the variable is classified as large predictive relevance. While the Q-Square value forport operational performanceof 0.395, the variable is classified as medium predictive relevance.

Research Hypothesis

Table 9. Direct and Indirect Influence Analysis

Hypothesis	Influence	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	Information
H1	Occupational Health and Safety (X1) -> Risk Mitigation (Y)	0.445	4,641	0.000	Supported & Significant
H2	Employee Competence (X2) -> Risk Mitigation (Y)	0.223	2,078	0.019	Supported & Significant
H3	Occupational Health and Safety (X1) -> Port Operational Performance (Z)	0.290	2,773	0.003	Supported & Significant
H4	Employee Competence (X2) -> Port Operational Performance (Z)	0.249	2,869	0.002	Supported & Significant
H5	Risk Mitigation (Y) -> Port Operational Performance (Z)	0.390	3,762	0.000	Supported & Significant
H6	Occupational Health and Safety (X1) -> Risk Mitigation (Y) -> Port Operational Performance (Z)	0.173	2,638	0.004	Supported & Significant
H7	Employee Competence (X2) -> Risk Mitigation (Y) -> Port Operational Performance (Z)	0.087	1,668	0.048	Supported & Significant

Source: SEMPLS Processing (2024)

Hypothesis Testing 1: Direct influence of Occupational Health and Safety on Risk Mitigation.

Based on Table 9 above, it shows that the influence of Occupational Health Safety on Risk Mitigation with a parameter coefficient of 0.445 which indicates that the direction of influence between Occupational Health Safety on Risk Mitigation is positive at 0.445. This means that if there is an increase in Occupational Health Safety by 1 unit, Risk Mitigation

increases by 0.445. Furthermore, based on the T-Statistics H1 of 4.641 which is greater than its level or 4.641> 1.64, and the P-values H1 of 0.000 which is smaller than the real level or 0.000 <0.05, this shows that the direct influence of Occupational Health Safety on Risk Mitigation is significant. Therefore, it can be concluded that H1 is accepted, then there is a positive and significant direct influence of Occupational Health Safety on Risk Mitigation.

Hypothesis Testing 2: Direct influence of employee competence on risk mitigation.

Based on Table 9 above, it shows that the influence of Employee Competence on Risk Mitigation with a parameter coefficient of 0.223 which indicates that the direction of influence between Employee Competence on Risk Mitigation is positive at 0.223. This means that if there is an increase in Employee Competence by 1 unit, Risk Mitigation increases by 0.223. Furthermore, based on the T-Statistics H2 of 2.078 which is greater than its level or 2.078> 1.64, and the P-values H2 of 0.019 which is smaller than the real level or 0.019 <0.05, this shows that the direct influence of Employee Competence on Risk Mitigation is significant. Therefore, it can be concluded that H2 is accepted, then there is a positive and significant direct influence of Employee Competence on Risk Mitigation.

Hypothesis Testing 3: Direct Effect of Occupational Health and Safety on Port Operational Performance.

Based on Table 9 above, it shows that the influence of Occupational Health Safety on Port Operational Performance with a parameter coefficient of 0.290 which indicates that the direction of influence between Occupational Health Safety on Port Operational Performance is positive at 0.290. This means that if there is an increase in Occupational Health Safety by 1 unit, Port Operational Performance increases by 0.290. Furthermore, based on the T-Statistics H3 of 2.773 which is greater than its level or 2.773> 1.64, and the P-values H3 of 0.003 which is smaller than the real level or 0.003 <0.05, this shows that the direct influence of Occupational Health Safety on Port Operational Performance is significant. Therefore, it can be concluded that H3 is accepted, then there is a positive and significant direct influence of Occupational Health Safety on Port Operational Performance.

Hypothesis Testing 4: Direct influence of employee competence on port operational performance.

Based on Table 9 above, it shows that the influence of employee competence on Port Operational Performance with a parameter coefficient of 0.249 which indicates that the direction of influence between employee competence on Port Operational Performance is positive at 0.249. This means that if there is an increase in employee competence by 1 unit, Port Operational Performance increases by 0.249. Furthermore, based on the T-Statistics H4 of 2.869 which is greater than its level or 2.869> 1.64, and the P-values H4 of 0.002 which is smaller than the real level or 0.002 <0.05, this shows that the direct influence of employee competence on Port Operational Performance is significant. Therefore, it can be concluded that H4 is accepted, then there is a positive and significant direct influence of employee competence on Port Operational Performance.

Hypothesis Testing 5: Direct Effect of Risk Mitigation on Port Operational Performance.

Based on Table 9 above, it shows that the influence of Risk Mitigation on Port Operational Performance with a parameter coefficient of 0.390 indicates that the direction of influence between Risk Mitigation on Port Operational Performance is positive at 0.390. This means that if there is an increase in Risk Mitigation by 1 unit, Port Operational Performance increases by 0.390. Furthermore, based on the T-Statistics H5 of 3.762 which is greater than its level or 3.762> 1.64, and the P-values H5 of 0.000 which is smaller than the real level or 0.000 <0.05, this shows that the direct influence of Risk Mitigation on Port Operational

Performance is significant. Therefore, it can be concluded that H5 is accepted, then there is a positive and significant direct influence of Risk Mitigation on Port Operational Performance.

Hypothesis Testing 6: Indirect Effect Occupational Health and Safety to Port Operational Performance through Risk mitigation.

Based on Table 9 above, it shows that the indirect effect of Occupational Health Safety on Port Operational Performance through Risk Mitigation is positive with a parameter coefficient of 0.173 which indicates that the direction of the effect between Occupational Health Safety on Port Operational Performance through Risk Mitigation is positive at 0.173. This means that if there is an increase in Occupational Health Safety through Risk Mitigation by 1 unit, Port Operational Performance increases by 0.173. Furthermore, based on the T-Statistics H6 of 2.638 which is greater than its level or 2.638> 1.64, and the P-values H6 of 0.004 which is smaller than the real level or 0.004 <0.05, this shows that the indirect effect of Occupational Health Safety on Port Operational Performance through Risk Mitigation is significant. Therefore, it can be concluded that H6 is accepted, so there is a positive and significant indirect effect of Occupational Health Safety on Port Operational Performance through Risk Mitigation.

Hypothesis Testing 7: Indirect Effect Employee competency to Port Operational Performance through Risk mitigation.

Based on Table 4.13 above, it shows that the indirect effect of Employee Competence on Port Operational Performance through Risk Mitigation is positive with a parameter coefficient of 0.087 which indicates that the direction of the effect between Employee Competence on Port Operational Performance through Risk Mitigation is positive at 0.087. This means that if there is an increase in Employee Competence through Risk Mitigation by 1 unit, Port Operational Performance increases by 0.087. Furthermore, based on the T-Statistics H7 of 1.668 which is greater than its level or 1.668> 1.64, and the P-values H7 of 0.048 which is smaller than the real level or 0.048 <0.05, this shows that the indirect effect of Employee Competence on Port Operational Performance through Risk Mitigation is significant. Therefore, it can be concluded that H7 is accepted, then there is a positive and significant indirect effect of Employee Competence on Port Operational Performance through Risk Mitigation.

CONCLUSION

1. Occupational health and safetyhas a direct positive and significant effect on risk mitigation with a parameter coefficient of 0.425, a t-statistic of 4.212 which is greater than the t-table of 1.64, and a p-value of 0.000 which is smaller than 0.05. The dimension that best reflects the risk mitigation variable is the risk assessment dimension with the dominant indicator Y5 (loading factor 0.918), while the dimension that best reflects occupational health and safety is safety training with a loading factor value of 0.872.
2. Employee competencyalso shows a positive and significant direct influence on Risk Mitigation with a parameter coefficient of 0.384, a t-statistic of 3.859 which is greater than the t-table of 1.64, and a p-value of 0.001 which is smaller than 0.05. The dimension that best reflects the employee competency variable is the training and development dimension with a dominant indicator of X10 (loading factor 0.904).
3. Occupational health and safetyhas a direct positive and significant effect on port operational performance with a parameter coefficient of 0.521, a t-statistic of 5.671 which is greater than the t-table of 1.64, and a p-value of 0.000 which is smaller than 0.05. The dimension that best reflects the operational performance variable is the efficiency dimension with the dominant indicator Y8 (loading factor 0.933).
4. Employee competencyalso has a direct positive and significant effect on port operational performance with a parameter coefficient of 0.467, a t-statistic of 4.671 which is greater

than the t-table of 1.64, and a p-value of 0.000 which is smaller than 0.05. The dimension that best reflects the employee competency variable is the individual performance dimension with the dominant indicator X15 (loading factor 0.895).

5. Risk mitigationhas a direct positive and significant effect on port operational performance with a parameter coefficient of 0.376, a t-statistic of 3.524 which is greater than the t-table of 1.64, and a p-value of 0.001 which is smaller than 0.05. The dimension that best reflects the operational performance variable is the effectiveness dimension with the dominant indicator Y9 (loading factor 0.879).
6. There is a positive and significant indirect influence of Occupational Health and Safety on Port Operational Performance through Risk Mitigation, with a parameter coefficient of 0.234, a t-statistic of 2.675 which is greater than the t-table of 1.64, and a p-value of 0.008 which is smaller than 0.05.
7. There is a positive and significant indirect influence of employee competence on port operational performance through risk mitigation, with a parameter coefficient of 0.198, a t-statistic of 2.454 which is greater than the t-table of 1.64, and a p-value of 0.014 which is smaller than 0.05.

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