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RESEARCH ARTICLE

FACTOR ANALYSIS OF SEAFARERS PERFORMANCE.

Rini Nurahaju¹ and Dessy Nur Utami².

Psychology Faculty, Universitas Hang Tuah, Jl Arif Rahman Hakim 150 Surabaya Indonesia.

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Abstract

Seafarers are someone whose sails on the sea. Onboard, seafarers are required to be able to carry out their duties and responsibilities to the fullest. Many factors can influence the performance of seafarers. This study aims to identify the relationship between work environment, work situation, type of work, workload, keep shift, position, company management, education, tenure, marital status, age, and competence factors with the seafarers performance. The subject of this study consisted of 69 Indonesian seafarers. Data analysis of the research was carried out by factor analysis statistical method. The results of the study showed that the variables related to seafarers' performance of these 12 variables could be summarized into 2 factors, namely: 1) job characteristics & performance support factors and 2) job demand & work readiness factors. Job characteristics & performance support factors include the type of work, company management, education, tenure, work environment, work situation, and marital status. Job demand & work readiness factors include keep shift, workload, competence, position and age variables.

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Introduction:-

The seafarers' profession is a phenomenon. Interesting to learn it. There are certain unique characteristics of seafarers that must be considered when studying the work environment psychologically on board. The work of seafarers and crew on board as a whole is different from the mainland workplace (Kristiansen, 2005 in Lang 2011). First of all physical conditions are important to consider. A ship is a moving workplace that has a large impact on working conditions. How the work environment, work situation, type of work, up to the workload can affect the performance of seafarers.

As a seafarer who has expertise related to higher education, it is certainly expected to have an effect on his performance. The higher the education, of course, the higher the knowledge gained from educational institutions. Not only knowledge but also technical skills or competencies. Likewise, along with his tenure, of course, the position held by the seafarers will increase. A long work period will bring more experience than a relatively short work period. The existence of a shipping company operational management also cannot be ignored in relation to Human Resources (HR). The extent to which the company paid attention to the seafarers.

Besides the work location that distinguishes the island and sea. Onboard is a 24-hour crew function (Kristiansen, 2005 in Lang 2011). Seafarers spend both work and vacation time at the company, and the type of relationship that develops in the crew is not the same as mainland employees. Since seafarers work in shifts, difficult working hours

Corresponding Author:-Rini Nurahaju.

Address:-Psychology Faculty, Universitas Hang Tuah, Jl Arif Rahman Hakim 150 Surabaya Indonesia.

and time pressure result in a lot of psychological stress. A decrease in crew numbers is another factor that contributes to fatigue (Bloor, Thomas, & Lane, 2000 in Lang 2011)). Reductions often occur for reasons of cost and result in assignments being added to the burden of existing officers. Such a decrease in the crew is associated with damage to sleep patterns and long working hours. A survey of union organizations, the International Transport Workers Federation, notes that 14% of seafarers work 12 hours a day or more (MORI 1996, in Bloor, et al., 2000 in Lang, 2011).

Other stress factors that are important for all groups are separation from home and lack of contact (Kristiansen, 2005). Factors such as concerns about families, especially those who are married, lack of support from home and lack of stability in home life are mentioned as contributors to stress on various types of ships. That is the unique function of the crew that must be considered when studying the factors that shape the work environment both psychologically and physically on board (Lang, 2011).

These factors are assumed to be related to how seafarers work and display their performance. The author takes the seafarers respondents at the Politeknik on the grounds of the variety of seafarers in that location. They have a complex final education from the high school level. Thus the last position they held onboard also varied. The long working period makes them experienced and will be able to provide fairly complete and accurate information about everything the writer wants to know.

Methods:-

This type of research is research with multivariate statistical techniques. This research involves many variables. Of the many variables most likely have something in common in what will be measured. Analysis that can help to find out which factors are really very close or similar or which is actually different is factor analysis. In other words, the selection of factor analysis as an analysis tool in this study is because this research tries to find the interrelationship of several variables that are independent of each other so that a set of variables can be made that are less than the number of initial variables, namely education, company management, work environment, type of work, work period/tenure, age, keep shifts, workload, work situation, position, marital status, competence.

The population in this study are Indonesian seafarers with the criteria of commercial shipping officers on board and are responsible for the duties assigned to them as officers; still active from various shipping companies; carry out his profession to work on ships (not on land); have a minimum service period of 1 year. The minimum sample size of 5 x the variables studied. If there are 12 variables, then the sample must be at least 5 x 12, 60 respondents. The sampling technique or procedure for selecting research subjects is accidental sampling, that is, the sample chosen is by taking accidentally from all populations that meet the characteristics of the study. This research was conducted on seafarers who happened to be on land, namely the Politeknik.

Data collection techniques used in this study were using an open questionnaire. The author asks the twelve variables whether or not they affect the performance of seafarers and their reasons.

The data that has been collected will be processed and analyzed using factor analysis using SPSS 20 computer programs. Furthermore, to be able to carry out a factor analysis, the basic requirements that must be met are the KMO Measure of Sampling Adequacy (MSA) figures must be above 0.5. Provisions or criteria so that data can be further analyzed are as follows:

1. If the probability (sig) <0.5 then the variable can be further analyzed.
2. If the probability (sig) > 0.5 then the variable cannot be analyzed further. (Sarwono, 2006).

The amount of the KMO Measure of Sampling Adequacy (MSA) is between 0 - 1. If used in determining the merging of variables, the conditions are as follows:

1. If MSA = 1, the variable can be predicted without error
2. If MSA > 0.5, then this variable can still be predicted and can be further analyzed
3. If the MSA is <0.5 then the variable cannot be predicted and cannot be further analyzed, so the variable must be excluded or dropped. (Sarwono, 2006).

To be able to do the SPSS factor analysis the basic requirements that must be met are the Measure of Sampling Adequacy (MSA) number must be greater than 0.50. After that, a series of stages is carried out to form a new factor.

Result:-

The results of the calculation of the characteristics of the respondents of 69 seafarers based on gender, age, marital status, last education, and tenure are as follows:

Table 1:-Distribution of Respondents

Characteristics	Category	Amount	Percentage
Gender	Man	62	89,9 %
	Woman	3	4,3 %
	No answer	4	5,8 %
Age	21-25 years old	4	5,8 %
	26-30 years old	7	10,1 %
	31-35 years old	20	29,0 %
	36-40 years old	10	14,5 %
	41-50 years old	12	17,4 %
	46-50 years old	8	11,6 %
	51-55 years old	6	8,7 %
	56-60 years old	2	2,9 %
Marital Status	Married	58	84,1 %
	Not Married	6	8,7 %
	No answer	5	7,2 %
Last Education	Senior high school	24	34,8 %
	Diploma	20	29,0 %
	Bachelor degree	17	24,6 %
	Master	6	8,7 %
	No answer	2	2,9 %
Tenure	1-5 years old	11	15,9 %
	6-10 years old	24	34,8 %
	11-15 years old	9	13,0 %
	16-20 years old	12	17,4 %
	21-25 years old	6	8,7 %
	26-30 years old	3	4,3 %
	31-35 years old	2	2,9 %
	No answer	2	2,9 %

The data that has been collected is processed and analyzed using inferential analysis, namely factor analysis. To be able to do a factor analysis, the basic requirements that must be met are the probability (sig) <0.5; and the KMO (Kaiser-Meyer-Olkin) Measure of Sampling Adequacy (MSA) number must be above 0.5. Based on the SPSS output, the KMO number is 0800. This shows that variables can be predicted and analysis can proceed.

The steps undertaken in data processing using factor analysis are as follows:

Paying attention to the KMO Table

Table 2:-KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,800
Bartlett's Test of Sphericity	Approx. Chi-Square	331,715
	df	66
	Sig.	,000

In the KMO and Bartlett's test table, the K-M-O Measure of Sampling Adequacy (MSA) figure is 0.800. Because the MSA number is above 0.5, the set of variables can be further processed. Then each variable is analyzed to find out which one can be further processed and which should be excluded. The same conclusion can also be seen in the KMO and Bartlett's test figures (shown by the Chi-Square figure) of 331,715 with a significance of 0,000.

Paying attention to the Anti Image Matrix Table

Table 3:-Anti Image Matrix Table

		educatio n	comp any mana geme nt	work envir onme nt	ty pe of wor k	te nu re	a ge	kee p sh ift s	wor kloa d	wor k situ atio n	posi tio n	ma rit al sta tus	comp etenc e
Anti- imag e Cova rianc e	educat ion	,321	-,181	,038	- ,1 3 7	,0 06	,0 8 7	,0 6 9	- ,073	,08 5	,03 8	- ,04 4	,044
	compa ny manag ement	- ,181	,205	-,062	,0 9 6	- ,0 99	- ,0 9 0	- ,0 0 4	,048	- ,05 3	- ,04 5	,00 6	-,062
	work envir onme nt	,038	-,062	,469	- ,1 6 9	- ,0 65	,0 1 5	,0 2 3	,002	,01 0	- ,15 8	,09 5	-,067
	type of work	- ,137	,096	-,169	,5 9 9	- ,0 24	- ,1 2 5	- ,0 2 5	,023	- ,12 8	- ,03 6	- ,05 3	-,012
	tenure	,006	-,099	-,065	- ,0 2 4	,3 34	,0 6 8	- ,0 9 3	,048	- ,11 0	- ,02 1	- ,10 0	-,011
	age	,087	-,090	,015	- ,1 2 5	,0 68	,7 9 9	,0 0 2	- ,029	- ,01 1	- ,03 7	- ,05 4	-,088
	keep shifts	,069	-,004	,023	- ,0 2 5	- ,0 93	,0 0 2	,5 0 0	- ,217	,03 8	- ,03 1	,00 2	-,117
	worklo ad	- ,073	,048	,002	,0 2 3	,0 48	- ,0 2 9	- ,2 1 7	,443	- ,12 0	- ,15 1	- ,03 8	-,109
	work situati on	,085	-,053	,010	- ,1 2 8	- ,1 10	- ,0 1 1	,0 3 8	- ,120	,55 0	- ,01 4	- ,12 4	,110
	positi on	,038	-,045	-,158	- ,0 3 6	- ,0 21	- ,0 3 7	- ,0 3 1	- ,151	- ,01 4	,50 2	,03 1	,055
	marit al status	- ,044	,006	,095	- ,0 5 3	- ,1 00	- ,0 5 4	,0 0 2	- ,038	- ,12 4	,03 1	,63 4	-,116
	comp	,044	-,062	-,067	-	-	-	-	-	,11	,05	-	,591

	etence				,012	,011	,018	,117	,109	0	5	,116	
Anti- image Corr elatio n	educat ion	,667 ^a	-,705	,098	-,311	,019	,177	,173	-,194	,202	,094	-,097	,100
	compa ny manag ement	-,705	,728 ^a	-,199	,274	-,379	-,165	-,848 ^a	,159	-,156	-,139	-,325	-,178
	work envir onme nt	,098	-,199	,848 ^a	-,318	-,165	-,848 ^a	-,318	,003	,019	-,325	,174	-,127
	type of work	-,311	,274	-,318	,779 ^a	-,054	-,180	-,318	,045	-,222	-,066	-,087	-,020
	tenure	,019	-,379	-,165	-,054	,868 ^a	,131	-,227	,125	-,258	-,052	-,216	-,024
	age	,172	-,223	,024	-,180	,131	,820 ^a	-,318	-,049	-,016	-,058	-,076	-,128
	keep shifts	,173	-,012	,048	-,046	-,027	,003	,796 ^a	-,460	,072	-,061	,003	-,216
	worklo ad	-,194	,159	,003	,045	,125	-,049	,762 ^a	,762 ^a	-,244	-,320	-,073	-,213
	work situati on	,202	-,156	,019	-,222	-,258	-,016	-,077	-,244	,823 ^a	-,027	-,211	,193
	positi on	,094	-,139	-,325	-,066	-,052	-,058	-,061	-,320	-,027	,872 ^a	,055	,100
	marit al status	-,097	,017	,174	-,087	-,216	-,073	-,036	-,073	-,211	,055	,870 ^a	-,190
	comp etenc e	,100	-,178	-,127	-,020	-,024	-,128	-,213	-,213	,193	,100	-,190	,845 ^a

a. Measures of Sampling Adequacy(MSA)

In the Anti Image Matrices table, especially at the bottom (Anti Image Correlation), a number of numbers forming diagonals, marked 'a', indicate the MSA magnitude of a variable. From the six factors analyzed, the criteria for MSA number above 0.5. This means that variables can still be predicted for further analysis

Paying attention to the Communalities Table

In the Communalities table of educational variables, the number 0.713 means that 71.3% of the variance of the educational variable can be explained by the factors formed. The shipping company management variable, the number 0.807 means 80.7% of the variance of the shipping company management variable can be explained by the factors formed. The work environment variable, the number 0.510 means 51% of the variance of the work environment variable can be explained by the factors formed. Variable type of work, the number 0.376 means 37.6% of the variance of the variable type of work can be explained by the factors formed. Variable of tenure, the number 0.708 means 70.8% of the variance of the variable of tenure can be explained by the factors formed. The age variable, the number 0.215 means that 21.5% of the variance of the age variable can be explained by the factors formed. The shift variable, the number 0.699 means 69.9% of the variance of the shift variable can be explained by the factors formed. The workload variable, the number 0.707 means 70.7% of the variance of the workload variable can be explained by the factors formed. Work situation variable, the number 0.418 means 41.8% of the variance of the work situation variable can be explained by the factors formed. The position variable, the number 0.512 means 51.2% of the variance from the job variable can be explained by the factor formed. The marital status variable, the number 0.348 means that 34.8% of the variance of the marital status variable can be explained by the factors formed. Competency variable, the number 0.470 means 47% of the variance of the competency variable can be explained by the factors formed.

All variables can be explained by the factors formed by the provision that the greater the communalities, the closer the relationship of the variables concerned with the factors formed.

Table 4:-Communalities

	Initial	Extraction
education	1,000	,713
company management	1,000	,807
work environment	1,000	,510
type of work	1,000	,376
tenure	1,000	,708
age	1,000	,215
keep shifts	1,000	,699
workload	1,000	,707
work situation	1,000	,418
position	1,000	,512
marital status	1,000	,348
competence	1,000	,470

Extraction Method: Principal Component Analysis.

Pay attention to the Total Variance Explained Table

Table 5:-Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5,025	41,873	41,873	5,025	41,873	41,873	3,543	29,527	29,527
2	1,459	12,155	54,028	1,459	12,155	54,028	2,940	24,501	54,028
3	,980	8,163	62,190						
4	,896	7,469	69,659						

5	,890	7,418	77,077						
6	,640	5,331	82,409						
7	,557	4,642	87,050						
8	,468	3,898	90,948						
9	,414	3,452	94,400						
10	,309	2,578	96,978						
11	,235	1,955	98,933						
12	,128	1,067	100,000						
Extraction Method: Principal Component Analysis.									

Paying attention to the Component Matrix Table

The Component Matrix table shows the distribution of the 12 variables on two factors. While the figures in the table are factor loadings or the correlation between variables with a factor of 1 or factor 2. As in the variable of the tenure, the correlation between the variables of tenure with a factor of 1 is 0.805 (strong enough), while the correlation of variables of the tenure with a factor of 2 is -0.246 (weak). Thus it can be said that the variable of tenure can be included as a component of factor 1. In the company's management variable, the correlation between the company's management variables with factor1 is 0.776 (strong enough), while the correlation of company management variables with factor 2 is -0.453 (weak). Thus it can be said that company management variables can be included as a component of factor 1.

Table 6:-Component Matrix^a

	Component	
	1	2
tenure	,805	-,246
company management	,776	-,453
work environment	,704	-,120
position	,695	,169
Work situation	,646	-,029
Workload	,638	,548
education	,611	-,583
Type of work	,605	-,099
competence	,605	,323
Marital status	,589	-,034
age	,427	,181
keep shifts	,582	,601
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		

In the work environment variable, the correlation between work environment variables with factor1 is 0.704, while the correlation of work environment variables with factor 2 is -0.120. Thus it can be said that work environment variables can be included as a component of factor 1. On the position variable, the correlation between the position variable and factor1 is 0.695 while the correlation variable position with factor 2 is 0.169. Thus it can be said that the position variable can be included as a component of factor 1. In the work situation variable, the correlation between work situation variables with factor1 is 0.646, while the correlation of work situation variables with factor 2 is -0.029. Thus it can be said that the work situation variable can be included as a component of factor 1. On the workload variable, the correlation between workload variables with factor1 is 0.638, while the correlation of workload variables with factor 2 is 0.548. Thus it can be said that the workload variable can be included as a component of factor 1. On education variables, the correlation between education variables with factor1 is 0.611, while the correlation of education variables with factor 2 is -0.583. Thus it can be said that the education variable can be included as a component of factor 1. In the type of work variable, the correlation between the variable type of work with a factor of 1 is 0.605, while the correlation of the type of work with a factor of 2 is -0.099. Thus it can be said that the type of work variable can be included as a component factor 1. On the competency variable, the correlation between the competency variable with factor1 is 0.605, while the correlation variable with factor 2 is 0.323. Thus it can be said that the competency variable can be included as a component of factor 1. For marital status variables, the correlation between marital status variables with factor 1 is 0.589, while the correlation between

marital status variables and factor 2 is -0.034. Thus it can be said that marital status variables can be included as a component of factor 1. On the age variable, the correlation between the age variable with a factor of 1 is 0.427, while the correlation of the age variable with a factor of 2 is 0.181. Thus it can be said that the age variable can be included as a component of factor 1. In the shift variable, the correlation between the shift variable with a factor 1 is 0.582, while the shift variable with a factor of 2 is 0.601. Thus it can be said that the shift variable can be included as a component of factor 2.

Pay attention to the Rotated Matrix Table

Table 7:-Rotated Component Matrix^a

	Component	
	1	2
company management	,885	,153
Education	,843	-,052
tenure	,774	,330
Work environment	,616	,362
Type of work	,527	,314
Work situation	,512	,394
Marital status	,473	,353
keep shifts	,057	,834
Work load	,135	,830
competence	,254	,636
Position	,422	,578
age	,210	,414
Extraction Method: Principal Component Analysis.		
Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

Even though the six variables factors have been formed, it is necessary to rotate to clarify which variables are included in each factor. Lots of loading factors change after experiencing rotation to be smaller or larger. In the factor table, the variables included in each factor are as follows: Factor 1 consists of the variables of company management, education, tenure, work environment, type of work, work situation and marital status. Whereas factor 2 consists of the shift variables, workload, competence, position, and age.

Paying attention to the Component Transformation Matrix Table

Table 8:-Component Transformation Matrix

Component	1	2
1	,765	,645
2	-,645	,765
Extraction Method: Principal Component Analysis.		
Rotation Method: Varimax with Kaiser Normalization.		

In the Component Transformation Matrix table it can be seen that the diagonal factor (component) 1 and 2 above the number 0.5 (0.765 and 0.645), it proves that the two factors (components) that are formed are right because they have high correlations. Thus Factor 1 and Factor 2 can be said to be appropriate to summarize the 12 independent variables.

After obtaining two factors which are the results of the reduction of 12 variables, the next step is to name both factors. For the case above, the first factor consisting of company management variables, education, tenure, work environment, type of work, work situation and marital status can be named work characteristics & performance support, while the second factor consists of shift variables, workload, competence, position, and age can be called demands & work readiness. This is obtained from the type of work variable which is categorized as work characteristics, while company management, education, tenure, work environment, work situation, and marital status are performance supporting variables.

For the second factor, it can be explained that the variables of guard shift, workload, position are included in work demands, while competency and age can be called work readiness.

Discussion:-

Based on the theory and the results of data mining carried out through open questionnaires and interviews, the respondents namely the seafarers have a variety of opinions about the factors that influence the performance of seafarers and their reasons. In more detail the discussion will be elaborated as follows:

Education

According to the results of an open questionnaire asked to seafarers, they argue that education also influences seafarers' performance because higher education can broaden their horizons and knowledge while honing their skills. Education can be the basis and provision for seafarers in carrying out their duties and responsibilities, so they can more easily make adjustments to the tasks onboard. Therefore, seafarers need special education for seafarers because the work on the ship is not enough to be completed on the basis and stock of experience alone, but also requires knowledge and skills gained in educational institutions, such as knowledge about maritime and ship characteristics. In addition, the company also has certain skill and skill standards that must be possessed by seafarers to be able to operate a ship.

Besides being able to hone skills, education can also shape one's mindset to be more advanced, mature, and wise in acting and speaking, especially in solving problems encountered while working on a ship. It is highly needed by the superiors who must lead the crew. Education can help superiors to be more confident in providing and delivering learning materials to the crew because he has more insight into maritime and shipping. In addition, certain diplomas or licenses are also a requirement if someone wants to occupy a strategic position on a ship.

The seafarers' opinions are in line with the statement made by Nurwahida (in Malisan, 2013) that the level of education has a relationship with a seafarer's understanding of ship safety. Therefore, seafarers must attend formal education in advance to be able to comply with the provisions of certain positions on the ship. With education and training, seafarers will gain understanding and skills regarding the application of maintenance systems and safety systems and procedures. Malisan (2013) explains that the purpose of attending education and training is to ensure that seafarers can carry out their duties effectively and efficiently. Skilled seafarers with the support of knowledge of systems and procedures for handling a good safety system, is a very valuable asset for shipping companies. Therefore, shipping companies should support the development of competent staff and seafarers.

On the other hand, some other seafarers argue that education does not affect the performance of seafarers, because seafarers' performance is more influenced by the willingness and tenacity of individuals in carrying out their duties and responsibilities. In addition, the seafarers did not only come from shipping schools.

Company Management

According to most seafarers, company management also influences seafarers' performance because good company management can meet all the needs of seafarers on board, so seafarers can carry out their duties and responsibilities on board properly.

Besides, good company management can also increase the morale of seafarers because they feel safe and prosperous at work. Thus, the purpose of shipping can be achieved effectively and efficiently.

On the other hand, company management can also be the basis for the rules and control of seafarers' performance on board. Good company management has detailed work rules and procedures. This can make it easier for seafarers to operate ships and cooperate with other seafarers because the rules and work procedures have been regulated by company management.

According to seafarers, the company's management in managing work regulations such as working hours, rest hours, training, salaries, and the ease of obtaining seafarers' certificates also greatly affect the performance and development of seafarers. The management of a growing company also requires seafarers to be able to adjust to existing developments. That way, the seafarers will always learn and this can also form a seafarers to become more character. For this reason, Malisan (2013) explained that companies need to hold regular meetings to solve safety management problems. Company support for safe vessel operational needs, environmental protection, and good

company management is needed to prevent ship accidents, so as not to harm the company concerned and the transport user itself.

On the other hand, some seafarers believe that the company's management does not affect the performance of seafarers because the company is more concerned with the interests of the company than the crew. Besides, there are employees in the company who are not from a marine background, so he does not know about the marine field.

Work environment

According to seafarers, the work environment can also affect seafarers' performance because work on a ship requires the cooperation of a work team. A conducive and harmonious work environment, as well as a comfortable work atmosphere, can cause a positive mood and cause seafarers to feel lighter, more energized, and more happy at work. That way, the work also becomes more optimal.

In addition, mutual understanding and mutual respect among fellow seafarers can also cause seafarers to feel at home and last a long time in the company. Furthermore, a healthy and supportive work environment can also add to the motivation of seafarers at work. In particular, a supportive and constructive work environment, such as a varied work environment between countries (India, Croatia, Japan, etc.) which causes seafarers to always learn from one another in order to improve their capabilities on board.

The work environment can create a binding working relationship between people in the environment. According to Ruky (2001) work environment has a significant influence on employee performance and the course of company operations. Thus, both directly and indirectly, the work environment can affect the level of company productivity. A good work environment can increase employee work productivity, and vice versa a bad work environment can result in decreased employee productivity.

However, not all seafarers think so. Some seafarers argue that the work environment does not affect the performance of seafarers as seafarers should have a firm and disciplined attitude without being influenced by the environment. In addition, companies look more at seafarers' skills, so that each seafarer only carries out his or her own duties.

Type of work

Job characteristics are job descriptions that serve as guidelines for work so that in their implementation job satisfaction can be achieved. Employee performance can be even better if superiors know the work of subordinates. This can be done by knowing the job characteristics that become tasks in the job and demanding responsibility.

According to seafarers, the type of work also influences seafarers' performance because each position has different duties and responsibilities, so seafarers will show performance in accordance with their duties and responsibilities. The type of work that is liked and in accordance with the skills/skills will make the seafarers become easier and more happy in living it. Thus, seafarers can also produce better performance.

However, there are still types of work that are not specified in accordance with the PMS (Plan Maintenance System) position. This can cause seafarers to dislike the type of work or not be competent to carry out the task. As a result, the seafarers can experience stress and work is not completed properly. Therefore, adaptability is needed so that seafarers can adjust to the type of work assigned.

In line with this, some seafarers argue that the type of work does not affect the performance of seafarers because seafarers should be prepared to work in every type of work. Seafarers should be able to be professional to carry out all types of work given on board with full responsibility in accordance with the agreed work contract/agreement. The type of work will not affect the performance of seafarers as long as the seafarers are able to do it diligently and obey the rules.

Tenure

According to seafarers, the tenure also influences seafarers' performance because the longer they work, the more knowledge and experience in various problem situations, so that seafarers can be more capable at work and performance increases. That way, seafarers can also be more knowledgeable in their field of work. In addition, tenure can also increase the confidence and maturity of seafarers in taking actions and policies at work. This can sharpen the spirit of seafarers' leadership and enlarge his opportunities to obtain promotion.

The seafarers' opinion is in line with Praptadi's findings (in Taurisa, 2012) that employees with longer tenure, tend to have a better mastery of work, so they have more effective behavior than employees with less or less tenure experienced. Long work periods can also form effective work patterns because various obstacles that arise will be able to be controlled based on his experience. That way, experienced employees will be able to complete their work properly. According to Pringadi (2008), an understanding of the tenure of employees is needed to improve the quality of HR.

However, there are some seafarers who do not agree with the statement. Some seafarers believe that work tenure does not affect seafarers' performance because tenure does not guarantee that someone can work competently, and vice versa. There are experienced seafarers who tend to underestimate because they feel they already understand and master the terrain. This is in line with the results of research by Nurahaju and Utami (2017) who found that there was no significant

Age

The Indonesian General Dictionary explains that age is the length of time of life or existing (since birth or held). Based on this, Graham and Dyne (2005) argue that older employees tend to have a greater sense of attachment or commitment to the organization than younger employees, so they are more loyal to the organization.

Most seafarers believe that age also influences seafarers' performance. They argue that the effective age to become seafarers is 21-50 years because productivity and performance can decrease with age which causes physical decline. The physical decline can cause energy, memory, and instinct to be reduced, movements become less nimble, decreased endurance, and susceptible to disease. In addition, seafarers who have entered old age also have difficulty in learning new ship technology.

According to seafarers, top management positions should be filled by seafarers whose age and experience are mature, while support level positions should be filled by young seafarers who are reliable and have strong personnel. In line with this opinion, Nitisemito (2000) states that younger employees tend to have a strong physique, so they are expected to work harder and in general they are not yet married or when they have relatively few children. Therefore, each seafarers is limited to his maximum age to be able to work onboard. Even so, the seafarers also considered that as a person ages, knowledge and experience also increases and causes the person to become more mature, more careful, emotionally regulated so that his performance is also better and able to work safely. It also can foster leadership to subordinates.

On the other hand, there are some seafarers who have different opinions. According to them, age does not affect the performance of seafarers because age is not a barrier to becoming a seafarer as long as the individual has adequate abilities and competencies. This is in line with the results of research by Nurahaju and Utami (2017) who found that age does not affect seafarers' performance because according to seafarers there are other factors that are more influential on their performance, namely the ability and competence in carrying out tasks. This is the reason why seafarers, both young and old enough, can produce good performance. According to seafarers, the morale and consistency of a person affect their performance more than their age.

Keep shifts

Literally, according to Random House Webster's College Dictionary, Shift is "a group of workers scheduled to work during such a period" ie a group of workers who work according to a schedule and for a certain period. Working hours are part of working conditions which are one indicator that affects employee job satisfaction (Munandar, 2001).

Likewise in the maritime field, seafarers believe that the division of shifts can affect the performance of seafarers because the division of shifts is related to stress levels which also affect performance. Short and regular division of guard shifts can reduce stress, so that performance is not disrupted. Conversely, an irregular and systematic division of shifts can lead to inefficient performance because seafarers need time to be able to adapt to new hours, especially the division of night shifts.

Working conditions in the division of the night shift are different from those of the morning shift who are accustomed to more fit and fresher body conditions. Distribution of night shifts that are too long can cause the seafarers to be less rested and exhausted. This can be bad for health, reduce concentration, and increase the risk of

unwanted accidents. Changing shifts can also affect the resting hours of seafarers. The seafarers stated that they needed adequate rest hours, so they could be fresher at work. According to the seafarers, comfort in working largely determines the quality of their performance. In addition, the division of guard shifts also needs to be rotated to reduce boredom. Related to the distribution of night shifts, Nathanael, et al (2006) explained that the consequences faced by seafarers who obtained night keep shifts were disruption of sleep patterns. The circadian rhythm will be disturbed when seafarers work at night. Seafarers' body conditions will change and try to adapt to new conditions. This can affect the ability of seafarers to adapt to the night shift.

Nathanael et al. (2006) found that seafarers' complaints that most affected performance and safety were fatigue, second was drowsiness, and third was boredom. If those three things are not handled properly, it will result in a ship accident. According to Nathanael et al. (2006), aspects of fatigue occur due to work schedules that are too long, where the effect can lead to errors, work accidents, and unsafe behavior.

However, according to some seafarers, they are familiar with the existing working conditions and the body can also adjust, so the division of shifts does not affect their performance. In addition, they also

Work Situation

The work situation in a company is one of the important things to consider. Although the work environment does not carry out the production process in a company, the work environment has a direct influence on the employees who carry out the production process.

So it is with the work situation on the ship. According to seafarers, the work situation influences seafarers' performance because their comfort in working is one of their consideration factors in working. Non-conductive work situations can become a burden and cause errors in decision making, decreased performance and lack of cohesiveness on the ship. In addition, the situation that is not conducive can also affect the attitude of the seafarers when interacting with guests when he is working on a cruise ship. If left untreated, non-conductive work situations can endanger life and ship safety. Therefore, it is necessary to create a work situation and harmony and mutual respect, so that comfort and enthusiasm can be created at work. In addition, disputes among seafarers also need to be reduced because their work environment is closed and isolated in the middle of the ocean. For this reason, good leadership is needed from superiors to be able to mediate disputes between crew members.

In addition to the relationship between seafarers, according to seafarers, work situations such as ship conditions, communication, and food provided during sailing also greatly affect the performance of seafarers. Sailing too long at sea can cause fatigue and boredom, especially when seafarers have to work the long route. Distant routes cause communication to be hampered due to lack of signal power in certain locations where the environment around them is the only sea. This can cause seafarers to feel isolated, stressed, more emotional, and become lazy to work. On the other hand, the distance that is too close also has a negative side which can cause the seafarers to restless.

In addition, working conditions that are vulnerable to hazards also affect seafarers' performance. Therefore, seafarers need to adapt to the work situation at hand. However, there are some seafarers who think that the work situation does not affect the performance of seafarers because by establishing cooperation all situations will be faced together.

Position

According to Moehyi (2005), the purpose of placement is to create the right person in the right position. Meanwhile, the position itself consists of a number of tasks and responsibilities. Placement is important, because if the organization does it right, then the organization will get employees who can carry out their duties properly and responsibly.

According to the seafarers, the position can affect the performance of seafarers because the high position will demand high performance as well. A high position will get high duties and responsibilities in accordance with the functions of each position. This causes the higher the position carried, the harder a person's efforts to work optimally in order to be an example for subordinates and affect them positively. Therefore, the position can also determine the mindset and attitude taken in the task.

On the other hand, some other seafarers have different opinions. They argue that the position does not affect the performance of seafarers because seafarers must be able to work professionally whatever their position. In addition, fellow seafarers must also respect and support each other's positions.

Marital status

There are not enough studies to draw conclusions about the impact of marriage on productivity. However, consistent research shows that employees who get married have fewer absences, have lower turnover, and are more satisfied with their work than bachelor coworkers.

According to seafarers, marital status also influences seafarers' performance because families can be motivated and support work, so the workload is reduced. By having dependents of his wife and children, seafarers become more focused and eager to work in order to earn a large salary and meet family needs. Seafarers are of the opinion that married people will be more responsible and more careful in protecting their good name and actions while working. Likewise with female seafarers who are married and have children.

On the other hand, marital status can also cause seafarers to become homesick because they are far from home, rarely meet family, and give rise to the feeling of being bored being seafarers. In addition, problems at home can also disturb the mind when working. Therefore, maritime mariners often prefer short contracts. From the company side also gives different rights and tolerances to seafarers who are married.

However, not all seafarers think so. Some seafarers argue that marital status does not affect seafarers' performance because of whatever marital status they have to be able to work professionally.

Competence

Nurahaju (2017) through her dissertation research states that competence is very important in the shipping world. In line with this statement, seafarers are of the opinion that competence contributes to seafarers' performance because competence adds expertise, skills/knowledge, knowledge, and understanding needed to produce good performance. By having sufficient competence, seafarers can more quickly and more easily adapt to their positions and duties on board.

In addition, competence can also increase opportunities to raise positions with fair competition. Especially when seafarers work with foreigners, competence is needed so that seafarers can compete and protect the good name of the Indonesian people in the eyes of the world. Therefore, some companies also use competency as one of the workplace regulatory standards and requirements in selecting personnel.

The selection of personnel is important for the company to consider. Widarbowo (in Malisan, 2013) found that human factors were the dominant cause of accidents, where 54.7% of the crew members of the cruise ship had inadequate competence and this had a positive effect on ship accidents. Ship crew who understand the duties and technical maintenance of the ship is needed by the shipping company because it has a positive impact on the condition of the prime and long-lived ship.

However, there are some seafarers who have different opinions. According to them, competence has no effect on seafarers' performance because it depends on one's intentions at work.

Based on the Relationship between Seafarers and the Company

According to seafarers, a good relationship between seafarers and companies affects the seafarers' performance because of the greater the support provided by the company, the easier and better the seafarers in completing their duties. The support provided can be a reciprocal relationship between seafarers and the company. Good trade-offs can form beneficial partnerships for both parties. Seafarers need salaries to make ends meet and companies need a competent workforce to run ship operations.

In addition, seafarers also need support from companies to resolve problems on board. Good communication (communication) between seafarers and the company can facilitate the operation of the ship and the resolution of problems on the ship. According to seafarers, a healthy or open company also influences seafarers' performance with its professional and fair policies for all parties. In addition, the company can also provide input and capacity building opportunities through training that can improve seafarers' performance. Companies need to pay attention to

the welfare of their employees so that they are more enthusiastic in carrying out their duties and producing better performance. Thus, the seafarers will become more solid, comfortable, and encouraged to maintain and improve the quality of work.

Some other seafarers think that the good relationship between seafarers and companies does not affect the performance of seafarers because there are already standard procedures that can be used as a reference in operations so that companies and seafarers simply refer to these procedures.

Based on Experience

In addition to relationships with companies, seafarers believe that experience also affects seafarers' performance, where skills are based on experience, which causes them to become more mature and reliable as experience and knowledge increase. The experience of sailing a sailor is also contained in a seaman's book which can add value to a sailor. Thus, the seafarer's confidence also increases in maintaining safety and solving problems on the ship. On the other hand, some other seafarers think that experience does not affect their performance as seafarers because sailing is a fun job for them and has become a profession that they aspire to, so they live it seriously.

Conclusion:-

The variables related to seafarers' performance with a total of 12 variables can be summarized into 2 factors, namely: 1) factors of work characteristics & performance support and 2) factors of demand & work readiness. Factors of work characteristics & performance support include job type, company management, education, tenure, work environment, work situation, and marital status. Factors demands & work readiness include guard shift variables, workload, competence, position, and age.

Seafarers' responses to factors related to their performance vary. The seafarers are of the opinion that the twelve factors namely tenure, management of the shipping company, work environment, position, work situation, workload, education, type of work, competence, marital status, age, and shift can be closely related or not related to performance.

Suggestion

For Shipping Company Agencies, the results of this study are expected to be the basis of rules or policies that can benefit both parties. For Seafarers, it can be used as input in improving the performance of seafarers, especially those related to the factors of tenure, service company management, work environment, position, work situation, workload, education, type of work, competence, marital status, age, and guard shift. Researchers, can add to the bibliography in the field of maritime psychology and can be used as a source of information for further research, especially research on factors that are closely related to seafarers' performance. For Educational Institutions, the results of the research are expected to be able to add references and develop insights and knowledge for other academic communities.

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