

## THE IMPACT OF MOTIVATION AND WORK SKILLS ON THE PERFORMANCE OF THE CREW ABOARD THE MV PEGASUS UNIX

Mohamad Arif Guntoro

Faculty of Economics and Business, [arifguntoro@gmail.com](mailto:arifguntoro@gmail.com), Muhammadiyah University of Technology, Jakarta

### ABSTRACT

*This study aims to assess the impact of motivation and work ability on the performance of crew members (ABK) aboard the MV Pegasus Unix. Optimal performance of ABK is crucial for the success of ship operations and safety at sea, given the unique challenges and demanding work environment. A quantitative approach is employed in this study using a survey method to collect data from the ship's crew. The hypotheses examined are: (1) The effect of motivation on ABK performance, (2) The effect of work ability on ABK performance, and (3) The combined effect of motivation and work ability on ABK performance. This research is descriptive and quantitative, utilizing questionnaires for data collection. Data analysis is conducted with SPSS, involving descriptive statistical tests, classical tests, multiple linear regression analysis, and hypothesis testing. The study population consists of 71 ABK members from the MV Pegasus Unix in Jakarta. The data analysis results indicate that, individually, both work motivation and work ability impact ABK performance on the MV Pegasus Unix. Additionally, the independent variables (work motivation and work ability) together influence the performance of the ABK on the ship.*

*Keywords: work motivation, work ability, performance, ABK*

### 1. INTRODUCTION

The performance of the crew on board the MV Pegasus Unix plays a very important role in the success of the ship's operations and safety at sea. In the unique and challenging operational context of the maritime industry, motivation and work ability are two key factors that can significantly affect the performance of the crew.

The working environment on ships often faces harsh conditions, ranging from limited space, dependence on weather, to isolation from family and community. These factors can affect crew motivation. Work motivation is the drive that drives individuals to work with passion and dedication. In the context of ships, this motivation often comes from a variety of sources, including financial rewards, recognition for achievement, opportunities for career development, and a sense of responsibility for the safety and operational success of the ship. However, motivation is not always easy to maintain. Challenges such as long distance from family, heavy workloads, and pressure to meet operational standards can reduce crew motivation. Therefore, understanding how motivation affects crew performance and how management strategies can help maintain their motivation is very important.

Work ability involves the technical skills, knowledge, and competencies required to perform duties on board. These abilities include a thorough understanding of the ship's systems, skills in handling emergency situations, and the ability to work in a team. High work ability enables crew to complete tasks efficiently, resolve problems quickly, and ensure the safety of ship operations. However, inadequate skills can lead to operational errors and reduced quality of work. Lack of appropriate training or inadequate skills development can hinder the ability of crew to perform their duties optimally. In the maritime environment, where mistakes can have serious consequences, it is important to ensure that crew have the required skills and that training and development is tailored to their needs.

Motivation and work ability function synergistically in influencing ABK performance. High motivation without adequate ability may not produce effective results, while high ability without motivation may lead to lack of initiative and dedication. Therefore, it is important to assess and manage both of these factors simultaneously to achieve optimal performance.

Research on motivation has been conducted by (Purwanti, 2019) on the Influence of Work Ethic and Motivation on Employee Performance at PT. Trakindo Utama Bandar Lampung. The results that motivation influential to performance employees at PT. Trakindo Utama Bandar Lampung. PT. Trakindo Utama Bandar Lampung. The better the motivation, the better the performance produced by the employee. Asnawi, (2020) conducted a study on

the influence of the work environment on employee performance with motivation as an intervening variable at PT. Pratama Abadi Industri Sukabumi (Study on Quality Control Division). The results of the research is that motivation influential to employees . Employees who have motivation tall will impact on performance company . In addition to motivation , there are ability Work employees who influence performance employee as has been done research by (Santoso, 2021) with title Influence Ability Work, And Motivation Work On Employee Performance in the Office Regional II Palembang Housing Complex (2019). The results is that ability employee influence performance employees. Ability high employee capable overcome problems that exist in the company.

ABK often face challenge in guard motivation Because environment hard work , distance from family , and pressure high job . Understand How factors motivation influence performance they can help in design a better strategy Good For maintain motivation . Ability work that is not adequate can result in error operational and decline quality work . Training and development that is not in accordance or No adequate can influence performance in a way overall .. Research This aiming For analyze influence motivation work and ability Work to Performance of the MV Pegasus Unix Crew. Identified problems covering the need improvement motivation and ability work , communication and coordination between ABK, discipline work , culture work , and utilization means infrastructure . Research This will limit focus on influence motivation and ability Work to ABK performance .

## 2. LITERATURE REVIEW

### 2.1. Literature review

#### 2.1.1. Motivation

Motivation is the triggering impulse somebody For do action (Lestary & Harmon, 2017) . Surya & Suryoko, (2015) define motivation as stimulation For do action . consider motivation as implications from results considerations that have been studied . Terry stated that motivation is desire in self the individual who drives it For act . (Supriatiningsih, 2020) consider motivation as internal drive that comes from from needs and desires individual , motivation involving encouragement from factor external stimulating somebody For Work with full spirit . Effective motivation, both internal and external, is essential to improving discipline and performance. Understanding and utilizing both types of motivation can help a person achieve optimal results at work.

#### 2.1.2. Ability Work

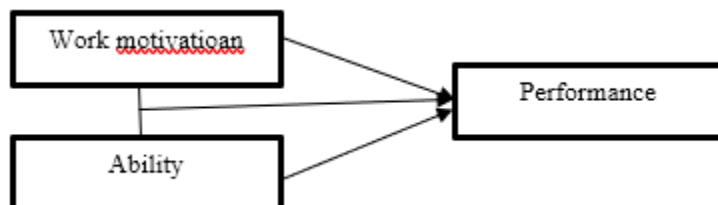
Work ability refers to an individual's capacity to perform tasks in a particular job. According to Santoso, (2021) work ability is a person's capacity to perform various tasks, while Dwi Budiyatno et al., (2022) defines work ability as a person's potential to complete tasks or jobs. Work ability includes intelligence and skills, as well as physical and mental abilities that affect employee performance. This inability can have a negative impact on performance (Nurmega, 2022) . (Sabaruddin, 2022) defines ability as a condition that shows maturity related to knowledge and skills acquired through education and training. Ability includes knowledge, expertise, and attitudes that must be consistent with performance standards, including intelligence and manual skills, which reflect a person's potential strengths.

#### 2.1.3. Performance

ABK performance is element crucial in operation the ship that influences safety , efficiency and success operational . Factors such as motivation, work ability, working conditions, and leadership play a significant role in determining how well crew perform their duties. With a thorough understanding of these elements and effective management, shipping companies can improve crew performance and achieve optimal operational results.

## 2.2. Framework Thinking

Figure: Framework



**2.3. Hypothesis Study**

1. The Influence of Motivation on ABK Performance
  - Hypothesis (H01): There is no influence motivation to ABK performance on the MV Pegasus Unix Ship.
  - Hypothesis Alternative (Ha1): There is influence motivation to ABK performance on the MV Pegasus Unix Ship.
2. The Influence of Work Ability on ABK Performance
  - Null Hypothesis (H02): There is no influence of work ability on crew performance on the MV Pegasus Unix Ship.
  - Alternative Hypothesis (Ha2): There is an influence of work ability on ABK performance on the MV Pegasus Unix Ship.
3. The Influence of Motivation and Working Ability Together on ABK Performance
  - Null Hypothesis (H03): There is no influence of motivation and work ability simultaneously on the performance of ABK on the MV Pegasus Unix Ship.
  - Alternative Hypothesis (Ha3): There is a simultaneous influence of motivation and work ability on the performance of ABK on the MV Pegasus Unix Ship.

**3. RESEARCH METHODOLOGY**

Types of research This is quantitative descriptive , with use questionnaire . Data processing using SPSS. Data testing with descriptive statistical tests , classical tests , multiple linear regression tests and hypothesis tests . Researchers set population in study This is a Subordinate The MV Pegasus Unix Jakarta ship has 71 people on board.

**4. ANALYSIS RESULTS AND DISCUSSION**

**4.1. Data analysis**

**4.1.1. Normality**

**Table 4.41 Normality Test**

| Variables      | KS Count | Asymp. Sig. | Information |
|----------------|----------|-------------|-------------|
| X <sub>1</sub> | 0.923    | 0.362       | Normal      |
| X <sub>2</sub> | 0.766    | 0.600       | Normal      |
| Y              | 1,104    | 0.174       | Normal      |

Source: Processed primary data (2024)

Normality test results show asymp. Sig. Kolmogorov-Smirnov on variables motivation Work of 0.362, the ability Work of 0.600 and performance employee of 0.174. From the results the show mark significance or probability more big from level significant 0.05, which means third variable normally distributed .

**4.1.2. Multicollinearity Test**

**Table 4.42 Multicollinearity Test**

| Variables      | Tolerance | VIF   | Information                   |
|----------------|-----------|-------|-------------------------------|
| X <sub>1</sub> | 0.880     | 1,136 | There is no multicollinearity |
| X <sub>2</sub> | 0.880     | 1,136 | There is no multicollinearity |

Source : Processed primary data (2024)

Absence Multicollinearity can seen in the Tolerance Value or Variance Inflation Factor (VIF). Table 4.42 above shows that the VIF value of the variable is less than 10. Thus, in the regression model used, there is no multicollinearity.

**4.1.3. Homoscedasticity Test**

**Table 4.43 Results of Homoscedasticity Test**

| Variables              | t count | Sig. t |
|------------------------|---------|--------|
| Rank of X <sub>1</sub> | -1,861  | 0.071  |
| Rank of X <sub>2</sub> | 0.052   | 0.959  |

Source: Processed primary data (2024)

The sig. t value is calculated above level 0.05, so that can known that the regression model in study This No there is heteroscedasticity or fulfilled assumption homoscedasticity. equation the regression is as following :

**4.1.4. Analysis Multiple Linear Regression**

$$Y = a + b_1 X_1 + b_2 X_2$$

Information :

- Y = Employee performance
- a = Constant (intercept)
- X<sub>1</sub> = Motivation Work
- X<sub>2</sub> = Ability Work
- b<sub>1</sub> b<sub>2</sub> = Regression coefficients X<sub>1</sub>, X<sub>2</sub>

**Table 4.44 Analysis Results Regression Multiple**

| Variables                         | Coefficient Regression | Standard Error | t count | Sig. (2-tailed) |
|-----------------------------------|------------------------|----------------|---------|-----------------|
| Work Motivation (X <sub>2</sub> ) | 0.496                  | 0.133          | 3,735   | 0.001**         |
| Work Ability(X <sub>3</sub> )     | 0.623                  | 0.187          | 3,328   | 0.002**         |
| Constants                         | -8,522                 |                |         |                 |
| R                                 | 0.713                  |                |         |                 |
| Square                            | 0.508                  |                |         |                 |
| F                                 | 19,104                 |                |         |                 |
| Sig, F(p)                         | 0.000**                |                |         |                 |
| ** sig. at $\alpha = 0.05$        |                        |                |         |                 |

Source: Processed primary data (2024)

Based on results calculation analysis regression multiple so equality multiple linear regression is as following:

$$Y = a + b_1 X_1 + b_2 X_2$$

$$Y = -8.522 + 0.496 X_1 + 0.623 X_2$$

In the equation the shown influence variable independent (X) of variable dependent (Y). The meaning of coefficient regression the is as following:

- a. Constant = -8.522  
It means if motivation work and ability Work assumed No There is so performance employee will down of 8,522.
- b. Coefficient regression (b<sub>1</sub>) = 0.496  
It means if motivation Work more okay then will happen increase performance employees amounting to 0.496 units , with assumption other variables remain constant . The value of b<sub>1</sub> is marked positive , so that if motivation Work more Good cause increasing performance employees and vice versa .
- c. Coefficient regression (b<sub>2</sub>) = 0.623  
It means if ability Work more okay then performance employee increase amounting to 0.623 units with assumption other variables remain constant . The value of b<sub>2</sub> is marked positive , so that if ability Work more Good cause increasing performance employees and vice versa .

**4.1.5. Testing Hypothesis**

**4.1.5.1. Testing Variables Free In general Partial (t-test)**

- a. Determine hypothesis  
 $H_0 : b_i = 0$ , meaning in a way partial No There is significant influence from variable variable independent (motivation) work , Ability work) against variable bound (performance employee)  
 $H_1 : b_i \neq 0$ , meaning in a way partial There is significant influence from variable variable independent (motivation) work, Ability work against variable bound (performance employee)
- b. With use level significant ( $\alpha$ ) = 0.05 and df (degree of freedom) =  $n - k - 1$  (df = 37) obtained t table value of 2,026
- c. Criteria testing  
 If t count > t table or -t count < -t table then  $H_0$  is rejected and  $H_a$  is accepted, meaning individually there is significant influence variable free to variable No free.  
 If t count < t table or -t count > -t table then  $H_0$  is accepted and  $H_a$  is rejected, meaning that individually there is no significant influence of the independent variable on the dependent variable.

#### 4.1.5.2. Testing Variables Motivation Work

Criteria Hypothesis proposed:

- a.  $H_0: b_1 = 0$  means there is no partial influence of the work motivation variable on the employee performance variable.
- b.  $H_a: b_1 < 0$  means that there is a partial influence of the work motivation variable on the employee performance variable.

Based on the calculation results, the calculated t value (3.735) > t table (2.026) is obtained so that the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted. By rejecting  $H_0$ , it means that work motivation has a significant effect on employee performance, so that if work motivation improves, employee performance on the MV Pegasus Unix Ship will increase.

#### 4.1.5.3. Testing Variables Ability Work

Criteria Hypothesis proposed:

- a.  $H_0 : b_2 = 0$  means No There is influence in a way partial variable ability Work to variable performance employee
- b.  $H_a : b_2 < 0$  means There is influence in a way partial variable ability Work to variable performance employee

Based on results calculation obtained t - value (3.328) > t - table (2.026) so that hypothesis zero ( $H_0$ ) is rejected and the hypothesis alternative ( $H_a$ ) is accepted. With  $H_a$ 's rejection means ability Work influential significant to performance employees, so that if ability Work the more Good so level performance employees on the MV Pegasus Unix Ship will experience increase.

#### 4.1.5.4. F Test

- a. Determine hypothesis  
 $H_0 : b_1 = b_2 = 0$ , meaning in a way simultaneously No There is significant influence from variables independent ( motivation) work, ability work against variable bound (performance employee)  
 $H_a : b_1 < b_2 < 0$ , meaning in a way simultaneously There is significant influence from variables independent (motivation) work, ability work against variable bound (performance employee)
- b. With use level significance ( $\alpha$ ) = 0.05 ; degrees freedom (dk) =  $(nk-1) = 37$  is obtained F table value = 3.252
- c. Criteria testing  
 $H_0$  accepted if F count < 3.252  $H_0$  is rejected if F count > 3.252
- d. Test results obtained F -value count = 19.104 with sig. F = 0.00
- e. Conclusion

Based on results testing so can known that F value count performance employee more big from the F table (3.252) so that  $H_0$  is rejected and  $H_a$  is accepted which means in a way simultaneously There is significant influence from variable free ( motivation) work, ability work against variable bound (performance employee).

## 4.2. Discussion

### 4.2.1. Influence of Work Motivation:

Based on the results of the data analysis above, the partial test shows that work motivation has an effect on employee performance. Motivated crew members tend to work harder and more efficiently. They are more likely to complete tasks on time and with better quality. High motivation helps crew members to comply with important

safety procedures and regulations on board, thereby reducing the risk of accidents and increasing safety. Good work motivation can increase crew job satisfaction, which in turn reduces turnover and increases loyalty to the company. Motivated crew members are often more proactive in improving their skills and seeking opportunities for professional development, which has a positive impact on overall performance. High work motivation is positively related to increased employee performance. This is in accordance with the results of research from (Santoso, 2021), (Surya & Suryoko, 2015), (Purwanti, 2019).

#### **4.2.2. Influence Ability Work:**

Analysis results stated that ability Work influential significant to performance employees on the MV Pegasus Unix Ship. ABK who have ability good job will Work more efficient. They can finish task with fast and accurate, reducing possibility errors, and improve productivity. Ability high work ensure that ABK can follow procedure safety with true. This is especially important on ships, where safety is priority main. skilled crew can identify and address potential danger with more effective. Skills adequate technical and knowledge increase quality jobs. ABK who are capable Good will produce quality results height, from maintenance equipment until management operational. Ability For face and resolve problem with fast and effective is part important from ability work. skilled crew can overcome situation emergency or problem technical without postpone work, reduce disturbance operational. Interpersonal and work skills the same also includes in ability work. ABK who are capable Work The same with Good in team will support environment harmonious and efficient work. Effective communication between member crew can repair coordination and minimization conflict. Research results This in line with (F. Pasalbessy, 2022), (Sari & Yuniningsih, 2022)

#### **4.2.3. Connection Motivation and Ability**

Analysis results state that in a way simultaneously independent variables (work motivation and work ability) affect employee performance. Motivation and work ability play an important and complementary role in determining the performance of ABK on the MV Pegasus Unix ship. The combination of the two can produce high performance, good productivity, and compliance with procedures. Therefore, it is important to manage and improve both of these aspects simultaneously to achieve optimal work results and improve the overall operational efficiency of the ship. The results of the study are supported by (Fitrah, 2022), (Wuwungan et al., 2020), (F. Pasalbessy, 2022)

## **5. CONCLUSION AND SUGGESTIONS**

### **5.1. Conclusion**

Based on the results of the data analysis above, partial tests for work motivation and work ability affect employee performance on the MV Pegasus Unix Ship. Simultaneously, independent variables (work motivation and work ability) affect employee performance on the MV Pegasus Unix Ship.

### **5.2. Research Limitations**

This study has several limitations that need to be considered. First, although there was a significant influence of work motivation and work ability on employee performance on the MV Pegasus Unix Ship both individually and simultaneously, external factors such as economic conditions, company policies, and individual psychological factors that were not measured in the study could affect the relationship. Second, the generalization of the results of this study must be done with caution because the study was only conducted on one ship, namely the MV Pegasus Unix, so that differences in organizational contexts or other industrial sectors may produce different findings. In addition, the unique characteristics of this ship, such as organizational structure and company culture, may affect the results of the study. Third, the data collection methods and statistical analysis used need to be further evaluated to ensure their reliability and validity. Although providing valuable insights, further research with a wider sample and a variety of organizational contexts can provide a deeper understanding of the relationship between work motivation, work ability, and employee performance in general.

This study has limitations in terms of data analysis, where there were 2 questionnaires that were not filled in completely and could not be processed, so this could affect the strength of the research results.

### **5.3. Suggestion**

- a. **Workload Management:** The findings indicate that the current workload assigned to employees is perceived as reasonable but still causes some doubt among respondents. It is recommended that

management reassess the workload distribution, including optimizing overtime schedules, considering employees' abilities and physical conditions, aligning job roles with employees' expertise, and fairly distributing tasks among competent employees.

- b. **Speeding Up Work Processes:** Respondents showed indecisiveness regarding new methods to expedite work. To address this, it is suggested that the company invests in training and skill development for employees, particularly in operational machinery, to enhance efficiency and accelerate task completion.
- c. **Performance Alignment with Targets:** There is also uncertainty among respondents about the alignment of performance with set targets. To improve work results and meet targets, it is crucial to implement continuous or regular performance evaluations. This will help identify any performance declines and facilitate corrective actions. Enhancing interaction and communication between employees and leadership can foster cooperation and create a conducive work environment that supports comfort and productivity.
- d. **Future Research Recommendations:** To further optimize the results of this study, future research should incorporate additional relevant variables and offer a more in-depth analysis. For instance, differentiating performance levels across various departments or work units could provide valuable insights. Additionally, combining questionnaires with direct interviews may improve the accuracy and quality of the data collected.

## REFERENCES

- [1] Audi Surya K, Sri Suryoko, S. L. (2015). Pengaruh kompensasi dan motivasi terhadap prestasi kerja karyawan PT Bank Sahabat Purba dan Arta Kantor Pusat Semarang. *Pengaruh Kompensasi Dan Motivasi Terhadap Prestasi Kerja Karyawan PT Bank Sahabat Purba Dan Arta Kantor Pusat Semarang*, 4(3), 57–56. <http://marefateadyan.nashriyat.ir/node/150>
- [2] Dwi Budiayatno, Subijanto, & Woro Utari. (2022). Pengaruh Kemampuan Kerja Terhadap Kinerja Pegawai Pada Kantor Kecamatan Sampang Kabupaten Sampang Yang Dimediasi Oleh Motivasi. *EKONOMIKA45: Jurnal Ilmiah Manajemen, Ekonomi Bisnis, Kewirausahaan*, 9(2), 36–48. <https://doi.org/10.30640/ekonomika45.v9i2.207>
- [3] F. Pasalbessy, V. (2022). Pengaruh Kemampuan Kerja Dan Motivasi Kerja Terhadap Kinerja Aparatur Sipil Negara Pada Kantor Badan Kependudukan Dan Keluarga Berencana Nasional Provinsi Papua. *Jurnal Ekonomi Dan Bisnis*, 14(2), 73–78. <https://doi.org/10.55049/jeb.v14i2.122>
- [4] Fitrah, F. (2022). Pengaruh Kemampuan Kerja Dan Motivasi Kerja Terhadap Kinerja Karyawan Pada Pt. Equiport Inti Indonesia. *Jurnal Manajemen*, 1(2), 76. <https://doi.org/10.26858/jm.v1i2.27693>
- [5] Kiki Asnawi. (2020). PENGARUH LINGKUNGAN KERJA TERHADAP KINERJA KARYAWAN DENGAN MOTIVASI SEBAGAI VARIABEL INTERVENING PADA PT. PRATAMA ABADI INDUSTRI SUKABUMI (Studi Pada Divisi Quality Control). *Jurnal STIE Pasmu Sukabumi*, 7(4), 1–17.
- [6] Lestary, L., & Harmon. (2017). Pengaruh Lingkungan Kerja Terhadap Kinerja Karyawan Divisi Detail Part Manufacturing Direktorat Produksi PT Dirgantara Indonesia (Persero). *Riset Bisnis & Investasi*, 3(2), 94–103.
- [7] Nurmega, N. (2022). Pengaruh Pengalaman Dan Kemampuan Kerja Terhadap Kinerja Karyawan Di Balai Latihan Dan Pemberdayaan Masyarakat Desa Daerah Tertinggal Dan Transmigrasi Makassar. *Jurnal Online Manajemen ELPEI*, 2(2), 357–367. <https://doi.org/10.58191/jomel.v2i2.87>
- [8] Purwanti, I. P. (2019). Pengaruh Etos Kerja Dan Motivasi Terhadap Kinerja Karyawan Di PT. Trakindo Utama Bandar Lampung. *Journal of Chemical Information and Modeling*, 53(9), 3.
- [9] Sabaruddin, S. (2022). Kemampuan Fraud Diamond Mendeteksi Kecurangan Pelaporan Keuangan Dimoderasi Ukuran Perusahaan. *Jurnal Akuntansi Dan Governance*, 2(2), 130. <https://doi.org/10.24853/jago.2.2.130-140>
- [10] Santoso, I. (2021). PENGARUH KEMAMPUAN KERJA, DAN MOTIVASI KERJA TERHADAP KINERJA PEGAWAI pada kantor Perumnas Regional II Palembang ( 2019). *Aliansi: Jurnal Manajemen Dan Bisnis*, 16(1), 51–64. <https://doi.org/10.46975/aliansi.v16i1.85>
- [11] Sari, S. A., & Yuniningsih, T. (2022). Pengaruh kemampuan kerja dan motivasi kerja terhadap kinerja pegawai di badan kesatuan bangsa dan politik kota semarang. *Jurnal Akuntansi UNDIP*, 5(3).
- [12] Supriatiningsih, H. darwis. (2020). *The Effect Of Learning , Motivation And Personality On Taxpayers In Implementation Self Assesment System*. 8(12), 62–70.
- [13] Wuwungan, M. B. A., Nelwan, O. S., & Uhing, Y. (2020). Pengaruh Kemampuan Kerja Dan Motivasi Kerja Terhadap Kinerja Karyawan. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 8(1), 75–84