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Management Onboard training on student job readiness

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ABSTRACT

Education is an effort to develop the ability of human resources. Developing education related to management onboard training can improve science and technology, especially maritime education in Indonesia. Facing these challenges, arranging management onboard training and relevance to work needs is necessary. So it is required to have onboard training management that regulates the onboard training system to prepare students to enter the world of work. Maritime education is expected to provide provisions so graduates can work and adjust to the increasingly advanced naval industry. It can be a skilled workforce and have the ability to maintain, operate, and perform equipment on board. Onboard training is expected to improve students' ability to recognize the environment, working atmosphere, management, organizational structure, workplace and environmental maintenance, work safety, and work attitude based on expertise. In addition, onboard training also provides opportunities for students to explore skills and provide real work experience. Cultivating a professional attitude, broadening the horizons of the world of work, to providing opportunities to promote themselves in the world of work. Experience is one of the factors that determine work participation. The experience students gain while attending onboard training is needed to improve mastery of knowledge and performance following their field of work obtained through education and training. In this study, SPSS was used to test and analyze. The classical assumption test is the normality, linearity, and homogeneity test. A single regression analysis technique is used to determine whether there is an influence between onboard training and job readiness. that On board training has a natural effect on student job readiness. The higher the quality of Onboard training carried out by students, the higher the level of work readiness. Onboard training affects student job readiness by 45.6%, meaning that changes in job readiness by 54.4% are due to the onboard activity carried out.

1. Introduction.

Indonesia focuses on being a country in the industrial sector (Nur, 2022). To achieve this goal, reliable, skilled, intelligent, professional and responsible work attitudes are needed. Various efforts are made, including improving the quality of education with management onboard training (Morrissey & Sylvia, 2004).

Education is an effort to develop the ability of human resources (Fahyuni et al., 2020). Education is an effort to educate the quality of a nation's human resources (Singh Malik, 2018). Developing education related to management onboard training can improve science and technology (Vidan et al., 2019), especially maritime education in Indonesia. Facing these challenges, arranging management onboard training and relevance to work needs is necessary (Khan & Yairi, 2018). So it is required to have onboard training management that regulates the onboard training system to prepare students to enter the world of work (Emad & Roth, 2008).

Among the problems of maritime education is onboard training. Maritime education is expected to provide provisions so graduates can work and adjust to the increasingly advanced naval industry (Guest et al., 2015). It can be a skilled workforce and have the ability to maintain, operate, and perform equipment on board.

Improving Indonesia's Human Resources through educa-

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tion is the best solution to meet these demands (Alabdali et al., 2023). Education outside of school in maritime education requires onboard training as a complementary element (Nikitakos et al., 2017).

The purpose of maritime education is to equip students to have the ability to work on ships, have job readiness and be able to work according to their competence (Emad & Roth, 2008). Politeknik Ilmu Pelayaran Semarang is one of the maritime education institutions that produce skilled personnel in shipping. One of the skills provided during learning is onboard training activities.

When students are in semesters 5 and 6, they are required to attend onboard training in the maritime industry. The skills students acquire during onboard training indirectly prepare them for the world of work. In addition, after disembarking the ship, they are mentored and tested as an entry requirement to semester 7. Through these onboard training activities, students are expected to have job readiness so that after graduation, they can go directly into the world of work.

2. Materials and Methods.

2.1. Onboard training.

Vocational school is a formal education that produces workers who have certain skills and expertise in specific fields (Eraut, 2000). Onboard training prepares students to understand the duties and responsibilities of marine transportation personnel, work on ships, have an independent spirit, understand work on boats, apply the learning results obtained in school, and develop and align themselves according to the shipping industry (C. Contantinou, 2012).

Onboard training is an effort to bring the world of education closer and harmonize with the industrial world (Horck, 2004). This pattern of education is expected to provide opportunities to adapt and learn to be ready to work after graduation (Rapanta et al., 2020).

Onboard training is expected to improve students' ability to recognize the environment, working atmosphere, management, organizational structure, workplace and environmental maintenance, work safety, and work attitude based on expertise. In addition, onboard training also provides opportunities for students to explore skills and provide real work experience. Cultivating a professional attitude, broadening the horizons of the world of work, to providing opportunities to promote themselves in the world of work.

2.2. Material Technology.

Formal education is carried out in preparation for entering the world of work. Work readiness is a process of maturity to be ready to work (Fataron & Sijabat, 2019). Work readiness is influenced by maturity, experience, mental and emotional state, knowledge, skills, habits, attitudes and behaviours. A person's job readiness can be shaped, learned and developed through formal or informal learning experiences. Achieving good work readiness requires a good work attitude and mental readiness. It requires the emotional maturity of someone who will work, interest in work, motivation to work and a positive attitude towards a job.

An individual's social maturity can be influenced by age or physical condition. A person is ready to work after adulthood after experiencing primary changes (body shape) and secondary (social functions in society or the environment) (William G. Huitt Courtney Dawson, 2011).

A person's maturity can be seen from their appearance, behaviour, and feelings as adults in society. At this age, a person experiences an adventurous, creative, romantic life and pays excellent attention to common interests in the community.

Experience is one of the factors that determine work participation (Harun et al., 2022). The experience students gain while attending onboard training is needed to improve mastery of knowledge and performance following their field of work obtained through education and training.

3. Methodology.

The population in this study was all students of the Politeknik Ilmu Pelayaran Semarang. At the same time, the sample taken was only 81 students using the cluster random sampling method. The independent variable in this study was onboard training (X). The dependent variable of this study is student job readiness (Y). The research instrument used is a questionnaire in the form of written questions to obtain information from respondents (Coleman et al., 2022). This questionnaire method will get data on onboard training and job readiness of Politeknik Ilmu Pelayaran Semarang students.

The documentation method in this study was used to obtain data on student names and scores of results onboard training students of the Politeknik Ilmu Pelayaran Semarang (Ozdowska et al., 2021). The instrument's validity uses the product moment correlation formula with an error rate of 5%. If the calculated rxy price is more significant than the r table, it is said that the question item or instrument is valid (Smith, 2007).

The results of the questionnaire validity analysis, after being tested on 30 students, found that all scores were valid. The alpha formula was used to test the reliability of measuring instruments in this study.

In this study, SPSS was used to test and analyze (Senmar et al., 2023). The classical assumption test is the normality, linearity, and homogeneity test. A single regression analysis technique is used to determine whether there is an influence between onboard training and job readiness.

4. Results and Discussion.

4.1. Research Results.

Onboard training is integral to teaching and learning activities in maritime schools. Onboard training is a student learning activity on a boat. The implementation of onboard training, according to the perception of most Politeknik Ilmu Pelayaran Semarang students, is exemplary.

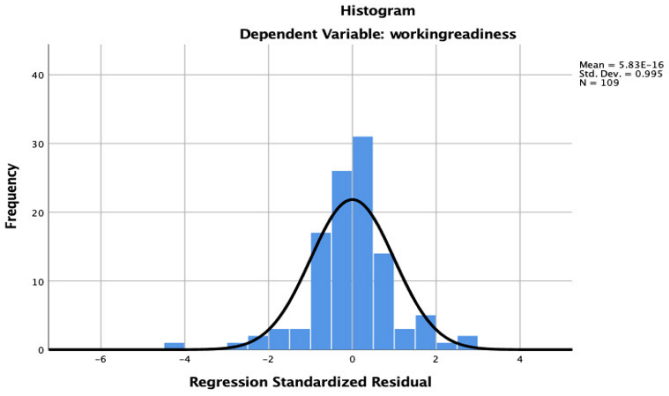
4.2. The Effect of On-Board Training on Work Readiness.

The hypothesis that there is an effect of Onboard training on job readiness was tested using a simple linear regression analysis. The free variable is Onboard training, while job readiness is a dependent variable. The study can be continued if it meets several assumption conditions, including the normality test, linearity, homogeneity, and multicollinearity.

4.3. Normality Test.

Based on the output of SPSS version 25, it can be seen that in the histogram diagram, most of the data is close to a linear curve. The standard P Plot diagram shows that most of the data is close to a linear line, so it can be concluded that the data is usually distributed. The full results can be seen in the following diagram. The complete normality test results can be seen in the following figure.

Figure 1: Normality Test Histogram Diagram.

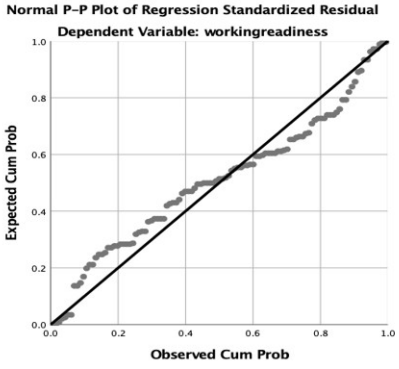


Source: Author.

4.4. Linearity Test.

The linearity test tests whether the relationship between the independent variable (On board training) and the dependent variable (job readiness) is linear. They are linear means of forming a straight line. Based on the following figure, it can be concluded that the relationship between On board training and job readiness develops a linear sequence. The complete linearity test results can be seen in the following diagram.

Figure 2: Diagram Normal P Plot.

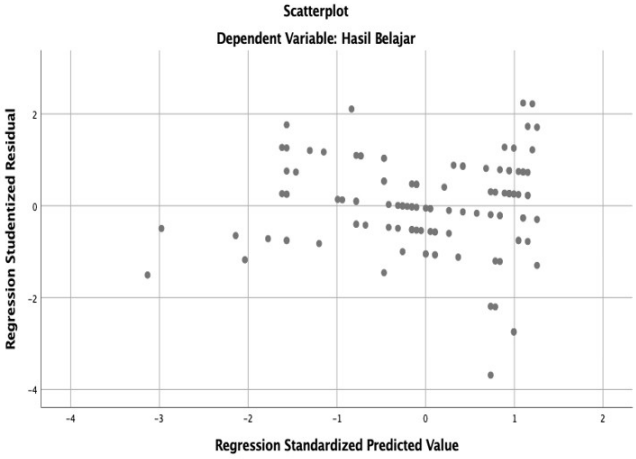


Source: Author.

4.5. Homogeneity Test.

Based on the output of SPSS version 25, it can be seen that in the Scatterplot diagram, most of the data is scattered from one another. So it can be concluded that there is no homogeneity of data. The full results can be seen in the following diagram.

Figure 3: Diagram Scatterplot.



Source: Author.

4.6. Multicollinearity Test.

Based on the output of SPSS version 25, it can be seen that the VIF is 0.675 < 10.0. So it can be concluded that there is no data multicollinearity. The full results can be seen in the following table.

Table 1: Multicollinearity Test Output Interpretation Table.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	10.525	3.869		2.720	.008		
	onboard training	.519	.055	.675	9.471	.000	.675	.675

Source: Author.

4.7. Correlation analysis.

The amount of correlation value/relationship R is on board training to job readiness is 0.675. Based on these data, a coefficient of determination (R Square) of 0.456 was obtained. This can be interpreted that the influence of variables on board training on job readiness is 45.6%, while the remaining 54.4% is influenced by other factors that are not studied. The full results can be seen in the following table.

Table 2: Interpretation Table Correlation Analysis.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.675a	.456	.451	4.02765

a. Predictors: (Constant), onboard training
b. Dependent Variable: working readiness

Source: Author.

4.8. Anova Analysis.

Based on the output of SPSS version 25, it is obtained that F is calculated at 88.709 with a significance level of 0.000 < 0.05. So it can be concluded that regression models can be used to predict teaching motivation variables on learning outcomes. The full results can be seen in the following table.

Table 3: Anova Analysis Interpretation Table.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1455.245	1	1455.245	89.709	.000b
	Residual	1735.746	107	16.222		
	Total	3190.991	108			

a. Dependent Variable: working readiness

b. Predictors: (Constant), onboard training

Source: Author.

4.9. Analysis Coefficients.

Based on the output of SPSS version 25, the coefficient for the onboard training variable is 0.519, and the constant is 10.525, with the regression model obtained as $\hat{Y}$ = 10.525 + 0.519X. A continuous of 10.525 means that the consistent value of the teaching motivation variable is 10.525. The X regression coefficient of 0.519 states that for every 1% increase in the value of teaching motivation, the participation value increases by 0.519. The regression coefficient is positive, so it can be said that the direction of influence of onboard training on job readiness is positive. The full results can be seen in the following table.

Table 4: Coefficients Analysis Table.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.525	3.869		2.720	.008
	Motivasi Mengajar	.519	.055	.675	9.471	.000

a. Dependent Variable: working readiness

Source: Author.

4.10. Discussion.

The results showed that most Politeknik Ilmu Pelayaran Semarang students carried out onboard training well. Onboard training is part of the activities that all Politeknik Ilmu Pelayaran Semarang students must follow. This is by the 2010 STCW policy as a form of approach to the world of education and work or industry. This system allows students to adapt to the world of work, so they have more readiness to be ready for the world of work (Kamin, 2012).

To carry out the On board training program, Politeknik Ilmu Pelayaran Semarang students are equipped with theoretical material and supported practical courses in laboratories/simulators. The material is taught by lecturers who are experienced in their fields so that students are ready to work after graduation. Onboard training is carried out for a minimum of 10 months, so students are expected to recognize more of their duties and responsibilities on board.

Although they have been equipped with theoretical and practical materials, it is common for students to know only a little about their work on the ship. This happens because of the gap between the industrial world and schools (Kamin, 2012). The gap occurs because the material taught in schools is not necessarily following what is practised on the boat. Sometimes, the development of machinery science on board is faster than in school. These complaints are sometimes encountered by students when conducting on-board training activities. Most students, in general, already know a lot about the work on the ship. However, several factors influence when directly involved on the boat, such as students' initial ability, environmental factors, family and community. Students in the circle of maritime friends/family tend to know more about ship machinery so that when onboard training, they are no longer awkward with their work (Kamin, 2012).

Onboard training is routinely carried out by students of the Politeknik Ilmu Pelayaran Semarang with the primary aim that students gain expertise and experience in working on ships and are ready to work after graduation. This goal is already widely understood by most students. Most students feel the benefits, even if it is only limited to how to maintain/repair machines. Onboard training also provides a lot of social and emotional change (Kamin, 2012). Based on the data, it is obtained that most students experience a shift from being unable to be able to. This change is beneficial as a provision to prepare him to enter the world of work. Changes in a positive direction can motivate students to learn machinery on board and strive to be more advanced.

On-board training for 10-12 months is needed to adjust to working hours on board. With the similarity of time, it is a form of learning about practising discipline. This follows the purpose of onboard training that not only equips skills but trains students about relationships with others (teams), superiors, and colleagues and trains them about discipline and respect for work time.

Good support from the industry for onboard training activities is instrumental for students to equip themselves with skills in the field of ship machinery (Kamin, 2012). This support can

be in the form of providing space for accommodation during practice. Research data shows that most students have the provision of knowledge and practice while in school brings a positive impact when onboard training. Based on research data, it was obtained that most students could use equipment and functions to understand the duties and responsibilities on board. They also have sufficient knowledge about engine components, able to perform maintenance to unloading as an essential part of the practice. Based on these basic skills, it is very supportive of students so that they are better prepared for work.

Based on the results of the study, it shows that most students of Politeknik Ilmu Pelayaran Semarang have good readiness. Most Shiva feels ready to work after attending onboard training and is prepared to compete to enter the job field. The high enthusiasm of students is shown by the readiness of students to take part in the selection of the ship needs employees.

The high readiness of students is shown by their critical attitude and cooperation with others. They feel ready to solve a problem in the automotive engine, cooperate, and take responsibility while working. Students' readiness to work is also shown by their readiness always to follow the development of engineering and technological advances. Ready to attend various trainings to support career paths, knowledge and skills in ship machinery. In general, the presence of onboard training positively affects students' readiness to work. The amount of contribution of Onboard training activities can encourage student readiness to work to reach 54%.

However, implementing Onboard training cannot be separated from various obstacles, including companies and licensing letters. The increasing number of shipping schools creates competition when going to practice. The company's location, which tends to be in a big city, requires more time and costs in accommodation. Students also feel obstacles in terms of licensing because bureaucracy tends to be procedural and manual (it has not maximized the use of information technology).

Other obstacles experienced by students during the implementation of Onboard training related to mastery of material and skills in practice, adjustment of equipment conditions and exercise while at school require adjustment. This obstacle occurs because not everything practised in the industry is the same as what is learned in school, so adjustments are needed.

Conclusions.

Based on the study's results, it can be concluded that on board training has a natural effect on student job readiness. The higher the quality of Onboard training carried out by students, the higher the level of work readiness. Onboard training affects student job readiness by 45.6%, meaning that changes in job readiness by 54.4% are due to the onboard activity carried out.

The advice that can be given is the need for cooperation between schools and shipping companies so that students will be motivated to excel in getting a quality shipping company. It takes collaborative efforts between the school and the industrial world to recruit labour from the best students in onboard training activities to motivate students to excel.

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