


Does education and skills affect productivity? (study on Pontianak Pelindo)

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Article Info	ABSTRACT
Keywords: Education, Skills, Productivity	This study aims to determine the effect of education and skills on employee work productivity. The data was obtained in the form of primary data and secondary data. Questionnaires were distributed to one of the state-owned companies in Pontianak, namely PT Pelabuhan Indonesia (Persero) Regional 2 Pontianak. The number of samples used in the study was 51 respondents. Data collection techniques were used by distributing questionnaires and processed using SPSS 25 Statistics. This study uses a quantitative descriptive method and uses multiple linear regression analysis. This research also uses data quality tests, classical assumption tests, and hypothesis tests in the form of t-test, F test, and coefficient of determination (R ²). The results show that education does not affect employee work productivity. While skills affect employee work productivity.
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INTRODUCTION

The development of the business world today is happening so fast. Business competition is getting tougher and economic resources have forced organizations and business companies to be able to survive in difficult situations. Changes in the structure of the Indonesian market in free trade, which are motivated by global issues, have had a huge impact on the Indonesian business climate. One solution that can be taken to face this competition is to increase competitiveness, both in terms of products and the quality of a company's production. It is not enough for a company to just have large capital to achieve its goals but must be assisted by its employees. In an era of increasingly tight business competition, employee productivity is required to continue to increase. The ability to survive of a company depends on the quality of its human resources. A human resources manager must be able to know, understand, and comprehend the employees who work for the company he leads, know the level of economic needs of employees, and be able to utilize employee abilities so that employees will make a big contribution to the company.

One of the steps to maintain or increase work productivity can be done by evaluating work productivity and making a series of improvements to always improve the quality of work so that the company grows and excels in competition because increasing employee

productivity can provide large profits for the company. If we look at the level of labor productivity in countries in Asia, Indonesia is still far from other countries on the Asian continent. Based on data from the Asian Productivity Organization (APO) 2022, Indonesia's productivity per worker is ranked 19th out of 32 countries, which is shown as follows:

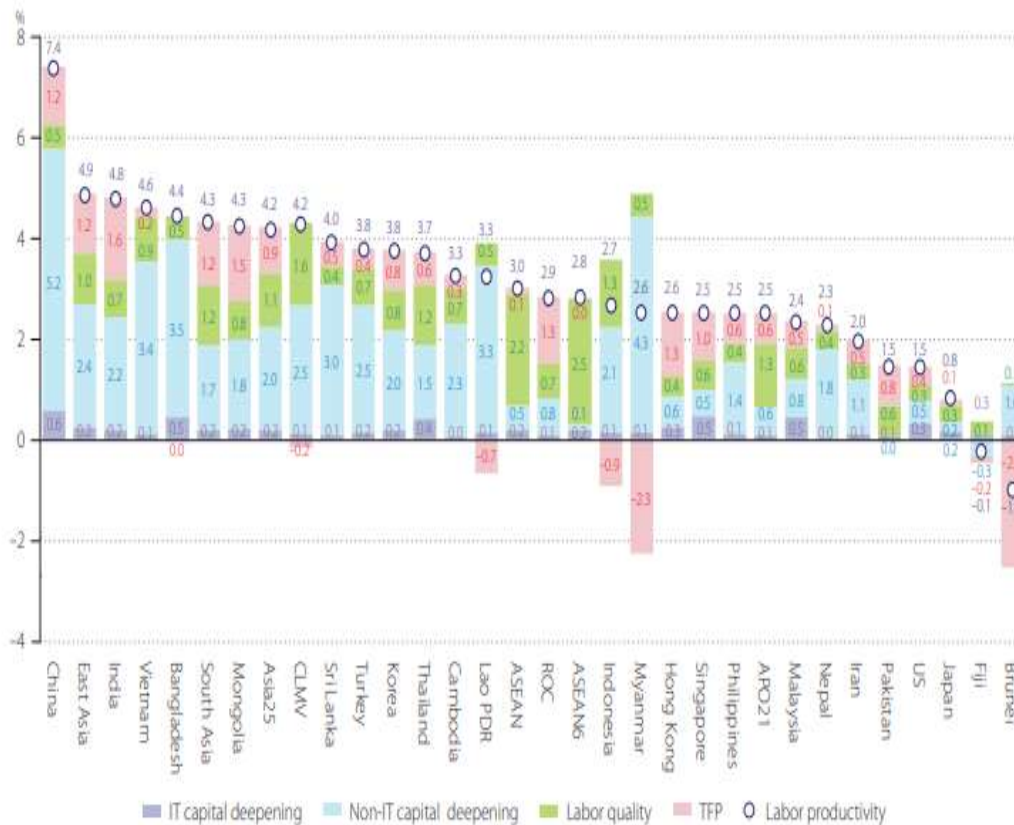


Figure 1. Labor Productivity Levels of Countries in ASEAN
 Source : Asian Productivity Organization (2022)

Based on data released by APO, Figure 1 shows that need done efforts to enhance productivity in Indonesia, because ultimately high productivity will have an impact on contributions to GDP. According to the Ministry of Manpower (2020), productivity is seen as an indicator important in the activity economy. Growth sustainable economy be wrong One target main policy Indonesian government. A growth economy is formed from business output growth or company. Because of that, a productivity worker is one of the criteria sources Power superior human resources Because can influence the country's economy productivity must Be encouraged to continue increasing the quality of human resources.

One of the factors important influences the productivity of employees is the level of education. Currently in Indonesia the Gross Participation Rate (APK) for continuing education tall We still below 40 percent. Based on a statement from Staff Especially the

Vice President In the field of Bureaucratic Reform and Education, Mohamad Nasir said that the Gross Enrollment Rate (GER) for education is high reaching 34.58%. That figure is left behind by neighboring countries like Malaysia which is almost 50% and Singapore almost 78%.

PT. Indonesian Regional Port 2 Pontianak has a background behind level different education, from formal education, namely SMA/SMK equivalent, Diploma IV, Diploma III, Stara 1, and Strata 2. Education employee will join in increasing their ability and mastery will their job in the end impacting productivity nice work. _ Level of education employees are very important For noticed Because level education you have somebody will influence pattern thoughts, attitudes and behavior in demand they. Therefore _ To support successful activity businesses should level of education of employees must truly considered. Employees who are educated tall often considered more potential and productive compared to the educated low. Remember that power Productive work is very necessary for activities main company can walk with God so that achieved productivity nice work so recruitment employee must do with be careful because productivity Work will underlying activity in matter development career, p This can be seen from his abilities in operate assigned tasks _ Now This.

Apart from the level of education, which influences productivity Work somebody is Skills Work. According to a results study from Rehman and Khalid (2013) said that although power Work is skilled increases productivity Work in a way whole in a way positive and on the other hand energy Work is not skilled No increase in productivity power Works in a way. But the second variable is independent (power Work skilled and not skilled). In a way together increase productivity and power Work in a way whole in case Pakistani economy. According to Sutihat (2016), employee skills in work are very important, and capable supporters influence the enhancement of productivity Work employees in A-supported companies _ with progress technology. These skills an employee can obtain through education and training. Every company will give education and training to new employees Because training will give several benefits. According to Dessler who quoted Sirait (2016) said that training gives employees new skills _ needed For carrying out work. Can be concluded from the statement above that Skills is a factor important in increasing productivity Work employee in A company, fine power skilled work _ or not _ skilled.

Since the era kingdom Hindu -Buddhist, ports have been one means of linking channel trade and sourcing defense kingdoms in Indonesia. After the development era, role harbors the more required For support various field in a country. Harbor holds a role important in the economy. The port can role in building growth activity economy, trade, and industry. However, port No creates activity but only serves growth and development activity.

Port complies with Regulation Republic of Indonesia Government No. 69 of 2001 consists of place from surrounding land and waters with certain limits as place activity government and activities economy used as place boat lean, anchor, rise and fall passengers and/ or demolish load equipped items with facility safety cruises and activities support harbor as well as place intra and inter transfer mode transportation. As an

archipelagic country, it also becomes the track main in the trading process (unloading load) between islands in Indonesian territory.

According to Law no. 17 of 2008 concerning Shipping, the port consists of a place on land and or waters with certain limits as place activities of government and companies. Physically, the port is used to place boats anchored, up and down passengers, and or demolish load goods. As one of the infrastructure transportation, the port's role is strategic For support system transportation Because becomes a point node connection between region/country. By economy, port works as one of the mover wheel economies Because become easy facilities _ and distribution results in production.

Based on data released by PT. Pelabuhan Indonesia Persero (2021), the performance of PT Pelabuhan Indonesia II or IPC in 2020 experienced a decline. From achievements recorded audited operations throughout 2020 current chest containerized IPC experienced a decline by 10% ie from 7.7 million TEUs in 2019 to 6.92 million TEUs. However, if reviewed more continued, PT. Indonesia Port II consists of over 10 provinces, of which one among them is PT. Pontianak Harbor, West Kalimantan. based on notes current chest pack it up, PT Pelabuhan Pontianak experienced an increase in 2022 if compared with 2021. In 2022 current chest container (throughput) reached 263,225 TEUs so experience enhancement by 3 % in comparison with current chest capacity in 2021 will be 256,799 TEUs (logistiknews.com, 2023).

According to Hermawan (2017), the level of education is influential on the productivity of Work employees. Contrary to the matter Astuti (2017) stated that level of education in a way Partial No influential to productivity Work employees. Hikmawati (2021) shows that Skills employee influential to productivity work, however, research conducted by Lengkong, et al (2019) shows that Skills Work does not influential to the performance of employees.

Literature Review

Education is an experiential process to help individual development to mature humans through teaching and training because education helps human inner growth without being limited by age. Education is mover main from development. The more tall level of education somebody so the higher their level too productivity. Based on research conducted by Hermawan (2017) and Hikmawati (2021) explains that the level of education is influential on the productivity of Work employees.

Basically, Skills are individual things. every individual will own level different skills depending on ability and experience. Understanding Skills is the definition from What do you mean with Skills along with the explanation. There are many understanding Skills based on experts. Following several understandings from Skills. According to Soemarjadi (1992), skills are that behavior obtained through stages of study, and training as well as through a coordination process of discrimination (difference) and integration (combination) to obtain something necessary skills for an objective certain. According to Shahdan in Nurhasanah (2019), skills Work is proficiency or skill For doing something work is only obtained in practice that can mastered through learning and can improved through learning and helping others.

Productivity is a measure of the extent to which an activity can achieve the specified quantity and quality targets (Tisnawati & Kuriniawan, 2005). According to Tohardi in Sutrisno (2017), work productivity is also a mental attitude that always looks for improvements to what already exists. A belief that one can do a job better today than yesterday and tomorrow better than today. Allusions Busro (2018) judges Work productivity as the ability of a person or group of people to produce goods and services within a certain predetermined time or according to plan. According to researchers, ability here can be interpreted as physical ability or it can also be called skill ability. In the large Indonesian dictionary, skill is defined as the ability to complete a task.

Conceptual framework

Based on the description above, it can be built research framework as follows:

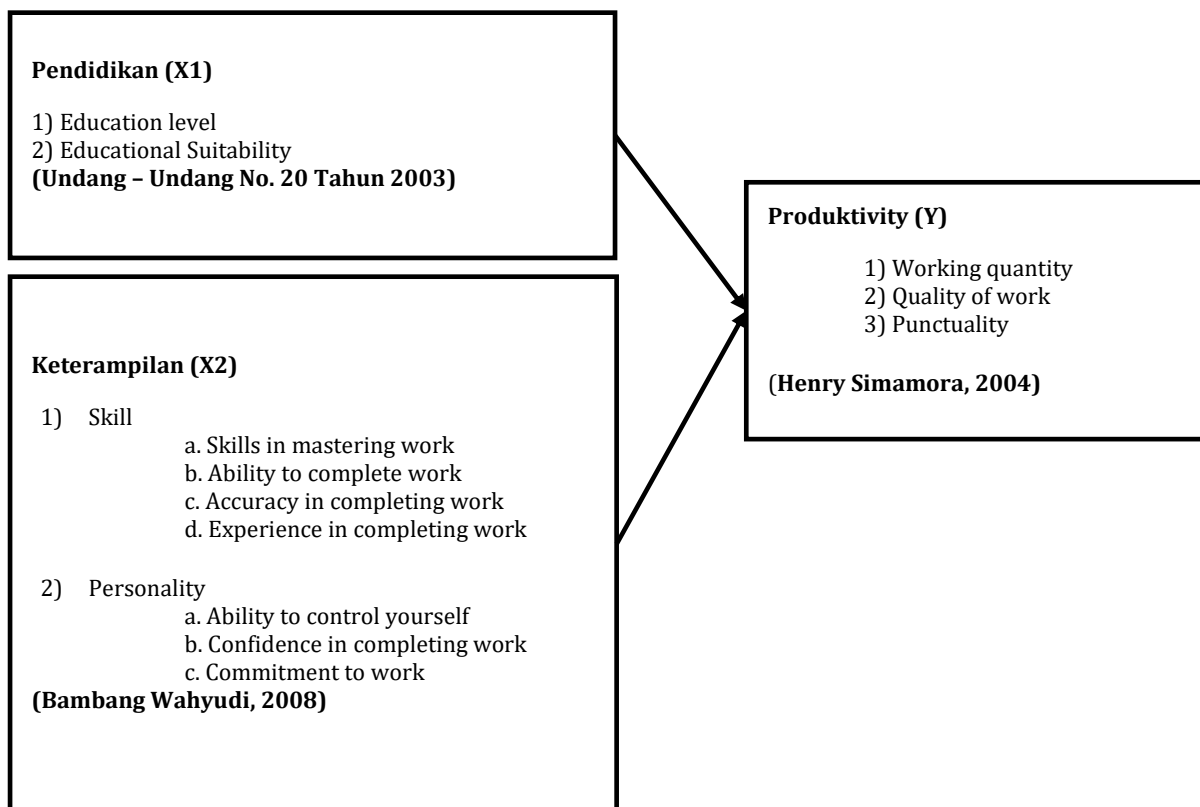


Figure 2. Research Framework

Research Hypothesis

Based on the problem formulation and conceptual framework above, the research hypothesis put forward by the researcher is as follows:

1. Education matters positive on employee work productivity.
2. Influential skills positive on employee work productivity.

METHOD

Causal research is the design chosen in this study. This study uses a questionnaire distributed to respondents who are considered to meet the criteria that have been set. The questionnaire uses a Likert scale of 1 to 5 with categories: Strongly agree has a score of 5; Agree has a score of 4; Indecisive has a score of 3; Disagreement has a score of 2; Strongly disagree has a score of 1. Population in the study This is employees of PT Pelabuhan Indonesia (Persero) Regional 2 Pontianak. Amount sample in study This as many as 45 respondents who were employees at PT. Indonesian Port 2 (Persero) Regional 2 Pontianak. The sampling technique used is purposive sampling with the following criteria: 1) as PT employees. Indonesian port in the Pontianak area; 2) have worked for at least 2 years ; 3) have at least a high school education. Special For question productivity performance will be answered by superior respondents. For the modified Education Level question item based on Law No. 20 of 2003 and Hermawan (2017). Meanwhile, the question item related to Skills was modified based on Wahyudi (2008) and Halawa (2019). As for the question Sourced Performance Productivity from Simamora (2004) and Hermawan (2017). Study This will pass series analysis including feasibility tests instruments, test assumptions classical and hypothesis testing with tool help SPSS Statistics 25.

RESULTS AND DISCUSSION

Respondent Characteristics

Analysis of the profile of respondents in this survey is based on the following demographics:

Table 1. Characteristics of Respondents

Category	Items	f	%
Gender	Male	36	70.6%
	Female	15	29.4%
	Total	51	100%
Age	<30 years old	8	15.7%
	30-40 years old	25	49%
	>40 years old	18	35.3%
	Total	51	100%
Education	Senior High School	13	25.5%
	Diploma	11	21.6%
	Bachelor	26	50.9%
	Post Graduate	1	2%
	Total	51	100%
Years of service	2 to <5 Years	172	42
	5 to 10 Years	21	5
	>10 Years	88	22
	Total	51	100%

Measurement Models

The conformance, validity, and reliability test results are as follows.

Table 2 . Test Validity and Reliability

Variable	Items	r count	r table	Cronbach's Alpha
Education	X1.1	0.773	0.281	0.693
	X1.2	0.620	0.281	
	X1.3	0.738	0.281	
	X1.4	0.746	0.281	
	X1.5	0.466	0.281	
Skills	X2.1	0.803	0.281	0.723
	X2.2	0.581	0.281	
	X2.3	0.514	0.281	
	X2.4	0.731	0.281	
	X2.5	0.691	0.281	
	X2.6	0.563	0.281	
	X2.7	0.470	0.281	
ProductivityWork Employee	Y1	0.727	0.281	0.734
	Y2	0.652	0.281	
	Y3	0.753	0.281	
	Y4	0.662	0.281	
	Y5	0.687	0.281	

Based on Table 2, Based on the calculation results in the table above, shows that each question item has a calculated r value $>$ r table from this research, the r table is 0.281. This means that each question from the variables education (X1), skills (X2), and employee work productivity (Y) contained in the questionnaire is declared valid. As for the reliability test, it can be seen using the Cronbach's Alpha method, that the variables of education, skills, and employee work productivity have a Cronbach's Alpha value $>$ 0.60 above 0.60 so it can be concluded that each variable from the questionnaire is reliable (can be relied upon) so that the next item -The items in each of these variables are suitable to be used as measuring tools.

Test Assumptions Classic

Data Normality

Based on the normality test with the Kolmogorov-Smirnov Test, the Monte Carlo Sig value was obtained. (2-tailed) of 0.460 is greater than 0.05, so it can be concluded that the data is normally distributed. Below is presented the data from the normality test as follows:

Table 3. Kolmogorov Smirnov Data Normality Test Results

One-Sample Kolmogorov-Smirnov Test			Unstandardized Residual
N			51
Normal Parameters ^{a,b}	Mean		,0000000
	Std. Deviation		1,74272244
Most Extreme Differences:	Absolute		,116
	Positive		,090
	Negative		-,116
Test Statistic			,116
Asymp. Sig. (2-tailed)			,083 ^c
Monte Carlo Sig. (2-tailed)	Sig.		,460 ^d
	99% Confidence Interval	Lower Bound	,447
		Upper Bound	,473

a. Test distribution is Normal.
 b. Calculated from data.
 c. Lilliefors Significance Correction.
 d. Based on 10000 sampled tables with starting seed 299883525.

Multicollinearity Test

Based on the results of the multicollinearity test, shows that the tolerance value for education is 0.883 > 0.10 the VIF value is 1.132 < 10, the skills variable has a tolerance value of 0.883 > 0.10 and the VIF value is 1.132 < 10, it can be concluded that there are no symptoms of multicollinearity. Following served results from testing multicollinearity as following:

Table 4. Multicollinearity Test Results

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	14,990	2,696		5,560	,000		
	Pendidikan (X1)	,046	,126	,051	,365	,717	,883	1,132
	Keterampilan (X2)	,199	,069	,401	2,876	,006	,883	1,132

a. Dependent Variable: Produktivitas Kerja Karyawan (Y)

Heteroscedasticity Test

Based on the results of the heteroscedasticity test, it can be seen that the Education variable (X1) shows a sig value. of 0.374 and the Skills variable (X2) shows a sig value. of 0.376. From these results, it can be concluded that the independent variable has a big value. > 0.05, it can be said that the variables used are free from heteroscedasticity.

Hypothesis Testing

The results of testing the effects of relationships between variables in the study configuration constructed in this study can be conveyed as follows.

Table 5 . Hypothesis Testing

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	14,990	2,696		5,560	,000		
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a. Dependent Variable: Produktivitas Kerja Karyawan (Y)

Variable t-test results education to productivity Work employee obtained mark more significance _ big of 0.05 ie of 0.717 for variable education and the calculated t value is $0.365 < t$ table 2.011, so has the meaning that variable education No influence to productivity Work employee. As for the t-test results on variables Skills to productivity Work employee obtained mark more significance _ small of 0.05 ie of 0.006 for variable skills and calculated t value $2.876 > t$ table 2.011, so has the meaning that variable Skills are influential to productivity Work employee.

Table 6. F test

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32,656	2	16,328	5,161	,009 ^b
	Residual	151,854	48	3,164		
	Total	184,510	50			

a. Dependent Variable: Produktivitas Kerja Karyawan (Y)
b. Predictors: (Constant), Keterampilan (X2), Pendidikan (X1)

Based on The table 6 shows the results of the simultaneous test (F test), that mark Ftable obtained from $df_1 = 2$ and $df_2 = 48$ with $\alpha = 0.05$. Table 4.9 shows that mark Fcount For variable independent that is education and skills amounting to 5,161 with amount sample $N = 51$ was reduced amount variable dependent. Therefore _ The obtained results with a mark of more significance _ small of 0.05 ie of 0.009 and value Fcount $5.161 > F$ table 3.19, then can interpreted as that research model with variable education and skills to productivity Work employee declared fit.

Table 7 . Coefficient of Determination Test (R2)

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,421 ^a	,177	,143	1,779	2,300

a. Predictors: (Constant), Keterampilan (X2), Pendidikan (X1)
b. Dependent Variable: Produktivitas Kerja Karyawan (Y)

The calculation results statistics can show that R Square is 0.177 or amounting to 17.7%. This matter show that influence education and skills in a way simultaneous to productivity Work employee amounted to 17.7% whereas the rest 82.3 % was influenced by other outside factors.

CONCLUSION

Education is an effort to develop personality and develop human abilities, which is carried out both inside and outside school (Hermawan, 2017). Based on the results of hypothesis testing, what is known is that hypothesis H1 is rejected. So, as seen from the t-test, the significance level of 0.717 is greater than 0.05 and the value of count = 0.365 is smaller than table = 2.011 which means that education has No influence on productivity Work employees with donation effective by 0.96% less than 1 then has the meaning that influence education to productivity Work employee of 0.96% or can said No influential to productivity Work employee. This matters because education final employees of PT Pelabuhan Indonesia (Persero) Regional 2 Pontianak, namely high school students are ranking second the most after bachelor. Due to education Lastly, the employees in high school, the education factor does Not influence productivity Work employee. Result of study This in line with research conducted by Astuti (2020) said that education has no influence significant on productivity Work employee to employee BUMDes Prosperous Fair Prosperity. With results study show that educated employees do not have enough support for productivity Work employees in some Company agencies. Skills are proficiency or proficiency For doing something, which is just obtained from practice, good through _ exercise practice, or experience (Bambang Wahyudi, 2002). Based on results testing known hypothesis _ is that hypothesis H2 is accepted. So look from the t-test with a level significant 0.006 smaller than 0.05 and value count = 2,876 big from table = 2.011 which means that Skills influential to productivity Work employee with donation effective amounting to 16.76% then This means that influence Skills to productivity Work employee amounting to 16.76%. This matter Can caused by my experience high level of work at PT Pelabuhan Indonesia (Persero) Regional 2 Pontianak which has with work period more of than 10 years and is ranked First the most. Due to experience Work longest serving employees is more than 10 years, then factor Skills become influential to productivity Work employee. This matter is in line with the theory from Notoadmodjo (2007), namely influencing factors _ Skills There are three including education level, age, and experience. Result of study This in line with research conducted by Astuti (2020) said that Skills influence significantly productivity Work employee to employee BUMDes Prosperous Fair Prosperity. Also in line with the results of research conducted _ Hikmawati (2021) stated that Skills are influential in a way significant to productivity works at the Employment Service in Makasar City. With results studies show that Skilled employees support productivity Work employees are a something agency companies.

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