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Influence of Experience in Industrial Work Practices on Students' Work Readiness Light Technology Vehicle Engineering at Indomobil Nissan Datsun East Java in 2019

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ABSTRACT

Based on BPS in 2019, the highest middle class unemployment force is for SMK graduates, which is 11.24% of the total 7 million people. Based on this, it can be seen that the purpose and function of this vocational high school is not yet well underway, because with a ratio of 51% of Vocational High Schools and 49% of the total number of students absorbed by the industrial world to SMK graduates, only 35% while high school graduates 65%. This study aims to find a correlation between industry work practice experience on work readiness research was an ex post facto study. The study population consisted of TKR students who were carrying out industrial work practices in the official workshop of Indomobil Nissan Datsun in East Java in 2019. Data collection techniques were in the form of questionnaires for industrial work experience experience variables (X_1), work interest (X_2) and self-confidence (X_3), and for the work readiness variable there are three domains, cognitive and psychomotor domains, data collection in the form of tests, and affective domain variables in the form of observation. Data analysis of this study using multiple regression and assisted using SPSS for Windows. The results of this study are expected to There is a positive correlation between apprenticeship experience on work readiness (sig. Cognitive domain value of 0.001; sig. Affective domain value of 0.031; and psychomotor domain sig value of 0.004) in TKR students who are implementing apprenticeship in Indomobil's official workshop Nissan Datsun in East Java in 2019.

1. INTRODUCTION

In detail the highest unemployment rate is in the secondary education group, namely vocational graduates of 11.24%. There was a decrease of 0.17% when compared with the data for August 2017, which was 11.41%. Unemployed high school graduates (SMA) 7.97%, down 0.32% compared to August 2017 data which was 8.29%. The data shows that there is a difference in the absorption of educated personnel from SMK graduates with high school graduates. This difference is not proportional to the number of SMKs with high school. Current conditions, there has been an increase with the SKKNI curriculum that harmonizes the curriculum in schools with competencies needed in the industry. However, the alignment of this curriculum has not been fully fulfilled, - because there are still many students who are seen implementing the apprenticeship program not in their majors and expertise. In this condition, schools that have links and are creative and have a lot of cooperation with large industries, can be seen from the well-established internship program and almost 85% of graduates are immediately accepted in the industry.

The opposite condition, if the school is passive in this case does not have the creativity or industry links and the infrastructure used in teaching is inadequate, it will be seen in the apprenticeship program only in small and medium industries where standard operating procedures (SOPs) are not prioritized. Many examples of this condition are due to a lack of awareness between the industrial world

and the world of education. Many factors cause this imbalance to occur, one of which is the perspective, where the industry is more concerned with profit or profit oriented and the world of education/schools is still focused on social oriented or humanitarian missions.

This condition causes no harmony and balance, because the industry does not want to accept students to implement the internship program for fear of disrupting the production process, and from the world of central education does not try to provide mediators and enlighteners. Even though at the time the students implemented the internship program, here learning of students' skills would be honed and theoretical knowledge (basic skills) would increase. Learning soft skills and hard skills will also be seen, by doing real work in the industry the qualifications of students will increase by themselves. In line with the honing of the skills and knowledge gained, for the future students will not only rely on the diploma obtained to find work, but will be supported by experience during the implementation of industrial apprenticeship programs. And for the research site, it was taken in the official workshop of Indomobil Nissan Datsun because of the learning system in the form of Indomobil Nissan Technician Education Class (INTEC) which was very interesting and good to be applied in all schools.In INTEC there is one module as the basis of learning before students enter the field directly. Learning starts from K3 (occupational health and safety), introduction of tools and equipment, basic knowledge of light / automotive vehicles, work practices, to how to maintain the cleanliness of the workplace and industrial environment. This briefing was held for two weeks before the students went directly in the field to implement all the provisions that had been learned during their school days.

Based on the explanation, description, and description above, the researchers came up with an idea to focus on researching the influence of experience when implementing internship, as well as established self-confidence in work readiness according to technical competence light vehicles needed in the industrial world. The place for conducting this research is in the official workshop of Indomobil Nissan Datsun in East Java in 2019.

2. METHODS

Research using a quantitative approach, on the grounds that this study is used to examine the population or sample by collecting data using research instruments and statistical analysis (testing predetermined hypotheses) based on the philosophy of positivism (Sugiyono, 2013, p. 35). This type of research is ex post facto research. Here the research looks for the effect of correlation between independent variables (free) on the dependent variable (bound), and the independent variable that has occurred. And this research can be said as a research with nominal data.

2.1 Prakerin Experience

The experience here is an activity that has been passed by or experienced by students. Industrial work practices (apprenticeship) itself is a productive activity carried out in the industry directly and has the aim to hone skills and develop theories or knowledge that have been obtained at school. So that the experience of industrial work practices (apprenticeship) has a definition as an activity of students who have experienced or have ever done in the industry directly to develop science and sharpen skills.

2.2 Working Readiness

This work readiness variable is adjusted to the competencies needed in real and direct by the industrial world especially for vocational students in the field of light vehicle expertise. Competencies taken in the industry from the ATPM (Brand Sole Agent) include HONDA, SUZUKI UMC, and Indomobil Nissan Datsun. From the competencies needed can be categorized and divided into variables of cognitive work readiness, affective domain work readiness variables and psychomotor domain readiness variables. For this study indicators from all work readiness variables are as follows: (1) students have a basic skill in accordance with the technical expertise of light/automotive vehicles; (2) students are able to make a critical and specific analysis; (3) students are able to distinguish types according to the functions of the equipment used (Tools and Equipment); (4) students are able to cooperate with others; (5) students have a good level of emotional control; (6) students dare to accept responsibility individually; (7) students can follow a work culture in the industrial environment; (8) students have the desire and motivation to be better by participating in certain projects; (9) students have good skills and discipline; and (10) students have the soul or nature of 5S/5R to maintain the existing facilities and infrastructure in the industrial environment.

3. RESULTS AND DISCUSSION

Prakerin experience

The internship experience variable is measured by 4 indicators that have been set and are translated into 15 questions that are valid. Based on Table 4.2, it can be seen that the experience of apprenticeship lowest score (minimum) is 76 and the highest score (maximum) is 94 with range 18. The average score of internship experience is 84, 62 and the standard deviation is 4.328 so that the standard deviation is smaller than average.

Variable distribution of internship experience for each indicator can be seen in the figure below.

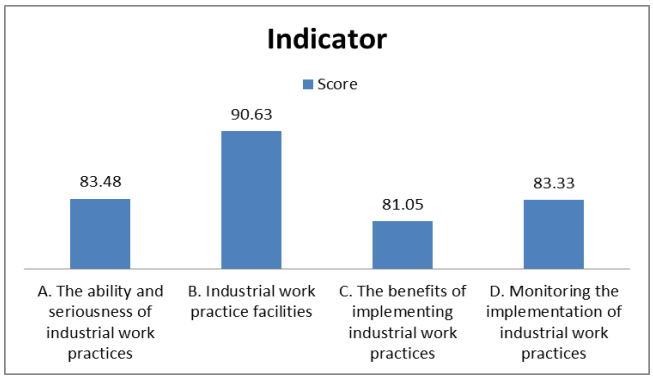

Figure 1. Average Score on Indicators of Employee Experience

Based on the picture above, it can be described the average variable score of apprenticeship experience on indicators of ability and seriousness of industrial apprenticeship amounting to 83.48; indicator of internship facilities of 90.63; indicator of apprenticeship implementation benefits amounting to 81.05; and the monitoring indicators for apprenticeship implementation amounted to 83.33.

Based on the results of the normality test data above, it can be seen in the experience data apprenticeship sig. amounting to 0.200 > 0.05; then it can be stated that the data on apprenticeship experience research has met the normal distribution.

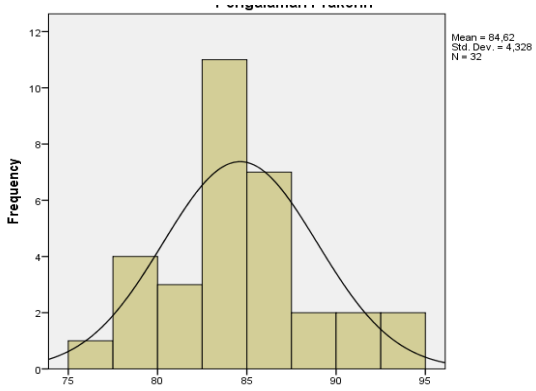

Figure 2. Histogram of Prakerin Experience

Below are the results of the analysis for the experience of internship in the work readiness of the cognitive domain, affective work readiness and psychomotor domain readiness.

Table 1. Test of Linearity of Apprenticeship Experience with The Readiness of Work Domains

ANOVA Table

			Sum of	df	Mean	F	Sig.
Monitoring the implementation of industrial work	Between Groups	(Combined	570,87	2	27,18	1,03	,499
		Linearity	24,813	1	24,81	,947	,353
		Deviation	546,06	2	27,30	1,04	,495
	Within Groups		262,00	1	26,20		
	Total		832,87	3			

Based on the results of linearity test in Table 1. shows that the results of the test between the experience of internship with the cognitive field work readiness obtained a value of 0.495 > 0.05 which indicates that the relationship between internship experience and work readiness in the cognitive realm is linear.

Table 2. Linearity Test of Internship Experience With Affective Work Readiness

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Affective Domain Work Readiness * Internship Experience	Between Groups	(Combined)	378,546	21	18,026	1,400	,298
		Linearity	14,111	1	14,111	1,096	,320
		Deviation from Linearity	364,436	20	18,222	1,415	,292
	Within Groups		128,759	10	12,876		
	Total		507,306	31			

The test results between internship experience and affective work readiness are 0.292 > 0.05 which indicates that the relationship between internship experience and affective workplace readiness is linear.

Table 3. Linearity Test of internship experience with the work readiness of the psychomotor domain

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Work Readiness Psychomotor domain * Internship experience	Between Groups	(Combined)	465,179	21	22,151	,697	,767
		Linearity	10,921	1	10,921	,344	,571
		Deviation from Linearity	454,258	20	22,713	,715	,750
	Within Groups		317,731	10	31,773		
	Total		782,910	31			

The test results between the experience of internship and work readiness are equal to 0.750 > 0.05 which indicates that the relationship between internship experience and work readiness in the psychomotor domain is linear.

The test results between the experience of internship and work readiness are equal to 0.750 > 0.05 which indicates that the relationship between internship experience and work readiness in the psychomotor domain is linear.

Table 4. The Hypothesis of Internship Experience on the Readiness of Work in The Cognitive Domain

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	31,118	15,251		-2,040	,051
	Experience of industry work practices	,473	,131	,425	3,598	,001

a. Dependent Variable: Cognitive Domain Work Readiness

Table 5. Hypothesis of Internship Experience on Affective Work Readiness

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	27,521	14,889		1,848	,075
	Experience of industry work practices	,310	,136	,245	2,273	0,031

a. Dependent Variable: Affective Domain Work Readiness

Table 6. Hypothesis of Internship Experience on Psychomotor Domain Readiness

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-9,954	12,958		-,768	0,449
	Experience of industry work practices	,416	,131	,414	3,164	0,004

a. Dependent Variable:Psychomotor Domain Work Readiness

The findings in this study are aligned with pre-existing and relevant research. The influence of the internship experience, students on work readiness are as follows.

Table 7. Recapitulation of Hypothesis Experiences of Employees AgainstWorking readiness

No	Industrial Worker Experience on Work Readiness	Score Sig.
1	Cognitive Domain Work Readiness	0.001
2	Affective Domain Work Readiness	0.031
3	Psychomotor Domain Work Readiness	0.004

Looking at the table of results obtained it can be seen that the value of sig. < 0.05; so that it can be concluded that there is a positive influence between internship experience on work readiness from the cognitive domain, affective work readiness and psychomotor domain readiness in light vehicle engineering students in the official automotive workshop of Nissan Datsun in East Java in 2019.

Therefore, it is necessary to implement apprenticeship based on existing competencies to be carried out theoretically in schools and professionally / productively in the industry. Not only schools that have direct responsibility for the development of this knowledge, but the industry also has the same responsibility in advancing and improving the skills of prospective workers later.

4. CONCLUSION

Based on the results of the research and discussion of the research described above, the conclusion of this study is that there is a positive correlation between internship experience on work readiness (sig. Cognitive domain value of 0.001; sig. Affective domain value of 0.031; and sig. Psychomotor domain value). amounting to 0.004) for TKR students who are implementing apprenticeship in the official workshop of Indomobil Nissan Datsun in East Java in 2019.

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