



Analysis of Education and Job Training on the Competence of Prospective Workers at Sukabumi District Job Training Centers (BLK)

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Abstract. The purpose of this study was to determine the effect of formal education and on-the-job training on the competence of prospective employees at Sukabumi District Job Training Centers. Quantitative research is the method used in this study. A total of 128 respondents were sampled in this study. The purposive sampling method was used to collect the sample. The data analysis used was multiple linear regression, partial t test, simultaneous f test, coefficient of determination (R²) test, and normality test. Data was obtained using a distribution in the form of a questionnaire. Based on the results of the study, education (X1) has a considerable influence on the competence of potential employees. The competence of potential employees is significantly influenced by job training (X2). The combined effect of education (X1) and job training (X2) has a considerable impact on the competence of potential employees at BLK Sukabumi District.

Keywords: Education, Job Training, Competency of Prospective Workers

1 Introduction

Indonesia, one of the growing nations, continues to struggle with labor challenges since work is scarce and the number of employees rises annually. According to the Central Bureau of Statistics (BPS), 9.1 million people in Indonesia were without a job as of August 2021. Although up from 8.7 million in February 2021, this figure is still far below the 9.8 million recorded in the same time period in the previous year. However, if the TPT for open unemployment is considered, The TPT for Indonesia was 6.49% at the end of August 2021. In August 2020, the TPT dropped from 9.72% in February 2021 to 7.07%. According to BPS research, eight provinces have a TPT that is greater than the national average. One of them is West Java Province. West Java Province's TPT of 9.82% is still under pressure in 2021 as a result of the COVID-19 epidemic. As can be seen from the adjoining graph, West Java Province has a higher open unemployment rate than the country as a whole, with the gap reaching 3.33 percentage points in August 2021 (RKPD, 2023). West Java Province's open unemployment rate was

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8.31% in August 2022, according to the latest BPS statistics, down 1.51 percentage points from August 2021's 9.82%. When compared to the national statistics, the decline is larger. On the other hand, according to statistics collected at the national level, the TPT only fell by 0.63% from August 2021 to August 2022. Although it fell more slowly than other regions, the unemployment rate in West Java Province has decreased. This is due to the large number of job prospects in West Java as well as the large number of interested people [1].

The unemployment rate in Sukabumi District increases every year due to the large number of adults who are eligible to work there. Based on [2], the unemployment rate in Sukabumi District was 7.99%, the same as the unemployment rate in West Java in 2019. In 2020, both in West Java Province and Sukabumi District, the unemployment rate increased significantly. West Java Province had a percentage of 10.46%, while Sukabumi District exceeded 9.60%. As evidence, Sukabumi and Bogor both have high unemployment rates. The Sukabumi District Government and the Manpower and Transmigration Office are working together to supervise the competency-based vocational training program. This is in line with government policy and is intended to address the decline in employment issues.

Together with the Manpower Office [2], BLK Kabupaten Sukabumi has the duty and responsibility to assist job seekers in finding jobs that suit their talents, interests, and abilities and to assist businesses in placing employees that suit their needs. Based on the current phenomenon, companies looking for employees not only look at the applicant's official education certificate but also consider the talents and skills that the applicant has in relation to the requirements that the company has to fill job vacancies. After completing the vocational training program, participants are expected to have a unique set of skills and talents that match the demands of the job and have the potential to increase labor productivity.

Based on the description above, the problem formulations in this study are: (1) Is there an effect of education on the competence of prospective employees at the Sukabumi District Job Training Center? (2) Is there an effect of job training on the competence of prospective employees at the Sukabumi District Job Training Center? (3) Is there an effect of education and job training on the competence of prospective employees at the Sukabumi District Job Training Center?

The objectives of this study were to determine: first, the impact of education on the competence of prospective employees at the Sukabumi District Vocational Training Center; second, the impact of job training on the competence of prospective employees at the Sukabumi District Vocational Training Center; and third, the impact of education and job training on the competence of prospective employees at the Sukabumi District Vocational Training Center.

2 Hypothesis Development

2.1 Education on the Competence of Prospective Workers

The level of formal education taken by extension workers after becoming civil servant extension workers shows that the competence of agricultural extension workers

is not significantly influenced by the level of formal education [3]. Education has a good and large influence on the abilities of employees of the Pangkep Regency Tourism and Culture Office [4]. There is no relationship between a student's educational background and competency level at LPK Alfabank Yogyakarta, claims study [5]. A significance score of 0.250, a t value of 1.172, and a b value of 8.417 all corroborate this. According to studies [6], there is a strong and favorable correlation between teacher quality and academic achievement. This conclusion was validated and corroborated by the beta value of 0.360 and sig value of 0.000, both less than 0.05. According to study [7], education has a favorable and considerable impact on the competency of the staff at PT Baru Barakah Property [7].

Therefore, the following hypothesis can be formulated:

H1: Education has a positive and significant effect on the competence of prospective workers.

2.2 On-The-Job Training on Prospective Labor Competencies

Labor competence as the dependent variable is mainly formed by independent variables including training procedures, training materials, and training instructors [8]. The results of the t test indicate that each independent variable (teaching techniques, resources, and personnel) and the dependent variable (labor competence) have a strong connection. The claim is that training has a positive and substantial effect on competence [4]. Comparison of tcount with ttable or sig value of 0.010 with an alpha level of 5% and a magnitude of 0.299, which indicates that H2 (approved), is presented in Table 5.10.

Therefore, the following hypothesis can be formulated:

H2: Training has a positive and significant effect on the competence of prospective workers.

2.3 Education, Vocational Training and Competency of Prospective Workers

Their level of education and training significantly impacts their ability to do their job[9]. Organizational learning, teaching, and mentoring have a positive and significant impact on competence[6]. Performance is positively and significantly influenced by organizational learning, training, and development, as well as education and training. Teachers' tasks are basically replaced by education and teaching without requiring skills. In contrast, organizational training should focus more on competency development before honing job-related skills.

Therefore, the following hypothesis can be formulated:

H3: education and work training have a positive and significant effect on the competence of prospective workers.

3 Research Model

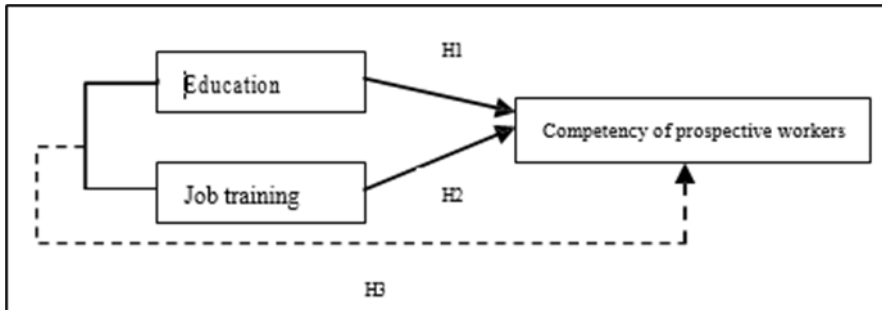


Fig. 1. Research Model

4 Research Methods

This research is quantitative and uses survey research methods. The survey method is a quantitative research approach that can be used to collect data about viewpoints, traits, variable relationship behavior, and events that occurred in the past or present, as well as assess various hypotheses. Factors used to create instruments or data collection tools include questions about the education, work experience, and competence of prospective employees of the Sukabumi District Job Training Centers. These variables then become a reference for researchers when creating questionnaires. Multiple linear regression analysis, the t test (partial), the f test (simultaneous), the coefficient of determination test (R²), and the normality test are techniques used in data analysis.

The Sukabumi District Job Training Center (BLK) in Lembur Sawah, Cicantayan Subdistrict, Sukabumi District, became the research location. The population of this study is all job-training students at Sukabumi District Job Training centers. A sample is part of a population consisting of many individuals [10]. Purposive sampling is the sampling approach used in this study, which also uses non-probability sampling as its sampling strategy. The phrase "purposive sampling" describes a sampling approach that is limited to a small group of people who can provide important data, either because they are the only ones with the data or because they meet the researcher's criteria [10]. Based on these criteria, the characteristics of the sample to be used were selected: Using the methodology suggested by [11], which calls for sample calculation at a ratio of 10:1, where a minimum of 5–10 observations with various indicators are evaluated, the sample size in this study was decided. The minimum sample size for this study was 120, which was determined by multiplying the 12 indicators in this study by 10 in accordance with the methodology recommended by [11]. In this study, 128 respondents were included in the sample size; this number is more than the minimum required and is considered the best number for most studies for the above reasons, according to expert opinion.

5 Result and Discussion

5.1 Descriptive Analysis Results

Table 1. Descriptive Analysis

Variable	N	Min	Max	Mean	Std. Deviation
Education	128	4	20	14,40	4,249
Job Training	128	10	50	35,04	10,127
Competence	128	10	50	35,76	10,419

Based on the aforementioned table, it can be observed that the competence of potential workers (Y) with a total of 128 data points results in a standard deviation of 10.419 with a minimum value of 0.10 and a maximum value of 0.50, with a mean value of 35.76 obtained using SPSS. According to SPSS, Education (X1) from 128 samples has a standard deviation of 4.249, with a minimum value of 0.10 and a maximum value of 0.50, and a mean value of 14.40. As a result of training (X2) on 128 sample data, SPSS calculated the mean to be 35.04, with a standard deviation of 10.127 and a range of 0.10 to 0.50.

5.2 Normality Test Result

Table 2. Normality Test Result

		Unstandardized Residual
N		128
Normal Parameters	Mean	.0000000
	Std. Deviation	4.36115521
Most Extreme Differences	Absolute	.090
	Positive	.080
	Negative	-.090
Kolmogorov-Smirnov Z		1.014
Asymp. Sig. (2-tailed)		.255

Since the significant value of Asymp.Sig. (2-tailed) is 0.255, which is significantly higher than 0.05, it is clear that the data is normally distributed.

5.3 Multiple Linear Regression Test Results

Table 3. Multiple Linear Regression Test Results

Variables	Koef. Regresi	Std. Error	t _{hitung}	Sig t	Conclusion
Constant	2,470	1.430	1,727	0,087	<i>Ho rejected</i>
Education (X1)	0,572	0,199	2,882	0,005	<i>Ho rejected</i>
Job Training (X2)	0,712	0,083	8,576	0,000	<i>Ho rejected</i>
Standar error of estimated	4,396				<i>Ho rejected</i>
Adjusted R Square	0,822				<i>Ho rejected</i>
R Square	0,825				<i>Ho rejected</i>
R	0,908				<i>Ho rejected</i>
F count	294.245				<i>Ho rejected</i>
Sig	0,000				<i>Ho rejected</i>
F table	3,0687				<i>Ho rejected</i>
t table	1,6572				<i>Ho rejected</i>

The multiple linear regression equation used to produce this test is shown in the table above as follows: $Y = 2.470 + (0.572) X1 + (0.712) X2 +$. The following is an explanation of the regression equation: The resulting constant value (α) has a value of 2.470, indicating that the competence of prospective employees will be worth 2.470 if the independent research factors, namely education and job training, have no effect. The coefficient value of education (X1) produces a positive value of 0.572, indicating that when education increases, the skill level of prospective employees will also increase. The results of the job training coefficient value (X2) show a positive value of 0.715. This shows that when job training increases, the level of competence of prospective employees will also increase.

5.4 The Result of t Test (Partial)

Table 4. The Result of t Test (Partial)

Variables	Koef. Regresi	Std. Error	t _{hitung}	Sig t	Conclusion
Constant	2,470	1.430	1,727	0,087	<i>Ho rejected</i>
Education (X1)	0,572	0,199	2,882	0,005	<i>Ho rejected</i>
Job Training (X2)	0,712	0,083	8,576	0,000	<i>Ho rejected</i>

The information in the previous table, which was obtained from the multiple regression's computation of the education variable, served as the foundation for the t value calculation, which was computed as 2.292. As a result, H_0 is disregarded and H_a is approved since the t count is larger than the t table ($2.882 > 1.6572$), indicating that the education variable has a considerable impact on the degree of potential employees' competence. A t value of 3.105 was obtained from the multiple linear regression analysis of the work education variable. Because t count is bigger than t table ($8.576 > 1.6572$), H_0 is disregarded and H_a is accepted, demonstrating that the job training variable has a considerable impact on the competency of potential employees up to a certain level.

5.5 Test Results f (Simultaneous)

Table 5. Test Results f (Simultaneous)

Variabel	Koef. Regresi	Std. Error	t hitung	Sig t	Conclusion
Standar error of estimated	4,396				<i>Ho rejected</i>
Adjusted R Square	0,822				<i>Ho rejected</i>
R Square	0,825				<i>Ho rejected</i>
R	0,908				<i>Ho rejected</i>
F Count	294.245				<i>Ho rejected</i>
Sig	0,000				<i>Ho rejected</i>
F table	3,0687				<i>Ho rejected</i>
t table	1,6572				<i>Ho rejected</i>

Based on the findings in the previous table, it can be concluded that if f count $>$ f tabel ($294.245 > 3.0687$), then H_0 or H_a is accepted. Thus, Sukabumi District Job Training Centers, which consists of Education (X1) and Training (X2) variables together, provide a considerable influence on the competence of prospective employees at Sukabumi District Job Training Centers.

5.6 Coefficient of Determination Test Results

Table 6. Coefficient of Determination Test Results

Variables	Koef. Regresi	Std. Error	t_{hitung}	Sig t	Conclusion
Standar error of estimated	4,396				<i>Ho rejected</i>
<i>Adjusted R Square</i>	0,822				<i>Ho rejected</i>
R Square	0,825				<i>Ho rejected</i>
R	0,908				<i>Ho rejected</i>

The adjusted R square value is 0.822, as can be seen from the findings of the table above. This indicates that the education (X1) and training (X2) variables can explain 82.2% of the variance in the anticipated workforce competency variable (Y). While additional factors outside the scope of the research model are responsible for the remaining 17.8%.

6 Discussion

6.1 The Effect of Education on the Competence of Prospective Workers

As can be seen from the results of testing this hypothesis, the significance value of the education variable is $0.005 < 0.05$. This shows that education has a great influence on the competence of prospective employees. Therefore, accurate and appropriate educational assessment can improve the competence of prospective employees. This supports the view that learning and education are actions taken by workers in an effort to master certain skills, information, and attitudes that result in relatively long-lasting changes in workplace behavior. This supports the theory put forward by [12]

The findings of this study are also very consistent with previous research conducted by [7], entitled "The Effect of Education and Training Through Competence and Its Impact on Performance at Pt Barru Barakah Property," which came to the conclusion that education has a good and significant impact on the competence of employees of PT Baru Barakah Property.

6.2 The Effect of Job Training on the Competence of Prospective Workers

Based on the findings of testing this hypothesis, the significant value of the job training variable is $0.000 < 0.05$. This shows that on-the-job training is a determining factor in the success of job prospects. Prospective employees' competencies will improve if training is conducted efficiently and enjoyably. Job training, also known as general education, is the process of supplying, gaining, developing, and enhancing work competence, productivity, discipline, attitude, and work ethic at a certain level of skill and

competency in accordance with the level and expectations of the working environment, job or position. On-the-job training, in its most basic sense, is the process of disseminating knowledge and changing work practices and attitudes to assist staff members in improving their competencies and abilities in order to perform their jobs successfully. Government Regulation No. 31/2006 on the National Job Training System supports this.

The findings of this study corroborate previous research by [4], "The Effect of Education and Training on Performance Through Employee Competence at the Pangkep Regency Tourism and Culture Office," so it can be concluded that training has a positive and significant impact on competence.

6.3 The Effect of Education and Training on the Competence of Prospective Workers

The results of the research based on the premise show that the variables related to education and job training have significant values of 0.000 and 0.05, respectively. This shows how the combined effect of education (X1) and job training (X2) has a significant influence on the skill level of prospective employees at Sukabumi District Job Training Centers. This indicates that the effectiveness of training and the amount of education of potential workers increase competence linearly. The findings of this study corroborate previous research conducted by [9], which shows that the level of education and training of graduate participants has a major impact on their degree of competence. Education has a big role in improving the competence of potential candidates. Of course, the higher the education threshold will be used as a benchmark to increase the competence of prospective workers, meaning that the higher the education threshold of prospective workers, the more competent the skills they have. On-the-job training can improve a candidate's competency, but this also depends on how well they have mastered a particular field of work.

7 Closing

7.1 Conclusion

Based on the results of the research and analysis of the author, several conclusions can be drawn, among them: there is a partial influence of education on the competence of prospective workers at Sukabumi District Job Training Centers; there is a partial influence of job training on the competence of prospective workers at Sukabumi District Job Training Centers; and there is a simultaneous influence of education and job training on the competence of prospective workers at Sukabumi District Job Training Centers.

7.2 Suggestions

The researcher's suggestion for Sukabumi District Job Training Centers is to maintain and improve education and training in order to increase the enthusiasm of prospective employees for taking tests and exams that will help them become more competent as future employees. Future researchers are advised to continue this research by carefully studying the findings, because the results of this study can still be expanded with further research. Research should be conducted in other locations using more samples if future researchers are interested in conducting more research to ensure that the findings are varied. In addition, they can include additional elements in their study, such as disciplines.

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