THE INFLUENCE OF EDUCATION LEVEL AND EMPLOYMENT ABSORPTION ON POVERTY WITH UNEMPLOYMENT RATE AS AN INTERVENING VARIABLE IN CIREBON REGENCY 2011-2023

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Article Info	Abstract
	This study aims to analyze the impact of education level and labor absorption on the poverty rate, with the unemployment rate as an intervening variable in Cirebon Regency, using data from 2011 to 2023. The method used in this research is a quantitative analysis method with path analysis. The data type used is secondary data obtained from the Central Bureau of Statistics of Cirebon Regency, including data on education levels, labor absorption (the number of employed people), unemployment, and poverty rates from 2011 to 2023. Data processing in this study uses IBM SPSS version 25 software. The results of this study indicate no significant effect of education level on the unemployment rate, a negative and significant impact of labor absorption on the unemployment rate, a significant effect of education level on the poverty rate, a negative and significant impact of labor absorption on the poverty rate, no significant effect of the unemployment rate on the poverty rate, and that the unemployment rate is not an intervening variable between education level and the poverty rate. Still, it is an intervening variable between labor absorption and the poverty rate.

Introduction

One of the most common social issues is poverty, a persistent problem in many developing countries. According to Prayoga (2021), the issue of poverty involves a complex set of factors, including educational attainment, employment absorption rates, low health levels, inequality within the legal system, the inability of society to find opportunities for a better life, a rising number of unemployed individuals that is not balanced by job creation, insufficient wages to meet living needs, and low quality of life for the community.

According to the Central Statistics Agency (BPS), the poverty rate in Cirebon Regency remains one of the highest, ranking fifth in West Java Province. The percentage of poor people in Cirebon Regency in 2011 was 15.56%, which then decreased to 9.94% in 2019, increased again to 12.3% in 2021, and reached 11.2% in 2023.

The unemployment rate in Cirebon Regency has fluctuated yearly. In 2011, it was 10.18%, then drastically increased to 16.04% in 2012, and decreased to 9.61% by 2017, continuing to decline until 2023, reaching 7.65%.

Poverty and unemployment rates in many studies are influenced by education levels, labor absorption, and economic growth. As Sukarno stated in Mardiatillah et al. (2021), unemployment can impact poverty levels due to a decline in income within the community. This situation can threaten the well-being achieved by individuals. When unemployed, individuals are more likely to fall into a poverty cycle due to a lack of income sources.

One way to assess the welfare of a community is through educational indicators. The higher a person's education level, the more their skills improve, which in turn can boost productivity at work.

Research findings from Made Ariasih and Yuliarmi (2021), Susanto and Pangesti (2019), and Alwi, Syaparuddin, and Hardiani (2021) conclude that education level has a significant impact on poverty.

In Cirebon Regency, the education level, as measured by the school participation rate, has fluctuated from 2011 to 2023. In 2011, the school participation rate was 47.81%, then it increased until 2016, reaching 68.04%. In 2017, it decreased to 62.8%. In 2019, it increased again to 67.03%, but then gradually declined until 2023, reaching 64.86%.

Another factor contributing to poverty is the issue of labor absorption. The economy of a developing country often faces labor-related challenges, particularly the imbalance between the increasing number of people needing employment and the insufficient number of available job opportunities. The number of employed people reflects the availability and occupancy of job positions, a situation commonly referred to as labor absorption (Yustitia et al., 2022).

In Cirebon Regency, the number of employed people has increased significantly each year. For instance, in 2011, the working population was 828,506 people, which decreased to 762,065 people the following year. However, labor absorption has continued to increase each year, reaching 1,101,094 people in 2023. Therefore, it can be said that labor absorption in Cirebon Regency has improved annually, but it still has not been able to alleviate poverty in the region, as the number of employed people is still only half of the total population.

Based on the data above, where the school participation rate has decreased and employment absorption has increased but still cannot alleviate poverty, there are many factors influencing poverty and unemployment rates in a region. However, given the educational level and employment absorption conditions in

Cirebon Regency, the researcher is interested in studying "the influence of education level and employment absorption on poverty levels with unemployment rates as an intervening variable in Cirebon Regency from 2011 to 2023."

LITERATURE REVIEWS

According to Santos (2017) poverty is those who do not have enough money to live and sustain life in their own way, if assistance is not given to them, they will starve, they will be cold if they live in a country with cold weather, and they will be overheated if they live in a country with high temperatures. According to Safira, et al. (2021) The level of education is a long-term process that uses systematic and organized procedures, in which the managerial workforce learns conceptual and theoretical knowledge for general purposes.

Labor absorption is a condition that allows job seekers to fill available job positions with the skills and talents they already have, then it is hoped that later the young population will be absorbed into the labor market (Pratiwi and Indrajaya 2019).

Unemployment can be defined as a situation where a person who belongs to the labor force category but does not have a job and is actively looking for a job. The inequality between the number of job opportunities and the labor force can be referred to as unemployment (Suharlina, 2020).

Research Methods

This study is quantitative research, which aims to explain the influence of independent variables on dependent variables, as well as to examine the indirect effects of independent variables on dependent variables through an intervening variable. The type of data used is secondary data with a time series from 2011 to 2023. The data studied include poverty rates, unemployment rates, education levels (school participation rates), and labor absorption (number of employed people).

Path analysis is employed in this research to test the hypotheses that have been established, following these steps:

Figure 1. Path Diagram
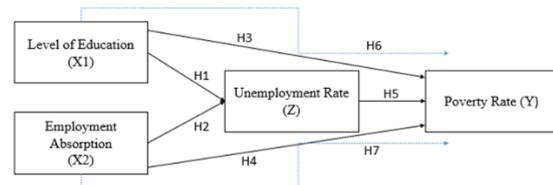
The structural equations used in the path analysis of this study are:

$$Z = PZX1 + PZX2 + e1$$
(Equation 1)
$$Y = PYX1 + PYX2 + PZY + e2$$
(Equation 2)

Explanation:
- P = Regression Coefficient
- Z = Unemployment
- Y = Poverty Rate
- X1 = Level of Education
- X2 = Employment Absorption
- e = Error

Result and Discussion
Descriptive Statistics

The results of the path analysis calculations for the first equation, which consists of two independent variables, namely Education Level (X1) and Labor Absorption (X2), as well as one dependent variable, Unemployment (Z), can be seen as follows:

Table 1. Path Analysis Calculation Results for Sub-Structure 1:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.800ª	.640	.568	1.59156

a. Predictors: (Constant), Unemployment, APS, Employment absorption

Coefficientsª

Model		Unstandardized Coefficients		Standardiz ed Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	35.093	6.596		4.619	.001
	APS	-.140	.100	.116	.457	.658
	Employment absorption	-2.217E-5	.001	-.817	-3.210	.011

a. Dependent Variable: unemployment

Source: Output from IBM SPSS Statistics Version 25, Data Processed, 2024

Based on these results, the path equation obtained is as follows:

$$Z = 0{,}116X1 - 0{,}817X2 + 0{,}657$$ (Substructure 1)

Based on the equation above, it can be interpreted that if the education level increases by 1%, the unemployment rate will decrease by 0.116 (11.6%), assuming the values of other variables remain constant. Furthermore, if labor absorption increases by 1%, the unemployment rate will decrease by -0.817 (81.7%), again assuming other variables remain constant. According to the Adjusted R Square value, the education level and labor absorption variables can explain 56.8% of the unemployment variable, with the remaining 43.2% being influenced by other variables.

The results of the path analysis calculations for the second equation, which consists of three independent variables, namely Education Level (X1), Labor Absorption (X2), and Unemployment (Z), and one dependent variable, namely Poverty (Y), can be seen as follows

Table 2. Results of Path Analysis Calculations for Substructure

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.869ª	.755	.673	1.04785

a. Predictors: (Constant), Unemployment, APS, Employment absorption

Coefficientsª

Model		Unstandardized Coefficients		Standardiz ed Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	35.093	6.596		5.320	.000
	APS	-.140	.062	-.427	-2.264	.050
	Employment absorption	-1.304E-5	.001	-.732	-2.477	.035
	Unemployment	-.160	.208	-.212	-.770	.461

a. Dependent Variable: **Poverty**

Source: Output from IBM SPSS Statistics Version 25, Data Processed, 2024

Based on these results, the path equation is as follows:

$$Y = -0{,}427X1 - 0{,}732X2 - 0{,}212Z + 0{,}571$$ (Substructure 2)

From the equation above, it can be interpreted that if the level of education increases by 1%, the poverty rate will decrease by -0.427 (42.7%) assuming other variable values remain constant. Furthermore, if labor absorption increases by 1%, the poverty rate will decrease by -0.732 (73.2%) assuming other variable values remain constant. Additionally, if the unemployment rate decreases by 1%, the poverty rate will decrease by -0.212 (21.2%) assuming other variable values remain constant. The three variables—education level, labor absorption, and unemployment rate—can explain 67.3% of the poverty rate, with the remaining 32.7% explained by other variables.

From the path analysis calculations above, the summary is as follows:

Unemployment (Z) is = (-0,732) + 0,173 = -0,559.

Table 3. Results of Path Analysis Calculations for Substructure

Model	Koefisien Jalur	t-hitung	Sig.	Adjusted R Squared	e1 dan e2
Model 1					
PZX1	0,116	0,457	0,658	0,568	0,657
PZX2	-0,817	-3,210	0,011		
Model 2					
PYX1	-0,427	-2,264	0,050	0,673	0,571
PYX2	-0,732	-2,477	0,035		
PYZ	-0,212	-0,770	0,461		

Source: Output from IBM SPSS Statistics Version 25, Data Processed, 2024

Based on Table 3 above, the calculations for the magnitude of the effects are as follows:

1. Direct Effect:

a. The effect of the Education Level variable (X1) on Unemployment (Z) is 0,116

b. The effect of the Labor Absorption variable (X2) on Unemployment (Z) is -0,817

c. The effect of the Education Level variable (X1) on Poverty (Y) is 0,427

d. The effect of the Labor variable (X2) on Poverty (Y) is -0,732

e. The effect of the Unemployment variable (Z) on Poverty (Y) is -0,212

2. Indirect Effect

a. The effect of the Education Level variable (X1) on Poverty (Y) through Unemployment (Z) is = (0,116) x (-0,212) = -0,024

b. The effect of the Labor Absorption variable (X2) on Poverty (Y) through Unemployment (Z) is = (-0,817) x (-0,212) = 0,173

3. Total Effect

a. The effect of the Education Level variable (X1) on Poverty (Y) through Unemployment (Z) is = (-0,427) + (-0,024) = -0,451

b. The effect of the Labor Absorption variable (X2) on Poverty (Y) through

The Influence of Education Level on Unemployment Rate

In this study, hypothesis testing results through the t-test on the Education Level variable (X1) show a significance value of 0.658, which is greater than 0.05. Therefore, the Education Level variable (X1) does not have a partial effect on the Unemployment Rate variable (Z). This means that no matter how high the school participation rate is, it will not affect the unemployment rate in Cirebon Regency. Thus, this test result indicates that education level has a positive but insignificant effect on the unemployment rate, suggesting that H1 in this study is rejected.

The lack of effect of education level (X1) on the unemployment rate (Z) in Cirebon Regency may be due to the decline in school participation rates over the past two years, meaning fewer people have the opportunity to receive formal education in Cirebon Regency. In 2023, the school participation rate reached 65.56%, meaning that out of 100 people, only 65 can attend school, while the remaining cannot obtain formal education. This indicates that a lack of awareness about education leads to the insignificant impact of education on unemployment.

The results of this study are inconsistent with Marxist-Socialist educational theory, which states that the teaching system is considered

part of education in society, planned with instructive techniques to make changes to disparities and injustices in society (Soyomukti, 2017). However, the findings of this study align with research conducted by Karisma et al. (2021) and Ramdhan et al. (2018), which both show a positive but insignificant effect of education level on the unemployment rate due to an increase in the number of high-education graduates.

The Impact of Labor Absorption on the Unemployment Rate

In this study, hypothesis testing results through the t-test on the Labor Absorption variable (X2) show a significance value of 0.011, which is less than 0.05. Therefore, the Labor Absorption variable has a negative and significant effect on the Unemployment Rate variable (Z). This indicates that H2 in this study is accepted.

This finding is consistent with the theory proposed by Al-Syaibani, which states that the working population involved in the economic sector is one way to meet their needs by earning income from these economic activities (Yustitia et al., 2022). According to this theory, productive labor with jobs can be assumed to be a factor that helps reduce the unemployment rate. The results of this study are consistent with research by Irawan (2022) and Fauzhiah (2019), which states that labor absorption has a significant impact on the unemployment rate. An increase in labor absorption must be matched by an adequate expansion of job opportunities. This is because if labor absorption decreases, it will lead to an increase in the unemployment rate.

The Influence of Education Level on Poverty Rate

In this study, the hypothesis testing through t-tests on the Education Level variable (X1) resulted in a significance value of 0.050, which is equal to 0.05. This indicates that the Education Level variable (X1) has a negative and partial effect on the Poverty Rate variable (Y). The direction of this influence is negative, meaning that as the education level increases, the poverty rate in a region decreases. Thus, this test result shows that education level (X1) has a negative and significant impact on poverty rate (Y). This suggests that Hypothesis 3 (H3) in this study is accepted.

This finding is supported by Marxist-Socialist educational theory, which posits that the education system is considered a part of societal education designed with instructive techniques to address gaps and injustices in society (Soyomukti 2017). The results are consistent with studies by Made Ariasih and Yuliarmi (2021) and Susanto and Pangesti (2019), which indicate that education level has a significant impact on poverty rates. Consistently, lower education levels are associated with higher poverty rates, while higher education levels correlate with lower poverty rates.

The Influence of Employment Absorption on Poverty Rate

In this study, hypothesis testing through t-tests on the Employment Absorption variable (X2) resulted in a significance value of 0.035, which is less than 0.05. This indicates that the Employment Absorption variable (X2) has a negative and partial effect on the Poverty Rate variable (Y). The direction of this influence is negative, meaning that as employment absorption increases, the poverty rate in a region decreases. Thus, this test result shows that employment absorption (X2) has a negative and significant impact on the poverty rate (Y). This suggests that Hypothesis 4 (H4) in this study is accepted.

This finding aligns with the theory proposed by Al-Syaibani, which states that employed individuals filling available economic sectors is a way to meet their needs through earned income (Yustitia et al. 2022). This is consistent with findings from research conducted by Yustitia (2022) and Nurlayli and Jumarni (2022), which found that employment absorption has a significant impact on poverty rates. Therefore, increasing employment absorption can help reduce poverty rates, as more absorbed labor leads to a decrease in poverty.

The Impact of Unemployment Rate on Poverty Level

In this study, the results of hypothesis testing through the t-test on the Unemployment Rate (Z) variable showed a significance of 0.461, which is greater than 0.05, indicating that the Unemployment variable does not have a partial effect on the Poverty (Y) variable. This implies that H5 in this study is rejected.

The findings of this research do not align with the theory explained by Sukirno in the study conducted by Mardiatillah and colleagues (Mardiatillah et al., 2021). Sukirno argues that unemployment can impact poverty levels due to a decrease in income among the population. This can threaten the level of welfare achieved by individuals. With unemployment, the likelihood of individuals being trapped in a poverty cycle increases due to the lack of income sources. The findings of this study are supported by research conducted by Devanantyo (2021) and Hilmi et al. (2022), which shows that although unemployment has a negative impact, its effect on poverty levels is not significant.

The Impact of Education Level on Poverty Level Through Unemployment Rate

In this study, the direct effect of education level (X1) on poverty (Y) is 0.116.

The indirect effect obtained from Path Analysis is -0.024, which is smaller than the direct effect value (i.e., -0.024 < 0.116). This indicates that unemployment does not mediate the effect of Education Level on Poverty. Therefore, it can be stated that the unemployment variable is not intervening variable because it does not provide additional influence on the relationship between education level and poverty. This implies that H6 in this study is rejected.

The findings of this research contradict the views presented by Todaro and Smith in the study conducted by Ramdhan, Setyadi, and Wijaya (2018). According to Todaro and Smith, education plays a crucial role in shaping the ability to adopt modern technology and enhance individual capabilities to create conditions for economic growth and sustainable development, as well as improving welfare. However, these results are consistent with the research conducted by Alwi, Syaparuddin, and Hardiani (2021), which states that the unemployment variable does not serve as an intervening variable because it does not provide additional contribution to the relationship between education level and poverty level.

The Effect of Labor Absorption on Poverty Levels Through Unemployment Rates

In this study, the direct effect of labor absorption (X2) on poverty (Y) through unemployment (Z) is -0.817. The indirect effect, as obtained from the path analysis test, is 0.173, which is greater than the direct effect (0.173 > -0.817). This indicates that the unemployment variable (Z) acts as an intervening variable because it adds influence to the effect of labor absorption (X2) on poverty levels (Y). This shows that Hypothesis 7 (H7) in this study is accepted.

The results of this test are consistent with the theory proposed by Al-Syaibani, which states that employed individuals occupy various sectors within the economy as a way to meet

their needs through the income earned (Yustitia et al., 2022). The high contribution of the employed population in reducing poverty can be used as a benchmark for the government in creating policies to expand job opportunities as a potential effort to reduce the number of poor people.

Conclusion

Educational level does not have a significant effect on the unemployment rate in Cirebon Regency from 2011 to 2023. Employment absorption has a negative and significant effect on the unemployment rate in Cirebon Regency from 2011 to 2023.

Educational level affects the poverty rate in Cirebon Regency from 2011 to 2023. Employment absorption has a negative and significant effect on the poverty rate in Cirebon Regency from 2011 to 2023. The unemployment rate does not have a significant effect on the poverty rate in Cirebon Regency from 2011 to 2023.

The unemployment rate is not an intervening variable between educational level and poverty rate in Cirebon Regency from 2011 to 2023.

The unemployment rate is an intervening variable between employment absorption and the poverty rate in Cirebon Regency from 2011 to 2023.

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More job opportunities should be created for unemployed residents by involving them in innovation and creativity. This can be achieved by encouraging the productive-age population to create new job opportunities. These efforts are hoped to reduce the rates of unemployment and poverty in Cirebon Regency.

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