THE EFFECT OF EDUCATION, UNEMPLOYMENT, AND POPULATION ON CRIME RATESTHROUGH POVERTY

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Abstract

Crime rates in South Kalimantan Province have shown significant fluctuations, causing concern for the community and local government. High crime rates are often attributed to poverty, which encourages individuals to seek shortcuts to make ends meet. However, poverty is influenced by various factors such as education, unemployment, and population. Low education limits employment opportunities, high unemployment rates increase economic vulnerability, and high population numbers put pressure on economic and social resources. This research was conducted to: (1) determine the direct effect of education, unemployment, and population on poverty. (2) determine the direct effect of education, unemployment, population, and poverty on the crime rate. (3) determine the indirect effect of education, unemployment, and population on crime through poverty. This research uses secondary data collected from the Central Bureau of Statistics for South Kalimantan Province. The data used is Pooled data on districts/cities from 2017-2022. The approach used is a quantitative approach with the Partial Least Squares-Structural Equation Modeling (PLS-SEM) method using SMARTPLS 4.0 software assistance. The results of the research in stage 1 show that only the Total Population variable has a significant negative direct effect on Poverty. Stage 2 shows that the variables of Education and Population have a significant positive direct effect on the Criminality Rate and Poverty has a significant negative direct effect on the Criminality Rate. Stage 3 shows that only the total population variable has a significant positive indirect effect on the crime rate through poverty.

Keywords: Education, Unemployment, Population, Poverty, Crime Rate, South Kalimantan.

1. Introduction

The fundamental needs of every human being consist of biological needs such as eating, drinking, and sleeping, and social needs such as social status, social roles, self- actualization, and security. Today, it can be said that security is one of the basic human needs in carrying out daily activities (Fauziah, 2019). The need for security is difficult to fulfill if there are still many criminal acts that occur. Criminality is a form of law violation that is not in accordance with the norms and rules in the community, causing problems and unrest (Maslow, 1943). This is stated in the 1945 Constitution of the Republic of Indonesia Article 28G Paragraph 1 which states: "Everyone has the right to protection of self, family, honor, dignity, and property under their control, and is entitled to a sense of security and protection from threats of fear to do or not do something that is a human right" (UUD 1945 Pasal 28H, 2005). The need for security is difficult to fulfill if there are still many criminal acts that occur. Criminality is a form of law violation that is not in accordance with the norms and rules in the community, causing problems and unrest (Lapebesi et al., 2021). The crime rate is seen from the number of crimes reported. The higher the crime rate, the higher the crime rate. **Table 1 Number of Crimes Reported by Districts/Cities in South Kalimantan Province**

2017-2022

Districts/Cities	Number of Crimes Reported					
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Tanah Laut	410	349	1.295	1.172	194	236
Kotabaru	641	451	469	649	344	399
Banjar	667	715	667	626	555	653
Barito Kuala	272	319	232	226	253	331
Tapin	335	248	333	276	219	257
Hulu Sungai Selatan	371	306	287	262	223	276
Hulu Sungai Tengah	167	270	177	224	237	237
Hulu Sungai Utara	272	171	210	274	183	221
Tabalong	345	226	223	296	282	278
Tanah Bumbu	570	394	224	216	344	402
Balangan	244	235	332	252	174	194
Kota Banjarmasin	1.885	1.502	418	377	990	1.239
Kota Banjarbaru	525	544	433	438	522	497

Source: Central Bureau of Statistics of South Kalimantan Province (data processed)

In Table 1, it can be seen that the number of crimes reported in the Regency / City of South Kalimantan Province tends to fluctuate. In 2017-2018 Banjarmasin was the city with the highest number of reported criminal offenses in South Kalimantan Province with 1,885 cases then dropped to 1,502 reported cases. In 2019-2020 the number of criminal offenses

reported, Tanah Laut Regency was in the first position with 1,295 cases then dropped to 1,172 reported cases. In 2021-2022 Banjarmasin City again became the city with the highest number of reported crimes with 990 cases increasing to 1,239 cases and Banjar Regency in 2022 with 653 cases became the highest number of reported crimes at the district level. The higher the number of crimes reported indicates that the crime rate is increasing. This shows that the level of security in the Regency/City of South Kalimantan Province still needs to be improved so that the crime rate decreases. According to Simadjuntak (1981), crime or criminality can be known through the approach of demographic factors (population growth), ecological factors (distribution of settlement space), geographic factors (temperature, humidity, climate exchange), economic factors (poverty, unemployment) and social factors (economy, family, education, politics, and religion) (Sukarna et al., 2022). The problems of poverty and crime are two concepts of social problems that cannot be separated from one another, and even these problems are still difficult to solve.Poverty has a huge impact on the opportunity for crime. There is a cohesion between the high poverty rate and the high crime rate. This is because the more unfulfilled human needs are, the more a human being justifies all means to fulfill their needs. For example, in order to get money or to feed his family, an individual dares to steal, rob, mugging, or maybe kill another individual to fulfill his life needs (Dulkiah & Nurjanah, 2018).

The percentage of poor people in the Regency/City of South Kalimantan Province in table 2 continues to fluctuate from 2017-2022.Hulu Sungai Utara Regency from 2017-2022 has the highest percentage of poor people in South Kalimantan Province.The higher the percentage of poor people in an area, the more poor people in the area and the greater the chance of crime and vice versa, the lower the percentage of poor people, the fewer poor people in the area so that the lower the chance of crime.

Table 2 Districts/Cities Poverty Levels in South Kalimantan Province 2017-2022

Districts/Cities	percentage of poor population					
	2017	2018	2019	2020	2021	2022
Tanah Laut	4.6	4.4	4.51	4.26	4.57	3.86
Kotabaru	4.38	4.52	4.49	4.22	4.86	4.3
Banjar	2.96	2.7	2.72	2.55	3.04	2.79
Barito Kuala	5.13	4.56	4.63	4.51	5.11	4.75
Tapin	3.77	3.7	3.41	3.06	3.6	3.6
Hulu Sungai Selatan	5.8	5.21	5.33	5.17	4.84	4.54
Hulu Sungai Tengah	6.09	6.01	5.93	5.64	6.18	5.92
Hulu Sungai Utara	6.65	6.38	6.5	6.14	6.83	6.49
Tabalong	6.09	5.95	6.01	5.72	6.27	5.87
Tanah Bumbuu	4.99	4.88	4.85	4.6	4.82	4.26

Districts/Cities	percentage of poor population					
	2017	2018	2019	2020	2021	2022
Balangan	5.68	5.59	5.55	5.32	6.07	5.83
Kota Banjarmasin	4.19	4.18	4.2	4.39	4.89	4.74
Kota Banjarbaru	4.68	4.19	4.3	4.01	4.4	4.17

Source: Central Bureau of Statistics of South Kalimantan Province (data processed)

There are several factors that influence the amount of poverty in an area, including education, unemployment, and population. The education factor is one of the external factors that cause crime. Education plays a vital role in shaping the behavior and mindset of a person in society, so that it can support the improvement of the quality of human resources. education in Indonesia looks inconsistent curriculum every year but in fact there has not been a significant increase in the morals of the nation's children. This shows that the picture of education in Indonesia is still unstable. The level of education on crime in Indonesia has a negative and insignificant effect. This means that if education decreases, crime will increase. The lower a person's level of education, it can be concluded that the skills he has are also lower than those of someone with a high education, and the free time a primary and junior high school graduate has will be more than a high school and university graduate.So that the availability of excess free time can be an opportunity for them to commit criminal acts (Rahmalia et al., 2019).

Education is the most basic need for all people because an educated society can at least have the ability to free itself from poverty, thus reducing the chances of criminality.One indicator of whether or not the level of education in a region/country is good can be seen through the average number of years of schooling.The average years of schooling is used to identify the level of education graduation of the population in a region. The average length of schooling is the length of education that has been taken by a person. The higher a person's education, the higher his or her level of thinking (Rafiqi, 2020).

A low level of education results in low human resources and makes it difficult to obtain employment, thus making the unemployment rate high.Unemployment is the number of workers in the economy who are actively seeking work but have not yet found a job.Unemployment can have a negative impact on the economy of individuals and society.Unemployment triggers a low level of income for a person.This low income will continue to lead to poverty. Economic hardship can cause people to commit crimes to fulfill their basic needs. Economic hardship leads to increased crime while economic prosperity reduces criminal activity (Hulu, 2022). A person who previously had a job and then became

unemployed loses a certain amount of income. Starting to get a job again is certainly not fast because he has to compete with other job seekers with few jobs.Seeing these obstacles, the unemployed have the opportunity to commit crime (Fachrurrozi et al., 2021). Unemployment leads to a person's low income level. Sustained low income will lead to poverty.Being poor means having an income that is less than the income needed to live decently or an expenditure capacity below the poverty line (Priatna, 2016).

The overall population is one of the variables that affect the number of offenses, given that areas that have a high population will generally face financial problems, food needs, and the absence of welfare guidelines that lead to crime.The more population in a place will result in fewer open positions which will encourage unemployment and wage imbalances between labor and unemployed experts, so this will encourage someone to commit a crime (Hachica & Triani, 2022).

Based on the description of the background that has been described, there are three problem formulations, namely, first, how is the direct effect of education, unemployment, and population on poverty? Second, what is the direct effect of education, unemployment, population, and poverty on crime rates? Third, what is the indirect effect of education, unemployment, and population on the crime rate through poverty? The objectives to be achieved are, first, to determine the direct effect of education, unemployment, and population on poverty. Second, to determine the direct effect of education, unemployment, population, and poverty on crime rates. Third, to determine the indirect effect of education, unemployment, and population on the crime rate through poverty.

2. Literature Review
2.1 Criminality Rate

Criminality or crime is a problem that overshadows humanity and always exists in society. One of the causes of crime is because the need for material objects is limited, while the means to obtain these objects are also limited. We already know that the human desire for material things is unlimited, when one need has been met, the next need will immediately arise and so on endlessly (Zaidan, 2016).

The social factor theory views the environment and social forces as the factors that cause crime.Aristotle (384-322 BC) and Thomas Van Aquino (1226-1274) assert that poverty and greed drive people to commit crime and immorality.In chronic poverty, a person does not find a way out and eventually despairs so that criminal acts emerge (Burlian, 2016).

Low education, high unemployment, and rapid population growth can all create social and economic conditions that exacerbate poverty and hopelessness.These conditions, in the view of social factor theory, can encourage individuals to turn to crime as a way to survive or cope with their frustrations.As such, improving education, reducing unemployment, and managing population growth are important measures to reduce crime rates in society.

2.2 The Poverty

Poverty according to Bappenas is the inability of a person or group to fulfill their basic rights, such as food, health, education, employment, housing, clean water, land, natural resources, and the environment; as well as security from threats of violence and the right to participate in socio-political life (Rafiqi, 2020).

Social Democratic theory considers that poverty is not an individual problem but a structural problem.Poverty is caused by injustice and inequality in society due to the blockage of group access to social resources, especially economic resources. Social Democratic theory suggests the role of government to respond to existing poverty.

The relationship between poverty and crime rates is that poverty can trigger crime because of difficulties in meeting basic needs such as clothing, food and shelter. Individuals in an environment of poverty may be driven to seek other ways to fulfill these needs, including through crime. The anomie theory suggests that crime rates can increase with high levels of poverty and economic imbalance (Fauziah, 2019).

2.2 Education

According to Law Number 20 of 2003, education aims to provide a learning process for students to develop their potential, have a good personality, intelligence, noble character, and have skills. In addition, education is also considered the main provision for obtaining a good job. People who have higher education tend to generate higher incomes compared to those with low education, so a person's income can increase along with an increase in education level (Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 Tentang Sistem Pendidikan Nasional, 2003).

Becker (1964) in his book entitled "Human Capital" explains that education has an important role in poverty alleviation and economic growth.Becker argues that a person with higher education (years of schooling) will get a more decent wage and can prevent him from poverty (Faritz & Soejoto, 2020).

Education has a negative significant effect on poverty. This means that individuals with higher levels of education tend to have a lower risk of experiencing poverty. A higher level of education opens up more opportunities to obtain a good job, which in turn increases household income. The accumulation of these effects can sustainably help people move out of poverty (Jamir, Chubakumzuk. & Ezung, 2017).

Education has a negative influence on crime rates, which means that the higher the level of education of the community, the lower the crime rate. Human capital theory states that education enables a person to improve their welfare. Each additional year of schooling not only increases an individual's employability and income, but also facilitates their access to economic opportunities during their education (Hachica & Triani, 2022).

2.4 Unemployment

Unemployment is a situation experienced by the labor force who want to work but have not yet obtained a job (Sukirno, 2016). Unemployment according to the Central Bureau of Statistics is defined as those who are in the working age group but are not currently working and are over 15 years old.

According to Keynes, total spending in the economy, or aggregate demand, is the main determinant of the level of economic activity and employment. Aggregate demand consists of consumption, investment, government spending, and net exports (exports minus imports). Keynes argued that unemployment occurs when aggregate demand is insufficient to buy all the output produced by the economy, leading firms to reduce production and lay off workers. Unemployment will not resolve itself through the market mechanism as believed by classical economics (Soesastro, 2005).

Unemployment has a positive and significant relationship with poverty. Unemployment can reduce people's income, which in turn reduces the level of prosperity that individuals have achieved. The fall in prosperity due to unemployment increases the risk of individuals being trapped in poverty because they have no source of income. The Keynesian theory developed by John Maynard Keynes also highlights that a shortage of aggregate demand is the main cause of unemployment and significant economic setbacks (Nugroho, 2015).

Unemployment has a positive and significant impact on the crime rate in Indonesia.The difficulty of finding a job encourages some individuals to commit crimes as a source of income.Initially, crimes start on a small scale and then develop into more serious

crimes.In addition, people involved in criminal activities tend to be trapped in the cycle, making it difficult to get out and move on to better jobs (Fachrurrozi et al., 2021).
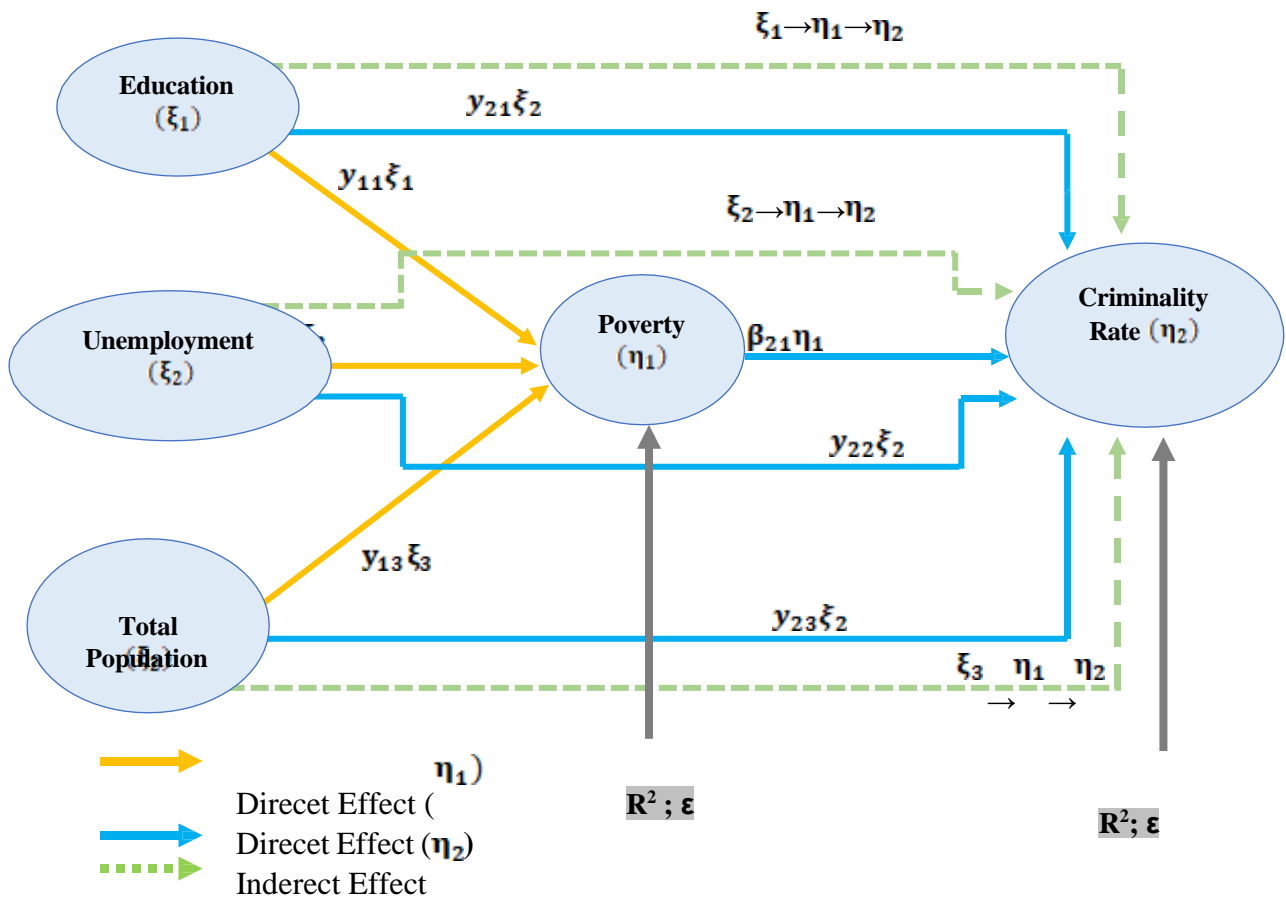
2.5 Total Population

The Central Bureau of Statistics in Satistic Indonesia (2020) explains that residents are all people who live in the geographical area of the Republic of Indonesia for six months or more and or those who live for less than six months but aim to settle down (Statistik Indonesia, 2020)

The Malthusian school states that if there are no restrictions, the population will multiply rapidly, similar to plants and animals, and soon fill the earth. High population growth is caused by unstoppable sex, while the growth rate of foodstuffs is much slower than the population growth rate.As a result, humans will experience food shortages if population growth is not restricted (Lucky Radita Alma, S.KM., 2019).

Total Population has a significant impact on poverty and economic development. Uncontrolled population growth can hinder the achievement of the goal of economic development, which is the welfare of society.Countries with large populations tend to have higher poverty rates than countries with smaller populations. This view is in line with the Malthusian school developed by Thomas Robert Malthus, who highlighted that population growth tends to outpace the growth of available resources, especially in terms of foodstuffs. Malthus predicted that this imbalance could lead to poverty and famine (Adinda & Abd, 2023).

Rapid population growth can contribute to an increase in crime. This is due to increased opportunities for potentially crime-producing social interactions, as well as additional pressure on social and economic resources that can exacerbate social problems and increase crime rates.

Source: SmartPLS 3 (Data Processed)

Figure 1 Partial Least Square-Structural Equation Modeling

The hypotheses of this study are as follows:

1. Education, Unemployment, and Total Population have a direct effect on Poverty
2. Education, unemployment, population, and poverty have a direct effect on the crime rate
3. Education, unemployment, and population have an indirect effect on the crime rate through poverty

3. Material and Method

The scope of this research focuses on Education, Unemployment, Total This research is a quantitative study with an associative approach that aims to identify the relationship between the main variables, namely Education (Average Years of Schooling), Unemployment (Open Unemployment Rate), Total Population, Poverty (Percentage of Poor Population), and Crime Rate (Number of Crimes Reported) in South Kalimantan Districts / Cities from 2017 to 2022. The analysis method used is Partial Least Square-Structural Equation Modeling (PLS-SEM) The data collection technique used is the documentation technique, where researchers collect information from various previously published sources such as books, literature, and related agency reports. These data were analyzed to understand

the patterns of relationships between variables and the implications of the findings for policies and interventions at the local level.

3.1 Design Study

Table 3 Operational Definition of Variables

No.	Nama Variabel	Variable Name	Measurement
1.	Criminality Rate (η_2)	The level of criminality is seen through the number of reported crimes. Sourced from the Central Bureau of Statistics of South Kalimantan Province	The number of reported crimes is the number of reported crimes, which is any incident received by the police from a public report, or an incident where the perpetrator is caught red-handed by the police. Criminality is measured in case units.
2.	Education (ξ_1)	Education is seen through the Average Years of Schooling figure. According to the Central Bureau of Statistics (2023) Average Years of Schooling is the number of years of study of the population aged 25 years and over in undergoing formal education (excluding years that repeat). Sourced from the Central Bureau of Statistics of South Kalimantan Province	**Average Years of Schooling** $= \frac{1}{n} X \sum_{i=1}^{n} xi$ Description: xi = Years of schooling of the i-th population aged 25 years and above n = Total population aged 25 years and above Additional Information: People who finish primary school are calculated for 6 years, junior high school graduates for 9 years, senior high school graduates for 12 years. Measurement of Average Years of Schooling is expressed in years.
3.	Unemployment (ξ_2)	Unemployment seen through the Open Unemployment Rate. Open unemployment, consisting of: a. Those who are unemployed and looking for work. b. Those who are unemployed and	Open Unemployment Rate = (Total Open Unemployment / Labor Force) x 100% Unemployment measurement is expressed in percent.

No.	Nama Variabel	Variable Name	Measurement
		preparing for business. c. Those who do not have a job and are not looking for a job because they think it is impossible to find a job. d. Those who already have a job, but have not yet started working. Sourced from the Central Bureau of Statistics of South Kalimantan Province.	
4.	Total Population (ξ_4)	According to Hijri's opinion in Population, it is all people who settle and live in an area or country legally. Sourced from the Central Bureau of Statistics of Indonesia,	Total Population = Number of births - number of deaths + migration Population measurement is expressed in units of souls.
5.	Poverty (η_1)	Poverty is the percentage of people who are poor or have monthly per capita expenditure below the poverty line in South Kalimantan Province. Sourced from the Central Bureau of Statistics of South Kalimantan Province.	Poverty = (Number of households or individuals living below the poverty line / Total population) X 100 Poverty measurement is expressed in percent.

Source: Data Processed

3.2 Data Analysis

Partial Least Square – Structural Equation Model (PLS-SEM)

SEM-PLS is an alternative technique to SEM analysis where this model eliminates the assumptions of OLS regression. The purpose of using PLS is to develop or predict an existing theory (Sarwono & Narimawati, 2015). The data obtained is processed using the SmartPLS 3 application. This can be seen through the substructure equation which can be used to calculate the coefficient of each path.

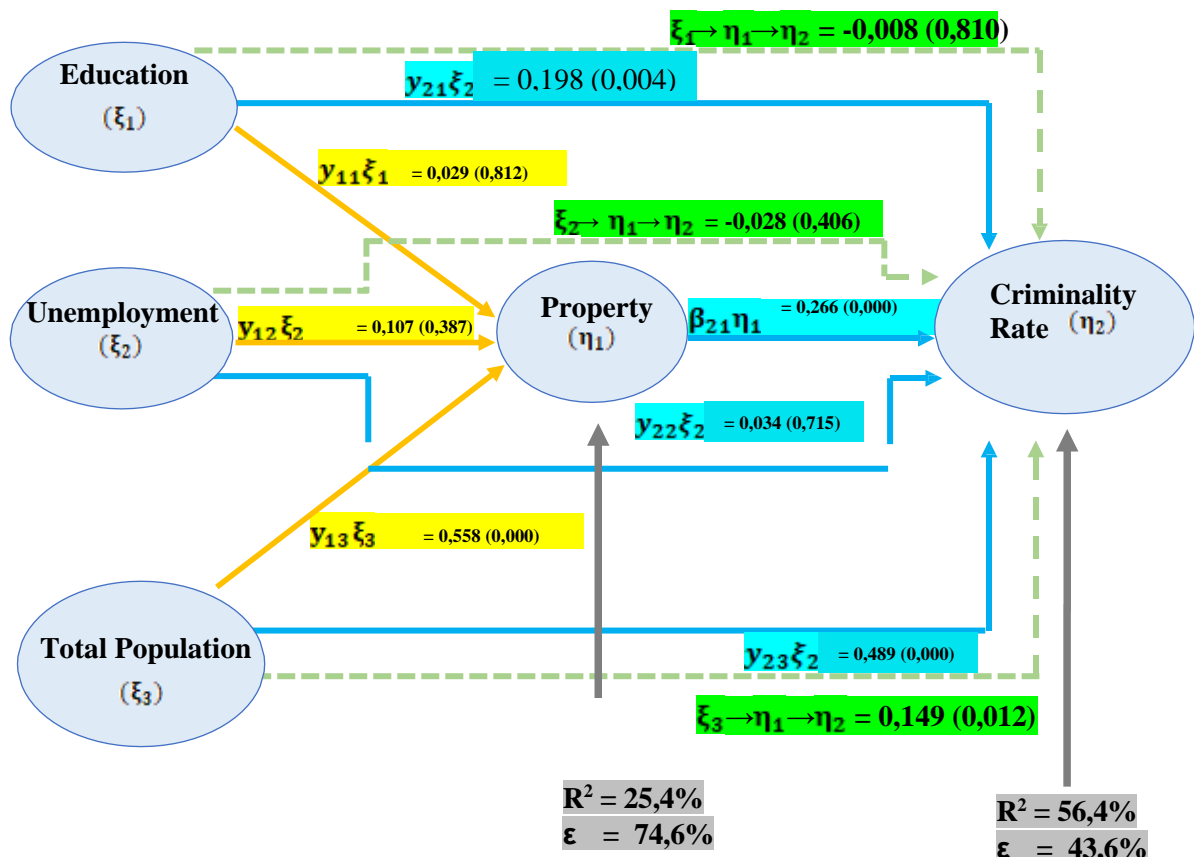$$\eta_1 = y_{11}\xi_1 + y_{12}\xi_2 + y_{13}\xi_3 + \zeta_1$$

$$\eta_2 = y_{21}\xi_1 + y_{22}\xi_2 + y_{23}\xi_3 + \beta_{21}\eta_1 + \zeta_2$$

Where:

η_1	=	Poverty
η_2	=	Crime Rate
$y_{11}\xi_1$	=	Path Coefficient of Education on Poverty
$y_{12}\xi_2$	=	Coefficient of Unemployment Path to Poverty
$y_{13}\xi_3$	=	Path Coefficient of Total Population on Poverty
$y_{21}\xi_1$	=	Education Path Coefficient on Crime Rate
$y_{22}\xi_2$	=	Coefficient of Unemployment Path to Crime Rate
	=	Path coefficient of total population on crime rate
$y_{23}\xi_3$	=	Path coefficient of poverty on crime rate
$\beta_{21}\eta_1$	=	*Error*
ζ		

- The sequence of data analysis in this study is as follows:
  Structural Model (Inner Model)
1. Hypothesis Test
2. R-Square Test

4. Result

Source: SmartPLS 3 (Data Processed)

Figure 2 PLS-SEM Equation Results

First Substructure Equation

$$\eta_1 = y_{11}\xi_1 + y_{12}\xi_2 + y_{13}\xi_3 + \zeta_1\eta_1 = 0{,}029\xi_1 + 0{,}107\xi_2 - 0{,}558\xi_3 + \zeta_1$$

The results of the above equation can be explained as follows:

1. The path coefficient for education $(y_{11}\xi_1)$ is 0,029, which indicates the direct effect of education (ξ_1) on poverty (η_1). If there is an increase in education (ξ_1) by 1% assuming other exogenous variables remain constant, then poverty (η_1) will increase by 2,9%.

2. The path coefficient for unemployment $(y_{12}\xi_2)$ is 0,107 which indicates the direct effect of unemployment (ξ_2) on poverty (η_1). If there is an increase in unemployment (ξ_2) by 1% assuming the other exogenous variables remain constant, then poverty (η_1) will increase by 10,7%.

3. The path coefficient for population $(y_{13}\xi_3)$ is -0,558, which shows the direct effect of population (ξ_3) on poverty (η_1). If there is an increase in population (ξ_3) by 1% assuming other exogenous variables remain constant, then poverty (η_1) will decrease by 55,8%.

Second Substructure Equation

$$\eta_2 = y_{21}\xi_1 + y_{22}\xi_2 + y_{23}\xi_3 + \beta_{21}\eta_1 + \zeta_2\eta_2 = 0{,}198\xi_1 + 0{,}034\xi_2 + 0{,}489\xi_3 - 0{,}266\eta_1 + \zeta_2$$

The results of the above equation can be explained as follows :

1. The path coefficient for education $(y_{21}\xi_1)$ is 0,198, which shows the direct effect of education (ξ_1) on Crime Rate (η_2). If there is an increase in education (ξ_1) by 1assuming the other exogenous variables remain constant, the Criminality Rate (η_2) will increase by 19,8%.

2. The path coefficient for unemployment $(y_{22}\xi_2)$ is 0,034, which indicates the direct effect of unemployment (ξ_2) on Crime Rate (η_2). If there is an increase in unemployment (ξ_2) by 1% assuming the other exogenous variables remain constant, then the Crime Rate (η_2) will increase by 3,4%.

3. The path coefficient for population $(y_{23}\xi_3)$ is 0,489, which indicates the direct effect of population (ξ_3) on Crime Rate (η_2). If there is an increase in population (ξ_3) by 1%. assuming other exogenous variables remain constant, then the Crime Rate (η_2) will increase by 48,9%.

4. The path coefficient for poverty $(\beta_{21}\eta_1)$ is -0,266, which shows the direct effect of poverty (η_1) on Crime Rate (η_2). If there is an increase in poverty (η_1) by 1% assuming other exogenous variables remain constant, the Criminality Rate (η_2) will decrease by 26,6%.

- **Inner Model Test Results**

Table 4 Hypothesis Test Results

Influence between Variables	Direct Effect		Indirect Effect Through Poverty (η_1)	
	Original Sample (O)	P Value	Original Sample (O)	P Value
Education $(\xi_1) \to$ Poverty (η_1)	0,029	0,812	-	-
Unemployment $(\xi_2) \to$ Poverty (η_1)	0,107	0,387	-	-
Total Population $(\xi_3) \to$ Poverty (η_1)	-0,558	0,000	-	-
Education $(\xi_1) \to$ Criminality Rate (η_2)	0,198	0,004	-0,008	0,810
Unemployment $(\xi_2) \to$ Criminality Rate (η_2)	0,034	0,715	-0,028	0,406
Total Population $(\xi_3) \to$ Criminality Rate (η_2)	0,489	0,000	0,149	0,012
Poverty $(\eta_1) \to$ Criminality Rate (η_2)	-0,266	0,000	-	-

Source: SmartPLS 3 (Data Processed)

The table shows the direct and indirect effects which are explained as follows :

1. Education (ξ_1) has no significant effect on poverty (η_1) as shown by the p value of 0,812 > 0,05.

2. Unemployment (ξ_2) has no significant effect on poverty (η_1) as shown by the p value of 0,387 > 0,05.

3. Population (ξ_3) has a negative and significant effect on poverty (η_1) as shown by the p value of 0,000 < 0,05.

4. Education (ξ_1) has a positive effect on Crime Rate (η_2) as shown by the p value of 0,004 < 0,05.

5. Unemployment (ξ_2) has no significant effect on Crime Rate (η_2) as shown by the p value of 0,715 > 0,05.

6. Population (ξ_3) has a positive effect on Crime Rate (η_2) as shown by the p value of $0,000 < 0,05$.

7. Poverty (η_2) has a negative and significant effect on poverty (η_2) as shown by the p value of $0,000 < 0,05$.

8. Indirectly Education (ξ_1) has no significant effect on Crime Rate (η_2) through Poverty (η_1) as shown by the p value of $0,810 > 0,05$.

9. Indirectly Unemployment (ξ_2) has no significant effect on Crime Rate (η_2) through Poverty (η_1) as shown by the p value of $0,406 > 0,05$.

10. Indirectly, Total Population (ξ_3) has a positive effect on Crime Rate (η_2) through Poverty (η_1) as shown by the p value of $0,012 < 0,05$.

R-Square Test Results

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Table 5 Uji *R-Square*

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R-Square (R^2)	
Poverty (η_1)	0,254
Criminality Rate (η_1)	0,564

Source: SmartPLS 3 (Data Processed)

The calculation results in the table show that the *R-Square* (R^2) value on the poverty variable is 0,254, which means that the education variable (ξ_1), unemployment (ξ_2), and population (ξ_3) can provide the information needed to predict variations in the poverty variable (η_1) by 25,4%. The other 74,6% is explained by other variables not included in the study.

Based on the table, the *R-Square* (R^2) value on the endogenous variable Crime Rate (η_2) is 0,564, which means that the variables of education (ξ_1), unemployment (ξ_2), population (ξ_3), and poverty (η_1) can provide the information needed to predict variations in the variable Crime Rate (η_2) by 56,4%. While the other 43,6% is explained by other variables not included in the study.

R-Square Test Results

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Table 5 Uji *R-Square*

R-Square (R^2)	
Poverty (η_1)	0,254
Criminality Rate (η_1)	0,564

Source: SmartPLS 3 (Data Processed)

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The calculation results in the table show that the *R-Square* (R^2) value on the poverty variable is 0,254, which means that the education variable (ξ_1), unemployment (ξ_2), and population (ξ_3) can provide the information needed to predict variations in the poverty variable (η_1) by 25,4%. The other 74,6% is explained by other variables not included in the study.

Based on the table, the *R-Square* (R^2) value on the endogenous variable Crime Rate (η_2) is 0,564, which means that the variables of education (ξ_1), unemployment (ξ_2), population (ξ_3), and poverty (η_1) can provide the information needed to predict variations in the variable Crime Rate (η_2) by 56,4%. While the other 43,6% is explained by other variables not included in the study.

5. **Results**

First, in this study, the education variable has an insignificant positive relationship with poverty, indicating that an increase in education will not have an effect on increasing poverty. As revealed by the Secretary of Commission IV of the South Kalimantan DPRD, most of the low-educated workforce (elementary school or not graduated from elementary school) tend to work as laborers. This suggests that despite improvements in education levels if the quality of education or its relevance to labor market needs is low, then this will not significantly reduce poverty (*Daya Saing Tenaga Kerja Kalsel Rendah*, 2022).

Unemployment has an insignificant positive relationship with poverty, indicating that an increase in unemployment will not lead to an increase in poverty. Effective social assistance programs can reduce the direct impact of unemployment on poverty by providing financial and material support to unemployed families. If unemployed families receive sufficient assistance, their basic needs can still be met, so poverty does not increase significantly even if the unemployment rate rises. In addition, the dominance of a low- educated workforce (elementary school or not graduated from elementary school) causes many working people to remain in poverty due to low wages and lack of career advancement opportunities.

Population has a negative and significant relationship with poverty, indicating that an increase in population will reduce the poverty rate. The larger the population, the greater the potential to create new jobs and increase economic activity. With more labor available, businesses can expand their production and services, which in turn can increase income and

reduce poverty.

Education has a positive and significant relationship with crime rates, indicating that an increase in education will lead to an increase in crime rates in South Kalimantan districts/cities. Increased education not only increases people's awareness of their rights and the legal process, but also gives educated individuals access to opportunities or resources that can be used to commit more elaborate or complex crimes, which in turn can increase the number of criminal offenses reported to authorities.

Unemployment has an insignificant positive relationship with crime rates, indicating that an increase in unemployment will not affect the increase in crime rates in South Kalimantan districts/cities. Strong social networks can provide financial or emotional support to individuals experiencing unemployment. With this support, an individual's economic distress can be alleviated, thereby reducing the urge to seek economic solutions through crime. In addition, a stable social environment often provides an informal security system through support from neighbors, family or community in maintaining security and order.

Total population has a positive and significant relationship with the crime rate, indicating that an increase in population has an effect on increasing the crime rate in the South Kalimantan Regency / City. The more people in an area, the greater the likelihood of social interactions that can produce conflict or provide opportunities for crime. Population increases can also create greater economic and social pressures, pushing individuals to seek alternative solutions to meet their needs, including through crime. With more people comes greater potential to engage in complex social activities, which in some cases can increase the risk of crime in the community.

Poverty has a negative and significant relationship with crime rates, indicating that increasing poverty has an effect on decreasing crime rates in South Kalimantan districts/cities. Individuals living in conditions of poverty often experience limitations in their social networks, potentially reducing their likelihood of collaboration or gaining social support that can support crime. This condition sometimes makes them more vulnerable to economic pressures that encourage alternative economic behaviors, including criminal acts. On the other hand, levels of religion or religiosity can also be significant in shaping an individual's crime-related behavior. Involvement in religion often increases awareness of personal morality and spiritual responsibility. Highly religious individuals tend to consider their decisions based on religious values that establish firm moral rules, which often prohibit or condemn criminal behavior.

Indirectly, education has an insignificant negative relationship with crime rates through poverty, indicating that indirectly increasing education has no effect on reducing crime rates

through reducing poverty in South Kalimantan districts/cities. Although there is an assumption that higher education can improve economic conditions and reduce poverty, there is not always a guarantee that increased education will automatically reduce crime rates in society. This is because crime can be influenced by complex social, cultural and economic dynamics, of which education is only one of many factors involved.

Indirectly, unemployment has a negative relationship with the crime rate through poverty, indicating that indirectly increasing unemployment has no effect on reducing the crime rate through poverty. Although unemployment can increase an individual's economic pressure, existing social support from family, community, or social assistance programs can help reduce the impact of poverty that drives individuals to engage in criminal activities. In other words, even if they experience unemployment, the presence of a strong social network can help them still fulfill their basic needs without having to commit criminal acts.

Indirectly, population has a positive and significant relationship with crime through poverty, indicating that an increase in population indirectly affects the increase in crime through an increase in poverty. Rapid population growth creates economic and social pressures in communities if infrastructure and public services do not develop in line. This increases demand for basic resources such as water, food, housing and employment. If not properly accommodated, this can lead to increased poverty among new or marginalized

populations, which is often a risk factor for criminality as it encourages illegal behavior to make ends meet. Unbalanced growth also creates social and economic inequality, encouraging marginalized groups to engage in crime to cope with their conditions.

1. **Conclusions, Implications, Recommendations, and Limitations**

• **Conclusions**

From the analysis conducted, it can be concluded that factors such as education, unemployment, and population growth have a complex impact on poverty and crime rates in the districts/cities of South Kalimantan. Although education and unemployment are not directly significantly related to poverty and crime, population growth indirectly contributes to increased poverty and crime rates through the economic and social pressures it generates. Therefore, policies that manage population growth and improve access to education and social support can help reduce the risk of poverty and crime in the region.

• **Implications**

The implications of the findings in this study are highly relevant for policy formulation in South Kalimantan districts/municipalities. First, although education has a positive but insignificant

relationship with poverty, this highlights the need to improve the quality and relevance of education to the local labor market to truly reduce poverty. Education policy should put more emphasis on developing skills that match the demands of the labor market so that individuals can significantly improve their living standards. Second, effective social assistance programs are needed to address the direct impact of unemployment on poverty. Adequate financial and material support can help maintain the basic needs of unemployed families, allowing them to survive without having to seek economic solutions through crime. Third, population increases have the potential to boost economic activity and create new jobs. Economic development policies should accommodate population growth by ensuring sufficient employment opportunities are created to minimize poverty levels. Fourth, in dealing with crime rates, education can play an important role in increasing legal awareness and individual morality. However, the need to also be wary of the potential increase in crime rates with increased education highlights the need for effective surveillance and preventive measures from the authorities. Fifth, addressing poverty can directly contribute to reducing crime rates. Efforts to strengthen social networks and support the economy of vulnerable communities should be a key focus of policy to reduce their potential to engage in criminal behavior. Finally, the level of religion or religiosity can also be leveraged in creating a social environment that prioritizes moral norms that can reduce criminal behavior. The involvement of religious communities can be enhanced to strengthen moral values and spiritual responsibility in society.

- **Recommendations**

To reduce poverty and crime in South Kalimantan's districts/cities, several steps need to be taken. First, it is necessary to improve the quality of education by adjusting the curriculum to make it more relevant to local labor market needs. This can help improve the ability of the workforce to find decent work and reduce involvement in crime as an alternative to earning a living. In addition, there is a need to strengthen effective social assistance programs to provide financial and material support to unemployed or low-income families, thereby reducing the economic pressures that drive individuals to engage in criminal activity. Infrastructure development is also crucial to match population growth, which can help reduce social and economic inequality and mitigate negative impacts on poverty and crime. In addition, it is important to manage population growth in balance with the capacity of existing infrastructure and public services in order to reduce social and economic pressures that could potentially trigger criminal behavior. Finally, increasing legal awareness and morality in society through better education on legal rights and moral responsibilities can also help reduce opportunities

and incentives to commit crimes. By implementing these measures, we hope to create a safer and more prosperous environment for the people of South Kalimantan.

- **Limitations**

This study has several limitations that need to be considered. First, the data used only covers the period 2017-2022, so it cannot capture long-term trends that might provide deeper insights into the relationship between the variables studied. Secondly, this study is limited to the South Kalimantan Regency/City area, so the results may not be generalizable to other regions with different socio-economic conditions.

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