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IMPACT OF EDUCATION AND HEALTH ON THE UNEMPLOYMENT RATE AND ECONOMY OF EAST JAVA Suyanto1), Bambang Purnomo2), Rahmawati Erma Standsyah3) 1) Faculty Of Economics and Business University of Dr. Soetomo Surabaya, Indonesia E-mail: suyanto_fe@unitomo.ac.id 2) Faculty Of Teacher Education And Educational Sciences University of Dr. Soetomo Surabaya, Indonesia E-mail: bambang.purnomo@unitomo.ac.id 2) Faculty Of Teacher Education And Educational Sciences University of Dr. Soetomo Surabaya, Indonesia E-mail: rahmawati.erma@unitomo.ac.id Abstract .

East Java statistics indicate that the total population of East Java Province is increasing every year. The increase in the population is followed by an increase in social problems, including unemployment. The unemployment rate can affect the economy of the society. Efforts must be made to reduce it by improving the quality of society through factors related to education and health.

According to data from East Java in 2017, East Java's education has a significant positive direct effect on the East Java economy of 0.343%, while indirectly through unemployment has an insignificant effect increased by 0.0021%. In addition, health has no significant direct and indirect effect on the East Java economy with coefficients of 0.078% and -0.0023%, respectively.

Keywords : East Java, Society Economy, Education, Health, Unemployment, SEM

PLS I. INTRODUCTION East Java statistics indicate that the total population of East Java Province is increasing every year. The sharp increase over the past 7 years about 2 million more inhabitants [1], [2].

The increase was also followed by an increase in the new workforce, which shows that an increase in the population has resulted in an increase in the new labor force above employment so that the number of unemployed rose to 840,000 [3]. It also affects the level of education and health of the people of East Java. Basic education data for 2017 in the province of East Java indicate a position below 10% [4].

According to data from the 2017 statistics report for the East java, the population of East Java over the age of 15 with a primary school education was only 30% [5]. Infant mortality remains a challenge. Out of 1,000 live births, 14 newborns die in the first month of life and 34 die before the age of five. Most women can access childbirth services and 95% of births are attended by skilled birth attendants.

However, reproductive health services still need to be improved, especially with regard to increased access to modern contraceptive methods [6]. In addition, East Java's economic growth, which reached 5.5% in the first quarter of 2018, represents a decrease compared to the fourth quarter of 2017, which reached 5.7% [7].

The level of education and health of the population is a dominant factor that must be given priority to improve the quality of human resources. With a high level of education and health, people determine the capacity to absorb and manage sources of economic development, from technological elements to institutional elements. It is an effort to increase the level of well- being of the population, all from advanced economic activities [8].

In addition to Indonesia, several foreign countries facing the same problems of economic development consider that the basic indicators of economic development are the level of unemployment and/or education [9]. Unemployment can also be observed from several indicators such as education and health [10]. Economic development research has been conducted on both Indonesian data and other data related to foreign countries, including the strategy for poverty alleviation through local economic development in the era of decentralization [11] ; the effect of unemployment, economic growth and public spending on the human development districts / cities of Central Java Province in 2007-2011 [8] and some constraints to poverty reduction in Indonesia [12].

In Europe, studies show the effect of education on unemployment and state income [13], the effect of education and health on unemployment [14], the effect of education, health and infrastructure on the labor force and poverty [15], as well as the increase in the labor force by optimizing education and unemployment [16]. So far, no research has been found on the economic improvements observed on the basis of education and health indicators with unemployment as an intermediate variable.

SEM PLS will therefore quantitatively study the factors that influence the economic improvement of East Java, based on the education and health variables, through the unemployment rate as an intermediate variable. It is hoped that this research shows that improving the education and health of the people of East Java can reduce unemployment and increase the economy of the province of East Java. II. METHODOLOGY A.

Research Data Source This research is a quantitative study using secondary data from the East Java BPS, resulting from the processing of data from the 2017 National Socio-Economic Survey (SUSENAS), the 2017 National Labor Force Survey, Projections for the East Java population and East Java Health Profile 2017 from East Java Health Department sources. It was according to districts/cities up to 38 data. B.

Research Variables The variable in this study uses 38 regencies/cities in East Java in 2017, so this is cross-sectional data. With reference to [6], [18], [19] overall, the concepts / constructs used include four variables, namely: 1. Education 2. Health 3. Unemployment rate 4. Economic A measured variable is a latent variable, that is, a variable that can not be measured directly. It, therefore, requires measurable indicators.

The analytical method used is the variant-based structural equation modeling approach, namely SEM PLS. SEM PLS has the advantage, compared to a covariant-based SEM, of ignoring the initial assumptions of the process. The concept of constructing three latent variables and one manifest variable, as a whole, is as follows: 1.

Educational Variables ? School Participation Rate Age Group 16-18 Years East Java 2017 (Percent) ? Literacy rate aged 10 years and over East Java 2017 (Percent) ? Highest level of education in East Java in 2017 (Percent) 2. Health Variable ? Percentage of East Java population with health problems in 2017 (Percent) ?

Percentage of young people in East Java who have smoked tobacco in the last month of 2017 (Percent) ? Percentage of households with healthy and healthy living practices in East Java in 2017 (Percent) 3.

Variable Open Unemployment Rate for 2017 East Java 4. Economic Variables ? ADHK GRDP without East Java Oil and Gas in 2017 Rate (Percent) ? Implicit ADHK GRDP without East Java Oil and Gas 2017 Rate (Percent) C. Conceptual Framework and Hypothesis The conceptual framework of this study is the relationship between certain latent variables that want to be observed or measured by several indicators in the context of research conducted with the SEM-PLS approach or method.

The hypothesis that forms the basis or the background of the conceptual framework used in this study is as follows. 1. Education and health affect the unemployment rate 2. Education, health, and unemployment have an influence on economic. 3. Education and health influence the economy through unemployment as an intermediate variable. While the conceptual model used is as follows. Fig.

1 The conceptual framework of Research III. Result And Discussion East Java is one of the provinces of Java with 38 regencies or cities and is the most populous province of Java. Before analyzing the influence model of the education and health variables on the economic variables, with the unemployment rate variable being used as an intermediate variable in East Java, descriptive statistics were produced to show the characteristics of the data.

The results of the descriptive statistics for the four variables of each indicator are as follows: TABLE I DESCRIPTIVE STATISTICS RESULTS Definisi Variabel Mean Min Max StDev Educational Variables School Participation Rate Age Group 16-18 Years East Java 2017 (Percent) x_{11} 73.821 49.42 90.01 10.26 Literacy rate aged 10 years and over East Java 2017 (Percent) x_{12} 95.532 80.75 98.84 4.83 Highest level of education in East Java in 2017 (Percent) x_{13} 27.279 11.01 50.99 10.8 Health Percentage of East Java population with health problems in 2017 (Percent) x_{21} 32.151 16.54 47.3 6.32 Percentage of young people in East Java who have smoked tobacco in the last month of 2017 (Percent) x_{22} 24.908 17.59 31.1 3.12 Percentage of households with healthy and healthy living practices in East Java in 2017 (Percent) x_{23} 54.005 24.2 100 14.98 Variable Open Unemployment Rate for 2017 East Java y_1 3.764 0.85 7.22 1.29 Economic Variables ADHK GRDP without East Java Oil and Gas in 2017 Rate (Percent) y_{21} 5.353 4.46 6.56 0.43 Implicit ADHK GRDP without East Java Oil and Gas 2017 Rate (Percent) y_{22} 2.921 1.82

4.39 0.46 Source: Output Of The Results SPSS Processed Data Based on the descriptive data in Table 1, which is then processed with SmartPLS software to determine the effect of endogenous variables on exogenous variables.

In the SEM analysis, there are 2 evaluation models, the inner model, and outer model An evaluation of the measurement model (Outer Model) by the loading factor is performed to determine the validity of the indicator which the measurement of latent variables, by examining the value of the reliability of the indicator, composite reliability, and convergent validity. While the evaluation of the structural model (Inner Model) on SEM-PLS can be known from the value of R- Square (R^2).

Theoretically explained that the value of R^2 greater than 0.67 means that the contribution of exogenous variables to the endogenous is high, between 0.33 and 0.67, it then has a sufficient or moderate contribution and between 0.19 to 0.33, weak contribution. Fig. 2 Value of Loading Factor TABLE 2 VALUE OF COMPOSITE RELIABILITY, DAN CONVERGENT VALIDITY Variable Composite reliability Average Variance Extracted (AVE) Education 0.924 0.8 Health 0.054 0.493 Unemployment 1 1 Economic 0.79 0.661 Source: Output Of The Results SmartPLS The post-evaluation measurement model can then be continued by writing the model in the equation.

The equation obtained as a function of the latent variables of the model is as follows: Equation of Outer Model: ? Education Variables $X_{11} = 0.822$ Education + d X_{11} $X_{12} = 0.915$ Education + d X_{12} $X_{13} = 0.947$ Education + d X_{13} (1) ? Health Variables $X_{21} = 0.461$ Hÿealth + d X_{21} $X_{22} = 0.708$ Hÿealth + d X_{22} $X_{23} = -0.875$ Hÿealth + d X_{23} (2) ? Economic Variables $Y_{21} = 0.954$ Economÿic + e y_{11} $Y_{22} = 0.641$ Economÿic + e Y_{22} (3) From Equation (1) - (3), it is known that each latent variable has a relationship with the indicator, with the exception of the latent health variable, where the indicator can not correctly measure the latent health variable.

However, the largest contribution to the latent variable is the GRDP (Y_{21}) rate indicator with the trajectory coefficient of the latent variable of economic growth of 0.954, while the lowest contribution relates to the rate indicator. GRDP implicit index (Y_{22}) with a coefficient of 0.641. also to the latent variable of the economy. The hypothesis test is performed by examining the p-value relative to the significance level of the study (a) .

If the p-value is less than the significance level, reject H_0 , which means

significant parameters (latent exogenous has a <mark>significant influence on the endogenous</mark> latent) and besides that, if the p- <mark>value is greater than the significance level</mark> than not to reject H 0 , <mark>which means that the</mark> parameter is not significant (the exogenous latent has no <mark>significant effect on the</mark> endogenous latent). <mark>The results of the</mark> causality using SmartPLS software can be viewed as in the table below.

TABLE 3 RESULTS OF CAUSALITY BETWEEN VARIABLES Causality T Statistic P-Value Education -> Economy 5.259 0.000 Education -> Unemployment Rate 2.255 0.025 Health -> Economy 0.328 0.743 Health -> Unemployment Rate 0.916 0.360 Unemployment Rate -> Economy 0.040 0.968 Source: Output Of The Results SmartPLS Then write the structural model in the equation based on <mark>the results of the</mark> SmartPLS data processing in Figure 2 is as follows: Structural Model : ? Unemployment Variables Uneÿmpÿloyÿmenÿt = 0.ÿ34ÿ3 Eÿduÿcÿation - 0.ÿ37ÿ8 Heÿaÿltÿh + ? 1 (4) ? Economic Variables Economÿic = 0.006 Unemÿploymÿent + 0.678 Education + 0.078 Hÿealth + ? 2 (5) Equation 4 shows that unemployment is proportional to the increase in education, as well as many unemployed people with formal education.

The phenomenon is, therefore, being developed by many government programs of vocational training activities. While health <mark>is inversely proportional to</mark> unemployment, according to his theory that a healthy person can work well. Whereas, according to equation 5, the increase in the economy is proportional to the increase in unemployment, which shows that the increase in the economy is not only affected by unemployment but can also be influenced by the consuming population of East Java.

Economic improvement is also proportionate to education and health, the higher and healthier the population of East Java, the higher the economy of East Java. Consistent with the assumptions discussed in this study, it can be argued that education has a direct and <mark>significant effect on the</mark> East Java economy, but it will <mark>not have a significant effect</mark> if it is related to the unemployment rate.

In addition, health has no significant effect, directly or indirectly, because of the unemployment rate in the East Java economy. IV. CONCLUSIONS Education in East Java has a <mark>significant positive effect on the unemployment rate and the</mark> economy of East Java with a coefficient increased by 0.343% and 0.678%, respectively. The health of East Java is not a significant negative effect with an increased coefficient of 0.378% on the East Java unemployment rate and 0.078% on the East Java economy.

The unemployment rate in East Java has a significant positive effect on the East Java economy of 0.006%. East Java Education has a significant positive effect directly on the economic improvement of East Java with a high growth coefficient compared indirectly with a very small coefficient increase of only 0.0021% due to the East Java unemployment rate. but on the contrary, health has no significant positive effect.

directly and without significant indirect negative effect on the economy of East Java with a coefficient plus only 0.0023%

REFERENCES [1] BPS Jawa Timur, Indikator Kesejahteraan Rakyat Provinsi Jawa Timur 2017. Surabaya: BPS Provinsi Jawa Timur, 2017. [2] BPS Jawa Timur, Provinsi Jawa Timur Dalam Angka 2010. Surabaya: BPS Provinsi Jawa Timur, 2010. [3] BPS Jawa Timur, Statistik Pemuda Provinsi Jawa Timur 2017.

Surabaya: BPS Provinsi Jawa Timur, 2017. [4] BPS Jawa Timur, "Laporan Eksekutif Pendidikan Provinsi Jawa Timur 2017," 2017. [5] Z. Effendi, "Jenjang Pendidikan di Jatim Masih Rendah, Ini Kata Khofifah," detiknews. Jan-2019. [6] Dinkes Jatim, Profil Kesehatan Propinsi Jawa Timur 2017. Surabaya, 2018. [7] J. T. BPS, Provinsi Jawa Timur Dalam Angka 2018. Surabaya: BPS Provinsi Jawa Timur, 2018. [8] N.

Baeti, "Pengaruh Pengangguran, Pertumbuhan Ekonomi, Dan Pengeluaran Pemerintah Terhadap Pembangunan Manusia Kabupaten/Kota Di Provinsi Jawa Tengah Tahun 2007-2011," Econ. Dev. Anal. J., vol. 2, no. 3, 2013. [9] V. Snieska, G. Valodkiene, A. Daunoriene, and A. Draksaite, "Education and Unemployment in European Union Economic Cycles," Procedia - Soc. Behav. Sci., vol. 213, pp. 211–216, 2015. [10] Z. Pirim, W. A.

Owings, and L. S. Kaplan, "The Long-Term Impact of Educational and Health Spending on Unemployment Rates," vol. 7, pp. 49–69, 2014. [11] S. Suyanto, "Strategi Memerangi Kemiskinan dengan Pengembangan Ekonomi Lokal pada Era Desentralisasi," J. EL- Ijtima, Media Komun. Pengemb. Masy. Madani, vol. 8, no. 1, pp. 21–38, Jan. 2007. [12] S. Suyanto, "Beberapa Kendala dalam Menanggulangi Kemiskinan di Indonesia," J. Huk. Maksigama, vol. 10, no. 2, pp. 82–94, Nov. 2007.

[13] I. Lavrinovicha, O. Lavrinenko, and J. Teivans-treinovskis, "Influence of education on unemployment rate and incomes of residents," Procedia - Soc. Behav. Sci., vol. 174, pp. 3824–3831, 2015. [14] S. K. R. Van Zon, S. A. Reijneveld, C. F. Mendes, and D. L. Ute, "The impact of low education and poor health on unemployment varies by work life stage," pp. 997–1006, 2017. [15] N.

Sulistyowati, "The Effect of Educational , Health , Infrastructure Expenses on the Workforce Employment and Poverty," vol. 20, no. 3, 2013. [16] W. C. Riddell, X. Song, and W. C. Riddell, "The Impact of Education on Unemployment Incidence The Impact of Education on Unemployment Incidence and Re-employment Success?: Evidence from the U .

S . Labour Market," no. 5572, 2011. [17] A. Jonnadi, S. Amar, and H. Aimon, "Analisis Pertumbuhan Ekonomi Dan Kemiskinan Di Indonesia," J. Kaji. Ekon., vol. 1, no. 1, 2012. [18] F. Amalia, "Pengaruh Pendidikan, Pengangguran Dan Inflasi Terhadap Tingkat Kemiskinan Di Kawasan Timur Indonesia (Kti) Periode 2001-2010," J. Ilm. Econosains, vol. 10, no. 2, pp. 158–169, 2012.

[19] Nur Baeti, "Pengaruh Pengangguran, pertumbuhan ekonomi, dan pengeluaran pemerintah terhadap pembangunan manusia kabupaten/kota di provinsi jawa tengah," Econ. Dev. Anal. J., vol. 2, no. 3, p. 94, 2013. [20] BPS, Statistik Kesehatan Provinsi Jawa Timur 2017. Surabaya: BPS, 2017. [21] BPS Jawa Timur, Laporan Eksekutif Keadaan Angkatan Kerja Provinsi Jawa Timur 2017. Surabaya: BPS Provinsi Jawa Timur, 2017.

[22] BPS Jawa Timur, Produk Domestik Regional Bruto Kabupaten/Kota Di Provinsi Jawa Timur Menurut Lapangan Usaha 2013-2017. Surabaya: BPS Provinsi Jawa Timur, 2018.

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