

Research Review: By using SEM (Structure Equation Model) to Analysis the Influencing Factors between Economic and Health Status in the District of Jayapura

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ABSTRACT

Health factors are closely related to the quality of human resources. Research about health factors had been studied recently. This study aims to examine and analyze (1) Influence of Health Development of the Human Resources Economic in Jayapura District; and (2) Influence of Human Resources, Health Care Effort, and Improvement of Health Status of the Human Resource Economics in Jayapura District.

This research was conducted through a survey of the implementation of health development in order to improve implementation of Human Resource Economics. Eksplanative design selected for this study to test the hypothesis in structural equations to analyze the influencing factors of health development in the context of economic development of human resources. Thus, this study used quantitative and qualitative methods, in which the hypothesis was being tested using empirical and primary data for the purpose of development theory and explain the research problem that has been proposed by previous researchers.

The analysis keen on answering the problem and proofing the hypothesis by using descriptive analysis and SEM (Structural Equation Model). The results showed that Critical Ration (CR) and Probability (Prob): (1) Of the three variables tested as factors influencing the Human Resource Economics in Jayapura District, produce that Human Resources (coefficient his regression of -3.383 and -2.729, Probability is 0.000 and 0.006), Budget (CR it amounted to 2.332 and 2.406, Probability is 0.020 and 0.16) and Infrastructure (CR of 3.416 and 2.508, Probability is 0.000 and 0.012) in Health is positive and have significant effect on the efforts of Health Services as well as Improve Health Status in Jayapura. (2) The Human Resources (CR by -0.802 and Prob. 0.423), Budget (CR is regression of -1.146 and Probability is 0.252), and Infrastructure (coefficient her by -0.787 and Probability is 0.431) in Health Economics do not directly affect Human Resources in Jayapura District, but through the variable effort between the Health Care and the Health Status Improvement in Jayapura, it is necessary to be optimized. (3) Health Care Efforts (CR of 4.895 and Prob. Is 0.000) and Health Status Improvement (CR his regression of 2.062 and Prob. 0.039) directly influence the Human Resource Economics in Jayapura District. The Implication of study is the effect of Health Resource (Human Resource, Budget, Infrastructure) Health Care Efforts and Health Status Improvement. Three out of five effects did not affect Human Resources Economic in Jayapura District, which were Human Resources, Budget, Infrastructure.

Keywords: *Health Development and Human Resources Economic.*

1. PRELIMINARY

Health factors are closely related to the quality of human resources itself. The high and low quality of human resources (HR) will be determined by the health status, education, and income level of per capita (Ananta and Hatmadji, 1985). In economic activities, the three indicators of the quality of human resources will indirectly also impact on the high and low productivity of human resources, specifically labor productivity.

The main objective of health development is to increase the ability of the community to help themselves in the health sector; improving environmental quality that can guarantee health

increasing the nutritional status of the community, reducing morbidity and mortality, and developing a healthy and prosperous family. Meanwhile the BOK Fund is Rp 5,182,700,000/- and JAMKESMAS / JAMPERSAL is Rp. 2,753,528,000,- as well as the TP Fund's APBN is Rp. 5,325,510,000. In addition, it also being funded from the UNICEF Fund as much as Rp. 318,773,000. Even though the total fund has met the standard amount, the allocation is somewhat experiencing a shortage related to the distance of several regions in the entire region. Despite from that the Health Facilities and Infrastructure in Jayapura Regency, the Facility Building consists of 19 Public Health Center (Puskesmas), 53 Pustu, and 26 Polindes, means the district already has public health centre, even though the condition of facilities and

infrastructure is far from the standard in order to provide optimal service quality for local people.

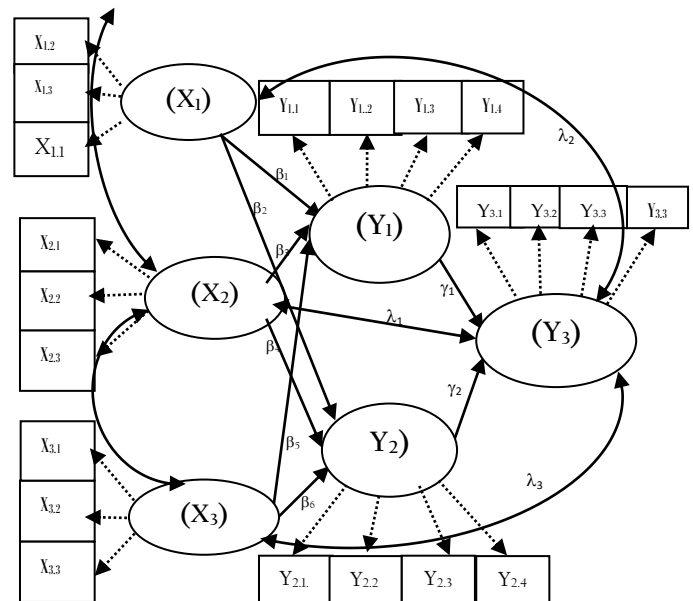
Otherwise, in terms of economy in Jayapura Regency based on the data of Health Profile in 2014, showed that the economic growth of Jayapura Regency in 2013 was 9.96% or equal to 0.25% compared to the growth in 2012 which was 9.03%. On per capita GRDP data based on the prevailing price in 2013, Jayapura Regency was Rp. 11,210,000,- experienced an increase in growth of 10% from 2012 amounting to Rp. 10.190,000,- and Inflation Rate in Jayapura Regency until in the third quarter of 2013 which reached 16.73% or increased by 1.15 compared to the inflation rate in 2012 that was only 16.54%. Literature review Conception of Development is a condition where there is improvement; "Development is a state in which things are improving." (Bloom, 2015). In 1966, Saul M. Katz stated "development is a change from a particular state to those that are considered as better or improved". This means that development is a change from a country that is intended to make the community better and experience an increase. Regional Development Policy Understanding Economics of human resources (Human Resources Economic) related to human resource planning (human resources planning), labor economy (labor economic), and population economy (economic population). Mulyadi. S (2003) stated that the economy of human resources is economics that is applied to analyze the formation and the use of human resources related to economic development. In other words, human resource economics is the application of economic theory of human resource analysis. According to Feriyanto (2014), there are several Economic Theory of Human Resources.

Several studies related to human resource economics, namely: 1. Human Resource Planning (Human Resources Planning) 2. Labor Economics 3. Population Economics 4. Development Economics Poor health will adversely affect economic growth, this is partly the case in Sub-Saharan Africa and South Asia. The heavy burden is mostly caused by disease and its dual influence on population productivity as well as the education standard that plays role in economic growth, as described the latest study conducted by (Bloom and Sachs, 2015), found that compared to East Asian countries, more than half of the economic growth in African countries are retarded, statistically it can be explained by the heavy burden of disease, population, and geography to be compared to the traditional variables of macroeconomic and political governance.

Research Concept Framework

This study referred to the theory of the development of the Economics of Human Resources (HR), which bases that changes in the number of health resources are influenced by several things.

Picture 1.
Research Scheme



Sources : Primary Data, 2017.

This study thoroughly looked at whether or not there are effects of health development factors on the Human Resources Economy in Jayapura Regency.

The essence of this research was to lead to the research question that whether there are factors influencing the health development factors which consisted of: HR Health variable (X1), Health Budget variable (X2), and Health Facility and Infrastructure variables (X3) on Human Resource Economy in Jayapura Regency through the dependent variable, namely Health Service Efforts and (Y1) and Increased Health Degrees (Y2) and Human Resource Economics (Y3) in Jayapura Regency, District Yowari.

Operational definition

- 1) **PRIMARY DATA** (*Questionnaire & Interview*).
 - A. Health Resources (X), Research at the Secretariat of the Health Service, Puskesmas, and Yowari District Hospital, Jayapura, Papua, which consists of Sub Variables:
 - 1. Human Resources in the Health Sector (X1)

- a. Health Education HR Level (X1.1)
- b. Health Skills Level of Health (X1.2)
- c. Health Competency Level (X1.3)
- 2. Health Sector Budget (X2)
 - a. APBD Funds (X2.1)
 - b. State Budget Fund (X2.2)
 - c. Dana Otsus (X2.3)
- 3. Health Sector Infrastructure (X3)
 - a. Facilities (Building) Health (X3.3)
 - b. Facilitation Infrastructure (Equipment and Equipment) Health (X3.2)
 - c. Health Technology (X3.3)

Between (Y) Health Development (Dependent) Variables, namely:

- A. Health Service Efforts Program (Y1)**
 - 1. Promotive Program (Y1.1)
 - 2. Preventive Program (Y1.2)
 - 3. Curative Program (Y1.3)
 - 4. Rehabilitative Program (Y1.4)
- B. Increased Health Degrees (Y2)**
 - 1. Increased Healthy Life Rates (Y2.1)
 - 2. Increased Life Expectancy Rate (Y2.2)
 - 3. Decreasing Rough Mortality Rate (Y2.3)
 - 4. Decreasing Mortality Rate (AKI & AKB) / (Y2.4)
- C. Development Health in Jayapura - Papua (Y3)**
 - 1. Economic Growth through Increased GRDP (Y3.1)
 - 2. Increased HR Economy through Increased HDI (Y3.2)
 - 3. HR Economic Growth through Increased MSEs (Y3.3)

SECONDARY DATA (*Time Series from 2011 - 2015*) in Jayapura District Papua:

- 1. Data on Population Kab. Jayapura - Papua
 - a) Education Data (Y3.1)
 - b) Health Data (Y3.2)
 - c) Economy (Y3.3)
- 2. Jayapura District Health and ESDM Development Program Data.
- 3. Policy Data of the Jayapura District Government concerning the Development of Health and HR Economics.

2. RESEARCH APPROACH

This research was conducted using a mixed method study. The data were obtained by conducting a field survey to various parties related to economic and health data in Jayapura Regency.

Descriptive statistics was intended to describe the characteristics of respondents and inferential descriptions using Structural Equation Modeling (SEM) in order to test the research hypothesis and

discuss the relationship of variables to be compared with the results of the study.

Place and time of research

This research was conducted in Jayapura Regency. The research locations were necessary to represent Jayapura Regency, therefore the research was done in all of the Districts (19 Districts) was conducted from November 2016 to January 2017 by distributing questionnaires as the research instruments to the stakeholders in the health and economic fields as well as doing interview guidelines for the key informants in the region Jayapura Regency.

Population and Sample

The population in this study were all ASN employees many staff of government who have links in the field of health in Jayapura Regency. Totally 2.560 people consisting of: Members of the DPRD, Regional Secretariat, BAPPEDA, BKD, BPKAD, DISPENDA, STIKES, Health Services, Puskesmas, Pustu / Polindes, Yowari Hospital, District, and Village / Village, BPJS Health & Employment in Jayapura Regency.

The sample of this study was based on the opinion of Arikunto Suharsimi (2002: 112-113), which stated that if the subject is less than 100 people it is going to be easier to take it all, meanwhile the large population can only be taken between 10-20%.

The sample in this study was $10\% \times 2.560 = 256$, namely Table 1:

Tabel 1.
Taken Research sample

No	Authorities	Respondent by Questionnaires		Respondents by Interview	
		Sat.	Jml.	Sat.	Total
1	DPRD	1x5	5	1x1	1
2	SETDA	1x5	5	1x0	1
3	BAPPEDA	1x5	5	1x1	1
4	BKD	1x5	5	1x1	1
5	BPKAD	1x5	5	1x1	1

6	DISPENDA	1x5	5	1x1	1
7	STIKES	1x5	5	1x1	1
8	DINKES	1x26	26	1x2	2
9	PUSKESMAS	3x19	57	1x1	1
10	PUSTU	2x11	22	1x0	1
11	RSUD YOWARI	1x22	22	1x1	1
12	DISTRİK	2x19	38	1x1	1
13	KAMPUNG	2x19	38	1x0	0
14	BPJS KES. & T.KERJA	2x9	18	1x1	2
TOTAL			256		15

Sources : Processed Data, 2016

Analysis techniques

The analysis model used in this study was multiple linear regression. According to Sugiyono (1999), multiple regression can be analyzed as follows:

$$Y = a + b_1X_1 + b_2X_2 \dots \dots b_nX_n + e$$

Where as:

- Y and Y_1, Y_2, Y_3 = dependent variable
- $b_1, b_2 \dots b_n$ = regression coefficient
- $X_1, X_2 \dots X_n$ = independent variable X
- X_1, X_2 = independent variable Y_1 dan Y_2
- Y_1 dan Y_2 = independent variable Y_3
- e = Error

(Sugiyono, 2002)

In this occasion, testing the hypothesis was intended to analyze whether or not the relationship between independent variables simultaneously has a significant effect, carried out by comparing between F_{count} and F_{table} . If F_{count} is greater than F_{table} , then the hypothesis raised in this study is accepted, and vice versa. Hypothesis testing was done by comparing the significant values (t) with a level of significant (LOS) value of 0.05. If the significant value (t) is smaller than the LOS value = 0.05, then the hypothesis in this study is accepted, and vice versa. Testing Regression Assumptions, consisted of: 1. Normal distribution, a theoretical distribution and a continuous random variable. To test whether or not the

research sample is a normal type of distribution, the Kolmogorov Smirnov Goodness of fit Test is used with the test criteria: \circ Number of significance (sig.) > 0.05, then the data is normally distributed. \circ Number of significance (sig.) < 0.05, then the data is not normally distributed.

Heteroscedasticity

If the variance of the variable is not the same, heteroscedastic interference occurs. The method that will be discussed here is the rank correlation test from Spearman (Gujarati, 2004) which uses the formula:

$$r_s = 1 - 6 \left[\frac{\sum d_i^2}{N(N^2 - 1)} \right]$$

Mathematically SEM, equation (P.1) - (P.3), explicitly stated as;

$$Y_1 = \alpha_1 + \beta_{11}X_1 + \beta_{21}X_2 + \beta_{31}X_3 + u_1 \text{ (P.4)}$$

$$Y_2 = \alpha_2 + \beta_{12}X_1 + \beta_{22}X_2 + \beta_{32}X_3 + u_2 \text{ (P.5)}$$

$$-\gamma_{13}Y_1 - \gamma_{23}Y_2 - \gamma_{33}Y_3 = \alpha_3 + \beta_{13}X_1 + \beta_{23}X_2 + \beta_{33}X_3 + u_3 \text{ (P.6)}$$

The simplified results of the reduced structural model form are stated;

$$Y_1 = \alpha_1 + \beta_{11}X_1 + \beta_{21}X_2 + \beta_{31}X_3 + u_1$$

$$Y_2 = \alpha_2 + \beta_{12}X_1 + \beta_{22}X_2 + \beta_{23}X_3 + u_2$$

$$Y_3 = (\alpha_1\gamma_{13} + \alpha_2\gamma_{23} + \alpha_3\gamma_{33} + \alpha_3) + (\beta_{11}\gamma_{13} + \beta_{12}\gamma_{23} + \beta_{13}\gamma_{33} + \beta_{13})X_1 + (\beta_{21}\gamma_{13} + \beta_{22}\gamma_{23} + \beta_{23}\gamma_{33} + \beta_{23})X_2 + (u_1\gamma_{13} + u_2\gamma_{23} + u_3\gamma_{33} + u_3)$$

Testing the hypothesis was necessary to see whether the relationships between independent variables simultaneously has a significant effect, it can be done by comparing F_{count} with F_{table} . If F_{count} is greater than F_{table} , then the hypothesis raised in this study is accepted, and vice versa. Then it was needed to compare the significant values (t) with the level of significant (LOS) value of 0.05. If the significant value (t) is smaller than the LOS value = 0.05, then the hypothesis in this study is accepted, and vice versa.

3. RESULTS AND DISCUSSION

Descriptive Analysis of Research Variable Characteristics and Indicators.

Table 2. Category Value(mean) variable and indicators

	Value (mean)	Category
1	$1,00 \leq \text{average} < 1.80$	Very Low

2	$1,81 \leq \text{average} < 2.60$	Low
3	$2,61 \leq \text{average} < 3.40$	Average
4	$3,41 \leq \text{average} < 4.20$	High
5	$4,21 \leq \text{average} < 5.00$	Very high

Sources: Secondary Data (2017)

1. Description of the Health HR variable (X1) and its indicators.

Table 3. Descriptions of Health HR variables and their Indicators

Indicators	Min	Max	Mean
<i>HRHealth education (X1.1)</i>	2.58	4.75	3.53
<i>Skilled HR Health (X1.2)</i>	2.42	4.42	3.45
<i>Skills HR HEalth (X1.3)</i>	2.58	4.17	3.38
Mean of variabel			3.45

Sources : Primary Data , 2017 (additional)

Table 3 showed that the value of Health HR Education (X1.1) was a minimum of 2.58, where in = the difference in rank is assigned to two different characteristics of each respondent to i and N = the number of respondents ranked. Significant level r was then tested by t test. If the significance value of t exceeded the 5% error rate (0.05), then the non-heteroscedasticity assumption was fulfilled.

1. Autocorrelation (Freedom of association)

Gujarati (2004: 201) stated that autocorrelation is a correlation between members of a series of observations sorted by time (as in time series data) or space (as in cross sectional data).

2. Multicollinearity

Multicollinearity is tested by calculating the value of VIF (Variance Inflating Factor). If the VIF value is smaller than 5, there is no multicollinearity or non-multicollinearity.

6. Linearity

Linearity test is done by looking at the scatter plot between residual standards and their predictions.

7. SEM testing

This method uses AMOS Software (Processed Data attached) and uses a Likert Scale (Questionnaire Data). Maximum representation is 4.75 with an average value of 3.53, The minimum value of Health HR Skills

(X1.2) is 2.42, and the maximum value is 4.42 with an average value of 3.45, and then the minimum value of Health HR Skills (X1.3)is 2.58, and the maximumvalue is 4.17 with an average value of 3.38. The average value of the Health HR variable (X1) is 3.45 which is included in the high category so that this indicates that the respondents considered Health HR as high.

2. Description of the Health Budget variable (X2) and its indicators.

Table 4. Description of Health Budget variables and the indicators.

Indicator	Min	Max	Mean
<i>APBD (X2.1)</i>	2.67	3.83	3.37
<i>APBN (X2.2)</i>	2.83	4.08	3.44
<i>OTSUS (X2.3)</i>	2.75	4.00	3.37
Mean of the variable	3.39		

Sources: Primary Data, 2017 (additional)

Table 4 shows that the minimum APBD Funds (X2.1) value is 2.67 and the maximum is 3.83 with an average value is 3.37. And then, the minimum APBN Fund (X2.2) value is 2.83 and the maximum of 4.08 with an average value 3.44. And the last is the minimum value of OTSUS Fund (X2.3) is 2.75 and the maximum value is 4.00 with an average value of 3.37. The average value of the Health Budget variable (X2) that is 3.39 indicates that respondents considered the Health Budget was high.

3. Description of variables Health Facilities & Facilities (X3) and indicators.

Table 5. Description of health facilities and indicators.

Indicators	Min	Max	Mean
<i>Building(X3.1)</i>	2.67	4.33	3.59
<i>Infrastructure (X3.2)</i>	2.58	4.25	3.64
<i>Technologi (X3.3)</i>	2,42	4,25	3,53
Mean variabel			3.58

Source : Primary Data , 2017 (additional)

Table 5. showed that the minimum value of Building Facilities (X3.1) was 2.67, and its maximum was 4.33

with an average value of 3.59, while the minimum value of Infrastructure (Equipment & Equipment) (X3.2) was 2.58 and the maximum was 4.25 with an average value of 3.64. In addition, the minimum value of Technology (X3.3) of 2.42 and the maximum value was 4.25 with an average value of 3.53. The mean value of Health Facilities and Facilities (X3) was 3.58 which was included in the high category, it thus indicated that respondents considered the Health Facilities and Infrastructure were high.

4. Description of the variable Health Service Efforts (Y1) and the indicators

Table 6. Descriptions of health facilities & its indicators.

Indicator	Min	Max	Mean
Promotive Health Service Program (Y1.1)	2.44	4.44	3.36
Preventive Health Service Program (Y1.2)	2.44	4.44	3.39
Health Curative Program (Y1.3)	2.40	4.30	3.45
Rehabilitative Service Program (Y1.4)	2.22	4.44	3.39
Mean variabel	3.40		

Sources : Primary Data , 2017 (additional)

Table 6. showed that the minimum value of the Promotive Service Program (Y1.1) was 2.44, and the maximum value was 4.44 with the average value was 3.36. Secondly, the minimum value of the Preventive Service Program (Y1.2) was 2.44, and the maximum value was 4.44 with the average value was 3.39. The minimum value of Curative Service Program (Y1.3) was 2.40, and the maximum value was 4.30 with the average value was 3.45. Moreover, the minimum value of Rehabilitation Service Program (Y1.4) is 2.22, and the maximum value was 4.44 with the average value was 3.39. The average value of the Health Service Effort variable (Y1) was 3.40 which was included in the high category, so that it indicated the respondents to consider that the Health Service effort was high.

5. Description of the variable Health Recall (Y2) and its indicators.

Table 7. Descriptions of the variable Health Recognition and its indicators

Indicators	Min	Max	Mean
Increasing AHS (Y2.1)	2.89	4.44	3.59
Increasing UHH (Y2.2)	2.78	4.67	3.60
Decreasing AKK (Y2.3)	2.17	3.17	2.69
Decreasing AKI & AKB (Y2.4)	2.78	4.22	3.51
Mean variable	3.35		

Sources: Primary Data, 2017 (additional)

Table 7 showed that the minimum value of AHS (Y2.1) Improvement was 2.89, and the maximum value was 4.44 with the average value was 3.59. Furthermore, the minimum value of UHH (Y2.2) was 2.78, and the maximum value was 4.67 with the average value was 3.60. In addition, the minimum value of AKK (Y2.3) was 2.17, and the maximum value was 3.17 with the average value was 2.69. And the last is the value of the AKI & AKB (Y2.4), with the minimum value was 2.78, and the maximum value was 4.22 with the average value was 3.51. The average value of the variable Health Recognition Level (Y2) was 3.35 which belongs to the medium category, so this indicated that respondents considered the Recognition of Health Degrees was classified as moderate.

6. Description of the variable Human Resources Economy (ESDM) (Y3) and its indicators.

Table 8. Description of the variables of Human Resources Economics (ESDM) and their indicators

Indicators	Min	Max	Mean
Increasing PDRB (Y3.1)	2.89	4.56	3.52
Increasing IPM (Y3.2)	2.78	4.33	3.54
Increasing UMR (Y3.3)	2.56	4.56	3.58
Mean variabel			3.55

Sources: Primary Data , 2017 (additional)

Analysis and Results of Structural Modeling Parameter Estimates

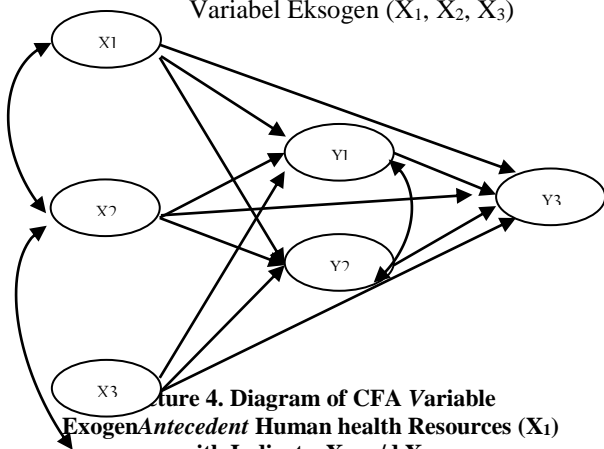
C1. Confirmatory Factor Analysis, Measurement Model

Confirmatory Factor Analysis (CFA) is intended to test the measurement model, proven to be valid or not,

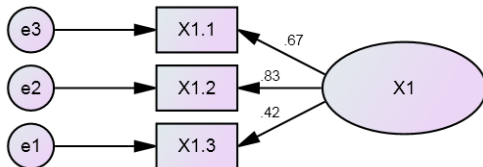
whether the indicators in a construct / latent variable are indeed the part which can explain the construct. The process is called construct validity test (latent variable), carried out by Convergent Validity Test and Discriminant Validity Test. The assumed CFA model diagram and the results are shown below.

C2 CFA Model Variabel Eksogen Antecedent X1, X2 dan X3.

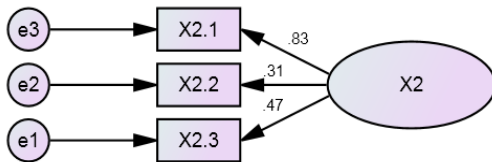
Picture 3. Diagram of CFA Exogen Variable Model Variabel Eksogen (X1, X2, X3)



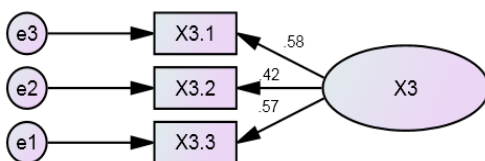
Picture 4. Diagram of CFA Variable ExogenAntecedent Human health Resources (X1) with Indicator X1.1 s/d X1.3



Picture 5. Diagram of CFA Variable ExogenAntecedentHealth Revision (X2) with Indicator X2.1 s/d X2.3



Picture6. Diagram of CFA Variable Ekxogen Antecedent Health infrastructure(X3)with Indicators X3.1 s/d X3.3



a) Convergent and Discriminant Validity

Tabel 9.

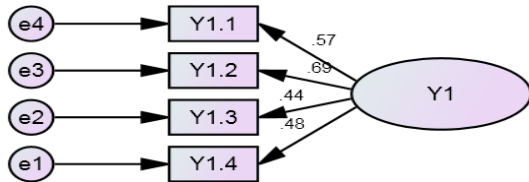
Validity and Reliability of CFA Models for Exogenous Variables Antecedent X1, X2 and X3

Regressi Weights	Standardized Loadings Factor	Construct Reliability	Variance Extracted	Critical Ratio	Sig. Level	Validity
X1.3 <--- X1	0.423	0.503	0.264	fix	fix	Valid
X1.2 <--- X1	0.831			4.78 8	0.0 00	Valid
X1.1 <--- X1	0.673			5.50 9	0.0 00	Valid
X2.3 <--- X2	0.474	0.397	0.203	fix	fix	Valid
X2.2 <--- X2	0.310			3.71 5	0.0 00	Valid
X2.1 <--- X2	0.834			2.51 0	0.0 12	Valid
X3.3 <--- X3	0.574	0.374	0.169	fix	fix	Valid
X3.2 <--- X3	0.422			3.58 5	0.0 00	Valid
X3.1 <--- X3	0.579			3.36 2	0.0 00	Valid

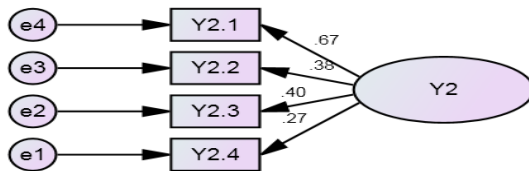
Sources: Processed Data (Primary Data)

b) CFA Endogenous Intervening Variable Models Y1 and Y2

Figure 3. Intervening CFA Diagram of Health Service Efforts (Y1) with Indicators Y1.1 s/d Y1.4



Picture 4.Diagram CFA Variabel intervening Increasing health degree (Y2)with Indicator Y2.1 s/d Y.4



b) Convergent and Discriminant Validity

Tabel10.

Validity and Reliability of CFA Models for Endogenous Intervening Variables Y1 dan Y2

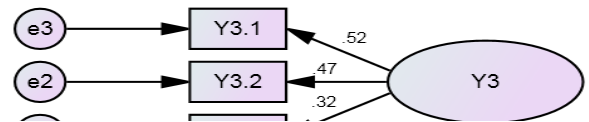
Regression Weights	Standardized Loading Factor	Construct Reliability	Variance Extracted	Critical Ratio	Sig. Level	Validity
Y1.4	0.484	0.556	0.224	fix	fix	Valid
Y1.3	0.440			4.44	0.00	Valid
Y1.2	0.686			5.02	0.00	Valid
Y1.1	0.566			5.02	0.00	Valid
Y2.4	0.269	0.416	0.166	fix	fix	Valid

Y2.3	0,403			2.67	0.0	Valid
Y2.2	0,381			2.63	0.0	Valid
Y2.1	0,670			2.50	0.0	Valid

Sources Data : Primary Data

c) CFA Model Variabel Endogen Independent Y3

Picture 5.Diagram of CFA for the Measurement Model with Endogenous Variables Independent Y3



d) These results are interpreted as the existence of a functional relationship between Y3 latent variables and manifest variables that construct the CFA model.

e) Convergent and Discriminant Validity

Table 6. Validity and Reliability of CFA Models for Endogenous Intervening Variables Y3

Regression Weights	Standardized Loading Factor	Construct Reliability	Variance Extracted	Critical Ratio	Sig. Level	Validity
Y3.3	0.319	0.280	0.119	fix	fix	Valid
Y3.2	0.469			2.370	0.0	Valid
Y3.1	0.522			2.207	0.0	Valid

Sources Data : (Data Primer)

Overall Model Testing (Overall Model)

Table 11. Test the goodness of fit for the overall model

Kriteria	Cut-off	Model Results	Description
Chi-square	Diharapkan kecil	685.7	Fit
Sig. Prob.	≥ 0.05	0.175	Fit
TLI	≥ 0.94	0.978	Fit
CFI	≥ 0.95	0.966	Fit
GFI	≥ 0.90	0.941	Fit
AGFI	≥ 0.90	0.923	Fit
RMSEA	≤ 0.08	0.014	Fit

Sources : Research SEM Amos 20, 2017

Structural Model Testing (Research Hypothesis)

Table 12. Results of testing the significance of the relationships between variables

Hipotesis	Variabels	Intervening Variables	Lambda (λ)	CR	Prob.	Description
Hip. 1	Health Human Resources	Health Service	0.910	-	0.00	Significant
Hip. 2	Health Human Resources	Health Standard	0.986	-	0.00	Significant
Hip. 3	Health Human Resources	Human Resources	0.366	0.802	0.423	Not Significant
Hip. 4	Health Budget	Health Service	0.392	2.32	0.020	Significant
Hip. 5	Health Budget	Health Standard	0.693	2.406	0.016	Significant

Hip. 6	Health Budget	Human Resources	0.324	-	0.252	Not Significant
Hip. 7	Health Facilities	Health Service	1.010	3.416	0.000	Significant
Hip. 8	Health Facilities	Health Standard	0.827	2.508	0.012	Significant
Hip. 9	Health Facilities	Human Resources	0.342	-	0.431	Not Significant
Hip. 10	Health Services	Human Resources	0.921	4.895	0.000	Significant
Hip. 11	Health Standard	Economic Human Resources	0.443	2.062	0.039	Significant

Sources: Results Attachment of SEM AMOS 20, 2017

Significant variable relationships are:

Hypothesis Research

1. Hypothesis 1: Effect of Health Human Resources on HealthService Efforts.
 2. Hypothesis 2: Effect of Health Human Resources on Increased Health Degrees.
 3. Hypothesis 4: Effect of Health Budget on Health Service Efforts.
 4. Hypothesis 5: Effect of Health Budget on Increased Health Degrees.
 5. Hypothesis 7: Effect of Health Facilities & Infrastructure on Health Service Efforts.
 6. Hypothesis 8: The Effect of Health Facilities & Infrastructure on Increasing Health Degrees.
 7. Hypothesis 10: Effect of Health Service Efforts on Human Resource Economics.
 8. Hypothesis 11: Effect of Increased Health Degrees on the Economy of Human Resources.
- While the relationship of insignificant variables is:
9. Hypothesis 3: The Effect of Health Human Resources on the Economy of Human Resources.
 10. Hypothesis 6: The Effect of Health Budget on the Economy of Human Resources.

4. FINDINGS

1. Effect of Health Human Resources (X1) on Health Care Efforts (Y1)

Hypothesis 1 stated that there was a significant effect of Health Human Resources on Health Service Efforts. From Table 13, it showed that the loading factor value is -0.910, the value of C.R. amounting to -3.383 and P value of 0.000. This showed that Health Human Resources has a direct, negative, and significant effect on Health Service Efforts. So hypothesis 1 was accepted.

2. Effect of Health Human Resources (X1) on Increased Health Degrees (Y2)

Hypothesis 2 stated that there was a significant effect of Health Human Resources on Increased Health Degrees. From Table 13, it can be seen that the loading factor value is -0.986, C.R. value. amounting to -2.729 and P value of 0.006. This showed that Health Human Resources has a direct, negative, and significant effect on Increasing Health Degrees. So hypothesis 2 was accepted.

3. Effect of Health Human Resources (X1) on Human Resource Economics (Y3)

Hypothesis 3 stated that there was a significant influence of Health Human Resources on the Economy of Human Resources. From Table 13 showed that the loading factor value was 0.366, the value of C.R. amounting to 0.802 and P value of 0.423. This showed that Health Human Resources has no significant effect on the Economy of Human Resources. So hypothesis 3 was rejected

4. Effect of Health Budget (X2) on Health Care Efforts (Y1)

Hypothesis 4 stated that there was a significant influence of Health Human Resources on Health Services Efforts. From Table 13, it showed that the loading factor value is 0.392, the value of C.R. amounting to 2.332 and P value of 0.020. This meant that the Health Budget has a direct, positive, and significant effect on the Health Service Efforts. So hypothesis 4 was accepted.

5. Effect of Health Budget (X2) on Increased Health Degrees (Y2)

Hypothesis 5 stated that there was a significant effect of the Health Budget on Increasing Health Degrees. From Table 13 showed that the loading factor value is 0.693, the value of C.R. amounting to 2.406 and P value of 0.016. This showed that the Health Budget has a direct, positive, and

significant effect on Increasing Health Degrees. So hypothesis 5 was accepted.

6. Effect of Health Budget (X2) on Human Resource Economics (Y3)

Hypothesis 6 stated that there was a significant influence on the Health Budget on Human Resource Economics. From Table 13 showed that the loading factor value is -0.332, the value of C.R. equal to -1,146 and P value was 0,252. This showed that the Health Budget did not have a significant effect on the Economy of Human Resources. So hypothesis 6 was rejected

7. Effect of Health Facilities & Facilities (X3) on Health Care Efforts (Y1)

Hypothesis 7 stated that there was a significant influence on Health Facilities & Infrastructure on Health Care Efforts. From Table 13 showed that the value of the loading factor was 1.010, the value of C.R. amounting to 3,416 and P value of 0,000. This showed that Health Facilities & Infrastructure has a direct, positive and significant impact on Health care Efforts. So hypothesis 7 was accepted

8. Effect of Health Service Efforts (Y1) on Human Resource Economics (Y3)

Hypothesis 8 stated that there was a significant influence of the Health Service Efforts on the Economy of Human Resources. From Table 13 showed that the loading factor value was 0.921, the value of C.R. amounting to 4.895 and P value of 0.000. This showed that Health Service Efforts had a direct, positive, and significant effect on the Economy of Human Resources. So hypothesis 8 was accepted.

5. CONCLUSIONS /RECOMMENDATIONS

1) Conclusion

In detail, research conclusions are presented as follows:

1. Health HR had a direct, negative and significant effect on Health Service Efforts (Hypothesis 1 was accepted). Seen from Table 13, it showed that the loading factor value is -0.910, the value of C.R. amounting to -3.383 and P value of 0.000.
2. Health Human Resources had a direct, negative and significant effect on Health Standard (Hypothesis 2 was accepted) seen from Table 13, it can be seen that

the loading factor value is -0.986, C.R value. amounting to -2.729 and P value of 0.006.

3. Health Human Resources had no significant effect on the Economy of Human Resources (Hypothesis 3 was rejected). Seen from Table 13 has showed that the loading factor value was 0.366, the value of C.R. amounting to 0.802 and P value of 0.423.

4. Health budget had a direct, positive, and significant effect on health care efforts (Hypothesis 4 was accepted).

5. Health budgets had a direct, positive, and significant influence on increasing health degrees (Hypothesis 5 was accepted).

6. Health budgets did not have a significant effect on the Economy of Human Resources (Hypothesis 6 was rejected).

7. Health facilities & infrastructure had a direct, positive and significant effect on health service efforts (Hypothesis 7 was accepted).

8. Health Facilities & Health had a direct, positive, and significant effect on Health Degrees (Hypothesis 8 was accepted).

9. Health Facilities & Infrastructure had no significant effect on the Economy of Human Resources (Hypothesis 9 was rejected).

10. Health Service Efforts had a direct, positive and significant effect on the Economy of Human Resources (Hypothesis 10 was accepted).

11. Increased Health Standard had a direct, positive, and significant effect on the Economics of Human Resources (Hypothesis 11 was accepted).

Some suggestions that the author will convey are as follow:

For the Jayapura District Government

1. Provide an overview or portrait of the real conditions of the human resource economy of the community. Provide input on how to intervene in local government to optimize the performance of Human Resources (HR) based on efforts to improve Health Development in the region.

2. For Further Researchers

Limited areas and research samples that carry the consequences of generalizing research results are also limited, so when the next researcher will do according to the theme of this research can cover other regions or even expand the research area.

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