Labour Productivity Analysis on Female Elementary Teachers in Elementary School District of Serengan Surakarta

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Abstract: The research aims in the long term at investigating and improving the labour productivity on female elementary teachers in Serengan Surakarta. It is hopefully enrich the role of woman in academic discipline. Whereas the short term of this research is to improve family's earning by encouraging woman's role at home without leaving their rights and nature of a woman. This way is hopefully enrich human resources quality that improve Indonesian development. This research employs survey method; to analyze female elementary teachers' labour productivity. Data collecting technique by means of interview; by filling out questionnaires. Purposive random sampling employs in gathering sampling. The sample in this research is 100 female elementary teachers in 10 elementary schools of Serengan Surakarta. Data analyzing technique is SPSS version 19. The results of this study are (1) partially, educational background gives no significant effect on the labour productivity of female teachers, (2) while the economic and expertise gives positive and significant effect of the labour productivity of female teachers. (3) Variable of education, expertises and economic give significant effect toward the labour productivity. (4) Among these three variables, namely the educational background, expertise and economic, the second mentioned is the most dominant one. (5) the contribution of these three variables; educational background, expertise and economic toward the labour productivity is 32,9%. While another contribution play its influence more for 67,10% which is not include in the variable of this research.

Keywords: Labour productivity, Female Elementary Teachers

1. Introduction

Human resources both men and women have an equal part in terms of a subject and object of development. Development in this case refers to the physical and spiritual development and infrastructure as well including natural resources and economic. It is based on legal constitution , the 1945 Constitution (Article 27, paragraph 2, article 29, paragraph 2, article 31, paragraphs 1 and 2, and article 33, paragraphs 1 and 3). Similarly, in the reformation era, the role of women in education, state and private organization is less than men's role. Nevertheless, there are several outstanding women who work as government officer such as mayor, ambassador, minister, directress and even president.

This type of Indonesian condition is caused by primordial perspective. This is what other development countries undergo. This primordial perspective turns to underestimate women, the following are things who support to underestimate women:

1. Dutch colonial culture (especially in Java) remained exist, that it isnot necessarily for women to be educated since women's life will be clinging to men or as a house wife, and raising children. On the other hand, men encourage to get higher education for men are expected to continue paren's responsibility.
2. Women were considered weaker than men.
3. The interpretation of religious scripture (especially Islam) which give less comprehensive interpretation, that women donot deseve to be a leader.

Whereas the common condition in developing countries including Indonesia is education needs high cost and the chance of having higher education just offer to men rather to women. This condition gives impact to job vacancy, thus men are easier to win job competition. To Azkiyah (2004), besides education factor, there are another factors to get a better job position, they are type oj job vacancy, work experienced, and

colleague.

In addition, the challenge of educational and employment opportunities for women in Indonesia like an open arm (Instruction President No. 9, 2000) and there is more progress from year to year although women's job remain less than men do. Based o the previous background, the present researcher wants to conduct a research about "Labour Productivity Analysis onFemale Elementary Teachers in Elementary School District of Serengan Surakarta".

2. Research Questions

There are two questions in this research:
1. Is there a significant influence among the level of education, the expertise and economic toward the labour productivity of female elementary teachers in District of Serengan Surakarta?
2. Which is the most influence factor affecting the labour productivity of female elementary teachersin District of Serengan Surakarta?
3. The Purpose of the Research

2.1. General Purpose

a) The researchabout labour productivity onfemale elementary teachers encourage them to increase family income through education sector.
b) Toincrease labor productivity on female elementary teachers in order to improve the quality of human resources (HR), which is hopefully able to increase the development of the Indonesia.

2.2. Specific Purpose

a) To know the influence of level of education, expertise and economics toward the productivity of female elementary teachers District of SerenganSurakarta.
b) To know the most affecting factor in the labour productivity of female elementary teachers in District of SerenganSurakarta.

3. Literature Review

A.   Labour Productivity

Productivity is the ratio between the expected results (output) and the overall resources (input) used per unit of time. (Payaman J. Simanjuntak. 2005).

The following efforts are the way to imrpove productivity:
1. Improving labour achievement through various remedies in work by using managerial and technical approach.
2. Improving labour participation by using related knowledge to achieve higher productivity and create training to produce a Increased labor force participation by the scope of the increase in the knowledge that underlies the achievement of productivity and training to produce a ready worker (Siswanto: 2007).

Productive teachers means a profesional teacher. A profesional teacher is a skillfull teacher, responsible, and maintain frienship which is supported with ethical profession. To reach that, teachers possess qualified competencies that consist of intellecual, social, spiritual, personal, moral and professional comptencies (Kasihadi, 2006).

The maturity of professional teacher embodies to the following things:
1.   Expertise
2.   Sense of responsibility
3.   Sense of frienship

The quality of professionalism shown by the five performance as follows: (Kasihadi: 2006).
1.   The desire to be ideal.
2.   Improving and maintaining the image of the profession.
3.   The desire to be professional in order to improve th quality of knowledge and skill.
4.   Pursuing quality and ideals of the profession.
5.   Having pride of their profession.
B.   Level of Education

Education is a conscious effort to prepare students through guidance, instruction and training for its role in the future. National education function to develop the skills and improve the quality of life and dignity of Indonesia in order to achieve national goals. National education aims at educating the nation and develop human resources.

Level of education consist of: elementary school (6 years in Elementary School plus 3 years in junior high so there are 9 years), Senior High School (3 years in high school) and higher education (Academy, Polytechnics, Colleges, Institutes and Universities). Elementary school was organized to develop the attitudes and abilities as well as provide basic knowledge and skills needed to live in the community as well as to prepare students to participate in senior high school.Senior High School was organized to continue and expand the basic education and to prepare students to be members of the community who have the ability to give impact to the social environment, cultural and natural vicinity and can develop further capabilities in the world of work or higher education. Senior High School consists of general education, vocational school, difabel school, kedinasanschool and religious school. Higher education is a continuation of Senior High School which is organized to prepare students to be members of the community who have the academic ability and or to create science, technology and art. A higher educationis calleduniversiity which can devided into Academy, Polytechnic, College, Institute or University. College or professional higher education is conducted by Universities, Colleges and Institutes. Professional education carried out by the Academy and the Polytechnic.
C.   Expertise

A teacher does not only master the content of the lesson but also able to instill the concept of the knowledge being taught. An expert teacherpossesses knowledge about how to teach (teaching is a knowledge), also skills (teaching is a skill), and understanding that teaching is an art (teaching is an art) (Kasihadi: 2006).

Teachers do not only teach but also educate. Through teaching, teachers froms the concept of thinking, attitude, spirit and touch the deepest affection of humanity on educated subject. That kind of teaching trick is interpreted as expert in giving knowledge and raising appreciation, so the core of humanity on educated subject will reach improvement. The process of finalizing the self is a process of individualism.

Teachers function as inspirational person. Teachers are able to change the students. Teachers help students in order this educated subject are able to help thmrselves. Teachers encourage initiative, motivation, so that students can prove their self actualization. Good teachers should be able to encourage creative thinking, to act effectively and to judge objectively.

D.   Position, Role of Women and its Barriers

Position and the role of Indonesian women are very important in pursuing for their rights in order to be equal to men since pre-independence (movement, the struggle for independence), the time of independence until the present development. That is demanded to have the similar professions of men did in state r government, education, social, cultural, religion and others. With regard to this situation, there emerge national figures like RA. Kartini, DewiSartika, Hj. Rasuna Said Sutanto, Mien Sugandhi, PratiwiSudarmono, MarwahDaud, KhofifahIndarParawansa, Megawati Sukarno Putri and others.

The emergence of those female figures demonstrate the ability of women to be equal to men and even do better than men although actually the population of women is bigger than men.

E.   Improvement of the Status and Role of Women

The effortsto put women's position and role to be equal to men through several ways. Those ways in th e form of rule and real act to raise women dignity to be equal their position and role as men did.

Regulations in Indonesia remained exist but in fact, the regulation sometimes is not appropriate even there is regulation which in turn doesnot touch women's need and interest.

4. Research Method

This researchuses survey method; it is a critical direct observation or investigation to get clear information from the source to a particular problem in a certain place. The main instrument is a list of questions (questionnaire). The emerging problemis the labour productivity on female elementary teacher to improve women's role in education sector.

4.1. Data Collecting Technique

a)   The Object of the Research

The object in this research are female elementary teachers in District of Serengan Surakarta. There are 29 elementary schools in district ofSerenganbut the reseracher takes 10 samples of elementary schools with 100 respondent.Those

100 respondents are derived from civil servant and non-civil servant teachers, they are 9 female elementary teachers from Muhammadiyah 10 Elementary School, 10 female teachers from Public Elementary School of Bunderan No. 164, 9 female teachers from Public Elementary School of Pringgolayan No. 198, 33 female techers from Public Elementary School of Danukusuman I No. 33, 9 female teachers from Public Elementary School of Joyotakan No. 59, 8 female teachers from Elementary School of Jogoprajan, 7 female teachers from Islamic Bakti I Elementary School in Joyotakan, 3 female teachers from Muhammadiyah 14 Elementary School ofDanusuman, 4 female teachers from Public Eelementary School of Plalan I No. 192 and 31 female teachers from Al Islam 2 lementary School of Jamsaren.

b)   Locationof the Research

The research is located in 10 Elementary Schools, they are Muhammadiyah 10 Tipes Elemetary Scool, Bunderan No. 164 Elementary School, Pringgolayan No. 198 Elementary School, Danusuman I No. 33 Elementary School, Joyotakan No. 59 Elementary School, Jogoprajan No. 218 Elementary School, Al Islam Bakti I Joyotakan Elementary School, Muhammadiyah 14 Danusuman Elementary School, Plalan I No. 192 Elementary School, and Al Islam 2 Jamsaren Elementary School, which is located in District of Serengan Surakarta.

c)   Types of Data and Sources of Data

Data are collected through the data collection, observation and documentation. (Sumanto, 2000).Whereas the data are:

•   Primary Data

Primary data are direct data from the object of the research or respondent by means of questionaire.

•   Secondary Data

Secondary data aresupporting data derived from other obtained support from other parties. This data comes from DIKPORA Surakarta and UPTD District of Serenganor other institution associated with this research.

d)   Data Collecting Technique

1.   Observation

2.   Questionnaires

3.   Library Studies

4.   Documentation

4.2. Data Analysing Techniques

The data analysing techniques in this research are as follows:

1)   Test Instruments

a)   Test of Validity

Validity in this study is the validity of the content. To maintain its objectivity, it is necessarily to prepare checklist to give to the teacher as the respondent. Checklist consist ofappropriate questions about the level of education, expertise,, economic and labor productivity and the questions have to agree with the aim of the research.

b)   Testof Reliability

Uji Reliabilitas dilakukan pada pernyataan-pernyataanyang terbukti reliabel atau tetap. Reliabilitas adalah ketetapan suatu tes apabila diteskan kepada subyek yang sama

(Suharsimi Arikunto, 2002:146)

Test of Reliabilityplay its role toward reliable or constant questions. Reliability is the provision of a test for the same subject (SuharsimiArikunto, 2002: 146)

2)   Classical Assumption Test
    a. Normality Test
    b. Multicollinearity test
    c. Heteroskidastity Test
3)   Data Analysing Technique
a)   Multiple Linear Regression Analysis

This analysis is useful to find a causal relationship between dependent variable and independent variable. It is hopefully usefull to investigate the most influence factor on labor productivity.

$$Y = a + b1 + b2\ X1\ X2\ X3 + b3 + e$$

in which:
Y: The level of productivity
X1: Level of education
X2: Expertise
X3: Economics
E: other variables

To obtain the value of a, b1 ... .3 , the resarcher uses computer to analize statistic data. This is done in order to obtain the valid value and to minimize the risk of calculation errors.

b)   t Test

To determine whether each variable is independent partially is to know the result is significant or not in influencing the dependent variable. In this research, the present researcher uses a significant level of 0.05.

c)   F Test

To determine whether or not the relationship between the variables X and Y are jointly significant.

d)   Coefficient of Determination

It is used to determine the contribution of a given independent variable (X) dependent variable (Y). The following is the formula of Correlation coefficients:

$$R^2 = \frac{b_1 \sum x_1 y + b_2 \sum x_2 y}{y^2}$$

5. Data and Discussion

From the total amount of 29 primary schools in the District of Serengan, the present researcher takes 10 primary schools as the sample with 100 female teachers as the respondent. Those elementary schools are as follow:

Table 01. *The sample of 10 elementary schools in the district of Serengan Surakarta.*

No.	Elementary School	Respondent (Female teachers)
1.	SD Muhammadiyah 10 Tipes	9
2.	SDN Bunderan No. 164	10
3.	SDN Pringgolayan No. 198	9
4.	SDN Danusuman I No. 33	10
5.	SDN Joyotakan No. 59	9
6.	SD Jogoprajan No. 218	8
7.	SD Islam Bakti I Joyotakan	7
8.	SD Muhammadiyah 14 Danusuman	3
9.	SDN Plalan I No. 192	4
10.	SD Al Islam 2 Jamsaren	31
	Total	100

Testing hypothesisin this research by using regression analysis, t test and F test. Regression analysis is an analysis to determine the effect of education level (X1), Expertise (X2), Economics (X3) toward Labour Productivity (Y). The following is the result of processing primary data by using SPSS 19 for windows:

a)   Regression Analysis

Table 02. *Results of Regression Coefficient Analysis.*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	10.904	2.068		5.272	.000
Education level (X1)	.023	.088	.028	.264	.792
Exertise (X2)	.372	.096	.414	3.858	.000
Economics (X3)	.139	.051	.256	2.741	.007

Source: Primary data processed, 2013

Based on the analysis shown in the table above, the formula of the regression is as follows:

$$Y = 10.904 + 0.023 + 0.372\ X1\ X2 + 0{,}139\ X3$$

The researcher finds the coefficient regression from the above regression equation which shows that all independent variables signs positive toward dependent variable (Labour Productivity). This means that variable of Education Level (X1), Expertise (X2), Economics (X3) give positive influence toward Labour Productivity (Y).

By scrutinizing the value of the Standardized Beta Coefficients among Level of Education, Expertise, and Economics, the most dominant variable is expertise, 0.414 thus expertise is the most influencing factor toward labour productivity on female elementary teachers. The previous hypothesis which state that "the most dominant factor affecting the productivity of female elementary teachers in District of Serengan Surakarta is education level is rejected."

b)   t Test

Table 03. T Test Result.

Variabel	t_{hitung}	t_{tabel}	Significance
Education Level (X1)	0.264	1,895	0.792
Expertise (X2)	3.858	1,895	0.000
Economics (X3)	2.741	1,895	0.007

Source: primary data proocessed, 2013

In sum:
a. T value Level of Education (0264) <t table (1,895)
b. T value of Expertise (3858)> t table (1,895)
c. T value of Economics (2741)> t table (1,895)
Based on the results of the t test above, it shows that the education level (X1) doesnot give significant influence toward labour productivity. While Expertise variable (X2) and Economics (X3) influence Labour Productivity. This is because both independent variables have a value of t> t table (1,895) or have a significance value (p value) <α (0.05).

c)   test F
    F test is a calculation to determine whether the independent variables consist of variables Level of Education (X1), Expertise (X2), Economics (X3), simultaneously give contribution in influencing dependent variable, Labour Productivity (Y).

Table 04. F Test Result.

ANOVA[b]					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	153.658	3	51.219	17.184	.000[a]
Residual	286.132	96	2.981		
Total	439.790	99			
a. Predictors: (Constant), X21, X1, X2					
b. Dependent Variable: Y					

The value of F Calculate in the first hypothesis is 17.184. While the value of F table at 95% confidence level ($\alpha = 0.05$) is 2.24. Thus the value of F calculate > F table, is 17.184> 2.24. This means that independent variables namely Level of Education (X1), Expertise (X2), and Economics (X3) simultaneously give significant influence towardLabour Productivity (Y).

Thus Ho states that "there is no significant influencing factors among Education Level (X1), Expertise (X2), Economics (X3) toward Labour Productivity (Y)" is rejected, and that means Hawhich states; "there is a significant influencing factors among Education Level (X1), Expertise (X2), Economics (X3) toward Labour Productivity (Y) is acepted.

d)   Test R² (coefficient of determination)
    The coefficient of determination is useful to determine the contribution of independent variables (Level of Education, Expertise and Economics) toward dependent variable (Labour Productivity) which is shown by the R². The results of coefficientcalculation determination can be seen in the following table.

Table 05. Results of coefficient of determination (R2).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.591[a]	.349	.329	1.72643
a. Predictors: (Constant), X3, X1, X2				
b. Dependent Variable: Y				

Based on the above analysing table, it shows that coefficient of determination (Adjusted R Square) is 0.329 or 32.90%. This means that variable of Education Level(X1), Expertise (X2), Economics (X3) give contribution for 32.90% toward Labour Productivity. While the rest is about 67.10%. The rest of the variable doesnot include in this research such as personal factor, environmental factor, social factor, psychological factor and the other factor.

6. Conclusion

Based on data analysing results and discussion in the previous chapter, the finding of the research are as follows:
1.   The level of education is partially gives no significant effect toward productivity of female elementary teachers. There is no influence of education level toward labour productivity. This implicate that improving labour productivity is not because of education level such like elementary teacher should possess undergraduate or postgraduate degree but improving productivity in elementary school is because of another factors.
2.   Expertise is proven to give positive influence and significant toward female elementary teacher productivity. The influence of this variable toward productivity gives implication that to improve labour productivity, elementary schools should be able to give expertise to their female teachers.
3.   Economics shows positive influence and significant as well toward labour productivity. This positive influence gives implication that the higher of the economics level the higher of labour productivity.
4.   Variable of education level, expertise and economics contribute significantly toward labour productivity. In other word, the better education level, expertise and economics the better labour productivity on female elementary techers in district of Serengan Surakarta.
5.   Among those three factors; education level, expertise,

and economics, the most affecting factor is expertise. It can be seen in Beta *Standardized Coefficients, 0,414* and the lowest significance is 0,000.

6. Based on multiple linear regression analysis, it shows that R^2 or coefficient determination is 0,329 where (R^2) shows changes of dependent variation variable which is affected by changes of independent variation variable. Thus, the magnitude variables as education level, expertise, and economics affect labour productivity for 32,9%. Whereas the rest is about 67,10% which is affected by another factors such as personal factor, environmental factor, external factor, social factor, psychological factor and another factors.

7. Suggestion

Based on the result of this research, the present reseacher proposes suggestions as follows:

1. For Elementary Schools

Elementary schools should give expertise to their teacher to improve their labour productivity. Besides, the headmaster or headmistress in elementary school should improve their teacher's econmics earning to get better productivity.

2. For Teachers

School is a place to seek knowledge for the next generation and teachers take an important part in this case. For that reason, teachers should be able to improve their expertise in order to improve their productivity as well.

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