FACTORS INFLUENCING LABOUR PRODUCTIVITY OF INDONESIAN PUBLIC SECTOR WORKERS

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INFO ARTIKEL

Abstract:
This study aims to determine the influences of education level, salary, and age to the work productivity of public sector workers. This study uses descriptive correlational regression design. The populations of the data, consists of lecturers and administrative public sector workers. The population numbers exceed 1,542 and 25% of the sample is taken proportionally with stratified random sampling and as the result, obtaining 377 people as the data. The type of data is in the form of secondary data. The data analysis is using descriptive and multiple regression techniques. The results show that the levels of education, salary, and age have significant effect to the work productivity of the public sector workers.

Abstrak:
This study aims to determine the influences of education level, salary, and age to the work productivity of public sector workers. This study uses descriptive correlational regression design. The populations of the data, consists of lecturers and administrative public sector workers. The population numbers exceed 1,542 and 25% of the sample is taken proportionally with stratified random sampling and as the result, obtaining 377 people as the data. The type of data is in the form of secondary data. The data analysis is using descriptive and multiple regression techniques. The results show that the levels of education, salary, and age have significant effect to the work productivity of the public sector workers.

Keywords:
education; salary; age; work productivity

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ABSTRAK

Public sector workers are one of the important components in the administration of state-owned organizations. They are variously ranging from departments in the central to the departments in regions. Based on recent data, the number of public sector workers in Indonesia has reached 3.7 million people (Gunawan, 2008). They have specific task in accordance with their respective fields. Society demands public sector workers can provide optimal service. As the result, public sector workers must be able to demonstrate optimal work productivity in their workplace to support the achievement of organizational goals effectively and efficiently.

As phenomenon suggest "one of the major problems in employment in Indonesia is low on work productivity" (Hamidum, 2008:1). Minister of Administrative Reform and Bureaucratic Reform Taufik Effendi (Gunawan, 2008) says that 55 percent of the total public sector workers simply take the salary without contributing significant work. Afterward, he stated that their levels of working productivity are declining after 12 PM due to resting, praying, and eating, going home and mostly do not return back to the office. Thus, the lack of time discipline, poor work ethic, self-responsibility to the work, and the low salaries can affect the working productivity of public sector workers individually and collectively.

The low performance of public sector workers is also associated with the level of their formal education. About 72% of all public sector workers are high school graduates and 53% of them are still need to be nurtured continuously in order to achieve the expected level of productivity and professionalism (Gunawan, 2008). It can be highlighted that there is a correlation between the levels of education possessed by public sector workers with their work productivity. The higher education levels own by the employee is resulted in the higher the level of work productivity. The issue is whether this statement relevant to public sector workers if it is associated with the statement of the Minister of Administrative Reform and Bureaucratic Reform. He said that the range number of public sector workers productivity currently is between three to eight. The variation of the productivity value, due to the perception of public sector workers who do not need to give priority to quality as whatever is done to the public sector, workers will receive the same income (Tempo Interaktif, 2006:1).

Some studies also suggest the link between person's ages with the level of work productivity. Hamidum (2008) shows that the age of person affecting the productivity of the work. The findings of Harsiwi (2001) shows that the age of lecturers in the group have certain effect on work productivity. The concepts of productivity in the view of the economics discipline are often associated with the number of output and output prices. Silver in Moeljono (2002:33) and Supardi (2008) views "productivity is simply number of inputs that are used to achieve a number of outcomes. Productivity is defined as output or efficiency in producing output ratio compared to input".
Kopelman (1986:4) in Supardi (2008) give broader meaning to productivity, namely as "a conception of the system, which in its form is expressed as a ratio that reflects the available resources utilized efficiently to produce output". The latter concept can be applied to a variety of conditions, including organizations, industry, and economy. Supardi (2008:1) giving advice, "productivity should not only refer to the number of outputs, but also to the variety of factors that may affect the achievement of productivity, so the productivity, efficiency, and effectiveness are inseparable". He states "productivity is not just about the outcome, but also the contribution of an effective and efficient process"). The productivity in essence can be seen from many things like comparison between input and output, and various factors that affect the process of achieving productivity and results.

Productivity viewed from the perspective of religion (Supardi, 2008) refers to the teachings and suggestions in order to achieve fortunate life in world and afterlife. Further, human productivity can be formed by 9 principles, namely: good intention (motivation), honesty, trust, keeping promises, discipline, obeying rules, having high work ethic, visionary, and patient. Person who worked with the foundation in the principles and performed optimally expected to achieve optimal productivity.

Governmental organizations, social, politics, household, especially the business, want their organization to run productively in producing goods, services, services for all stakeholders. Every organization's leaders must make all the factors of production or wealth organization to be managed properly, which later it will shows the effective and efficient or productive result. The philosophy of productivity which is easy to follow needed to be use and further, develop it into a daily behavior, so the employees can implement it in their work (Supardi, 2008). Philosophy regarding productivity means every human desire and effort to improve the quality of life and livelihood.

Every leader in organization expects its members can achieve high productivity. The achievement of high productivity of each member of the leader will have positive impact on the organization. Productivity can be defined by certain perspective. Philosophically, productivity implies to the view of life and mental attitude which is trying to improve the quality of life “tomorrow will be better than today”. Economically, the productivity in business/human activities to produce goods/services is useful to meet the needs of the community in general. Technically, productivity is a measure to some efficient person/an organization. This is determined by comparing the value of the output produced at a cost to resource inputs (Pakkana, 1998:16). Productivity related to work performed by employee is pointing at the totality of work. Work productivity also applies to public sector workers who work in a particular institution. With the status as the academic and administrative staff, they are required to be able to carry out works in accordance with their respective duties. The total of their work achievement can functions as benchmark to assess the level of employee productivity.

Measurement of work productivity needs to be done to determine the employee achievement in carrying out the assigned work optimally. The leader of the employee or employer carried the measurement which is conducted regularly on certain periods. Theoretically, there are methods and techniques used to measure employee productivity. The main target of measurement refers to the job performance of the employees performed in certain period, and the result usefulness for both of the employee and organization.

Employee performances measurement method according to Ranupandojo & Husnan (1984:122) is the ranking, the comparison of employees, grading, graphic scale, and checklists. Based on the method used to measure the performance of the employee, the head of the organization can choose and use them as a guideline to determine the productivity of its members. Leaders of the organization through their respective work units and under the coordination of the personnel can unify the used methods. The method can be selected to one method or more. The determination is highly dependent on the primary needs in the field yet, it should be more emphasized on what the ultimate goal of the measurement.

There are several aspects that must be considered in the measurement of employee performance. Dharma (1986:54) says nearly all organizations in implementing performance measurement consider the following matters: (1) quantity, the amount of completed work; (2) the quality produced; (3) the timeliness, which is appropriateness of the time that has been planned.

The assessment of productivity of public sector workers are meant in this context refers to the assessment of performance known as DP3 (List of Work Implementation Assessment) which content and format have been set by the government as the controller. Although, there are pros and cons about this, DP3 is an instrument that remains in effect to determine the productivity of public sector workers until today. Based on Indonesian Government Regulation Number 10 of 1979 on work of Performance Appraisal of public sector workers, there are assessed elements, namely: loyalty, performance, responsibility, obedience, honesty, cooperation, initiatives, and leadership.

The assessment of the public sector workers is usually carried out by the official Assessors, or the immediate superior of the work. Assessment is usually done at the end of the year in period of January to December. As a guideline, the value of work execution is expressed in verbal and numbers based on the Regulation Number 10 of 1979 on work Performance Appraisal of public sector workers in Table 1.
There are factors affecting the employee productivity in an organization. The aspects related to human are the quantity, level of expertise, cultural and educational backgrounds, abilities, attitudes, interest, employment structure, skills and age of the workforce. The aspects related to the capital, namely fixed capital, technology research and development, and raw materials. The aspects related to the method/process, namely spatial tasks, handling auxiliary raw materials and machinery, production. The aspects related to production, namely: quantity, quality, production rooms, the mixture structure, and specialized production. The aspects related to the circle of the organization (internal), the organization and planning, management systems, working conditions, work climate, the purpose of the company and its relationship with environmental objectives, intensive systems, personnel policy, and the size of the company. The aspects related to the environment of the country (external), namely: economic conditions and trade, social and political structures, industrial structures, long period development goals, recognition or ratification, the government's economic policy, labor policy, policy research and development, energy policy, education and practice policy, climatic and geographical conditions, and environmental protection policy. The aspects related to the international environment (regional), namely: the conditions of world trade, problems of international trade, investment, joint venture, labor immigration policies, international training facilities, international aid, and labor standards and international engineering (Sinungan, 2000:56).

Other experts also mention some of the factors that affect employee productivity. The factors are knowledge, skills, the ability, attitudes, and workers behavior in the organization (Gomes, 2001:160); education, skills, discipline, work attitude, motivation, nutrition, health, income level, social security, work environment and work climate (Saleh, 1993:26). Sudirman (1986) and Tarwaka (1991) in Haryono (2004) have detailed several factors that can affect the productivity of labor, namely: motivation, work discipline and work ethic.

Work productivity of public sector workers is more appropriate to be checked in philosophical approach, whereas it points the aspects of life outlook and mental attitude in improvement of life quality. Public sector workers as the state apparatus are required to be able to provide services to the public. However, productivity can be seen from the economic aspect as public sector workers should provide services to the community, technically it can be seen in the efficiency of its work.

Associated with the rise and fall in employee productivity, it can be viewed from various sources of causes. If the employee productivity decline, it caused by several factors that lead to low productivity which must be considered quickly. Some common cause are: the low level of motivation to work (Putti, 1989: 53), excessive workload, lack of authority, inadequate remuneration, continuing loss of feeling, treatment of unfairness and conflict of value (Gomes, 2003:154).

Various attempts to overcome the decreased productivity may use different ways as: the provision of various incentives, training and education (Putti, 1989:70), the improvement of products and processes, improvements in employment, workers motivation method, and changes in practices that are not active (Stoner, 1989:267). Some of the results of relevant research performed by Suwadi (2008) shows that the motivational factors, family environment, length of service and length of education, either partially or jointly have positive effect on employee productivity. All these factors have a significant influence factors except for the length of employment.

Gunawan (2008) discovered that there are several factors that can increase employee productivity, include: salary, work environment, and opportunities to get achievement. Through salary, work environment, and opportunities to get achievement is expected to increase the ability and skills of employees in carrying out the tasks given by the company. The test results show that the independent variable salary, work environment, and opportunities to get achievement could explain 98.90% of the dependent variables (work productivity). There are factors affecting work productivity; the human factor and non-human factor. As human is still remain as fundamental issues relating to the labor productivity of public sector workers, this study will examine variables related to human influence on work productivity, including public sector workers.

Age is one factor determining the level of productivity of a person, including the public sector workers. The higher the person's age affect the higher the level of productivity. It is based on the statement that, "the older the employees tend to be more satisfied with their jobs. There are a number of reasons behind their job satisfaction; the lowness of the hopes and better adjustments to the work situation "(Handoko, 2001:198).

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### Table 1. Work’s Performance Scoring Interpretation Guidelines

<table>
<thead>
<tr>
<th>No</th>
<th>Score</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>91—100</td>
<td>Excellent</td>
</tr>
<tr>
<td>2</td>
<td>76—90</td>
<td>Good</td>
</tr>
<tr>
<td>3</td>
<td>61—75</td>
<td>Average</td>
</tr>
<tr>
<td>4</td>
<td>51—60</td>
<td>Fair</td>
</tr>
<tr>
<td>5</td>
<td>Below 50</td>
<td>Poor</td>
</tr>
</tbody>
</table>

The value for each element in the implementation of the work assessment in DP3 is the average of the value of the sub-element of the judgment. The provision in each element of the specified assessment of the first new value expressed in numbers, afterwards the term is written. The results are set forth to the DP3. Public sector workers assessor is the official assessor who already had become supervisor at least for six (6) months.

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The view that the age of person can affect the level of productivity in the work is reinforced by Levinson (2006:1-2) he divides or classifies person's age and work productivity of employee. From the age of 17-22 are considered as the transition early adulthood, age 22-28 entering the age of an adult, age 28-33 as the review period goals and careers, age 33-40 as a time of consolidation of jobs and careers, and age 40-45 as term review of progress. Based on these classifications, it can be underlined that the higher person's age (range 17 to 45) it means becoming more productive. It would be better if Levinson is be able to express how productivity in the next age levels. Noting that the future employees have the working age up to 56 years (administrative staff) and 65 years (lecturers) alleged that up to the age of 65 years of productivity is also high.

The issue is whether the post 65 years of age can also becoming more productive? Seeing the ages that the public sector workers possibly have retired, meaning at that age, the work productivity as public sector workers has declined. The theoretical and empirical studies and related research proves that the level of education, salary, and age of employees and labor productivity have relationship with employee productivity, including productivity of public sector workers. Based on the foregoing description, it can be formulated hypothesis of this study as follows: the level of educational have effect on employee productivity, the amount of salary received have effect on the productivity of public sector workers, the age have effect on the productivity of public sector workers and the level of education, salary, and age affect the productivity of public sector workers.

Public sector workers in this context; is the educational and administrative personnel in public sector workers in educational institutions. Keeping up with their status as public sector workers, they are also required to achieve a high level of productivity corresponding to their fieldwork. Lecturers have duties in the field of teaching, research, and community service, while administrative personnel have duties of office to support the tasks of lecturers at the college. They have varying levels of education, salaries, and ages.

Based on the description, it needs to be carried out a research with the aim to identify and provide information: an overview of education level, salary, and age of lecturers and administrative public sector workers; the description of the level of productivity of educational and administrative personnel who are public sector workers; the effect of education level, salary, and age on the productivity of lecturers and administrative public sector workers.

**METHOD**

Based on the purpose, this study is using a quantitative approach with a regressive descriptive correlational design. Based on the draft, it can be described the relationship between the study variables in Figure 1.

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**Table 2. Descriptions of Variable Research**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Level (X1)</td>
<td>Last level of Formal Education</td>
<td>Document</td>
</tr>
<tr>
<td>Salary (X2)</td>
<td>The amount of basic salary at the time of the study</td>
<td>Document</td>
</tr>
<tr>
<td>Age (X3)</td>
<td>The Age of the Employee at the time of the study (Year)</td>
<td>Document</td>
</tr>
<tr>
<td>Work Productivity (Y)</td>
<td>Assesment of Working Implementation (DP3) of public sector workers</td>
<td>Document</td>
</tr>
</tbody>
</table>
Based on Table 2, it can be explained that the level of education is measured with the level of formal education achieved by the public sector workers. The data is in the form of secondary data from relevant documents. Salary refers to the amount of the last basic salary of public sector workers at the time of this study, based on the legislation, and using secondary data from documents. Age, refers to the age of employees at the time of the study, using secondary data obtained from the document. Labor productivity seen from the results of Work Implementation Assessment on public sector workers is using secondary data and the results obtained from the document of Work Implementation Assessment at the time of the research. The population of this study consists of all educational and administrative personnel and public sector workers working in a higher education of institution X. The amount of the target population (as the case) taken are 1,542 public sector workers, consists of 953 lecturers and 589 administrative personnel (Statistics Institute of Higher Education of State X, 2008), as the large number this study use a sample of approximately 25% of the population is proportionally stratified random sampling.

The sampling technique is the proportional stratified random sampling. Stratified random sampling technique is a method of selecting a sample by dividing the population into homogeneous groups called strata, and then the samples are taken randomly from each stratum, the sample size is drawn for each stratum is proportional or proportional to the size of population of each strata (Sugiarto , et al, 2003). Based on the guidelines obtained a sample of 337 public sector workers, consisting of 241 lecturers and 136 administrative personnel.

Types of data in this study consisted of secondary data (from both sources), ie data relating to each of the study variables (education, salary, age, and productivity). Paying attention to the data collected in the form of a document, then the data of this study is using the technique of documentary studies. The data related to the study variables obtained from the documents that exist in the location of the study.

The analysis technique is descriptive analysis techniques and multiple regressions. Descriptive analysis is performed to get an overview of the variables of this study (percent and mean). Multiple regression analysis is used to determine the influence of some independent variables on the dependent variable. The formula used to test the regression equation between education level variable (X1), the salary (X2), age (X3) and labor productivity (Y) is:

\[ Y = a + b_1x_1 + b_2x_2 + b_3x_3 \]

Description:
Y = value of criterion Y
a = predictor coefficients X
x = value of variable X

(Sugiyono, 2006:243)

The data analysis of this research in its practice is using the tools of Excel and SPSS. Through the process of analysis, the results obtained are described in the next section.

RESULTS
Descriptive Analysis

The results of this study descriptive analysis are summarized in Table 3. It can be explained that: the education levels of public sector workers at the institution, with the average number of 4.1592, the education are between bachelor and master degree, with the range of education are between elementary education to doctoral degree; the basic salary average of public sector workers at the time of the study shows the rate of IDR 2,007.69, and the lowest salary in range of IDR 1,440,600.00 and IDR 2,910,000.00 is the highest. Their average age is 44.9 year olds, with range 22 to 69 year olds. The level of productivity shows the average value 89.239 which means included in both categories, with a range of values up to 76.57 to 98.87.

<table>
<thead>
<tr>
<th>Variable of Research</th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Sum</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>377</td>
<td>7.00</td>
<td>0.00</td>
<td>7.00</td>
<td>1568.00</td>
<td>4.15</td>
<td>.07543</td>
<td>1.46452</td>
</tr>
<tr>
<td>Salary</td>
<td>377</td>
<td>1,469.400.00</td>
<td>1,440.600.00</td>
<td>2,910.000.00</td>
<td>8.E8</td>
<td>2.03</td>
<td>1.569E4</td>
<td>304724.370</td>
</tr>
<tr>
<td>Age</td>
<td>377</td>
<td>47.00</td>
<td>22.00</td>
<td>69.00</td>
<td>1.70E4</td>
<td>44.98</td>
<td>.44372</td>
<td>8.61543</td>
</tr>
<tr>
<td>Productivity</td>
<td>377</td>
<td>22.27</td>
<td>76.30</td>
<td>98.57</td>
<td>3.36E4</td>
<td>89.23</td>
<td>.18893</td>
<td>3.66841</td>
</tr>
</tbody>
</table>
**Testing Hypothesis**

The hypothesis of this study required testing assumptions as multiple regression analysis requirements. The tests are included: normality test, independence (autocorrelation), homoscedasticity test, and the linearity test relationships.

The normality test is based on decision-making significance of skewness test if a significant level is less than 0.5, the data are normally distributed. Conversely, if significance is more than 0.5, the data are not normally distributed. These test results show that this research data are normally distributed. The independence test (autocorrelation) refers to an independent variable that will be included in the regression equation which should be truly independent. The indication is shown in the results of statistical data processing by using durbin-watson. Statistical analysis showed by durbin-watson value is amounted to 1.959, means entering the first criterion, namely 1.65<DW<2.35. It can be concluded that there is no autocorrelation or all of the variables identified in this study is completely independent.

Testing homoscedasticity refers to a scatter plot with clear pattern, as well as the spread of points above and below the number 0 on axis Y. This test qualifies because heteroscedasticity is not being found. Based on the normal probability plot, it shows that the data are not disputing much of the regression. The coefficient of the residue did not form a system with dots that form a pattern which is not systematic or spread irregularly. It can be concluded that the variables of the study had a linear relationship.

**Multiple Linear Regression Analysis**

**Regression T-test**

Regression T-test is used to test the effect of partially independent variable on the dependent variable. From the results of the regression T-test, it is obtained the following results. The T-test imposed on the effect of educational level of the labor productivity of Educational and Administrative Power of public sector workers. T-test to the effect of variable levels of education to productivity is equal to -1.152 with a significance of 0.250, with a Beta coefficient of -0.049. This means that education affects the productivity of Educational and Administrative Power of public sector workers with a positive direction.

The T-test imposed on the salary influence on work productivity of Educational and Administrative Power of public sector workers. T-test, to the effect of variable salary to productivity is equal to 6.657 with a significance of 0.000, and a beta coefficient of 0.503. This means that education affects the productivity of Educational and Administrative Power of public sector workers with a positive direction.

The T-test imposed on the effect of age on productivity of Educational and Administrative Personnel working of the public sector workers. T-test for the effect of age on productivity variable is equal to 2.219 with a significance of 0.027, and a beta coefficient of 0.164. This means education affects the productivity of Educational and Administrative Power of public sector workers with a positive direction.

**F Regression Test**

F regression test is used to test the effect of simultaneous multiple independent variables on the dependent variable. F regression test results influence the level of education, salary, and age on the productivity of lecturers and administrative public sector workers result F-test value of 83.193 with a significance of 0.000, and R square of 0.396. It can be concluded that there is a simultaneous influence between education, salary, and age on the productivity of lecturers and administrative public sector workers. Based on the results of the test which is based on the results of the regression analysis as presented in Table 4 can then be obtained regression equation as follows: Labor productivity (Y) = 74.308 + (-0.049) education + 0.503 salary + 0.164 Age.

**Table 4. Regression Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.633*</td>
<td>.401</td>
<td>.396</td>
<td>2.85085</td>
<td>.401</td>
<td>83.193</td>
<td>3</td>
<td>373</td>
<td>.000</td>
<td>1.959</td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), AGE, EDUCATION, SALARY
b. Dependent Variable: WORK PRODUCTIVITY

**ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2028.414</td>
<td>3</td>
<td>676.138</td>
<td>83.193</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>3031.504</td>
<td>373</td>
<td>8.127</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3059.918</td>
<td>376</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), AGE, EDUCATION, SALARY
b. Dependent Variable: WORK PRODUCTIVITY

**Coefficients**

...
The results of this research are descriptively shows that education possessed by public sector workers at the institution, the average is between education of bachelor’s and master’s degree; the average basic salary of public sector workers at the time of the study shows the rate of IDR. 2,007.69; their average age shows 44.9 year olds, the level of productivity shows the average value of 89.239 which included in either category.

Based on the results of the regression analysis, it shows that there is a negative effect of educational, a positive effect of salary and a positive effect of age on the productivity of lecturers and administrative public sector workers. This means that the higher the level of education possessed by the educational and administrative personnel it cannot increase productivity as public sector workers, whereas the higher the basic salary received will increase the productivity, and the higher the age of employees will further increase the productivity of the work.

The researcher suspects that the education of a person who proved as negative effect is caused by the reward system which is not based on the level of education possessed but rather based on the ranks of public sector workers. This is very understandable, because in the reward system of public sector workers the educational level is least important. This condition is often to be debated, yet the results have not shown to be encouraging.

The results of this study is supporting to Minister of Administrative Reform and Bureaucratic statement that public sector workers in Indonesia is PGBS (Smart or Stupid Have the Same Income) as follows: "... The variation of the value of the productivity of public sector workers due to the perception of public sector workers who do not need to give priority to quality because whatever is done will receive the same income. "Itu namanya PGPS, pintar goblok penghasilan sama," he said" (Tempo Interaktif, 2006:1). It could be that the assessment of the productivity of public sector workers that used DP3 is irrelevant, because there is a tendency to promote even formality. Meanwhile, Haryono (2004) states that "DP3 actually very important to assess the accountability of personal (private). But unfortunately, until now DP3 as a measure of success public sector workers (PNS) is still a mere formality ". So it is natural if the opposite happens, i.e the higher the level of education can decreases labor productivity of public sector workers.

The education is supposed to have positive effect on employee productivity. This is confirmed that education has function to drive the potential ability in improving the productivity of human resources (Asih, 2008), the education factor have = positive effect on employee productivity (Suwadi, 2008). Employees in this context are focused on employees in general (non- public sector workers) whereas this study objects are public sector workers. Chevalier, Harmon, & Walker (2012:1) stated = “that education may act as a signal of productivity”. It means that educational of workers just as a characteristic first on productivity.

This is consistent with results of previous studies conducted by Gunawan (2008), that there are some factors which can increase employee productivity, including: salary, work environment, and opportunities to achieve. The test results show that the salary, work environment, and opportunities achievement can explain 98.90% of the dependent variables (work productivity). The age is proven to increase the work productivity. These results clearly support previous research (Levinson, 1986) which is only in the productive age (range 17 to 45). However, Levinson is unable to reveal productivity in the next age. Noting the future employees have the working age up to 56 years (administrative staff) and 65 years (lecturers) it is suspected until the age of 65 years of productivity can also be higher.

The issue is whether the post 65 years of age are also more productive? Noting at those ages have been retired as public sector workers; it means that on the post-age, they also have been experiencing a decline in work productivity as public sector workers. This issue has not been answered in this study, so we need further research to uncover the effect of age on employee work productivity, both in general and in those who are public sector workers in the future. Feldstein (2008:6) also support to this study that the rise in compensation or salary has been very similar to the rise in productivity. It mean, if productivity of public servant will be improved, so the compensation or salary must be increased proportionally and consistent.
CONCLUSIONS

The education possessed by public sector workers at the institution, the average shows the number 4.1592, in education levels between Bachelor and Master, with the range between those elementary education up to Doctoral; the average basic salary at the time of the study, shows the rate of IDR 2,007.69, the lowest salary range of IDR 1,440,600.00 and IDR 2,910,000.00 is the highest; and their average age showed 44.9 year olds, with a range of 22 to 69 year olds. The level of productivity indicates that productivity levels have an average value of 89.239 which means included in both categories, with value range from 76.57 to 98.87. Level of education, salary, and age proved to have a significant effect on the productivity of lecturers and public sector workers administratively significantly. Salary is a dominant factor in affecting employee productivity, while the other, age ranks second, and education ranks third. However, when seen in partial, education level proved to be influential in a negative direction on the productivity, while salary and age effect on work productivity with a positive direction.

There are some suggestions addressed to: policy makers, that it is time to enter the variable level of education as a basis in determining the salaries of public sector workers, so that the determination of salaries by rank and class without considering the education of staff should be immediately evaluated and systematically changes; the government and leaders of higher education institutions, namely the need to increase the salaries of lecturers and administrative, as variable salary can be used as an instrument to improve the productivity of their work, but the salary increases should be awarded proportionally, especially, it should be based on job performance achieved by each employee, not based on rank/grade and years of service only; and public sector workers namely those with high education need to increase labor productivity better; other researchers, need to do further research with a focus on policy analysis related to labor productivity in the workforce with the status of non-public sector workers.

REFERENCES


