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Satisfaction of Elderly Between Work and Leisure Time

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Abstract: ***The growing number of elderly problems will result to the increase of dependency ratio. This research will examine the factors that influence the decision of elderly citizens to work in Central Java. The data used is SUPAS 2015. By using a logistic regression model to analyze the factors that affect the elderly to work or not work. The results showed that the number of elderly people who still worked more than the elderly population who did not work. Elderly men who were married and had low education were more dominant in deciding to work. Based on the results of the regression analysis showed that gender, relationship with the head of the household, marital status, education level, pension insurance and health complaints significantly influence the decision of the elderly population to work.***

Keywords: quote elderly manpower, logistic regression

1. Introduction

The population baseline data, including the number and structure of population are very much needed in the development planning both as input and output. On the input side, data on the number and structure of the population are used as basic data to estimate the amount of labor that can be absorbed, while from the output data side, it is used to determine target groups of development, for example underfive age groups, school age residents and the elderly.

At present the elderly population is one of the development target groups which is the focus of government attention and the issue of aging population is one of the most interesting issues to be discussed in the domographic study. Now, Indonesia is experiencing a population phenomenon, which is a change in population structure is aimed to increase the proportion of the elderly population to the total population from 4.5 percent in 1971 to 7.6 percent in 2010 (BPS., 2011). In Central Java Province, the proportion of the elderly population towards the total population increased 4.2 percent in 1971 to 10.3 percent in 2010.

One of the reasons for this increase in the proportion of the elderly is the increase in the quality of health and the socio-economic conditions of society in general as a positive effect of the implementation of development in all fields. The results of Population Census in 2010 (SP2010) indicated that the population of Indonesia has a life expectancy that reaches the age of 70.7 years. This is far better than the life expectancy of the previous three or four decades which is under 60 years. The increase of life expectancy has increased the number of elderly people and changed the structure of the population of Indonesia.

The increasing number of elderly people, has many consequences in various aspects of life. One of them is if the number of elderly people increases, the depedency ratio will also increase. But in fact there are still many elderly residents who work to fulfill their needs even their families. Therefore, the increase of elderly population needs serious attention from all parties. The large number of elderly people who work on one side shows that the elderly population remains active and productive by not relying on other population groups, but on the other hand it will be a complex problem if it does not get serious attention, especially in terms of health and social security.

BPS-Statistics Indonesia (2015) report showed that the Work Participation Rate (TPAK) of the elderly population in Central Java Province in 2014 was 51.29 percent, which means that as many as 51.29 percent of the total population of the elderly is the workforce, those who are working. temporary not working, looking for work and preparing a business. This figure is higher than the national figure of 47.48 percent.

Williamson and McNamara (2001) explain that the problem of the elderly population working in developing countries was different from developed countries. From the social side, the work participation of the elderly population is also influenced by the gender and level of education they have. Hotopp (2005) and Kalwij (2005) both concluded that the elderly population with more male sexes remained in the workforce despite entering old age. Besides that the role of education shows that the level of education is in line with the level of earned income (Affandi., 2009). The level of education is also the motivation of the elderly population to work in addition to the number of family and health dependents (Andini., 2013)

Hellerstein in Hottop (2005) revealed that married workers were more productive than unmarried workers. The position of the elderly population in his family contributes to the tendency to participate in work. A well-developed social security institution gives most of the workforce access to some form of social security (Crawford., 1981). Social

security makes a real contribution to the decline on the elderly participation to work (Boskin., 1977; Quinn., 1977)
Seeing the situation above, the increasing impact of the elderly population needs to be immediately anticipated and receive comprehensive treatment, considering the condition of the elderly population is different from the condition of the population in other age structures. In this case at least the elderly population is not a constraint to development, but it remains a development capital, although physically, mentally and socially they have experienced a setback compared to the young population. The phenomenon of the number of elderly people who are still working is interesting to study about what are the factors that influence the decision of residents to continue working in Central Java Province.

2. Literature Review

The labor offer is the relationship between wage rates and the number of offered working hours. Human resource is the individuals who are free to make decisions to work or not and are also free to set the number of hours they want (Soleh., 2017).
The individual welfare cannot be obtained by itself so that people must work to get money to buy goods and services which are desirable as this is called an economic trade off . This is what encourages someone to do a job offer. When people do not work, it can obtain various goods and services, but also have to sacrifice a few hours of free time they have. With this consideration, someone offers a job. The supply of labor is the result of the decision to work by each individual in a society (Borjas., 2008).
Borjas (2008) added that work activities carried out by labor can be divided into two, namely work for wages and work without wages. Work to be paid is defined as all activities to produce goods and services by expecting compensation in the form of salary or income. Conversely, unpaid work is intended as all activities carried out without wages such as taking care of households or family workers. Furthermore, in this study, what is called work activity is work to be paid. According to Becker (1993), individual satisfaction can be obtained throughconsumption or enjoying leisure time. Working as a dilemma of leisure, meaning that each individual is willing to sacrifice his free time to be exchanged for work which ultimately earns income.

In relation to this research, an analysis of the labor supply of the elderly population will be examined. The supply of labor is illustrated by the decision of the elderly population to work or not work to enjoy leisure time.

Social and economic characteristics will influence the decision of the elderly population to carry out work activities. Most of the social and economic characteristics that had recently observed in previous studies include gender, relationship to head of household, marital status, education level, pension insurance, social security and health complaints.

Activities carried out by male elderly residents is different from the activities of the elderly population of women. The sex of the elderly population will influence the role, division of tasks and activities carried out both in the family and in the community. Relationship status with the head of the household will affect the elderly population to work. An elderly resident who has the status of a head of a household is certainly required to be responsible for the survival of his household members (Reddy., 2016). Elderly people who are not married or divorced have a smaller tendency to work when it is compared to the elderly population who are married. The possibility of this condition occurs because the elderly population does not have a spouse so they live with their child's household who are able to support it or even if they do not live with their children, they may have been guaranteed or retired (Affandi., 2009; Reddy., 2016).

The relationship between the level of education and the participation of the elderly population in work is still a contradiction. According to Ruhm (1996), the level of education has an important role in population participation in work. Of course the level of education of the elderly in the decision to work. The higher education level of the elderly population is generally those who used to have good jobs, so in their old age they did not need to work anymore. Those who used to work in the general formal sector get pension benefits, one of which is retirement. Whereas according to Redy (2016) for those who are highly educated and when the elderly are still working, generally they are the elderly whose thoughts are still needed. For the elderly population with low education, they are forced to work because they have always worked only to meet the needs of the time, without thinking of retirement. Thus, when entering old age they have no savings that can guarantee their old age.

According to Utami (2016) normatively the elderly population will work if there is no source of income obtained other than by working. If they have old age insurance, enough pension insurance or other social security, they will not work. Even if those who have these guarantees work, the reason is only for self-actualization or work activities and healthy because they move.

3. Research Method

There are various kinds of age restrictions for elderly people, in this study using the age limit is 60 years and above with reference to Law No. 13 of 1998 concerning Elderly Welfare. The population in this study were residents in Central Java Province, while the population was elderly residents. The sampling technique used was purposive sampling.

This study uses data collected in the 2015 Intercensal Population Survey (SUPAS) of Central Java Province. In the survey information is available for the purposes of analysis involving the work or absence of the elderly and social and economic characteristics that are thought to influence the decision to work or not an elderly person, namely the relationship with gender, relationship with the head of household, marital status, education level, pension insurance, social security and health complaints.
The used analytical method used is inferential analysis . Inferential analysis is used to explain the relationship in each used variable. In this binary logistic regression analysis, a model that includes characteristics related to the social and economic conditions. The model which is used in the analysis of the factors that influence the decisions of the elderly population to work are as follows :

$$Ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 Gender + \beta_2 HeadOfHH + \beta_3 MaritalStatus + \beta_4 Education + B_5 Pension + \beta_6 SocialSecurity + \beta_7 HealthComplaints + u_i$$

4. Results and Discussion

Central Java Province consists of 35 regencies/ cities . According to BPS-Statistics Indonesia (2015) the population of the elderly is 3,957,434 while the population of the working elderly is 1,995,192, spread across 35 regencies/cities in Central Java Province.

Table 1: Proportion of Elderly People who Work by Gender, Central Java, 2015

Gender	*Work*		*Does not work*		*Total*		*Proportion of Working Seniors (%)*
	N	*%*	*N*	*%*	*N*	*%*	
Man	1,241,687	62.23	597,338	30.44	1,839,025	46.47	67.52
Women	753,505	37.77	1,364,904	69.56	2,118,409	53.53	35.57
Total	1995,192	100.00	1,962,242	100.00	3,957,434	100.00	50.42

Source: BPS (Central Java SUPAS 2015, processed)

Table 1 above shows that elderly workers are dominated by elderly male population. From the total population of elderly people who work 62.23 percent are elderly men and 37.77 percent are residents of the elderly women. From the proportion of the elderly population who work also shows the same thing, 67.52 percent the proportion of the elderly male population is greater than the proportion of the elderly working women (35.57 percent). Other factors that might cause greater proportions of the population of elderly men who work are cultural factors, where usually the responsibility to fulfill the family economy is on the shoulders of men versus women

The elderly resident logistic regression model working in Central Java Province in 2015 in the form of logistics transformation is:

$$Ln\left(\frac{p}{1-p}\right) = -0.451 + 0.938Gender + 0.740HeadOfHH - 0.277MaritalStatus + 0.146Education - 1.765Pension - 0.004SocialSecurity - 0,916HealthComplaints + u_i$$

Menwhile, the hypotheses against the logistic regression coefficients using Wald test as presented in table 2 show that the logistic regression coefficient is statistically significant at error level 5 %

Table 2: Results of the Estimated Coefficient of Complete Model of Working Population, Wald Test Value, Significance and Odd Ratio Value

Variable Name	*B*	*Wald*	*Sig.*	*Exp (B) / Odd Ratio*
Gender	0.938	1163.451	0.000	2.555
Head of House Hold	0.740	653.469	0.000	2.097
Marital Status	-0.277	4.770	0.029	0.758
Education	0.146	32.516	0.000	1.157
Pension	-1.765	1283.656	0.000	0.171
Social Security	0.004	0.020	0.888*	1.004
Health Complaints	-0.916	1347.982	0.000	0.400
Constant	-0.451	314.289	0.000	0.637

* Not significant at level α = 5%

Based on the regression results, it is states :

1) The variable gender coefficient is positive, means that the elderly male population has a higher risk of working than the elderly female population. With a coefficient of 0.938 which means the odd ratio value sex variable is 2.555 shows that the tendency of the elderly male population to work 2.555 times the population of elderly women. This is consistent with the fact that men are the backbone of the household in fulfilling their household needs.
2) The relationship factor with the head of the household of the elderly population consists of two categories, namely the head of the household and others . The other meaning here is the relationship with the head of the household, can be a partner from the household head (husband/wife), child, daughter in law, grandchildren, father in law or other family. The variable coefficient of the relationship of the head of the household is 0.740 indicates that the elderly population with the status as head of the household is at greater risk of working compared to the elderly population with other statuses in the household. Someone who is not a household head in a status household does not feel obliged to work. The community still thinks that the head of the household is obliged to make a living . With an odd ratio value amounting to 2.097 indicates that the status of the head of the household having a tendency to work 2.097 times compared to other elderly people in the household.
3) Variable marital status of elderly people in this study are categorized into two, namely mating and others. From table 2, it can be seen that the variable coefficient of marital status is negative which means the risk of the elderly population who are currently married lower than those of other marital status. Value odd ratio variable marital status amounting to 0.277 indicates the tendency of the elderly population to work is 0.758 times compared to other elderly people with marital status.
4) The variable elderly people education in this study are categorized into two: the educated is less than or equal to the high school and others. Other education here means education above high school or undergraduate. Educational variables have coefficients that are positive value which implies that the elderly population with less than or equal to high school education has a higher risk of working than those who are highly educated elderly (undergraduate). The value of the odd ratio of education variables is equal to 1.157 implies that the elderly are less educated than or equal to the high school has tendency to work for 1.157 times bigger compared to elderly people who are highly educated (undergraduate) .
5) The coefficient value that compares whether the elderly population has a pension shows a negative sign, which means the elderly population who has a pension has a lower risk of becoming a worker than the elderly population who do not have a pension. The odd ratio for comparison of whether or not there is a pension is 0.171 which means that the tendency of senior citizens

who have a pension plan for the work of 0.171 times that of the elderly who do not have a pension.

6) Normatively, elderly people who are not healthy choose not to work. This is also evident in this study where the tendency of the elderly population to experience health complaints to work is 0.4 times of the elderly population who did not experience health complaints over the past month.

5. Conclusions and Suggestions

The results showed that the number of elderly people who still worked was slightly more than the elderly population who did not work. Based on the results of regression analysis showed that gender, relationship with head of household, marital status, education level and health complaints significantly influenced the decision of the elderly population to work while social security did not significantly influence the decision of the elderly population to work.

The need to strengthen the role of families, communities and the government in terms of improving the welfare of the elderly population, especially the elderly who work. In this case the main concern is the health and skills of the elderly population.

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Author Profile

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