

Study of Work Participation and Income of Elderly Workers in Indonesia

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Abstract: Working is one way for elderly to achieve welfare by earned, besides working is a form of self-existence and the way they spend their time in old age. This study aims to analyze: 1) the influence of education level, type of family, the number of dependents, health condition, non-labor income on the number of hours of elderly workers; 2) the influence of education level, family type, number of dependents, health condition, non-labor income to income of elderly workers; 3) the role of the number of working hours in mediating the influence of education level, family type, number of dependents, health condition, non-labor income to income of elderly workers. This study used primary data sources obtained from structured direct interviews and deep interviews using questionnaires to elderly workers. It was done purposively on 150 respondents. The analytical tool is used descriptive and path analysis by using SPSS. The results showed that: 1) the level of education and non-work income negatively affect the number of hours of work of the elderly; Elderly workers with the core family type have longer working hours than older workers with large family types; Healthy elderly workers have longer working hours than older workers in sick conditions; The number of dependents does not affect the number of working hours of elderly workers. 2) The level of education has a positive effect on the income of elderly workers; Type of family does not affect the income of elderly workers; the number of dependents in the household does not affect the income of elderly workers; Healthy elderly workers have higher incomes than older workers in sick conditions; Non-labor income has no negative effect on the income of elderly workers. 3) The number of working hours mediates the level of education and health conditions to elderly workers income. Health of the elderly is the main factor that must be paid attention by government to continue their activities, keep them to be productive and independent, also it is expected to increase education for next generation, social security for elderly, and socialize homecare of elderly care and support to their family for elderly life better in the future.

Keywords: income, number of working hours, elderly workers.

1. Introduction

In developed countries, the old people spending their time with relaxing and enjoying life. In this old age the elderly have more time to do activities that they did not have time to do during the productive age because they have to work to support their families, especially supported by the social benefits provided by the government to the elderly. Social benefits for the elderly will increase the economic ability of the elderly, thereby increasing their consumption expenditure (Banks, 2006). Unfortunately, similar things do not occur in developing countries that do not have a social security system for old age like in Indonesia. It is seen from the population that belongs to the workforce is the population from the age of 15 years or older, which means that there is no age limit for a person to work, even if a person has entered the age of age is still allowed to work.

The province of Bali is the province with the fifth highest work participation of elderly in Indonesia which is 52.95 percent after West Papua (58.58 percent), East Nusa Tenggara (57.04 percent), West Sulawesi (54.39 percent), DI Yogyakarta (53.69 percent), and Papua (53.69 percent) of which the elderly work force level of Bali Province is also above the national elderly (47.78 percent). The high elderly in Bali Province is associated with an increase in the number of elderly population as a result of an increase in life expectancy. Based on Bali Provincial BPS data (2017) shows life expectancy increase occurred in all regency / city of Bali Province during 2010 until 2016, where Badung Regency is Regency with highest life expectancy reach 74,42 year, then second rank Denpasar with life expectancy equal to 74.04 years, while Kabupaten Karangasem and Bangli

regencies are the two districts with the lowest life expectancy in Bali Province which is 69,69 years old and 69,66 years old.

The low life expectancy in Bangli Regency compared to the regencies/cities in southern Bali Province, is influenced by the economic, social and demographic conditions of Bangli Region itself, which will affect the ability of the community to fulfill their life needs in order to achieve their prosperity. When viewed from the economic side, Bangli regency is one of the highest poverty severity areas in Bali province, where Bangli ranks fourth highest poverty severity index in Bali Province after Kabupaten Karangasem (0.22), Klungkung (0.20), and Jembrana (0.19).

This indicates that most Bangli residents still face difficulties, especially in terms of meeting their daily needs. The low economy in Bangli Regency is also shown by Bangli minimum wage standard is the lowest in Bali Province. The low minimum wage standard indicates that the community has low consumption capability, so the low expenditure is consequently impacted on the low level of community welfare in the region.

The low level of community welfare in Bangli Regency will be related to the welfare level of the elderly population, where the poor economic condition makes the elderly must participate in helping to support their family's economy or just to fulfill their own needs so as not to burden the family or children / grandchildren. The Bali Provincial Employment Statistics data as of August 2016 indicates that Bangli is the second highest percentage of working elderly (62.73 percent) after Karangasem District (62.88 percent). Based on

the results of pre-research observations, it was found that the majority of elderly people in Bangli, especially in rural areas, are poor and work as farmers, most of whom work in elementary school and the highest education ever completed is to finish primary school.

Wirakartakusumah and Evi (1994) say that there are at least three reasons that affect the elderly to join into the labor market. First, there are still many elderly who remain strong physically and mentally so there is no reason to get out of the job market. Second, the plunge of the elderly into the labor market due to the economic urges. Third, the reason is not based on economic motives, but rather based on the motive of self-actualization or emotion. When viewed from the side of culture, in the beliefs of Hinduism embraced Balinese people, work is a duty of every human being or known as Dharma. Working as a devotion to God and done for the welfare of fellow human beings and maintaining social order. People who are lazy to work when he is still able to work as well as not living and when lazy to work someone will be easily controlled by evil thoughts. Thereby bound or unbound, the working culture has become the blood of the flesh and the habit in society, so that even though it has entered the age of the elderly, as long as it is still able to work, the elderly will still work (Bhagawadgita II.47, Bhagawadgita III.8, Bhagawadgita III .25)

The productivity of an elderly and his or her active role or participation in economic activity can be seen from the number of working hours of his work in producing goods and services for income. Older workers will tend to work longer to earn higher income that is used to improve their welfare, but for elderly who already feel enough with the income they have will work with less time and use the remaining time to do other activities. Viewed from the physiological aspects, the working elderly are usually more prosperous than those who do not work. While still able, the elderly can work to improve their welfare, in addition to work is a form of self-existence and independence (Andriyanti, 2013). Neugarten in Mulyono (2015) states that to grow old with success one must stay active as far as possible. This means that by working, in addition to making the elderly become healthy also generate income in the form of wages to increase income, so that the elderly can improve their welfare, especially in fulfilling basic needs through additional expenditures.

Health condition is the most important thing as a determinant of independence of an elderly. The result of research of Rinajumita (2011) and Sudibia (2014) where with good health condition of elderly will be able to do any activity in everyday life like taking care of herself, work, or recreation. When physically and mentally healthy, the elderly will be more productive and able to work longer to increase their income. Viewed from the economic side, the elderly status in the family will affect the participation of the elderly in the labor market. The existence of a large responsibility as head of the household, causing the elderly with a relatively old age (70 years and over) was forced to work (Junaedi, 2015). This responsibility is related to the number of family members covered. The dependent elderly or the head of the family will have a tendency to participate in a higher labor

market, that is, the greater the number of dependents (Wira, 2013), the greater their demand for income that causes the greater the time spent for work. On the other hand, modernization has an impact in all areas of life including changes in family structure (Cowgill, 1986 in cowgill, 1999). The steady flow of rural-to-urban migration affects the family structure and status of the elderly, Cowgill (1986) reveals three important things related to this: first, that extended families are rarely encountered in modern society, instead of the most common is the nuclear family. Second. Status of the elderly group is found in farmers group which is often assumed as traditional society and low income in modern society (urban). Third, the status of the elderly group tends to be high in the community that embraces the extended family structure and tends to be low in the community that embraces the small family (nuclear family). Cowgill's understanding is in line with the classical beliefs of Western society that the core family structure tends to aggravate the socioeconomic conditions and / or social position of the elderly.

The sense of devotion to our *rupaka* or parent can be realized one of them by caring for our parents in their old age (Sudibia, et al., 2015), but the fact that happened in some areas in Indonesia, the mobility caused by modernization causes children tend to leave their parents outside the area to go to school and find a better job, thus in the area of origin only left the elderly. Similarly, in Indonesia, especially in the Bangli region, the elderly tend to live alone or live with their relatives, while their children migrate out of the area to work, so the elderly must be independent especially in fulfilling daily needs, thus the elderly will use some of its time to work to earn income or to fill his spare time.

Indeed, the form of devotion of children to parents is not only by caring for them in old age. With the rapid flow of migration, which causes most of the time children are used to working and living away from their parents, it will usually manifest a form of transfers from children to parents in the form of money or goods that are useful to meet the needs of their parents the elderly. With the transfer will increase the non-working appetite of the elderly and this increase in non-work income will lead to increased ability to meet daily needs, thus the elderly can work with less time and use the remaining time for other leisure activities. This is in line with Mcconel's explanation in Nurhidayati (2015), that the relatively high non-labor income level causes a person to feel that his or her life's need for goods and services is sufficient, so they choose not to work and have time leisure time to enjoy the income earned from not working, thus the shorter the time spent working to cause lower wages.

Based on those, this research wanted to know the influence of education level, family type, number of dependents in the household, non-labor income, and health condition of elderly to number of working hours and income of elderly workers in Kecamatan Bangli, Bali, Indonesia, besides from this research is expected to analyze the differences of elderly workers in the rural and urban areas, especially regarding the allocation of working time, type of work, independence, liveliness, and the economic role of elderly in the household

and socio-cultural shifts arising from the modernization of the life of the elderly.

2. Literature Review

2.1 The Elderly Population and the Elderly Worker

The definition of elderly people varies depending on who defines. In this study, the intended elderly population refers to Law no. 13 of 1998 on Elderly Welfare, that is, the elderly population is a population aged 60 and above. From the economic aspect, the elderly (60 years and above) are grouped into: (1) productive elderly that is healthy elderly both from physical aspect, mental and social; and (2) unproductive elderly, physically healthy, but unhealthy elderly from the mental and social aspects; or mentally healthy but not healthy from the physical and social aspects; or elderly who are not healthy both from the physical, mental and social aspects.

Changes from modernization cause the elderly are increasingly involved in the job market, especially in terms of culture, the concept of work has significance. Hindu philosophy recognizes the teachings of karma yoga as part of the teachings of *Catur Marga* or the four ways or way to God. According to *Bhagawadgita*, "work" or "action" is a law of nature. Work is encouraged with a sense of sincerity and devotion addressed to Brahman without expecting personal gain (Prabhudupada, 2006). Work is an obligation that must be done by every man of Hinduism. Work includes not only physical but mental aspects (Prabhudupada, 2006).

The elderly worker is a group of workers who are still engaged in unproductive age employment activities (BPS, 2015). They are still doing work due to the demands of family dependents or economic circumstances or other personal reasons. According to Bernice Neugarten (1968), James.C.Chalhoun (1995) of old age is a time where people can be satisfied with their success. Old age is experienced in different ways. Some elderly people are able to see the significance of old age in the context of human existence, namely as a lifetime that gives them opportunities to grow and commit to devotion so they decide to keep working, and there are also elderly people who look to old age with the attitude- attitudes that range from passive surrender and rebellion, rejection, and despair.

2.2 Level of Education

Elderly who have lower education level will have higher working hours than elderly who have the level of education above junior high school education (Mandayati, 2012). A person's level of education will affect the income level of the person because education is closely related to the mindset of a person in doing the job. The lower the level of education then the type of work is also limited. With these limitations it tends to work longer but the wages (income) they receive are also limited. The higher the education level, the higher the level of education will result in higher level of education, resulting in high work experience and skills expected to help create new fields in the informal sector (Candra Sari, 2016).

Highly educated elderly people will tend to not work in their full-time jobs because they have a good job before retirement providing old-age social security. Elderly people living in rural areas tend to work more than urban residents, this is because most elderly people living in rural areas have low education and work in the informal sector, so even though they are over 60 years of age, they still work.

2.3 Family Type

Elderly people who live alone or are in elderly households tend to work longer compared with elderly people who are living with large families or children and grandchildren because there is still bears and take care of. According to Friedman (1998), individuals living in extended families will gain greater family support than individuals living in the nuclear family. Rudkin (1993) said elderly people living alone generally have lower levels of wellbeing compared with elderly people living with their families, thereby encouraging them to work and with longer working hours.

Cowgill (1986) proposed three important theses in connection with the link between the family structure and the status of the elderly. First, extended families are rarely encountered in modern society, instead, the most common form is the nuclear family. Secondly, the status of the elderly group tends to be high in the peasant society which is often assumed to be traditional and tends to be low in modern society (urban). Third, the status of the elderly group tends to be high in the community that embraces the extended family structure and, on the contrary, tends to be low in the community of small families (nuclear family). Thus with the presence of modernization is feared will corner the condition of the old class.

2.4 Number of Dependents in the Household

The large number of family dependents is a factor that affects the willingness to do the job. As more and more respondents have children and dependents, the time provided by respondents to work is more effective. The effectiveness of this time is useful for increasing the income of the respondents themselves (Sihol Situngkir et al, 2007). In addition to these, the non-work income will affect the number of working hours of the elderly to be less, because it already has an income before.

2.5 Health Conditions

Health includes physical and mental aspects. Health helps work process in completing their task. If health is disrupted, then the work will be disrupted. So maintaining and maintaining health is a useful step in success. Elderly people both men and women who have poor health conditions will decide to reduce their participation in work or even decide not to work (Met and Schultz, 2002).

2.6 Non-Labor Income

Theoretically, if the non-labor income (wealth) increases and the opportunity cost of leisure time is fixed, then one will consume more leisure time, thus reducing the allocation of

working time. This means that an increase in non-employment income will lead to a decrease in working hours, an increase in non-labor income resulting in a decrease in working hours is called the income effect (Marhaeni and Manuati, 2004: 25). Glies (2015) showed similar results, that workers who have retirement in their old age will tend to discontinue productive activities in their old age. This will affect the work income obtained to be relatively smaller than the elderly working with the same type of work in a longer time.

3. Research Methodology

Based on the empirical study, the hypothesis can be formulated to provide direction for research analysis:

- 1) The level of education and non-labor income has a negative effect on the number of working hours of elderly workers.
- 2) The number of dependents in the household has a positive effect on the number of working hours of elderly workers.
- 3) Elderly workers with core family type have higher work hours compared to elderly with large family type.
- 4) Healthy elderly workers have higher work hours compared with sickly elderly workers.
- 5) The level of education and the number of dependents in the households have a positive effect on the income of elderly workers.
- 6) Elderly workers with core family type have higher job income compared to elderly with big family type.
- 7) Elderly workers with healthy condition have higher work income compared with sick elderly.
- 8) Non-labor income negatively affects the income of elderly workers.
- 9) The number of working hours mediates the influence of education level, family type, number of household dependents, health condition, and non-work income to the income of elderly workers.

This study uses primary data sources, namely structured interviews and in-depth interviews directly to elderly workers. The sampling technique was done purposively on 150 respondents. It analyzed by descriptive and path analysis processed with SPSS.

The structural equation for path analysis is as follows:

$$Y_1 = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon_1 \quad (1)$$

$$Y_2 = \beta_6 X_1 + \beta_7 X_2 + \beta_8 X_3 + \beta_9 X_4 + \beta_{10} X_5 + \beta_{11} Y_1 + \varepsilon_2 \quad (2)$$

Where, Y_1 = Elderly Employee Revenue, Y_2 = Number of Working Hours, X_1 = Education Level, X_2 = Family Type, X_3 = Number of Household Dependents, X_4 = Health Condition, X_5 = Non-Labor Income, β_1 to β_{11} = Path Coefficient, and $\varepsilon_1, \varepsilon_2$ = Structural error (structural error).

The research model can be seen in Figure 1 below :

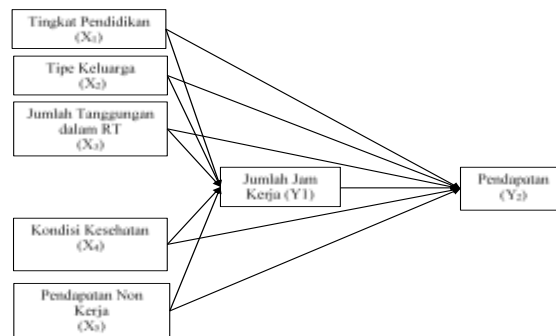


Figure 1: Research Concept

To test how much variable intervening mediates the influence of independent variables on dependent variable is used Sobel test. Where Sobel test uses z test with the following formula:

$$z = \frac{ab}{\sqrt{b^2 s_a^2 + a^2 s_b^2}} \quad (3)$$

Where: a = coefficient of regression of independent variable to regression variable, b = regression coefficient of mediation variable to dependent variable, s_a = standard error of estimation from influence of independent variable to mediation variable, s_b = standard error of estimation from influence of mediation variable to dependent variable.

4. Result and Discussion

4.1 Description of Research Results

Overall of the respondents encountered as many as 150 respondents, dominated by those who are female sex as much as 58.90 percent and the remaining 41.10 percent are male. This phenomenon is interesting, where in elderly workers, elderly women tend to be more active than men. This is related to Balinese culture which accustoms girls to be involved in all aspects of their lives since they were small, such as helping the parents to clean up, cook, and so on, so that the culture of working is so attached to Balinese women.

In general, the average respondents of elderly workers are mostly at aged 60 years to 74 years ranging from 24 percent to 25 percent, while workers aged 75 years and over are below 17 percent. The least age group are workers age 80 and older. This suggests that in general, the older the elderly will decrease their working activity. This is related to the physical condition of the elderly who decreases, causing the elderly to reduce their working activity, they feel faster fatigue even though the work done is a relatively light work, such as selling, gardening, weaving and other work that is not too draining the mind and mind,

The education of elderly workers is relatively low. Most of the elderly workers' education is not finished primary school by 56 percent, even the elderly who never attended school that is 4 percent, whereas the elderly who got high education is very little that is only 8 to 9 percent. Low education causes the elderly can not be absorbed in the formal sector when their age is productive, so the elderly must keep working in their old age because they do not have enough old age social benefits to protect their economy.

The highest frequency is respondents who have large family type of 69.33 percent, while those living only with nuclear family is 30.67 percent or in other words most of the working elderly still live with their big family, such as children, grandchild, son-in-law, and other relatives. The elderly who live with the nuclear family is mostly caused by having no sons and some who are left to work their children abroad or outside the area so that the elderly should stay alone.

The elderly workers generally do not have the burden of family dependents anymore. They work to meet their needs and spouse if it is still there. Similarly when working, most of them do similar work and help each other in completing his work. Their children are all working, so the elderly who work not because of the burden of dependents, but rather to look for busy and supplement their daily income, even some of them are borne by their children but still choose to work.

In general, elderly workers are in healthy condition, 78.67 percent of elderly workers have never been sick more than three days during the last month, while 21.33 percent of elderly have been sick for more than three days in the past month. The commonly afflicted diseases such as fever, uric acid, high blood pressure, fatigue, bone fragility, and muscle pain. The health condition of the elderly is very influential on the independence, the elderly, and the productivity of the elderly workers. Healthy condition makes elderly able to do any activity to improve their welfare.

Based on the findings in the field, 75.33 percent of total workers have non-labor income below Rp 1.000.000,00. Older workers with non-labor income mostly live in urban areas. The elderly workers in the city used to work as civil servants, while the elderly workers in the village were almost entirely employed in the agricultural and commercial sectors, so they did not have old-age social benefits. This causes the elderly in the village to work in a relatively longer time than the elderly workers in the city. The number of working hours of elderly workers presented by this Figure 2.

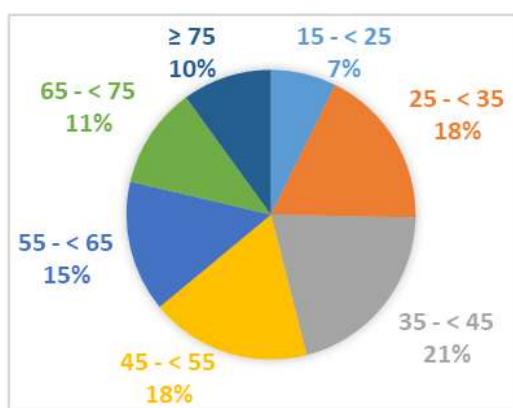


Figure 2 : Number of Working Hours of Elderly Workers

Most elderly workers work on average for 35 hours up to less than 45 hours per week, which is 21 percent. Field findings also show that the elderly work has a fairly high number of working hours if averaged ie the average work for 48 hours a week, even as many as 10 percent of respondents have working hours over 75 hours a week. Thus, most

elderly people spend an average time of at least 8 hours a day for work.

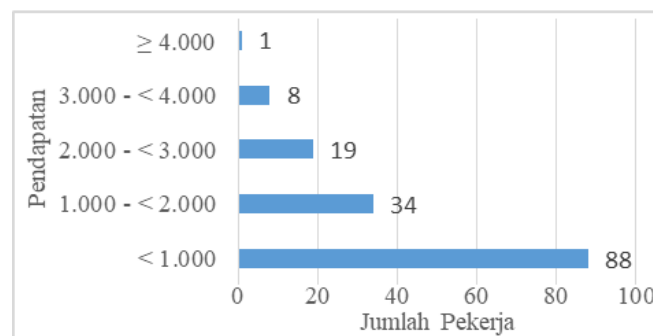


Figure 3: Elderly Employee Income

Figure 3 shows that there are still many elderly people who are in low economic condition, that is 80.34 percent have income below Bangli Regency minimum wage Rp 2.150.000,00 (2017) so it is fair if they work to earn additional income especially for the elderly who are on the ladder less well. They work to earn income so as to improve their welfare through increased expenditure or consumption.

4.2 Discussion of Research Results

Everyone working has certain reasons and motivations to work, especially for economic purposes, but different things happen to the elderly who decide to work in his old age. For the elderly, working to provide inner satisfaction, where they feel still able to do something, have income, and not rely on others. This situation brings confidence and self-esteem to the elderly workers, so that the elderly who feel still able physically and mentally will still work as before.

Health conditions are the most decisive factor for the productivity of the elderly workers. Elderly workers with healthy conditions will tend to work longer and can take on more diverse jobs. The elderly workers, working an average of 48 hours a week with an average income of Rp 1,000,000.00 - Rp 1,500,000.00, where the majority of elderly workers work in agriculture and trade. By working, the elderly generate income that will be used to meet daily needs. This means that indirectly increases the expenditure of the elderly, meaning that the elderly directly and indirectly contribute to the local economy, in addition to work means that the elderly are able to become economically independent and relieve the burden of being dependent on their children or the families they live with.

Family support to let the elderly do work actually makes the elderly more active, productive, and healthy, and happier. They feel appreciated and acknowledged that their existence is still useful to others. Field findings indicate the form of child or family support for the elderly working such as capital support, providing a place for the elderly to work, helping the elderly to prepare the raw materials of his wares, and the interaction to ask the health of the elderly in working.

In this study also found that although the elderly work to generate income, the responsibilities of children or their

families are not reduced. Children still pay attention to the elderly both in the form of morale and material, besides that although the elderly work has been able to independently in fulfilling their daily needs, they still want the attention of their children / grandchildren / family. For them non-material attention from family is very important, can make them feel calm and calm and even more optimistic in living the rest of their lives. This is in line with the results of Sudibia's study, et al. (2015) on Elderly Care Patterns in the Province of Bali that with the current old condition, the presence of family becomes very important, keeping communication with family makes them feel socially / economically healthy.

Based on the result of path analysis showed that education level has negative and significant effect to the number of working hours. This is indicated by the path coefficient of -0.215 and a significant level of less than 0.05 with a value of P-value 0.024. This means that the higher the level of education a person, the number of working hours will be lower. Older workers who have a nuclear family type will work longer than the elderly who live with large families. This is indicated by the path coefficient of -0.233 with a significance level of less than 0.05 with P-value of 0.001. The number of family dependents positively affects the number of working hours of elderly workers with a path coefficient of 0.019 dantidk significant where the significance level is greater than 0.05 with a P-value of 0.768. Health condition significantly influence the number of working hours of elderly workers. This is indicated by the path coefficient of 0.373 and the significant level less than 0.05 with the value of P-value 0.000. This means that healthy elderly will work longer than the elderly in sick condition. Non-labor income has a negative and significant effect on the number of working hours of elderly workers. This is indicated by the path coefficient of -0.2282 and significant level of less than 0.05 with the value of P-value 0.003. This means that higher non-work income will lead to lower working hours of older workers.

The level of education has a positive and significant effect on the income of elderly workers. This is indicated by the path coefficient of 0.082 and the significant level less than 0.05 with the value of P-value 0.020. This means that the higher a person's level of education, the higher the income will be. For non-influent family type variable to the income of elderly workers. This is indicated by the path coefficient of -0.024 with a significance level above 0.05 with P-value of 0.383. This means that there is no difference in income between elderly workers with core family types and elderly workers with extended family types. The number of family dependents is not positive on the income of elderly workers with path coefficient of -0.042 and not significant with significance level greater than 0.05 with P-value of 0.077. Health condition has significant effect to the income of elderly workers. This is indicated by the path coefficient of 0.013 and the significant level less than 0.05 with the value of P-value 0.003. This means that healthy elderly people will have more income than sickly elderly workers. Non-labor income variable has no negative effect on the earnings of elderly workers with path coefficient of 0.013 with significant level 0.015 above 0.05. For variable of number of

working hours, positively and significantly influence to earnings of elderly worker, shown by coefficient value of line 1,038 with P-value below 0,05 0.000. This indicates that the higher the number of working hours will cause Income to increase.

The variable that has the biggest influence on the number of working hours is the health condition with the coefficient of the path of 0.373, while the most influential variable on the income level is the variable number of working hours with the coefficient of the path of 1.041 followed by the health condition variable with the coefficient of the path of 0.084 and the level of education coefficient lane of 0.082.

Based on the results of the test, it was found that the variable number of working hours (Y1) mediated the effect of education level variables (X1) and health condition variables (X4) on the income variable of the elderly workers.

Things to note, most of the elderly have not obtained adequate health facilities to maintain their health. This is especially true in rural areas. Most of the elderly have no health insurance, and they rarely go to a doctor when sick, they prefer to go to a shaman. There are also elderly who choose to let the disease heal itself, resulting in pain suffered takes a long time to heal and even some are getting worse. This is what stirs up the activity and independence of the elderly themselves, besides the far-reaching health facilities out of reach causes the elderly to be reluctant to seek treatment.

With regard to health conditions, when the elderly sick they can't perform their economic activities as usual, so they will lose their income, but on the other hand the need must remain met. If only they had non-employment income in the form of social security, would greatly help them to improve their welfare. The elderly who have social security of the old days are more prosperous than the elderly who do not have social benefits, especially for the elderly who can't work when they are sick. They already have a handle for life and medical expenses and if possible so that special medical expenses for the elderly are free of charge. Thus, it really takes the government's attention related to old age social security and health insurance (free) for the elderly, especially for the elderly in conditions of illness that can't work optimally.

5. Conclusion and Suggestions

The purpose of this study is to analyze the factors that affect the number of working hours and income of elderly workers in Kecamatan Bangli, Bali, Indonesia. In general, the results of the analysis provide empirical support for the formulated hypothesis. The result shows that the level of education and non work income negatively affect the number of working hours of elderly workers, the number of dependents in the household does not affect the number of working hours of elderly workers elderly workers. Elderly workers with core family type have higher working hours compared with elderly with big family type, elderly worker with healthy condition have higher working hours compared with sickly

elderly worker, education level have positive effect to elderly worker's income of elderly worker, the number of dependents in the household does not affect the income of elderly workers, the type of family does not affect the income of elderly workers elderly, elderly workers with healthy conditions have higher work income compared with elderly sick workers elderly, non-labor income has no negative effect on income elderly workers, the number of working hours mediates the effect of education level and health condition on the income of elderly workers.

Based on the findings in the field as for suggestions that can be given: 1) health is the most important factor for the elderly to remain independent, thus the government through the head of the environment need to solicit Healthy Indonesia Card (KIS) and if can KIS for the elderly is not collected costs and the government is expected to increase health facilities and more activate the function of puskesmas in every sub-district for the elderly, 2) family support is also very necessary in encouraging the elderly spirit in conducting daily activities so that the government needs to socialize homecare and support of elderly by their family at home, 4) required a government policy related to the procurement of social security, either managed by the government or by private parties, especially to guarantee the security of elderly economic conditions that are unable to work due to illness, 5) improvement of quality and provision of educational facilities in, guns generations of elderly people in the future can enjoy the life of his old age better.

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