

The Effect of Education and Types of Work on Poor Households Income and Consumption in Buleleng District, Bali, Indonesia

Gusti Ayu Putu Krisnayanti¹, Putu Ayu Pramitha Purwanti²

¹ Department of Economics, Udayana University, Denpasar, Bali, Indonesia

² Department of Economics, Udayana University, Denpasar, Bali, Indonesia

Abstract

This study aims to analyze the influence of education level and type of work on the income of poor households in Buleleng Regency, analyze the influence of education level, type of work and income on poor households consumption patterns in Buleleng Regency, and analyze the influence of education level and type of work indirectly on poor household consumption patterns through income in Buleleng Regency. This research was conducted in all sub-districts in Buleleng Regency, with data collection using observations and in-depth interviews. Sampling method used is non probability sampling method with two methods namely quota sampling method and purposive sampling with the number of samples as many as a hundred of the heads of family. The data analysis technique used is path analysis technique. The results showed that the level of education and type of work had a positive effect on the income of poor households in Buleleng Regency; education level, type of work and income negatively affect the food consumption patterns of poor households in Buleleng Regency; and education level, this type of work has an indirect effect on income to the food consumption patterns of poor households in Buleleng Regency.

Keywords: *poor households, level of education, type of work, household income, food consumption patterns.*

1. Introduction

Overall, poverty is defined as a situation where there is an inability to meet basic needs such as food, clothing, housing, education and health (Rini & Sugiharti, 2017). There are two circles of poverty traps, such as in terms of supply where the low level of community income due to the low level of productivity causes the community's ability to save low so that the level of capital formation is low. The low level of capital formation (investment) causes a lack of capital, and thus the level of productivity is also low and so on. In terms of demand in poor countries the incentive to invest is very low. Because the market area for various types of goods is limited. This is due to the very low income of the community which occurs because of the low level of productivity as a form of a limited level of capital formation due to a lack of incentives to invest and so on (Puspa, 2016). The problem of poverty is still a subject that needs extra attention. In current conditions, the poverty level is not only viewed from a different angle and depending on the view used, the poverty limit has also shifted. In a broad sense, poverty is an economic inability not limited to not being able to meet basic needs but also generally not being able to meet the needs for clothing, food and shelter (Alit and Sudiana, 2013).

Bali Province has a very unique economic structure compared to other provinces in Indonesia. This uniqueness is due to the fact that most of the people's source of livelihood comes from the tertiary sector (tourism), while other sectors only play a role as a supporting sector. Economic sources and potential possessed by each region determine the progress of development in the respective regency / city. Even though Bali Province has been supported by its income by several districts that have various kinds of potential, Bali Province still has the same and relatively classic problems such as poverty (Margareni, 2016). Based on data from the National Socio-Economic Survey, it is known that almost all districts in Bali are inseparable from the problem of poverty. Bali is known as a developed tourist area as if it was untouched by the problem of poverty. But ironically, behind the development of the island's tourism industry, there is an area where the majority of its citizens are poor. The area in question is Buleleng Regency which is located in the northern region of Bali.

Bali Province is a province that has a fairly high poverty rate. Each district in Bali has the same problems as there are still many poor households. Data from the National Team for the Acceleration of Poverty Reduction shows that Buleleng Regency has a high poverty problem based on the highest proportion of poor households, namely 27.70 percent. The character of the poor in Buleleng Regency is highly varied compared to other districts in Bali. This can be seen from the proportion of households with low welfare in Buleleng Regency which is still quite high. By considering the relatively high

number of poor households in Buleleng Regency, various efforts are needed to overcome the various causes of poverty. A household is identified as chronically poor if the income is below the poverty line.

Some of the factors estimated to affect income are age, education level, working hours, number of dependents and capital (Cahyono, 1998). People who have high education generally have the opportunity to choose a job, so that they will get a high income as well. Education can affect a person's skills, behavior and attitudes and this will be related to a person's income level (Tumiwa, 2015). Julianto, et al (2016) stated that high education will also provide high income, high education will indirectly have consequences for individual choices in getting a job. Thus, jobs that generate high income tend to be taken by educated workers.

Apart from affecting income, the level of education also has an influence on consumption patterns. According to Suyastiri (2008), the pattern of food consumption also depends on education, the higher the formal education that is received by the community, the knowledge and insight into the importance of the quality of food that will be consumed by the community to improve health will lead to more varied food consumption. The higher a person's education level, the higher the expenditure for consumption will be, thus affecting consumption patterns.

Judging from the work status of the head of the household, the percentage of poor households according to the work status of the head of the household is not dominant, that is, they work as laborers in both urban and rural areas. If we look at poor households in rural areas who work as agricultural laborers, construction workers and others, the income generated is not sufficient. According to Dinar (2008), the main job of the head of the household greatly influences the poverty level of a household, this is because each type of work has a different wage rate. In Indonesia, the majority of poor household heads tend to work in the agricultural sector, both in the food crop, plantation and fishery sub-sector, so that the minimum wage that workers will receive will be lower. Poor people do not have quality so that productivity is low, resulting in low economic growth. Furthermore, their income is also low, so they are unable to fulfill proper clothing, food and shelter. Fulfilling basic needs just to be full, not paying attention to nutritional aspects, results in not strong immune system, so they are prone to disease (Seran, 2017).

2. Literature Review

Karmarni (2010)

Which states that the level of education affects income, high education will lead to high income, so the higher the education, the higher the level of income of the work. The low income of the poor results in low education and health, thus affecting the productivity of the already low population.

Purnami dan Saskara (2016)

Which states that someone who has a higher education usually has greater access to a higher paying job, compared to individuals with a lower level of education. This indicates that increasing education is one of the powerful efforts to increase one's income which in turn can reduce poverty.

Rahardja (2005)

Which states that when a person or family has a higher education, their life needs will increase. This is because what they have to fulfill is not only the need for food and drink, but also the need for information, good social relations, and the need for recognition of others for their existence.

Becker (1993)

Which states that the productive power of labor has a positive relationship with the level of education and training. The higher the level of education and training a person has, the more productive that individual is. Furthermore, this situation creates a positive relationship between education level and income.

Nicholson (2001)

Engel's law states that households that have low wages or incomes will spend most of their income on buying basic necessities. On the other hand, high-income households will spend only a small portion of the total expenditure on basic needs. This means that there is a negative influence between the level of income and the pattern of food consumption, which means that if income increases, one's food consumption pattern will decrease, and vice versa if one's income decreases, the pattern of food consumption will increase.

3. Problem Formulation

The hypothesis of this project is:

- a) The variables of education level (X1) and type of work (X2) directly have a negative effect on the food consumption patterns of poor households in Buleleng Regency.
- b) The variable level of education (X1) and type of work (X2) directly have a positive effect on the income of poor households in Buleleng Regency.
- c) The variables of education level (X1), type of work (X2), and income (Y1) directly have a negative effect on the food consumption pattern (Y2) of poor households in Buleleng Regency.
- d) Education (X1) and the type of work (X2) indirectly affect the food consumption pattern (Y2) through the income (Y1) of poor households in Buleleng Regency.

4. Research Methodology

This type of research used in this research is a quantitative approach in the form of an associative. The location of the research was carried out in Buleleng Regency using data issued by the Central Statistics Agency (BPS) and related agencies related to the research object because Buleleng Regency is the district that has the highest poverty rate in Bali Province . The object of this research is the factors that affect the income of poor households in Buleleng Regency, including the level of education and the type of work of the head of the household in the household. The data used in this study are qualitative data which includes guidelines and interviews, and quantitative data such as data on education levels and types of work as well as income levels and consumption patterns. The population in this study were poor households in Buleleng Regency. The sample collection method uses non-probability sampling methods, namely quota sampling and purposive sampling methods. Data collection methods used in this study were observation, interviews, and questionnaires. The data analysis technique used in this study is the path analysis technique.

5. Analysis Result

Characteristics of Respondents

Based on age, respondents aged 41-50 years dominate the most, as many as 37 respondents or 37 percent. Meanwhile, respondents over 60 years of age were 18 respondents or 18 percent. Based on occupation, respondents with non-farmer occupations were the most dominant, namely 62 respondents or 62 percent. Meanwhile, respondents with farmer occupations amounted to 38 respondents or 38 percent. Based on education, respondents with primary school education were the most dominant, namely as many as 33 respondents or 33 percent. Meanwhile, the respondents of undergraduate education were at least 1 respondent or 1 percent. For respondents who did not complete elementary school were 12 respondents, respondents who graduated from junior high school were 30 respondents, and respondents who only completed high school were 24 respondents.

Research Data Analysis

Total coefficient of determination

Based on the calculation results, the total determination coefficient is 0.53931 which means that 53.931 percent of the variation in the consumption pattern of poor households is influenced by the level of education, type of work, and income, while the remaining 46.069 percent is influenced by other factors not included in the research model.

1. The Direct Effect of Education Level on Income

The results of the SPSS calculation in structural model 1 obtained a sig.t value comparison of 0.017 less than the significant value used ($0.017 < 0.05$), and the beta value on standardized coefficients is 0.232 which indicates a positive direction means that the level of education has a positive effect on income. Education is one of the most important assets owned by a person. The level of education is one of the factors that affect income (Cahyono, 1998). People who have a higher level of education will get a better income. Education can bridge the gap between the level of education that has been achieved and the level of education required for the desired goals. In the long term, the population responds to investing in education by attending school or continuing higher education in the hope of getting a higher income. The

higher the level of education achieved by a person, the productivity that is owned by someone, the productivity of that person will be higher as well. In theory, it can be concluded that based on various views it has been concluded that there is a segmentation of wages related to the educational characteristics of workers. So that higher education will provide high income as well. Higher education will indirectly have consequences on individual choices in getting a job. Thus, jobs that generate high income tend to be taken by educated personnel (Julianto et al, 2016).

2. The Direct Effect of Work Types on Income

The results of the calculation of SPSS in structural model 1 obtained a comparison of the sig.t value of 0.000 less than the significant value used ($0.000 < 0.05$), and the beta value of standardized coefficients is 0.356 which indicates a positive direction. This shows that the type of work has a positive effect on income. Certain types of work include work in the informal sector or trade, trying to always increase the income from the results of his business which are used to meet the needs of his family and as much as possible the income earned can improve the standard of living in (Lintang, et al). The better job, will make the income even higher. The work performed will be paid a wage in accordance with the work load.

3. The Direct Effect of Education Level on Food Consumption Patterns of Poor Households

The results of the SPSS calculation in structural model 2 obtained a comparison of the sig.t value of 0.006 less than the significant value used ($0.006 < 0.05$), and the beta value on the standardized coefficients is -0.251 which indicates a negative direction. This shows that the level of education has a negative effect on the consumption patterns of poor households. Skills and ways of thinking will increase a person's wages or income. Human capital investment made in education cannot be felt directly but will be felt in the future. The relationship between education and food consumption patterns has a negative relationship. Someone with a higher education than those who are sufficiently educated have a regular food consumption pattern. When someone with higher education gets an increase in income, he will continue to maintain his food consumption pattern or even decrease. Besides, while someone who has enough education will change his food consumption pattern such as consuming pizza, spaghetti, and many others. When a person or a family has a high level of education, their needs for life are increasing, this is because what they have to fulfill is not only the need to eat and drink but also the need for information, good association in society, and the need for other people's recognition of their existence.

4. The Direct Effect of Work Type on Food Consumption Patterns of Poor Households

The results of the SPSS calculation in structural model 2 obtained a comparison of the sig.t value of 0.003 less than the significant value used ($0.003 < 0.05$), and the beta value on the standardized coefficients is -0.280 which indicates a negative direction. This shows that the type of work has a negative effect on the consumption pattern of poor households. The type of work is also a factor affecting income (Cahyono et al., 2006). In a broad sense, work is the main activity carried out by humans. In a narrow sense, the term work is something that is done by humans for a specific purpose which is done in a good and right way. Humans need to work to survive. By working someone will get money. The money obtained from the work is used to make ends meet. The type of work of each person will affect the level of consumption of each individual (Rahmatia, 2004). The agricultural sector is a sector that influences national economic growth. The role of the agricultural sector in economic development, namely as a source of income, opening job opportunities, reducing poverty, and increasing national food security in Alfrida (2017). The level of farm income, besides being a major determinant of the welfare of a farmer household, also appears as an important factor that conditions economic growth (Soekartawi, 2003).

5. Testing the Direct Effect of Income on Food Consumption Patterns of Poor Households

The results of the SPSS calculation in structural model 2 obtained a comparison of the sig.t value of 0.004 less than the significant value used ($0.004 < 0.05$), and the beta value on the standardized coefficients is -0.272 which indicates a negative direction. This shows that income has a negative effect on the consumption pattern of poor households. The level of welfare of a society can also be said to be improving if the income increases and part of the income is used to consume non-food items, and vice versa. The influence of the level of income on the level of consumption has a close relationship, as stated by Kadariah (2002) that income and wealth are the main determinants of consumption. Muana (2005) states that a person's income is the main factor determining consumption patterns. According to Sadono Sukirno (2001) in compiling consumption patterns, in general a person will prioritize basic needs, while secondary needs will be met when income levels increase. Samuelson and Nordhaus (2004) explain the regularity of consumption patterns in general that are carried out by households or families. Poor families spend their income mainly to fulfill their living needs in the form of food and housing. After income increases, food expenditure increases so that food becomes varied.

6. Indirect Effect Testing (Sobel Test)

Based on the Sobel test results, the value of $Z = 1.97 > 1.96$, which means that the income variable significantly mediates the effect of the level of education on the consumption pattern of poor households. A low level of education will cause less understanding in doing something. Indirectly, it will make it difficult for someone to get income, it will cause a different pattern of household consumption from people with high income.

Based on the results of the Sobel test, it was found that the value of $Z = 2.52 > 1.96$, which means that the income variable significantly mediates the effect of the type of work on the food consumption pattern of poor households. Certain types of work will indirectly affect income because a good job will increase wages and change food consumption patterns.

Research Implications

Based on the research results, the level of education has a positive and significant effect on income, this means that the higher a person's education level, the higher the income received. The higher the level of education a person completes, the higher income will be because they have special skills that are obtained during the education period. With these skills, they will find it easier to get a job. The results of this study are in line with the results of research conducted by Putri and Djinar (2013), and Febriadi, et al (2018) that education results have a positive and significant effect on income.

The results showed that the type of work has a positive and significant effect on income, this means that the better the type of work, the higher the income earned. A person's education is very influential on the type of work, if his education is higher then the type of work will be higher and this will affect the income someone gets. In addition, the type of work of a person will be seen in accordance with the skills they have. Therefore, the level of education and skills greatly affects the type of work which will then affect income. In line with research conducted by Aqila (2017), type of work has a positive and significant effect on income, meaning that the better the type of work a person receives, the better the income received.

Based on the research results, it was found that education has a negative and significant effect on the food consumption patterns of the poor. The relationship between education and food consumption patterns has a negative relationship. Someone with higher education than sufficiently educated has a regular food consumption pattern, when a highly educated person gets an increase in income he will continue to maintain his food consumption pattern or even decrease, while someone who has enough education will change his food consumption pattern such as consuming pizza, spaghetti, and many others. Bhandari and Smith (2000) the level of women's education has an influence on the pattern of food consumption, women's education affects the pattern of consumption of nutritious foods and choices that are independent of income.

The results of the research show that the type of work has a negative effect on the food consumption pattern of the poor, which means that the better the type of work a person gets, the less his food consumption pattern will be. In a study conducted by Rumaal, et al. (2016) The type of work has a significant effect on the shift in local food consumption patterns from corn to rice. Types of work are assumed to be transformed from agricultural enterprises to private enterprises (industry, services and trade) and civil servants.

The results of the research that have been described are hopeful that it can contribute to the government in making policies and provide solutions to the government related to increasing the productivity of poor households in Buleleng Regency so that they can also increase people's income, improve the quality of education, and meet household basic needs and improve standard of living which leads to an ideal household consumption pattern. The low income of the community is caused by the quality of education that is not evenly distributed and the lack of education subsidies. People who have undergone education are considered to be able to develop their abilities and have an impact on increasing the income generated from their profession. The better the job, the higher the income. The work performed will be paid a wage in accordance with the work load.

6. Conclusion

Based on the results of the analysis and previous discussion, several conclusions can be drawn that the level of education and the type of work have a positive effect on the income of poor households in Buleleng Regency. Education level, occupation and income have a negative effect on the food consumption patterns of poor households in Buleleng Regency. Education level, type of work has an indirect effect on income on the food consumption patterns of poor households in Buleleng Regency

As for some suggestions that can be given, such as the level of education which has an effect indirectly indicates that knowledge is equally important to reduce poverty. The author suggests that the government increase subsidies in the education sector because high costs of education lead to low levels of public education and this will change consumption patterns. Apart from subsidies, the government must also guarantee the quality level of education. Types of work that affect

income and have an indirect effect on food consumption patterns. The author also suggests that the government make policies to increase the level of quality of education in order to improve human resources in order to have good work qualifications in order to develop business or become professionals.

7. References

1. Alit, Wiradyatmika A.A. Gde dan Ketut Sudiana. (2013). Pengaruh Jumlah Penduduk, Jumlah Penyerapan Tenaga Kerja dan Pengangguran Terhadap Jumlah Penduduk Miskin di Kabupaten Buleleng. *Jurnal Ekonomi Pembangunan*, Fakultas Ekonomi dan Bisnis Universitas Udayana.
2. Aqila, Mesa. (2017). Pengaruh Human Capital Terhadap Pendapatan Pekerja Industri Perhotelan Kota Bukit Tinggi. *Skripsi*
3. Becker, Gary Stanley. (1993). Human Capital: a theoretical and empirical analysis, with special reference to education 3rd edition. London: The University of Chicago Press, Ltd
4. Bhandari, Rajika and Smith, Frank J. (2000). Education and Food Consumption Patterns in China: Household Analysis and Policy Implications. *Journal of Nutrition Education*. Vol. 32, No. 4
5. Cahyono, S. Andy. 1998. *Karakteristik Sosial Ekonomi yang Mempengaruhi Pendapatan Rumah Tangga Penyadap Getah Pinus di Desa Somagede*, Kebumen, Jawa Tengah. Jurnal UGM.
6. Febriadi, Lovelly Dwindah Dahren, dan Rian Hidayat. (2018). Pengaruh Tingkat Pendidikan, Usia, Curahan Jam Kerja Dan Jumlah Tanggungan Terhadap Pendapatan Rumah Tangga Miskin Pada Masyarakat Nagari Sungai Lansek Kecamatan Kamang Baru Kabupaten Sijunjung. *Jurnal Ilmiah Mahasiswa STKIP PGRI Sumbar*
7. Julianto, Dedi., Utari, P. A., Sawahan, J., Simpang, N., & Barat, P. S. (2016). *Analisa Pengaruh Tingkat Pendidikan Terhadap Pendapatan Individu Di Sumatera Barat*. IKRAITH EKONOMIKA, Vol. 2, No. 2, pp. 122–131.
8. Kadariah. (2002). *Analisis Pendapatan Nasional*. Jakarta: Bina Aksara.
9. Karmarni, Neng. (2010). Analisis Faktor-faktor Penyebab Di Kabupaten Padang Pariaman. *Jurnal Economac*. Vol. 10, No. 2, pp. 17
10. Margareni, N. P. A. P., Djayastra, I. K., & Murjana Yasa, I. G. (2016). FaktorFaktor yang Mempengaruhi Kemiskinan di Provinsi Bali. *PIRAMIDA*, Vol. 12, No. 1, pp. 101–110
11. Muana, N. (2005). *Makro Ekonomi, Teori, Masalah dan Kebijakan (2nd ed.)*. Jakarta: Raja Grafindo Persada
12. Nicholson, Walter. (2001). *Teori Ekonomi Mikro dan Prinsip Dasar Pengembangannya*. RajaGrafindo Perasada. Jakarta
13. Purnami, Ni Made Sasih & Saskara, I. A. N. (2016). Analisis Pengaruh Pendidikan dan Kontribusi Sektor Pertanian Terhadap Pertumbuhan Ekonomi serta Jumlah Penduduk Miskin. *E-Jurnal Ekonomi Pembangunan Universitas Udayana*, 5(11), 1188-1218.
14. Putri, Arya Dwiandana & Nyoman Djinar Setiawan. (2013). Pengaruh Umur, Pendidikan, Pekerjaan Terhadap Pendapatan Rumah Tangga Miskin Di Desa Bebandem. *E-Jurnal Ekonomi Pembangunan*

Universitas Udayana Vol. 2, No. 4, pp. 176

15. Rahardja, Pratama dan Manurung, M. (2005). *Teori Ekonomi Makro*. Fakultas Ekonomi Universitas Indonesia. Jakarta
16. Rahmatia, (2004). *Kajian Teoritis Dan Empiris Terhadap Pola Dan Efisiensi Konsumsi*. Makasar : Fakultas Ekonomi UNHAS.
17. Rini, Ayu Setyo & Sugiharti, L. (2017). Faktor-Faktor Penentu Kemiskinan Di Indonesia. *Jurnal Ilmu Ekonomi Terapan*, Vol. 1, No. 2, pp. 17–33.
18. Rumaal, Sendy, Wardis Girsang, dan S. F. W. Thenu. (2016). Faktor-Faktor Yang Mempengaruhi Pergeseran Pola Konsumsi Pangan Lokal Dari Jagung Ke Beras Di Desa Oirata Timur Kecamatan Pulau-Pulau Terselatan Kabupaten Maluku Barat Daya. *Jurnal Agribisnis Kepulauan*. Vol. 4, No. 3
19. Samuelson, Paul A. & William D. Nordhaus. (2004). Edisi Tujuh Belas. *Ilmu Makro-ekonomi*. Edisi Tujuh Belas, Penerbit Erlangga, Jakarta.
20. Seran, Sirilius. (2017). Hubungan Antara Pendidikan, Pengangguran, Dan Pertumbuhan Ekonomi dengan Kemiskinan. *Jurnal Ekonomi Kuantitatif Terapan*. Vol. 10, No.1, pp. 59-71.
21. Soekartawi. (2003). *Teori Ekonomi Produksi*. Raja Grafindo Persada. Jakarta.
22. Sukirno, S. (2001). *Ekonomi Mikro (Edisi Ketiga)*. Yogyakarta: LPFE UGM.
23. Suyastiri, Ni Made. (2008). Diversifikasi Konsumsi Pangan Pokok Berbasis Potensi Lokak Dalam Mewujudkan Ketahanan Pangan Rumah Tangga Pedesaan Di Kecamatan Semin Kabupaten Gunung Kidul. *Jurnal Ekonomi Pembangunan*. Vol. 13, No. 1, pp. 51-60
24. Tumiwa. (2015). Analisa Pengaruh Pendidikan Terhadap Pendapatan Rumah Tangga Melalui Kewirausahaan Sebuah Analisa Jalur. *Fakultas Ekonmi dan Bisnis Universitas Sam Ratulangi*. Vol. 1, No. 1.
25. Vincent, B. (2009). The Concept Poverty towards Understanding in the Context of Developing Countries Poverty qua Poverty. *Journal of Sustainable Development*. Vol. 2, No. 2.