Determination of Household Food Consumption Patterns in East Baturaja District OKU Regency

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ABSTRACT

The income level will influence household spending patterns. In conditions of limited income, low-income or poor households will prioritize allocating their income to buying food. This income will be used to spend on food for survival so it will affect the quantity and quality of household food consumption. Good quality food consumption indicates that nutritional adequacy levels are met. This research aims to analyze the factors influencing household food consumption patterns in East Baturaja District, OKU Regency. This research used the survey method and was carried out in three sub-districts in East Baturaja District, OKU Regency, namely Kemala Raja, Sekar Jaya and Tanjung Baru Villages. The method for determining respondents is random sampling using the Parell et al. (1973) formula with the statement if the variance of the total population is unknown, so the best way to determine the sample is to use a percentage of the entire population, namely 2%, 5%, 10%, 20% or 50% of the population. The number of the population is 2126 families, obtained by 2%, namely 42.52 and determined to be 43 families. This research used multiple linear regression model to determine the factors that influence food consumption patterns using multiple linear analysis. Based on the research results, it can be concluded that the factors that influence household food consumption patterns in East Baturaja District, OKU Regency are income (X_1), number of family members (X_2), age (X_3), and education level (X_4). The variable that has the most influence on household food consumption patterns in East Baturaja District, OKU Regency is the income level variable $(X1)$. Simultaneously or together the income variable (X_1), number of family members (X_2), age (X_3), and education level (X_4) has a significant influence. This was shown by R^2 with a value of 97.9%.

1. INTRODUCTION

1.1. Research Background

East Baturaja District, known for its diverse population and varying socio-economic conditions, presents a unique case for studying household food consumption. The district's agricultural landscape, market accessibility, and income levels significantly impact the types of food households consume. Furthermore, traditional dietary practices and local food availability also play pivotal roles in shaping consumption patterns.

Understanding household food consumption patterns is crucial for addressing community nutritional, economic, and social issues. In East Baturaja District, OKU Regency, these patterns are influenced by a complex interplay of cultural, economic, and environmental factors. Analyzing these patterns provides valuable insights into the dietary habits, food security, and overall well-being of the local population.

Consumer consumption behavior greatly influences consumption patterns in the long term. This consumer consumption behavior will be used as the basis for finding current consumption patterns. This community consumption pattern will ultimately influence macroeconomic conditions, such as people's income [1].

Households are the smallest unit in society, so it can be said that household income means community income. The consumption approach is one approach that is often used to analyze how much household income is. This income will ultimately influence the consumption patterns of each household. Households make decisions to allocate part of their budget to purchase food and non-food needs. According to Spencer quoted [2] Many factors determine individual consumption or expenditure on goods and services in an economy. These factors include disposable income, which is the main factor, the number of family members, their age, previous income, and expectations for future income.

East Baturaja District is an area with a fairly heterogeneous population background, with various levels of income, occupation, ethnicity, and religion. Based on the population and area area, it can be seen that the average population density of East Baturaja sub-district is 932.96 people per km^2.

The population in East Baturaja District will be 104,488 people. Kemalaraja Village is the village with the largest population, namely 14,744 people. Meanwhile, the village/sub-district that has the smallest population is Terusan Village with a population of 2,159 people. The highest population growth occurred in Terusan village, namely 8.25%, and the lowest population growth rate occurred in the Pasar Baru sub-district, namely -1.69%. In consumption activities, each family has different types of expenditure. Differences in consumption patterns in each family are used as a burden or responsibility in meeting the needs of all family members so that they are used as a measure of achieving equitable and complete family welfare. With a heterogeneous population background, East Baturaja District has a significant number of underprivileged families, namely 450 families. East Baturaja District is a district that has quite a large number of underprivileged families, namely 450 families. The better the level of community welfare, the better the level of family food security.

Poverty is synonymous with conditions where households cannot meet minimum needs. The income causes difficulty meeting living needs earned being still low [3]. Income is the main indicator that determines food consumption patterns and the diversity of food consumed by households. The income level will influence household spending patterns. In conditions of limited income, low-income or poor households will prioritize allocating their income to buying food. This income will be used to spend on food for survival so it will affect the quantity and quality of household food consumption. Good quality food consumption indicates that nutritional adequacy levels are met.

1.2. Literature Review

Consumption comes from the word consumptive, namely all activities used with the aim of taking advantage of a product or service [4]. Meanwhile, in English, consumption comes from the word consumption, which means usage, use, utilization, and/or expenditure. As is known, the scope of consumption is very broad and is not limited to just one particular item or service.

Consumption is spending on goods and services made by households with the aim of meeting the needs of the people making the purchases. People's spending on food, clothing and other necessities is classified as spending or consumption [5]. Goods that are produced for use by society to meet their needs are called consumer goods. Mankiw defines household needs as including household spending on durable goods, vehicles and equipment, and non-durable goods such as food and clothing. Services include goods that are not concretely realized, including education and health.

Consumption can be defined as the activity of purchasing goods and services to meet consumers' household food and drink needs [6]. So it can be concluded that consumption can be defined as the activity of purchasing goods and services to meet consumers' household food and drink needs. Consumption expenditure is largely determined by the size of income, where income and consumption have a positive relationship. Keynes said that there is a minimum consumption expenditure that must be made by society (*autunnmous consumption*) and consumption expenditure will increase with increasing income.

The definition of consumption is broader than consumption that occurs in everyday life, which is only considered in the form of food and drink. According to Soeharno, in Ref. [7]Consumption is the activity of utilizing goods or services to meet life's needs. It is absolutely necessary for everyone to survive. In economics, all expenditure other than that used for savings is called consumption. According to Samuelson, in Ref. [8], household consumption is expenditure for purchasing final goods and services that are useful for obtaining satisfaction or meeting needs. The act of consumption is carried out every day by anyone, the aim is to obtain the highest satisfaction and achieve a level of prosperity by fulfilling various kinds of needs, both basic needs and secondary needs, up to tertiary needs. Consumption levels illustrate the level of prosperity of a person or family. So it can be seen that household consumption does not stop at a certain stage, but always increases until it reaches the highest point of satisfaction and prosperity and feels prosperous.

Ref. [9] states that household consumption is the value of expenditures made by households to purchase various types of needs in a particular year. The income received by the household will be used to buy food, finance transportation services, pay for children's education, pay house rent, and buy vehicles. Households purchase these goods to meet their needs, including spending called consumption. Then, according to Dumairy in Ref. [10] A person's consumption is directly proportional to his income. The greater the income, the greater the expenditure on consumption. So, to get consumption, a person must have income. The size of a person's income really determines the level of consumption.

The income element has an important role in consumption theory. The income level (Y) can be used for two purposes, namely consumption (C) and savings (S), and the relationship between the three can be in the form of the equation Y=C+S. This function can be interpreted as meaning that a high level of consumption will usually follow the size of the income received by a person. In contrast, a low level of income will also be followed by a low level of consumption [11]. Community consumption patterns describe people's consumption tendencies towards food or non-food elements. Various factors influence people's consuming tendencies. A factor can be defined as a thing

situation, or event that causes or influences the occurrence of something [12].

Food consumption patterns depend on household education. The higher a community's formal education, the more knowledge, and insight about the importance of the quality of food consumed by the community will increase. Health will cause more variety in the food consumed. Furthermore, the number of household members will influence food consumption patterns based on local potential. The greater the number of household members, the more varied the food consumption needs will be because each household member has tastes that are not necessarily the same. According to [13] There are four (four) factors that influence household food consumption patterns: income, number of family members, mother's age, and mother's education level.

1.3. Research Objective

This research aims to analyze the factors that influence household food consumption patterns in East Baturaja District, OKU Regency.

2. METHODS

2.1. Research method

This research used the survey method and was carried out in three sub-districts in East Baturaja District, OKU Regency, namely Kemala Raja, Sekar Jaya, and Tanjung Baru Villages. The determination of the research location was carried out deliberately (*Purposive Sampling*), taking into consideration that Kemala Raja, Sekar Jaya, and Tanjung Baru sub-districts are areas with high potential for nutritional resilience and vulnerability because these areas are horticulture and livestock centers. This research was conducted in December 2023.

The survey method was chosen to determine the influence of advertising attractiveness and brand image on consumer decisions. The method for determining respondents is random sampling using the [14] formula with the statement if the variance of the total population is unknown, so the best way to determine the sample is to use a percentage of the entire population, namely 2%, 5%, 10%, 20%, or 50% of the population. So in this study, 20% of the population was used. In Kemala Raja Village, the population is 2014 families so the 2% is 40.28 and is determined to be 40 families; in Sekar Jaya Village, the population is 2189 families, so the 2% is 43.78 and is determined to be 44 families, and in Tanjung Baru Village. The number of the population is 2126 families, obtained by 2%, namely 42.52 and determined to be 43 families.

2.2. Research analysis

This research used a multiple linear regression model to determine the factors that influence food consumption patterns using multiple linear analysis, the multiple linear regression model is used:

$$\acute{Y} = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

Where :

Y : food consumption patterns

$\beta 0$: intercept constant

βi : parameter coefficient (i = 1, 2, 3, …, 5)

X_1 : Household income (Rp)

X_2 : Member of family (person)

X_3 : Education (year)

X_4 : Age (year)

e : Error

3. RESULT AND DISCUSSION

3.1. Multiple Linear Regression Analysis

The level of significance is the level of trust. In this study, a significance level of 0.01 (1%) is used, meaning the confidence level or truth level is 99% and the error level is 1%. If you look again at the form of the equation after drawing the natural logarithm and multiple linear regression equation. That is:

$$Y = 2.573 + 2.421 LnX_1 + 0.679\ LnX_2 + 0.001\ LnX_3 + 0.453\ LnX4$$

The multiple linear regression equation can be interpreted as follows:

a. The constant value is 2.573. This shows if the income (X_1), number of family members (X_2), age (X_3), and education level (X_4) is zero, then the household consumption pattern of East Baturaja District, OKU Regency is 2,573 units.

b. b. The regression coefficient for the income variable is 2.421, meaning that if household income increases by one rupiah, the community's consumption pattern will increase by 2.421 units.

c. The coefficient value of the variable number of family members is 0.679, meaning that if the number of family members covered increases by one unit, the community's consumption pattern will increase by 0.679, and an increase in the number of family members will increase consumption patterns.

d. The regression coefficient for the age variable is 0.679, indicating that if age increases by one year, people's consumption patterns will increase by 0.679, and increasing age will result in an increase in consumption patterns. amounting to 0.679%.

e. The coefficient value of the education level variable is 0.453. If the education level increases by one unit, the community's consumption pattern will increase by 0.453.

3.2 Statistical Tests

Hypothesis testing or statistical testing, also called first-order test, which consists of the coefficient of determination, also called R^2, F-test also called simultaneous test, and t-test or individual test The results of statistical tests showed that the Adjusted R Square value is 0.979. The Adj R^2 value means that 97.9% of household consumption patterns in East Baturaja District, OKU Regency, can be explained by the independent variables explained in the model, such as income (X_1), number of family members (X_2), age (X_3), level of education (X_4). Meanwhile, the remaining 2.1% is explained by other variables outside research, such as weather, climate, technology, and others [15].

The results of the F test show that the results of simultaneous testing of all the estimated parameters at a confidence level of 99% show that the F table value > calculated F (5.0533 > 2.330). It can be said that the independent variables, which include income (X1), number of family members (X2), age (X3), and

level of education (X4), together have a real influence on household consumption patterns in East Baturaja District, OKU Regency.

Income has a calculated t value > t table, namely 17,786 > 1.66660, which means that income has a real influence on household consumption patterns in East Baturaja District, OKU Regency, at a 99% confidence level. The regression coefficient for the income variable is 2.421, meaning that if household income increases by one rupiah, the community's consumption pattern will increase by 2.421 units.

The variable number of family members has a calculated t value > t table, namely 2.381> 1.66660, which means that dolomite fertilization has a real effect on household consumption patterns in East Baturaja District, OKU Regency at a 99% confidence level. The coefficient value of the variable number of family members is 0.679, meaning that if the number of family members covered increases by one unit, the community's consumption pattern will increase by 0.679, and an increase in the number of family members will increase consumption patterns.

The age variable has a calculated t value > t table, namely 2.078> 1.66660, which means that age has a real influence on household food consumption patterns in East Baturaja District, OKU Regency, at a 99% confidence level. The regression coefficient for the age variable is 0.679, indicating that if age increases by one year, people's consumption patterns will increase by 0.679, and increasing age will increase consumption patterns. amounting to 0.679%. A person's age can influence food consumption patterns and energy needs. This is due to changes in body composition with increasing age. So that energy and nutritional needs can be met.

The education level variable has a positive and significant effect on household food consumption patterns in East Baturaja District, OKU Regency. The coefficient value of the education level variable is 0.453 if the education level increases by one unit, then the consumption pattern society will experience an increase of 0.453, and an increase in education levels will increase society's consumption patterns. A mother's education can influence thought patterns and knowledge. This can influence the implementation of food consumption patterns at home. Their level of education can influence a person's good knowledge. The education referred to in this research is formal education attended by housewives, where a mother is able to understand more about diverse, nutritious, and balanced food. Not only does formal education need to be done, but it must also be better understood regarding nutritional knowledge itself, where the level of knowledge Good maternal nutrition will make it easier for a mother to carry out her responsibilities, namely the responsibility of choosing types of food that contain nutrients for her family.

4. CONCLUSION

Based on the research results, it can be concluded that the factors that influence household food consumption patterns in East Baturaja District, OKU Regency are income (X1), number of family members (X2), age (X3), and education level (X4). The variable that has the most influence on household food consumption patterns in East Baturaja District, OKU Regency, is the income level variable (X1). Simultaneously or together, the income variable (X1), number of family members (X2), age (X3), and education level (X4) has a significant influence. R^2 showed this with a value of 97.9%.

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