Predicting Household Standard of Living in Techiman North District: The Role of Income

Augustine Adu Frimpong   Isaac Owusu-Darko   Luther Ntim-Adjei

Department of Business, Valley View University, Techiman Campus, P.O. Box 183, Techiman, Ghana.

Abstract

In fact, there are marked inequalities in the standards of living of the people in different countries of the world. The extent of differences in the levels of living between two countries can be known from the comparison of per capita income in both countries, because, it is the per capita income on which the standard of living of a people primarily depends. Households in relation to the standard of living of people form an integral part of most economies. Ghanaian households can be classified into the compound housing type, with common dwelling types in all regions being detached houses, the semi-detached houses and block of flats or apartments. In view of that the study sought to find out the role of income in predicting household standard of living. The study used a sample size of 400 respondents across the inhabitants of Techiman North District. The study sampled only marriage couples with a family size (i.e. with children). The study adopted both descriptive (i.e. bar and pie charts as well as scatter plot correlational analysis) and quantitative methods (i.e. Logit regression and spearman's rank correlation test e.t.c) to analyzed the data. A random sampling method was used to solicit for information from married couples with children in the study area. The study find out that larger family size is a threat to a good standard of living. The further find out that the income, age and gender had a positive effect on all the standard of living factors (i.e. savings, ability to meet all basic needs e.t.c). In relation to the various findings, for every household to save, build a house, meet their basic needs and able to buy a car all depends on the household income or available resources. In view of this, the study further recommends that, before any marriage license or certificate is issued, stakeholders should make sure that the partners are all working in order to earn income for the future and the living condition of their family members to be enhanced.

Key words: Standard of Living, Savings, Basic needs, Household and Income

1.0 Introduction

In relation to Maslow theory of hierarchy of needs standard of living can be defined as the quality and quantity of goods and services available to people. However, lack of basic requirements or physiological needs (i.e. food, water, sanitation, clothing, shelter, health care and education) induces stress which in effect affects efficiency of labour and productivity. According to George (2007), Standard of living refers to the level of wealth, comfort, material goods and necessities to a certain socio-economic class in a geographical area. A major objective of the government of a country is to provide good living to its people. But different countries of the world provide different levels of living to their people. In fact, there are marked inequalities in the standards of living of the people in different countries of the world. The extent of differences in the levels of living between two countries can be known from the comparison of per capita income in both countries, because, it is the per capita income on which the standard of living of a people primarily depends.

A household may come in the form of a group of people related to a particular compound whose livelihoods depend on a common source (Fernando, 2013). Households in relation to the standard of living of people form an integral part of most economies. Ghanaian households can be classified into the compound housing type, with common dwelling types in all regions being detached houses (21%), the semi-detached houses (15.2%) ranking third among the housing units in Ghana. Next was block of flats or apartments which ranked fourth in the country (4.2%) and in urban localities (7.2%).

The quality of housing partly determines how the population lives and its state of well-being. Considering rural and urban settlements in Ghana, striking differences exist between materials used for housing construction in this area. Records have shown that, out of the total household population of 24,076,327 in the country, 50% of the households use mud for walls and buildings in rural areas and only 9.9 per cent in urban areas. On the other hand, 39.1% use cement for building walls and houses in the urban areas and 8.9 % in the rural areas. These building conditions regarding the building materials speak vividly about the living condition of the rural folk. Furthermore, water is also an important requirement in all spheres of human endeavor, about 70% of the world as well as the human body is made of water. Historically, most towns and villages were established at the banks of rivers and lakes such that access to water was uninhibited. In this wise, one can say that, an adequate supply of easily accessible potable water is a necessary condition for households to attain good quality of life. In fact, improvements in hygiene and sanitation are contingent on water availability. Records indicated that apart from Greater Accra and Ashanti, less than 10 per cent of households living in the economy has pipe borne water inside their houses. Wells and boreholes provide drinking water for about 32% households in each region except Greater Accra region. Rivers, streams, ponds and lakes provide drinking water for a

Journal of Economics and Sustainable Development   www.iiste.org
ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online)
Vol.7, No.10, 2016

IISTE

significant percentage of households living in the Western, Volta, Eastern, Brong-Ahafo and Northern regions.

Poverty reduction has been a major goal and issue for international organizations such as World Bank and the United Nations. According to World Bank reports (2008), an estimated value of 1.29 billion people was living in abject poverty including Ghana which deprived them from fulfilling their basic needs. According to FAO (2013) despite the global effort at reducing these challenges, urban and rural dwellers have adopted employment strategies in diverse ways in order to enhance their livelihood through farming, trading, hawking, weaving, carving, e.t.c.

In the light of this problem, the study aim to predict household standard of living in the Techiman North District by looking into the role of income. To ascertain the standard of living based on the number of people within a household.

2.0 Literature Review

Rajaram et. al. (2009) did a study on comparative analysis on standard of living among males and females using National Family Health Survey data (NFHS) for the year between 2005 to 2006. A logic regression method was adopted for the estimation. The study used poverty measures that reflected on the people's permanent income such as housing condition, wealth index and standard of living index, and argued that these measures could be more informative about the chronic living condition of people than the official measure based on consumption expenditure. The study found out that, there existed a relationship between female-headed households and poverty which depends on the choice of poverty measure. The study emphasized that, poverty measures are based on the housing conditions and the wealth indices. However, based on the standard of living index measure of poverty, female-headed households were marginally poorer than their male-headed counterparts.

Scott et. al. (2000) describes the relationship between per capita income and standard of living. Pope argued that, the standard of living of all classes could be assumed to have moved upward with the rise in average per capita income. The model used in the following study combines both the idea of per capita income as a measure of economic freedom and the cost of living as a constraint to this economic freedom.

Sen (1984) stated that the most explored views of standard of living are based on utility from consumption and from opulence. However, he argued that a better measure for standard of living is economic freedom. Economic freedom is the choice available to allocate income as one sees fit.

Blackorby and Russell (1978) established a relationship between standard of living and cost of living. They argue that the cost of living has a direct relationship with the standard of living of people. They defined the cost of living index as the ratio of costs of realizing a particular level of real income at different prices of commodities.

Ogburn (1951) explains some factors that affect differences in standard of livings of peoples. The study outlines that population, natural resources, organization, and technology explains the differences in standard of living among a group of peoples. The study concluded that population has a negative impact on the standard of living of the people. The study further argued that standard of living is most closely correlated with technology, as countries with advanced technology also have high standards of living. High technology is associated with low production costs which in effects increase output to ensure food security and economic growth.

The aforementioned references give us reason to predict household standard of living with logistic regression. In income distribution research, the household factor is incorporated into income measurement by re-estimating household income to "equivalent income." Equivalent income is estimated as a function of household income and household size and composition so as to allow for economies of scale in larger households. In summary, low inflation, high per capita income, low poverty rate, high quality of health care, income growth and good educational standards. However, standard of living of the people can also be related to leisure, safety, cultural resources, social life, physical health and environmental quality issues

3.0 METHOD AND MATERIALS

The study used a cross sectional source of data with a sample size of 400 respondents across the inhabitants of Techiman North District solely marriage household. The study adopted both descriptive and quantitative methods in analyzing the data. A random sampling method was used to solicit for information about the respondents in the study area. The study used questionnaires and interviews to retrieve all the relevant information needed for the study. The study used both SPSS and STATA software's in the processing and the interpretation of the data gathered from the field. A Logit regression model and correlational analysis was used to aid in predicting the household standard of living with the help of household income.

Model Design

A conceptualized Logit model was used to assess the role of income in predicting the household standard of living among the inhabitants of Techiman North District. The dependent variable is qualitative/ binary variable which takes into accounts yes or no responses of the standard of living variables. It would be useful to capture

the dependency of Y on X as a simple function, particularly when there are several explanatory variables. For example, in ordinary multiple regressions, the link function is called the identity link since

$$g(\mu_i) = \mu_i \quad \text{and so} \quad \mu_i = \eta_i, \text{ or}$$

$$E(y_i) = x_i' \beta = \mu_i = \eta_i$$

The usual assumption

$$Y_i = \beta_0 + \beta_1 X_1 + \cdots + \beta_k X_k + \varepsilon_k$$

where $\varepsilon_k \sim N(0, \sigma_\varepsilon^2)$ and ε_i and ε_k are independent for $i \neq k$. The expectation of Y i.e

$$E(Y_i) = E(\beta_0 + \beta_1 X_1 + \cdots + \beta_k X_k + \varepsilon_k) \text{ and so } \pi_i = \beta_0 + \sum \beta_k X_k$$

For this reason, the regression model to a dummy response variable is called the probability / logistic regression model. For a Logit model

$$\text{logit}(p) = \ln \frac{p}{1-p} = \ln \frac{P(y=1)}{1-P(y=1)} = b_0 + \sum_{j=1}^{\kappa} b_j x_j$$

Where p has a value $0 \leq p \leq 1$ (i.e. p is a probability value). The logistic regression of each y_i only takes the value 0 or 1. Now let E_i = the event that $y_i = 1$ and $p_i = P(E_i)$. Just as the regression line studied previously provides a way to predict the value of the dependent variable y from the values of the independent variables $x_1, \ldots, x_k$ in the model.

Hence the Logit model for the study is given as;

$$Logit(STL_i = 1) = \Phi\left(\beta_0 + \beta_1 Age + \beta_2 Gender + \beta_3 EMP + \beta_4 INC + \beta_5 FZ + \varepsilon_k\right)$$

Where **STL$_i$** = Qualitative dependent variable: if respondents enjoyed good standard of living=1; if not=0. The dependent variables ranges from one (1) to four (4) for where 1= Respondents able to meet their basic needs or not, 2= whether respondents own a car or not, 3= whether respondents own a house or not and 4= whether respondents make savings or not.

Age = Quantitative value of the respondents age

Gender = Dummy variable (if male =1, otherwise (female) =0)

EMP= Employment statue (if employed =1, otherwise (unemployed) =0)

INC = Monthly Income/Earnings

FZ = Family Size

Φ= Cumulative standard normal distribution function

ε=Error-term

3.1 STUDY HYPOTHESES

In relation to the Logit model regarding the standard of living among the people is based on the theoretical expectation, there is a positive relationship between the standard of living and the income level of the household, age of the household and low family size. However, there is also a negative relationship between standard of living and gender among the people as well as high family size. Thus, income of a person does not depend on the gender of the person. This is because females can also take care of their homes in the absence of their male counterparts.

In consideration to an output revealed from the data analyses, the study tested the appropriateness or otherwise of each of the model parameters such that one of the coefficient of the

$$\beta_i \neq 0 \quad \text{for at least one } i$$

The appropriate hypothesis is given as

$$H_0: \quad \beta_1 = \beta_2 = \beta_3 \ldots = \beta_k = 0 \text{ against the alternative that}$$

$$H_1: \quad \beta_i \neq 0 \quad \text{for at least one } i$$

$$At\ \alpha = 0.01, 0.05\ and\ 0.1 \text{ levels of significance respectively}$$

Where β_i are the model parameters (independent variables).

3.2: Conceptual Framework of Scatter Plot/Diagram Correlation

A scatter diagram is a dot of points diagram showing the relationship between two variables. Each pair of values is plotted as a point on the graph. A scatter diagram enables the researcher to see whether there exists a relationship between paired values (i.e. number of years pregnant women spend on education (i.e. increase in knowledge or absence of ignorance) and other maternal lifestyle). The points plotted on a scatter diagram show a definite pattern, this suggests that there exist a relationship between the variables. This relationship is called

correlation between the variables. The stronger the relationship, the higher the degree of correlation and the higher degree of correlation the more confidently we can predict values of one variable, given values of the other. This study makes use of the three types of correlation under scatter plotting; positive, negative and zero. Thus, if the band of points plotted slope upwards across the diagram, then the relationship is positive and this shows a positive correlation between the variables. However, if the band of points plotted slope downwards across the diagram, then the relationship is negative and this shows a negative correlation between the variables. Lastly, if the band of points plotted exhibited no pattern across the diagram, then the relationship is zero and this shows a zero or no correlation between the variables.

3.3: Conceptual Framework of Spearman's Rank Correlation Coefficient

Rank Correlation Coefficient is one of the alternative methods of measuring correlation, based on the ranks of the sizes of item values. The measure of rank correlation most commonly used is known as the Spearman's rank correlation coefficient. Given a set of paired data (X, Y) for where the "**X**" represents the number of years pregnant women spent on education (i.e. increase in knowledge or absence of ignorance) and the "Y" value represent maternal lifestyles. The spearman's rank correlation coefficient denoted as "r_s", is obtained by ranking the X's among themselves usually from high to low and also ranking the Y's among themselves from high to low. Then, the next step is to find the differences between the ranks of the values for "x" and "y" which is denoted by (d). Then the difference in the ranks is squared (d^2) as seen from the formula. The theoretical formula of spearman's rank correlation coefficient is given as:

$$r_s = 1 - \frac{6 \sum d^2}{n(n^2 - 1)},$$

Where d= the difference in ranks for each pair of values and n= the number of pairs of data (i.e. sample size).

Decision Rule for the Spearman's Rank Correlation Coefficient Analysis is given below;

1. If the value of the spearman's rank correlation coefficients falls between 0.0 and 0.2, then the relationship implies very weak or negligible correlation
2. If the value of the spearman's rank correlation coefficients falls above 0.2 but below 0.4, then the relationship implies weak or low correlation
3. If the value of the spearman's rank correlation coefficients falls above 0.4 but below 0.7, then the relationship implies moderately strong correlation
4. If the value of the spearman's rank correlation coefficients falls above 0.7 but below 0.9, then the relationship implies stronger or high or marked correlation
5. If the value of the spearman's rank correlation coefficients falls above 0.9 but below or equal to 1.0, then the relationship implies very strong or very high correlation

4.0 EMPIRICAL RESULTS

4.1: Descriptive Analysis

This section summarizes the distribution of sample respondents by occupation, residential status and gender. The latter looked in to the correlation analysis of income in predicting a household standard of living.

4.1.1: Distribution of Sample Respondent

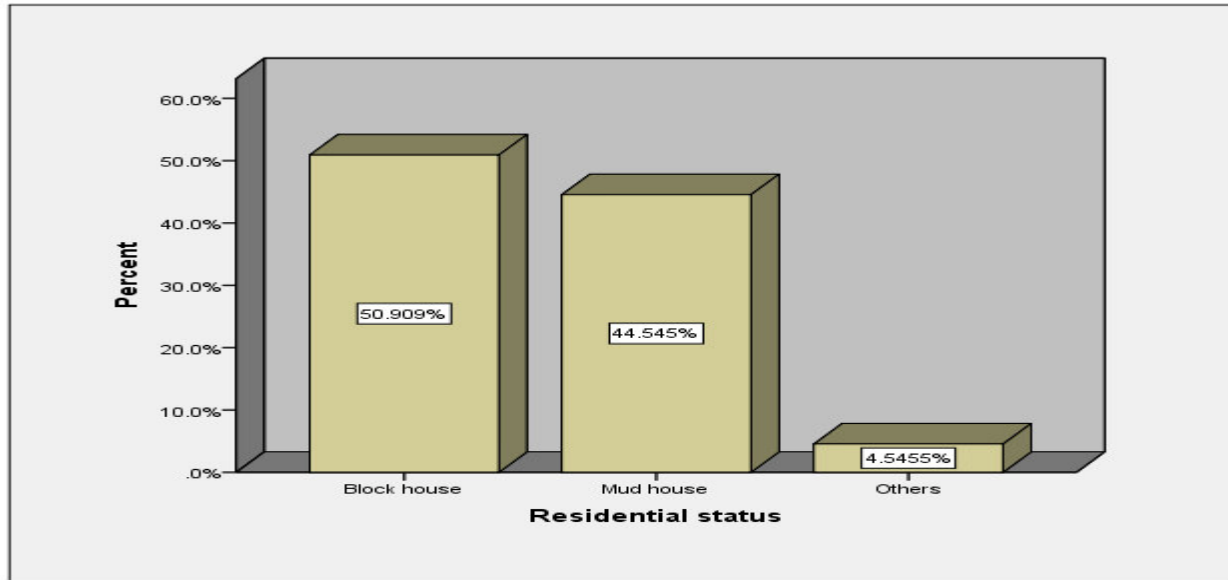**Figure 4.1.1.1: Distribution of Sample Respondent by Occupation**
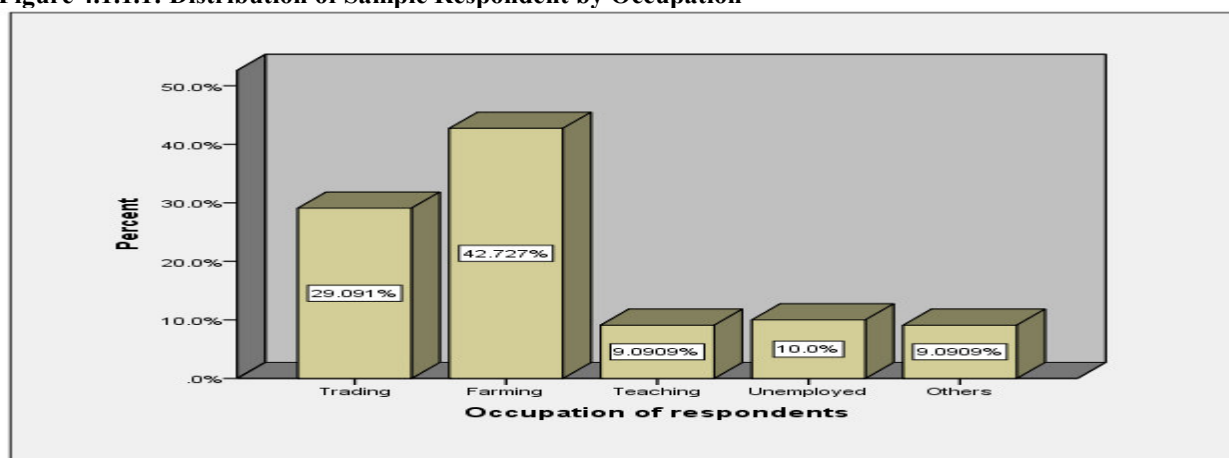
Source: Field data, April, 2016

Figure 4.1.1.1 shows the distribution of sample respondents by occupation. In relation to the various

occupations of the sample respondents from the inhabitants of Techiman North District, about 43% of the respondents were farmers forming the majority of the respondents. About 29% of the respondents were traders, 9% were teachers whereas 10% of the respondents were not working but the remaining 9% were doing other business such as carving, carpentry, weaving, e.t.c. The data revealed that majority of the inhabitants of Techiman North District are farmers which are likely to be poor.
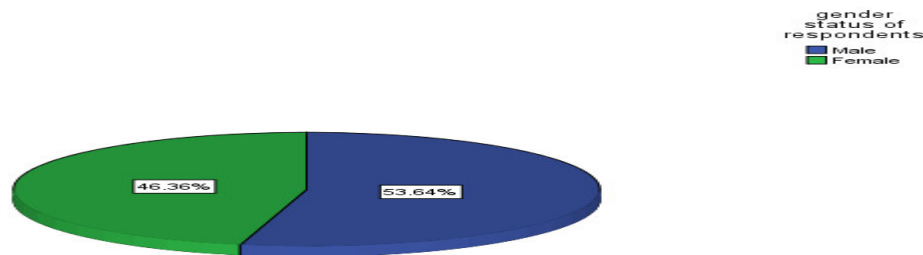
Figure 4.1.1.2: Distribution of Sample Respondent by Residential Status

Source: Field data, April, 2016

Figure 4.1.1.2 shows the distribution of sample respondents by residential status. In relation to the various residual statuses of the sample respondents from the inhabitants of Techiman North District, about 51% of the respondents own a block house forming the majority of the respondents. About 45% of the respondents own a mud house which forms the second highest, whereas about 4% of the respondents own and stay in other buildings such as thatched houses, bamboo houses and wooding structures. The data revealed that majority of the inhabitants of Techiman North District stayed in both block and mud houses.

Figure 4.1.1.3: Distribution of Sample Respondent by Gender
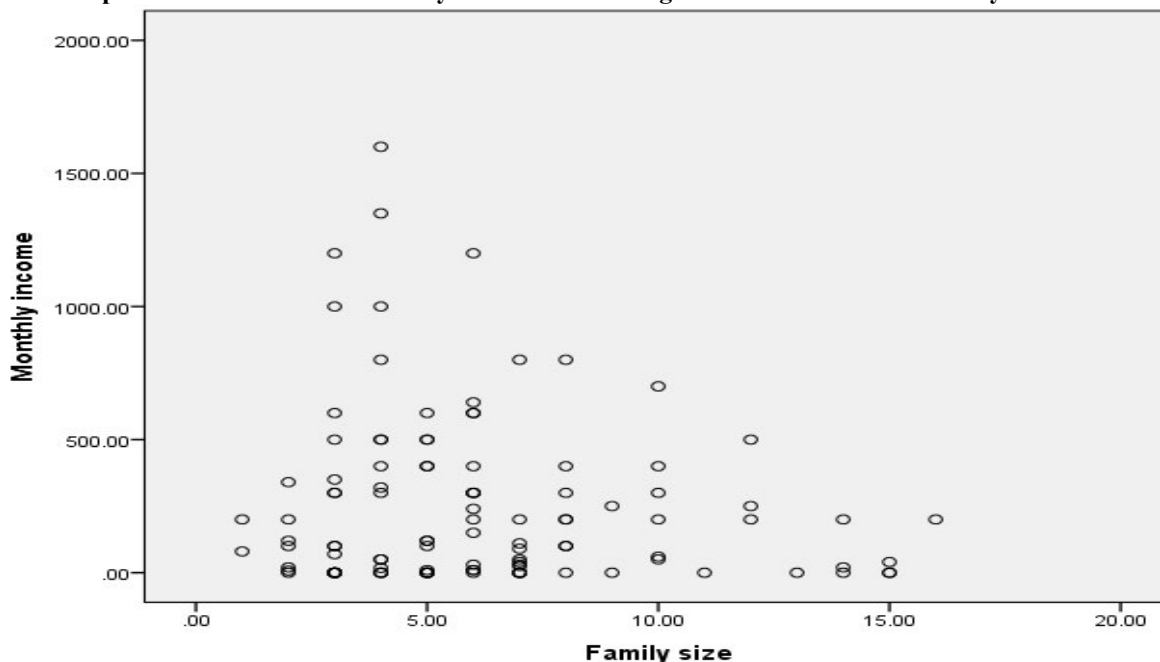

Source: Field data, April, 2016

Figure 4.1.1.3 shows the distribution of sample respondents by gender. In relation to the gender status of the sample respondents from the inhabitants of Techiman North District, about 64% of the respondents were male forming the majority of the respondents whereas about 46% of the respondents were female. The data revealed that majority of the inhabitants of Techiman North District household are headed by males than females.

4.1.2: Correlational Analysis: The Role of Income in Predicting the Household Standard of Living
Figure 4.1.2.1: Scattered Diagram and Spearman's ranks correlation coefficient analysis on the relationship between Household Monthly Income or Earnings and the Size of their Family

Source: Field data, April, 2016

Figure 4.1.2.1 talks about a scattered plot diagram showing the correlational relationship between the household monthly income and family size of the people of Techiman North District. In relation to the field data, the band of points plotted between household monthly income and family size of the people of Techiman North District scattered across the X-Y plane, which exhibited a negative pattern by stretching downwards from left to right. This implies that there exists a negative correlation between the household monthly income and family size. This explains that higher income levels or groups tend to reduce their family size or the number of births. These groups do not rely much on their children as a form of security and as a source of labour for farming and dealing with other businesses.

Table 4.1.2.1: Spearman's ranks correlation coefficient analysis on the relationship between Household Monthly Income or Earnings and the Size of their Family
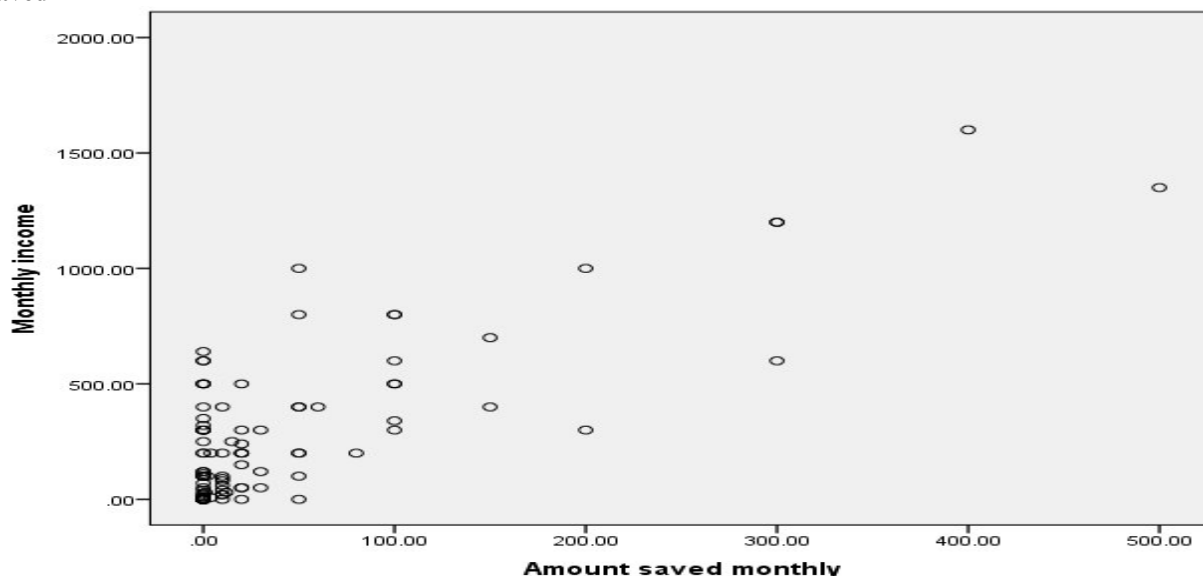
Correlations

			Family size	Monthly income
Spearman's rho	Family size	Correlation Coefficient	1.000	-.645
		Sig. (2-tailed)	.	.000
		N	400	400
	Monthly income	Correlation Coefficient	-.645	1.000
		Sig. (2-tailed)	.000	.
		N	400	400

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Field data, April; 2016

In relation to table 4.1.2.1, the spearman rank correlation coefficient established a correlational relationship between the household monthly income and family size. From the field data, the spearman's rank correlation coefficient analysis value was – 0.645. Here, the absolute value of the calculated coefficient is above 0.4 but below 0.7, which is also statistically significant at 5% significance level. This implies that there exists a negative moderate correlation between the household monthly income and family size. This explains that higher income levels or groups tend to reduce their family size. These groups do not rely much on their children as a form of security and as a source of labour for farming and dealing with other businesses.

Figure 4.1.2.2: Scattered Diagram and Spearman's ranks correlation coefficient analysis on the relationship Correlational Analysis between Household Monthly Income or Earnings and the Amount Saved

Source: Field data, April, 2016

Figure 4.1.2.2 reveals a scattered plot diagram showing the correlational relationship between the household monthly income and savings of the people of Techiman North District. In relation to the field data, the band of points plotted between the household monthly income and savings of the people of Techiman North District scattered across the X-Y plane, which exhibited a positive pattern by stretching upwards from left to right. This implies that, as the household income increases their ability to save also increases. This is also confirms that as an individual current income increases, the marginal rate of time preference for the individual to consume in future also increases and this in effect increases current savings for future consumption.

Table 4.1.2.2: Spearman's ranks correlation coefficient analysis on the relationship between Household Monthly Income or Earnings and the Amount Saved
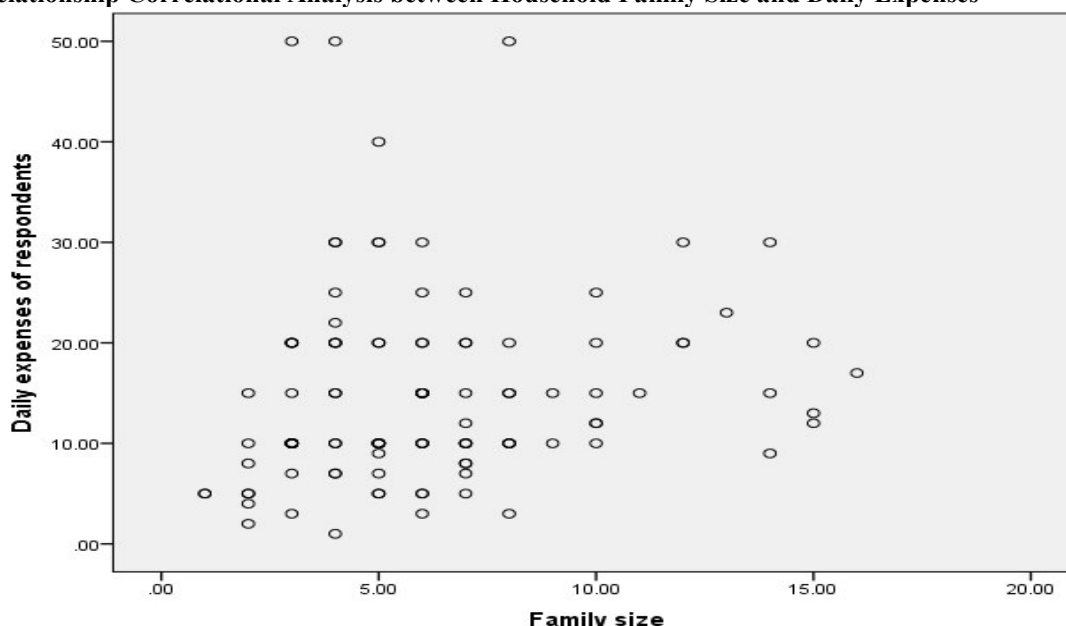
Correlations

			Monthly income	Amount saved monthly
Spearman's rho	Monthly income	Correlation Coefficient	1.000	.865**
		Sig. (2-tailed)	.	.000
		N	400	400
	Amount saved monthly	Correlation Coefficient	.865**	1.000
		Sig. (2-tailed)	.000	.
		N	400	400

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Field data, April; 2016

In relation to table 4.1.2.2, the spearman rank correlation coefficient established a positive correlational relationship between the household monthly income and savings. From the field data, the spearman's rank correlation coefficient analysis value was 0.865. Here, the absolute value of the calculated coefficient is above 0.7 but below 0.9, which is also statistically significant at 5% significance level. This implies that there exists a positive high or strong correlation between the household monthly income and savings. This also explains that, as the household income increases their ability to save also increases. Moreover, the analysis confirms that as individual current income increases, the marginal rate of time preference for the individual to consume in future also increases and this in effect increases current savings for future consumption.

Figure 4.1.2.3: Scattered Diagram and Spearman's ranks correlation coefficient analysis on the relationship Correlational Analysis between Household Family Size and Daily Expenses

Source: Field data, April, 2016

Figure 4.1.2.3 presents a scatter-plot diagram showing the correlational relationship between the daily expenses made by the respondents and the household family size of the people of Techiman North District. In relation to the field data, the band of points plotted between the daily expenses made by the respondents and the household family size of the people of Techiman North District scattered across the $X - Y$ plane, which exhibited a low positive pattern by stretching upwards from left to right. This implies that, as the household family size increases their ability to spend on daily basis also increases but depends on some other factors like their earning rate, savings rate and their assets base. This explains that, for the a larger family size to enjoy a good standard of living by making it possible to meet their daily demands, then the breadwinners income must also increases to enhance the livelihood of the family members.

Table 4.1.2.3: Spearman's ranks correlation coefficient analysis on the relationship between Household Family Size and Daily Expenses

<div align="center">Correlations</div>

			Family size	Daily expenses of respondents
Spearman's rho	Family size	Correlation Coefficient	1.000	.346[**]
		Sig. (2-tailed)	.	.010
		N	400	400
	Daily expenses of respondents	Correlation Coefficient	.346[**]	1.000
		Sig. (2-tailed)	.010	.
		N	400	400

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Field data, April, 2016

In relation to table 4.1.2.3, the spearman rank correlation coefficient established a positive correlational relationship between the daily expenses made by the respondents and the household family size of the people of Techiman North District. From the field data, the spearman's rank correlation coefficient analysis value was 0.346. Here, the absolute value of the calculated coefficient is above 0.2 but below 0.4, which is also statistically significant at 5% significance level. This implies that there exists a positive low or weak correlation between the daily expenses made by the respondents and the household family size of the people of Techiman North District, such that as the household family size increases their ability to spend on daily basis also increases but depends on some other factors like their earnings rate, savings rate and their assets base. This explains that, for a larger family size to enjoy a good standard of living by making it possible to meet their daily demands, and then the breadwinners' income must also increase to enhance the livelihood of the family members.

4.2: Quantitative Analysis

Table 4.2.1: Logistic Regression Results for Predicting Household Standard of Living

VARIABLES	BASIC NEED	OWING CAR	OWING HOUSE	SAVINGS
AGE	0. 054857***	0.025793***	0.025693***	-0.029199**
	(0. 012012)	(0. 007403)	(0. 006403)	(0. 013941)
GENDER	0. 240962**	1.103154**	1.203154**	0.040417**
	(0. 570220)	(0. 515492)	(0. 615492)	(0. 016515)
EMPLOYMENT	1.496576 ***	1.340791**	1.330791**	1.083549**
	(0.130729)	(0.574358)	(0.474358)	(0.447411)
INCOME (INC)	0. 433172***	0.331244***	0.213124***	0. 219132***
	(0.021547)	(0. 077116)	(0. 077116)	(0. 093178)
FAMILY SIZE	-0. 161517***	-0. 194112**	-0. 194112**	-0. 043976**
	(0. 018926)	(0. 095294)	(0. 095294)	(0. 015478)
OBSERVATION	400	400	400	400
R-Squared	0.7479	0.7532	0.7534	0.7494

Note: Standard errors are presented in parentheses. *, ** and *** denote significance at the 10%, 5% and 1% level, respectively. ***Source: Field data, April, 2016***

Table 4.2.1 summarizes the computations for parameter estimates for the Logit working correlation assumptions with respective to *predicting the household standard of living condition in specific reference from the role of the breadwinners income.* A parameter estimates that is asterisked (*) shows a statistical significance effect of its estimation in the model at 10%, 5% and 1% level of significance respectively. Standard errors are presented in parentheses. Figures that has been asterisked (*), (**) and (***) denote significance at the 10%, 5% and 1% level, respectively for each model. The independent variables (age, gender, income and family size) with respect to specific time points interaction with respondents responses on whether respondents are able to meet their basic needs or not, whether respondents own a car or not, whether respondents own a house or not and whether respondents make savings or not were all tested to be significant at $\alpha = 0.1 \ and \ 0.05$ respectively. About 75% of the data points were explained and taken into consideration for our analyses as seen from our R-squared estimate of 0.75 to 1d.p (75%). This implies that about 76% fluctuation in the standard of living of the people of Techiman North District was explained by the changes in the independent variables (i.e. age distribution of household, household gender distribution, family size and income level of the household breadwinner).

The parameter estimates for the models are approximately the same for all the assumptions when we consider estimation at 1 decimal point. However, age, income and family size were realized to have very high significant parameter estimates at all alpha levels (α=0.1, 0.05 and 0.01) considered in the analyses. The standard error that is asterisked (***) were age, income and family size with all the three responses representing model-based standard error tested to be significant at $\alpha = 0.01$. All computations are approximated to six (6) decimal places to increase effective comparison of computed parameter estimates for all variables considered for this study. The abbreviations follow the same way as explained in table 4.2.1.

The relationship between the ability of a household to afford all their basic needs such as healthcare demands, food, utility bills e.t.c. and all the independent variables (i.e. age, income and gender) seems to have a positive and direct correlation. This is because as the family members' ages they become less reliance on the family's breadwinner. Also, females were assumed to be the control group and the males being the treatment group. Therefore if majority of household breadwinners are males, they are likely to meet all their basic needs since males are always seen as the agents of the labour market as propounded by the male chauvinist labour supply model. Again, as the income level of the household increases, it tends to give a higher purchasing power to the family members to consume more of a good, all other things being equal, which will in effect help the household to meet all their basic need to improve upon their living conditions. However, family size exhibited a negative relationship with the ability of the household to meet their basic needs. This is because as the family size of the household becomes larger and larger, the household demands also increases which will put pressure on the household available resources or income, so in effect less need of the larger family will be met.

In relation to the ability of a household owing a car and a house equation, the models exhibited a positive relationship with all the independent variables (i.e. age, income and gender) except family size. This is because as the family members' ages they become less reliance on the family's breadwinner so less will be consume and more will be save towards future, this will enable the household to mobilize funds for building, buying car and owing other assets. Also, if majority of the household breadwinners are males, they are likely to work harder for more money to save to accumulate more future assets since males are always seen as the agents of the labour market as propounded by the male chauvinist labour supply model. Again, as the income level of the household increases, all other things being equal, savings will also going to increase, which will in effects

increases assets possession by the family. However, family size exhibited a negative relationship with household ability to acquire assets such as car and a building. This is because as the family size of the household becomes larger and larger, the household demands also increases which will put pressure on the household available resources or income to prefer current consumption to future consumption (i.e. savings) so in effect less assets is likely to be acquired.

The relationship between the ability of a household to save for future consumption and all the independent variables (i.e. age, income and gender) seems to have a positive correlation. This is because as the family members' ages they become less reliance on the family's breadwinner so less will be consume and more will be save towards future. Also, if majority of the household breadwinners are males, they are likely to work harder for more money to save as well since males are always seen as the agents of the labour market as propounded by the male chauvinist labour supply model. Again, as the income level of the household increases, all other things being equal, savings will also increase, this is because in relation Keynesians aggregate demand model, disposable income is divided into savings and consumption. However, family size exhibited a negative relationship with household ability to save. This is because as the family size of the household becomes larger and larger, the household demands also increases which will put pressure on the household available resources or income to prefer current consumption to future consumption (i.e. savings).

The proceeding sub-sections discuss the policy recommendations based on afore discussed findings.

Policy recommendation

Based on the findings, the study strongly recommends the following;

1. The various stakeholders (i.e. Social Welfare Department, Marriage Registry Department, Ghana Health Service e.t.c) and NGO's should intensify the media advert on the need to follow the various family planning policies to reduce the family size of every house in order to enhance the standard of living of the people.

2. In relation to the various findings, for every household to save, build a house, meet their basic needs and able to buy a car all depends on the household income or available resources. In view of this, the study further recommends that, before any marriage license or certificate is issued, stakeholders should make sure that the partners are all working in order to earn income for the future and the living condition of their family members to be enhanced.

3. The government and NGO's should do well to widen the scope of employment opportunities to enable many people to get jobs to support their family. If more jobs are created unemployment rate will be reduce and more people will also be eager to work for higher earnings in order to better the living conditions of their household members.

4. The policy makers together with the National Tripartite Committee should make the daily minimum wage more attractive to lure more people who fall within the active labour force category in order to avail themselves for work. This will enable many breadwinners to earn some considerable wages or salaries to support the living standard of their household members.

References

1. Adu-Frimpong, A. (2016). *Probit analysis on the socio-demographic consequence of maternal lifestyle among pregnant women: An Explanatory Study of Kwabre East District (Asonomaso Government hospital*), International Journal of Current Research, Vol. 8, Issue, 05, pp.30846-30850, (0, 05), 30846-30850.

2. Adu-Frimpong A., Owusu-Darko I. and Abandoh-Sam E. (2016). *An Explanatory Study on the Effect of Education on the Demand for Preventive Healthcare among Malaria Patients*: A Case Study of Asonomaso Hospital, Valley International Journals: The International Journal of Social Sciences and Humanities Invention. Vol. 3 issue 3 page no. 1925-1929 ISSN: 2349-2031.

3. Blank L. and Margaret G. (1999). Using household surveys to build analytic capacity. The World Bank Research Observer, vol. 14, No. 2 (August), pp. 209-227.

4. *Davidson B. R., and Tiermant M. F. (1975). A note on the comparative cost of living in Sydney and country towns in new south Wales; review of market yard agricultural economics vol 43, no. 3*

5. Elbers, C., Lanjouw J. and Lanjouw P. (2002). Micro-level Estimation of Welfare. Policy Research Working Paper, No. 2911. Washington, D.C.: World Bank

6. Ghana Statistical Service (2000). *Ghana Living Standards Survey*, Round Four (GLSS 4)1998- 99: Data Userís Guide. Accra.

7. *Rajaram M., Majumder S. and Mulay A. (2009). National family health survey. British journal of pharmacology, vol 158, no. 7.*

8. Scott K. L., Diane S. and Tilahun T. (2000). *Standards Measurement Study Surveys. A Household, Sample Surveys in Developing and Transition Countries* World Bank Washington, D.C. United States

of America, 523 Chapter XXIII.

9. *United Nations (2015). The millennium Development Goals Report. New York*

10. United Nations Hunger Task Force (UNHTF), (2005). *Recommended Seven Strategies to Achieve the First Millennium Development Goal* (MAG), *New York.*