

The Impact of Poverty on Senior Secondary School Girls' Prospect for Tertiary Education in Nigeria

Ikebude, Osita C.^{[a],*}; Modebelu, Obiageli J.^[b]; Okafor, Ogochukwu S.^[c]

^[a]Economics Department, St. Augustine's College of Education, Akoka, Lagos, Nigeria.

^[b]PhD. Guidance and Counselling Department, St. Augustine's College of Education, Akoka, Lagos, Nigeria.

^[c]Department of Social Studies, St. Augustine's College of Education, Akoka, Lagos, Nigeria.

*Corresponding author.

Received 12 March 2013; accepted 6 July 2013

Abstract

Poverty has degraded lives for centuries; and human deprivation is still persistent in the developing countries of the world. It is in this regard that this study examined the impact of poverty on senior secondary school girls' prospect for tertiary education in Nigeria. The aim was to ascertain the extent to which the prospect of senior secondary school girls for tertiary education is susceptible to poverty. The study was conducted adopting empirical design. The data used for the study were time series data. A stochastic model was specified for the study to show the impact of poverty on senior secondary school girls' prospect for tertiary education in Nigeria during the period under study (1992 – 2011). The ordinary least square (OLS) regression technique with econometric views 3 software was used to analyze the study's data. The estimated result showed that both poverty and unemployment are significant determinants of senior secondary school girls' prospect for tertiary education in Nigeria. It is therefore suggested among other things that Governments should not only direct policy actions towards encouraging the education of the girls from poor homes by creating separate scholarship platforms for them that can fund their education from secondary school to university level; but also should extend the free education policy to secondary school level in order to give every child from a poor home the opportunity to have at least secondary education. This would help to reduce the girl-child trafficking for sex work, as well as all poverty stimulated juvenile delinquencies in the country.

Key words: Poverty; Senior secondary school girls; Education; Nigeria

Ikebude, Osita C., Modebelu, Obiageli J., & Okafor, Ogochukwu S. (2013). The Impact of Poverty on Senior Secondary School Girls' Prospect for Tertiary Education in Nigeria. *Canadian Social Science*, 9(4), 209-215. Available from: <http://www.cscanada.net/index.php/css/article/view/j.css.1923669720130904.2658>
DOI: <http://dx.doi.org/10.3968/j.css.1923669720130904.2658>.

INTRODUCTION

It is clear that poverty is highly associated with deprivation in various aspects of quality of life. Thus, dealing with poverty is the main instrument that can effectively eliminate deprivation and inequalities in human well-being (Dollar & Kraay, 2001). Poverty has degraded lives for centuries; and human deprivation is still persistent in the developing countries of the world (Sachs & Warner, 1999). According to Sachs *et al* (1999), about 800 million people do not get enough to eat and more than half billion are chronically malnourished; more than 840 million adults are still illiterate and about 800 million people lack access to health services, while more than 1.2 billion lack access to safe drinking water. The children and the women suffer the most. Nearly 160 million children under age five are malnourished, and more than 110 million children are out of school. The maternal mortality rate is nearly 500 women per 100,000 live births (Sachs & Warner, 1999). The state poverty among African countries is described thus:

"It is in the deprivation of the lives that people can lead that poverty manifests itself. Poverty can involve not only the lack of the necessities of material well-being, but the denial of opportunities for living a tolerable life. Life can be prematurely shortened. It can be made difficult, painful or hazardous. It can be deprived of knowledge and communication. And it can be robbed of dignity, confidence and self-respect – as well as the respect of others. All are aspects of poverty that limit and

blight the lives of many millions in the world today.” (Human Development Report, 1997)

Poverty is an issue that more and more of our nation's children are coming face to face with. The price that children of poverty must pay is unbelievably high. Each year, increasing numbers of children are entering schools with needs from circumstances, such as poverty, that schools are not prepared to meet. Conditions required for families to be successful are often lacking in the environment of poverty: stability, security, emotionally positive time together, access to basic resources, and a strong shared belief system. Thus, family relationships suffer when individuals live in poverty. Parents exhibit less capacity to be supportive and consistent in their parenting, provide less vocal and emotional stimulation, are less responsive to their children's needs and model less sophisticated language. Parenting style is more punitive and coercive and less consistent (Kaiser & Delaney, 1996). Overall, parental support and involvement in school activities is lower among poor parents. This does not necessarily indicate a lack of interest. It reflects issues related to poverty such as time (especially if they work shifts or more than one job), availability and affordability of child care and/or transportation, as well as possible negative personal experiences between the parent and his or her own school when growing up (Kaiser and Delaney, 1996).

Children from low socioeconomic status live in environments with social conditions over which they have little control. It is not their choice where they live. It is not their choice that their parent may be unemployed or disabled. It was not their choice to be born into poverty. They often have the feeling they want or need to escape this environment and do better; but they feel they have no control over the nature and quality of their lives (Brophy, 1998; Bandura, 2001).

In Nigeria, the poor, which constitute the majority, are left on their own to contend for survival. Poverty stares them on, in the faces and their children are made to manage scrappy educational programmes and in most cases not at all. To support their families' survival as well as their education, such children are most times abused and made to engage in different forms of economic activities (Ebigbo, 1993). The quality of life of the poor in Nigeria is very low and this is currently linked with different factors varying from poor governance and high level of corruption, high unemployment, feeble education system to impotent manufacturing sector and productivity (Nwangwu, 2000).

Quality of life suggests a balance between resources and the proportion of it being made available to the people. When majority of the people lack basic amenities of life they are described as poor, with an assumption that where there is a high or good quality of life, there is likelihood of a balance between population and available

resources. This is allied to optimum and balanced population in the sense that it confers a balanced and proportional weight between the number of people and the available resources (Phillip-Ogoh, 2000). The peculiar unplanned population of most developing countries has created serious problem associated with over population; and over population promotes poverty, as it brings about an inbuilt mismatch between people and available resources.

When people are considered poor, the belief is that their purchasing power has crumbled; and that they are financially incapacitated to enjoy all that they needed to guarantee a moderate economic life. Demand for social product like education most times becomes very difficult. Those who manage to afford primary and secondary education are given some sort of special applauding for going that far. As such, poverty seems to frustrate students' educational prospect. In addition, parents who have little or no education may not have got the opportunity to be rich that much to guarantee the educational advancement of their children. Similarly, a nation like Nigeria where a lot of value is attached to money and people that have it, the youths, especially those from poor homes are apparently becoming highly disinterested in schooling and education; and are seriously opting for shortcuts (legal or illegal; moral or immoral) that can spin money very fast for them. As such, many of our girls get involved in full time prostitution or part-time sex hawking after their secondary school education. It is against this backdrop that this study attempts to examine the impact of poverty on senior secondary school girls' prospect for tertiary education in Nigeria.

STATEMENT OF PROBLEM

It has been revealed in literature that many Nigerians are living below poverty line (Ehiemetalor, 2005). This is evidenced by the inability of many parents in the country to adequately provide for the needs of their children, including their education. Survival in Nigeria is getting tougher by the day. Government policies are politically oriented without positive impact on the welfare of the masses. Economic policies that would stimulate the economy and better the welfare of the people if appropriately implemented are relegated to the background (Adeotomre, 2007). The economic environment is not conducive for business operators. Businesses are not thriving as they used to do. People no longer show much interest in engaging in serious production investments; as such job opportunities have become extremely scarce, and the economic status of many families has been immensely affected negatively. Consequently, in many cultural oriented families where the males are highly favoured in everything because of the belief that the training of a male child is for the family, while that of a female child

is for the prospective husband; girls' prospects for further education is considered second class in favour of that of the boys. The girls are benched at home helping their mothers with domestic work and petty business activities to make money for the training of the boys pending the time a good suitor will come. This is a serious problem. In this scenario, the girls are educationally marginalized as they are given less opportunity to further in their education than the boys. But, is poverty really the cause of this problem? Finding answer to this question describes the entire business of this research.

PURPOSE OF THE STUDY

The purpose of this study is to ascertain whether senior secondary school girls' prospect for tertiary education in Nigeria is influenced by poverty or not. Specifically, this study sought to:

- Examine the relationship between poverty and secondary school girls' prospect for tertiary education in Nigeria; and
- Assess the influence of unemployment on secondary school girls' prospect for tertiary education in Nigeria.

RESEARCH QUESTIONS

The following research questions were raised to guide this study.

- Is there any significant relationship poverty and secondary school girls' prospect for tertiary education in Nigeria?
- Does unemployment have significant influence on secondary school girls' prospect for tertiary education in Nigeria?

RESEARCH HYPOTHESES

The following hypotheses were stated and tested in the study.

Ho1: There is no significant relationship between secondary school girls' prospect for tertiary education and poverty in Nigeria.

Ho2: Unemployment does not have significant influence on secondary school girls' prospect for tertiary education in Nigeria.

SIGNIFICANCE OF THE STUDY

Senior secondary school students' prospect for tertiary education is important to both policy makers and individual institutions. Tertiary institutions are highly dependent on public money, mainly allocated according to the number of enrolled students. Therefore forecasting senior secondary school students' prospect for tertiary education is therefore useful to inform them of their funding, staff management, tuition and recruitment policies.

Furthermore, for policy makers, understanding the trends in senior secondary school students prospect for tertiary education is crucial for the optimal decision for the higher education system for long term budget planning for a more correct management of the system and more importantly, to anticipate the overall effects of academic qualifications on social and economic development.

This study is a contribution to the few existing literature on the impact of poverty on senior secondary school students' demand for higher education in Nigeria; and will equally serve as a reference document by researchers carrying out research on the same or similar topic.

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Prospect for tertiary education is defined as a relationship between prices (tuition fee levels) and quantities (number of applicants). Prospect for tertiary education is the quantity of tertiary education demanded measured by the head count of applicants to public institutions. Thus, demographics, socio-economic, secondary education success rates, female participation, unemployment and some institutional reforms in secondary and tertiary education are statistically significant determinants of prospect for tertiary education (Becker, 1990). According to Adeotomre (2007), prospect for tertiary education is driven by the prospect for an upwardly mobile population and the needs of a globalised economy which invariably leads to expansion and diversification in tertiary education in Nigeria today; hence, the major contributing factors in this expansion include high population growth, expansion in basic and secondary education, and in the number and rate of students applying for tertiary education.

Chang and Hsing (1996) noted that access to tertiary education should not be restricted through wanton policies. He observes that variations in educational development between the southern and northern parts in Nigeria had necessitated the individual of certain policies to engender even natural representation in institutions nationally owned. Adeyemi (2001) emphasizes that the major obstacles to increased access to tertiary education in Nigeria are not prices but the reform policies of quota system, catchment, poor and inadequate facilities and the limited absorptive capacity of Nigerian universities.

The objectives of Joint Admissions and Matriculation Board (JAMB) from inception had been to develop machinery for streamlining university admissions on a uniform and fair basis. But today, Adeyemi (2001) notes that there is a contradiction between the stated goals of JAMB and what are in practice. A quota based system of non academic considerations predominates. JAMB examination has become a political tool used for equalizing educational opportunities between the advantaged states in the south and disadvantaged states

in the North. Also, Adeyemi (2001) notes that JAMB documents specified catchment areas, that is, geographical areas from which a tertiary educational institution is permitted or obliged to select candidates. Thus, the general operations of JAMB is turned into a political tool by government to equalize educational development between the North and south, as such continue to decelerate the growth and development of tertiary education in the southern states.

An efficient and effective prospect for tertiary education is a key priority for a democratic society. According to Sachs *et al* (1999), prospect for tertiary education would affect structural discrimination. Systematic or structural inequalities are those that are reliably reproduced overtime along the lines of social group differences on the part of identifiable social agents. This ran across an array of social domains including, income, education, social status (includes cultural, affirmation or stigmatization, health, life expectancy, infant mortality and representation of political institutions.

Allen and Shen (1999) in their studies found that the prospect for tertiary education is relatively sensitive to tuition, thereby confirming tuition fee to be one of the main determinants of prospect for tertiary education. Allen and Shen (1999) also found that students are more apt to attend an institution if it offers them scholarships rather than general grants. He also noted that students have a greater prospect for tertiary education when financial aid is given in bulk at the commencement of the programme as opposed to being evenly distributed over the period of study.

Another study by Becker (1990) has it that an increase in tuition in conjunction with an equal increase in financial aid would lower prospect for tertiary education; and this brings to us the concept of price elasticity of students' prospect for would simply apply as a function of the net price (tuition minus financial aid). But relating students' prospect for to the average gross tuition at other liberal arts schools yielded a statistically insignificant cross elasticity measure. Another study by Canton and De Long (2002) stated that overall students' prospect for was inelastic, and that net tuition should be increased in order to optimize revenues and also noted that by raising net tuition and lowering cost, prospect for would go down.

METHODOLOGY

The research design was purely empirical and it was intended to facilitate the examination of selected control variables on their tendency to influence senior secondary school girls' prospect for tertiary education in Nigeria. The variables involved in this study include both dependent and independent variables. The dependent or endogenous variable is senior secondary school girls' prospect for tertiary education (SGPTE), while the independent or explanatory variables are poverty (POV) and unemployment (UNEMP).

MODEL SPECIFICATION

It has been revealed in literature (Robert, 2003; and Bratti, McKnight, Naylor and Smith (2004) that both poverty and unemployment are inversely related to a child's education. Based on this submission, we specify the regression model for this study with some modification. Our regression model, therefore expresses senior secondary school girls' prospect for tertiary education (SGPTE) as a function of poverty (POV) and unemployment (UNEMP). The functional form of the model is shown thus:

$$SGPTE = f(POV, UNEMP) \quad (1)$$

Taking the linear approximation of the above functional equation (equ. 1), we have:

$$SGPTE = \beta_0 + \beta_1 POV + \beta_2 UNEMP \quad (2)$$

Equation 2 is finally specified in an econometric or linear stochastic form as follows:

$$SGPTE = \beta_0 + \beta_1 POV + \beta_2 UNEMP + \mu_t \quad (3)$$

Where: SGPTE = Senior Secondary School Girls' Prospect for Tertiary Education measured by annual total female applicants for tertiary education;

POV = Poverty to be captured by Poverty Index for Nigeria;

UNEMP = Unemployment captured by annual unemployment rate;

β_0 = constant or intercept

$\beta_1 - \beta_2$ = various slope coefficients

μ_t = Error Term

The stochastic model above was formulated to determine the relationship existing between the endogenous and exogenous variables of this study. The a-priori assumptions for the model parameters are: $\beta_1 < 0$; and $\beta_2 < 0$. These signs $\beta_1 < 0$ and $\beta_2 < 0$; imply that inverse relationship is expected between poverty (POV) and Senior Secondary School Girls' Prospect for Tertiary Education (SGPTE); and also between unemployment and Senior Secondary School Girls' Prospect for Tertiary Education (SGPTE).

DATA AND SOURCES

The poverty index for Nigeria (1992 – 2011), which was used to capture the level of poverty in Nigeria, was sourced from Professor J. Umoh's calculations from National Bureau of Statistics and Annual Digest of Statistics (various issues) based on UN estimated Nigerian population of 167million in 2011. Annual total female applications for tertiary education, which was used to measure Senior Secondary School Girls' Prospect for Tertiary Education was sourced from Joint Admissions and Matriculation Board (JAMB) Admission records (various issues), while unemployment rate which was used to capture the level unemployment in Nigeria was sourced from the CBN statistical bulletin from 1992 - 2011.

ESTIMATION TECHNIQUES

First and foremost, it has been revealed in literature (Granger and Newbold, 1974) that most time series data are not stationary; and that research carried out with them or inferences drawn from them are not only likely to be spurious or non-sense, but will violate the classical econometric assumption, thus making the result unreliable for policy making; hence, a unit root or stationarity test is usually carried out on the time series data used for a study to detect the order of integration of the variables. Accordingly, the stationarity status of the time series data used for this study was determined using the Dickey - Fuller (1979) unit root test as follows:

$$\Delta Y_t = \lambda Y_{t-1} + V_t \quad (4)$$

But, given the inherent weakness of the unit root test to distinguish between null and the alternative hypotheses, the augmented Dickey - Fuller (ADF) test was further conducted as follows:

$$\Delta Y_t = \alpha + \beta t + \delta Y_{t-1} + \gamma_i \sum_{i=1}^m \Delta Y_{t-i} + \varepsilon_t \quad (5)$$

Where Δ is the first difference operator, ε_t is the new random error term, m is the optimum number of lags needed to obtain “white noise”. The null hypothesis of non-stationarity is rejected if the estimated ADF statistic is found to be larger in absolute term or more negative than its critical values at 1 or 5 percent level of significance.

The parameters of the model formulated for this study were estimated, using the Ordinary Least Square (OLS) regression technique. Specifically, the multiple regression analysis was employed in this study. This is because the regression analysis is very reliable and widely used in research involving large time series. In addition, the test for the presence or absence of multicollinearity in the regression line of our model was carried out using correlation matrix; while the Durbin Watson statistics was used to test for the presence or absence of serial or autocorrelation in the model. However, since this study’s data is time series, we did not test for heteroskedasticity in the model, as that has to do with cross sectional data analysis.

EVALUATION OF ESTIMATED MODEL

Three criteria were employed to evaluate our estimated model. First, the results of the estimated model were

economically assessed by ascertaining whether the a-priori expectations were satisfied or not. Second, the estimated R-squared (R^2) or coefficient of determination was used to assess the goodness of fit of the model, that is, to ascertain the proportion of the total variation in the dependent variable that is explained by the regression line or the explanatory variables. The estimated t-statistic values were used to determine the significance of the individual explanatory variables in explaining changes in the dependent variable. The calculated t-values were compared with the t-table values at 5% level of significance and $n-k$ degrees of freedom to test the respective hypotheses posited for the study. In addition, while the calculated f-statistic was compared with the critical f-statistic at 5% alpha level and $k-1$ and $n-k$ degrees of freedom to test the overall significance of the estimated model, the outcome of the correlation matrix of the explanatory variables of our model was used to determine whether there is presence of multicollinearity among the variables or not; and the result of the Durbin Watson statistics was used to ascertain whether there is presence of serial or autocorrelation in our model or not.

DATA ANALYSIS

As earlier stated, the model specified above is to show the impact of poverty on senior secondary school girls’ prospect for tertiary education in Nigeria during the period under study (1992 – 2011). The study adopted the ordinary least square (OLS) regression technique using econometric views – 7 software to analyze the study’s data. The estimated result is presented below.

THE UNIT ROOT TEST

Granger and Newbold (1974), Granger (1986), have demonstrated that if time series variables are non stationary, all regression results with these time series will differ from the conventional theory of regression with stationary series. That is, regression coefficients with non-stationary variables will be spurious and misleading. To get over this problem, we test for stationarity of the time series using the Augmented Dickey Fuller (ADF) test. The result of the test is presented in the table below.

Table 1
Unit Root Test

Variable	ADF calculated value at level	ADF calculated value at 1 st difference	McKinnon 5% critical value	Order of Integration
SGPTE	-0.136496	-8.161384	-3.5562	I(1)
POV	-0.845192	-5.590621	-3.6661	I(1)
UNEMP	-0.962633	-5.928811	-2.9627	I(1)

In the table above, time series of senior secondary school girls’ prospect for tertiary education (SGPTE), poverty (POV) and unemployment (UNEMP) are

stationary at first difference, since the ADF value of each variable at first difference is greater than the McKinnon 5% critical values.

Table 2
Presentation of Estimated Result

Dependent Variable: LOGSGPTE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	11.65130	0.286187	40.71213	0.0000
LOGPOV	-0.004386	0.001007	-4.353573	0.0002
UNEMP	-0.009176	0.001501	-6.113213	0.0001
R-squared	0.955457	Mean dependent var		12.69076
Adjusted R-squared	0.941930	S.D. dependent var		0.443336
S.E. of regression	0.138835	Akaike info criterion		-0.960043
Sum squared resid	0.481882	Schwarz criterion		-0.726510
Log likelihood	19.40065	F-statistic		67.67695
Durbin-Watson stat	1.750260	Prob(F-statistic)		0.000000

Source: Authors Computation

INTERPRETATION OF RESULT AND DISCUSSION

First and foremost, the value of the coefficient of multiple determinations (R^2) of the OLS estimate shows that 94 percent systematic variation in senior secondary school girls' prospect for tertiary education in Nigeria can be explained by the regressors (POV, UNEMP). This shows a good fit as only 6 percent systematic variation in senior secondary school girls' prospect for tertiary education (SGPTE) in Nigeria is left unaccounted for by the model, which we attribute to the error term. The calculated f-statistic value of 67.67695 is greater than the critical f-statistic value of 6.11 at 5% level of significance given 2 and 17 degrees of freedom, which shows that the variations in senior secondary school girls' prospect for tertiary education in Nigeria could be attributed to changes in the independent variables (poverty and unemployment). In addition, the outcome of the correlation matrix of the explanatory variables of our model showed the absence of multicollinearity among the variables, while the value of Durbin Watson statistic of 1.7503, clearly indicates the absence of serial correlation in the model, thus the model is good for forecast and policy.

The signs of the slope coefficients are in line with apriori expectations indicating that the model behaved well. The coefficient of poverty shows that a negative relationship exists between poverty and senior secondary school girls' prospect for tertiary education, which implies that a one percent reduction in the level of poverty will increase senior secondary school girls' prospect for tertiary education in Nigeria by 0.004386, *ceteris paribus*. In addition, the calculated t-statistic value of -4.353573 is greater than the critical t-value of 2.11 given 17 degrees of freedom at 0.05 significance level. As a result, null hypothesis one was rejected and the alternative accepted in confirmation that poverty is a significant determinant of senior secondary school girls' prospect for tertiary education in Nigeria. This result supports that of Ebigbo (1993) who noted that in Nigeria, the children of the poor are made to manage scrappy educational programmes and in most cases not at all.

The coefficient of unemployment indicates also that there is a negative relationship between unemployment and senior secondary school girls' prospect for tertiary education in Nigeria, which implies that a one percent reduction in the level of unemployment will increase senior secondary school girls' prospect for tertiary education in Nigeria by 0.009176. The calculated t-statistic value of -6.113213 is greater than the critical t-value of 2.11 given 17 degrees of freedom at 0.05 significance level. As a result, null hypothesis two was rejected and the alternative accepted in affirmation that unemployment has significant influence on senior secondary school girls' prospect for tertiary education in Nigeria. This result is in consonance with that of Nwangwu (2000) who noted that the quality of life of the poor in Nigeria is very low and this is currently linked with different factors varying from poor governance and high level of corruption, high unemployment, and feeble education system to impotent manufacturing sector and productivity. When parents are jobless or underemployed, they may be financially incapacitated to give their children the basic necessities of life including education.

IMPLICATIONS OF THE FINDINGS FOR POLICY AND PRACTICE

The findings of this research have serious implications for policy and practice in Nigeria. Governments should not only direct policy actions towards encouraging the education of the girls from poor homes by creating separate scholarship platforms for them that can fund their education from secondary school to university level; but also should extend the free education policy to secondary school level in order to give every child from a poor home the opportunity to have at least secondary education. This would help to reduce the girl-child trafficking for sex work, as well as all poverty stimulated juvenile delinquencies in the country.

Policy actions should as well be directed by governments towards the provision of social goods that will create enabling business environment for investors to

invest. This will help to create jobs for the masses, which will in-turn enhance the consumption pattern and welfare of many parents and families in the country.

Non-governmental organizations (NGOs), private corporate bodies, churches and concerned individuals can equally intervene in the education of the poor girl-child through provision of diverse scholarship programmes.

CONCLUSION

Education is not only a powerful tool for the development of man, but also the best legacy any nation can bequeath to her citizens. It is the key that unlocks the doors to better life, economic growth and development; and therefore, should be made an all-inclusive affair. The children of the poor should not be left behind to rot in the quagmire of illiteracy and all its attending problems. Governments should eschew corruption and political oriented policies, and work sincerely with the private sector to resuscitate the driving sectors of the economy, especially the education and manufacturing sectors. Besides, the 'Mass Literacy Campaign', 'Education for All Programme', the 'Nigerian Economic Empowerment and Development Strategies (NEEDS)', 'Poverty Alleviation Programme', and other relevant policies that are left redundant today should be revisited and sincerely implemented. All the above will work together to better the life of the people, especially that of the poor in this country. This is our submission.

REFERENCES

Adeotomre, J. E. (2007). Universal access to tertiary education in Nigeria. *Tertiary Education*, 42, 282 – 306.

Adeyemi, K. (2001). Equity of access and catchment area factor in university admissions in Nigeria. *Higher Education*, 42, 307 – 332.

Alien, R., & Shen, J. (1999). Some new evidence of the character of competition among higher education institutions. *Economics of Education Review*, 18, 465-470.

Bandura, A. (2001). Social cognitive theory: An argentic perspective. *Annual Review of Psychology*, 52(4), 1-26.

Becker, W. (1990). The demand for higher education. In Hoenack, S., & E. Collins (Eds.), *The Economics of American Universities: Management, Operations, and Fiscal Environment*. Albany, NY: State University of New York Press.

Bratti, M., McKnight, A., Naylor, R., & Smith, J. (2004). Higher education outcomes, graduate employment and university performance indicators. *Journal of the Royal Statistical Society, Series A (Statistics in Society)*, 167(3).

Brophy, J. (1998). Failure syndrome students. *ERIC Digest*, ERIC Clearinghouse on Elementary and Early Childhood Education, Champaign, IL.

Canton, E., & De Long, F. (2002). The demand for higher education in the Netherlands, 1950-99. *Working Paper*, CPB Netherlands Bureau for Economic Policy Analysis.

Chang, H., & Hsing, Y. (1996). A study of demand for higher education at private institutions in the U.S.: A dynamic and general specification. *Education Economics*, 4, 267-278.

Dollar, D. & Kraay, A. (2001). Trade and, growth and poverty. *World Bank Policy Research Working Paper* (No. 2199). World Bank: Washington.

Ebigbo, P. O. (1993). Situation analysis on child abuse and neglect in Nigeria. *Journal of Psychology in Africa Special Edition (Child Development in Cameroon)*.

Ehiametalor, E. T. (2005). Issues of access and equity and private sector participation in the deregulation of education. *Journal of Tertiary Education*. 68, 588-623.

Granger, F. & Newbold, G. (1974). Spurious regression in econometrics. *Journal of Econometrics*, 2.

Kaiser, A. & Delaney, E. (1996). The effects of poverty on parenting young children. *Peabody Journal of Education*, 71(4) 66-85.

National Child Welfare Policy (1989). *National Child Rights Implementation Committee*, Abuja, Nigeria.

Nwafor, M. O. (2000, October). Child labour as a barrier to education: Implications for poverty alleviation in Nigeria. *JOWICE Journal of Women in Colleges of Education*, (6), 101-105

Nwangwu, R. E. (2000). Bridging the gap between education and the world of work in Nigeria. In Ejiogu, A. & Alani, R. A. (Eds), *Emergent issues in Nigeria education*. Lagos: Mukugamu Publishers.

Phillip-Ogoh, A. (2000). Child labour and education: Implication for poverty alleviation in Nigeria. *JOWICE Journal of Women in Colleges of Education*, 6, 107-113.

Roberts, J. (2003). Poverty reduction and outcomes in education and health: Public expenditure and aid. *ODI Working Paper 210*. London: Overseas Development Institute.

Sachs, J. & Warner, A. (1999). Sources of slow growth in African economies. *Journal of African Economics*, 6(3) 335-376.