



An Assessment of the Effect of Child Labour on School Enrolment: An Empirical Study of Delta Central Senatorial District

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ABSTRACT

The study was focused on the socio-economic implications of child labour among secondary school students in Nigeria. The prevalence of Child labour is a serious and contentious issue throughout the developing world as it is demeaning and damaging to a child's health and intellectual development. The rise in its rate in Nigeria could have been a consequence of the demand for cheap labour and poverty. The objectives of the study gave rise to research questions and hypotheses which were answered and analysed with the use of t-test for the primary data and multiple regressions models for the secondary data. The primary data were obtained with the use of a well structured and adequately administered questionnaire while the secondary data were obtained from CBN Statistical Bulletin (2019), Annual Report and Statement of Account (2019) and publications of the National Bureau of Statistics. The apriori expectations for the study conformed with the results of the study thus: poverty had a negative correlation with child labour; school enrolment was greatly affected by the prevalence of child labour and students' academic performance was likely to be inversely related to child labour. It is hoped that the study through its findings will be paramount and significant to the students, parents, community, teachers, Ministry of Education, educators and curriculum planners in Nigeria especially in the study area (Delta Central Senatorial District of Delta State).

Keywords: Child Labour, Poverty, School Enrolment, Academic Performance.

INTRODUCTION

The welfare of habitation, its growth and development depends on the health, strength and wellbeing of its children. The prosperity and development of any country would certainly depend upon 'human development' or the wellbeing of its people in general and children in particular, than the development of their military or economic strength or the splendour of their capital cities and public buildings. In order to protect and secure human Rights of the children, Universal Declaration of Human Rights, adopted way back in 1948, had proclaimed that childhood was entitled to special care and protection. The UN Convention on the Rights of the child, adopted in 1989, proclaims in Article 6, that every child has the inherent right to life and that the state parties shall ensure to the maximum extent possible the survival and development of the child.

The specter of small children toiling long hours under dehumanizing conditions have precipitated an intense debate among scholars, policy makers and human right activists over the past two decades. In the middle of the 19th century, industrial revolution, policy makers and the public have attempted to come to grip with the causes and consequences of child labour (Bassey, Baghebo & Otu, 2012). The prevalence of Child labour is a serious and contentious issue throughout the developing world as it is demeaning and damaging to a child's health and intellectual development. The rise in its rate in Nigeria could have been a consequence of the demand for cheap labour and poverty. However children have always worked in Nigeria, the philosophy of most cultures in Nigeria encourage children to work with their families, learning skills they would need as adults. But today children are forced to work for their own and their family's survival. That is to say that in some regions child labour has persisted or reconstituted from the customary into the exploitative. Low wages, irregular hours of employment, exploitative slavery, and atrocious working conditions all characterize child labour in Nigeria.

Child labour is a complex phenomenon, mostly common in rural areas of African and Asian countries. Child labour constituted street hawking, farm work and domestic chores such as taking care of babies, fetching water and firewood, preparing and cooking food, individual cleanliness and washing. Child labour remains a major source of concern in Nigeria, in spite of legislative measures taken by the government at various levels. In 1998, the international labour organization (ILO) estimated that 24.6 percent of children between the ages 10-14 in Nigeria were working (World Development Indicators, 2000). Earlier before that time in 1994, the United Nations Children's Emergency Fund (UNICEF) reported that approximately 24 percent (12 million) of all children under the age of 15 worked. It is a ridiculous sight in most big cities, as well as rural villages today, to see children of school age, trading food on the streets, herding animals, tanning and drying raw leather products, fetching water for commercial purposes, washing dishes at restaurants, serving as domestic hands, selling wares at kiosks, collecting firewood for business, harvesting crops in family farms or commercial plantations, amongst other activities (Bassey, Baghebo & Otu, 2012).

International organizations like the ILO, UNESCO, UNICEF, WHO see child labour as a serious global issue, it is the contention of these organizations that the engagement of children in labour is harmful in several ways to the children, the family and the society. It is their belief that it impairs the physical and mental development of children. It affects the family image and rubs society of her future leaders and labour force. It is this conception that the act of child labour is viewed as a deviation from the rule even though it is assuming epidemic dimensions. Legislations have been put in place to discourage child labour and organizations have spring up to pursue the legislation to the letter. It is the position of these efforts that no single institution acting alone can solve the problem, given the massive resources required, partnerships are therefore essential and that working together, a global effort to eliminate child labour is feasible and would be a major contribution to world development.

Since Nigeria is a member of this organization, an action to the contrary of these conventions is viewed as a deviation and a break of an international law. This paper therefore intends to study the concept of child labour looking at its socio-economic implications on the individual, the family and the society at large. The paper will also attempt to proffer solutions to this "evil" condition.

Statement of the Problem

It has been observed that child labour is caused mainly by poverty and is exacerbated by cultural practices, large families and lack of education. Most children who work do not work on their volition but do so because their parents force them. A few exceptions are children who prefer to work than to attend school. Working could put children at a disadvantage, physically, mentally, economically and socially. Working children are in many cases totally or partially deprived of primary and/or secondary schools education. Totally because they are taken out of school permanently, and partially because they go to school but are absent some days to work or go to school every day but have little or no time to study at home due to their work.

The working children have very little time to play and socialize with others as a consequence they may not develop to be productive and they will always feel inferior where others are. All these affects the larger society because in future there will be a delay in the development of the country due to lack of

human capital and also high crime rate which will lead to the need for more protection of life and properties in the society. Sexually exploited and abused children are also vulnerable to contracting sexually transmitted diseases (STD'S) including HIV/AIDS and unwanted pregnancies.

Thus, the way children are being molested, maltreated, violated and denied of their basic right has led to a decline in school enrolment which constitutes the problem of this study. The problem will be thoroughly studied and investigated to be able to highlight its root cause and the way forward for the eradication of child labour and improvement in school enrolment in Delta Central Senatorial District of Delta State.

Objectives of the Study

The general objective of this study is to investigate the effect of child labour on school enrolment in delta central senatorial district of Delta State.

Specifically, the study will also:

1. Analyse the socio-economic implications in relation to child labour.
2. Examine the relationship that exist between poverty and child labour.
3. Analyse the effect of child labour on school enrolment
4. Examine the effect of child labour on students' academic performance.

Research Questions

The following research questions will help guide the scope of the paper:

- i. What are the socio-economic implications of child labour in delta central senatorial district of Delta State?
- ii. What relationship exist between poverty and child labour?
- iii. Is there any relationship between child labour and school enrolment?
- iv. What effect does child labour have on students' academic performance?

Research Hypotheses

To check for the trueness of the study, the following hypotheses have been formulated to be tested:

Ho₁ There is no significant relationship between child labour and socio-economic implications on delta central senatorial district of Delta State

Ho₂ There is no significant difference between child labour and poverty

Ho₃ There is no significant difference between child labour and decline in school enrolment.

Ho₄ There is no significant difference between child labour and students' academic performance.

LITERATURE REVIEW

Concept of Child Labour

The concept under discussion does not align to an easy definition. This is because the person considered to be a child in one context may not be a child in another while labour in one may not be so in another. Bassy (2012) stated that the definitional problem stems from two extremes, at one, all non-educational non-leisure time of individuals below a certain age can be counted as child labour. At the other only full-time employment in economic activity would be counted. The former includes light work after school work during school holidays, which helps in skill acquisition while; the latter excludes part-time engagement in such horrendous activities as child prostitution. Another part of the problem arises from the conception of most people of child labour to mean "bad" child labour such as prostitution or scavenging or backbreaking work on a construction site or long hours in a carpet factory etc. such bad child labour can be part-time or full time and a child can both engage in schooling and in 'bad' child labour.

Nadu (2011) defines child labour as the exploitation of children with the premature assumption of adult role, working for long hours for low wages, the damage to the physical and psycho-social well-being and denial of opportunities for their education and recreation. According to him, it is a situation whereby children are made to join the work force in their early years as a compulsion for their own and family survival.

Child labour has received considerable attention in economics throughout the disciplines history. Early writing tended to focus on child labour solely through the lens of labour demand. Adam Smith (1980) emphasized the value of children labour shortage societies as motives for fertility. Bark (2013) stated that,

quite a number of children preferred taking petty jobs to going to school. Even those who were sent to schools were usually not performing well in academic work.

According to Gill (2012) and Verma (2013), other studies noted that child labourers tended to engage in delinquent behaviors. Hassan and Dehnath (2000) stated that socially, children in industries were found to experience negative consequences in their educational development and performance. The prevalence of illiteracy, low school attendance and low enrolment has been attributed to children's economic participation. According to Lopez-Calva (2011), Bass (2014), the global phenomenon of child labour can be attributed to several factors. The rapid population growth of many less developed countries, high rates of unemployment, inflation and low wages have contributed to occurrence and necessity for children to engage in economic activity.

Categories of Child Labour

The UNICEF has classified child work into three different categories.

- i. Within family in which children are engaged without pay in domestic/household tasks, agricultural/pastoral work, handicrafts/cottage industries and so on.
- ii. Within the family, but outside the home in which children do agricultural/pastoral work which consists of (seasonal/full time) migrant labour, local agricultural work, domestic service, construction work and informal occupations; i.e. laundry/ recycling of waste - employed by others and self-employed.
- iii. Outside the family in which children are employed by others in bonded work, apprenticeship, skilled trades (carpet, embroidery, brass/copper work), industrial/unskilled occupations/mines, domestic work, commercial work in shops and restaurants, begging, prostitution and pornography.

Each form of child labour has its own peculiar features, which are in the forms of domestic labour, agriculture labour, migrant labour, bonded labour, wage based labour, self employed labour and invisible labour.

Stylized Facts on Child Labour (UNICEF)

- ❖ An estimated 246 million children are engaged in child labour. Nearly 70% (171 million) of these children work in hazardous conditions – including working in mines, working with chemicals and pesticides in agriculture or with dangerous machinery. They are everywhere, but invisible, toiling as domestic servants in homes, labouring behind the walls of workshops, hidden from view in plantations. The vast majority of working children – about 70% – work in the agriculture sector.
- ❖ Millions of girls work as domestic servants and unpaid household help and are especially vulnerable to exploitation and abuse.
- ❖ Millions of others work under horrific circumstances. They may be are trafficked (1.2 million), forced into debt bondage or other forms of slavery (5.7 million), forced into prostitution and/or pornography (1.8 million) or recruited as child soldiers in armed conflict (300,000).
- ❖ The Asia and Pacific region harbours the largest number of child workers in the 5 to 14 age group, 127.3 million in total (19 per cent of children are working in the region)
- ❖ Sub-Saharan Africa has an estimated 48 million child workers. Almost one child in three (29 per cent) below the age of 15 is economically active
- ❖ Latin America and the Caribbean harbours approximately 17.4 million child workers (16 per cent of children in the region are working)
- ❖ 15 per cent of children in the Middle East and North Africa are working; approximately 2.5 million and 2.4 million children are working in developed and transition economies respectively.

Child Right Act

Ladan (2007) asserted that in terms of contents, the Nigerian Child Rights Act borrowed a leaf from the United Nations, Convention on the Rights of the Child (CRC) and the African Unity Charter in respect of the guiding principles for the promotion and protection of the rights of children.

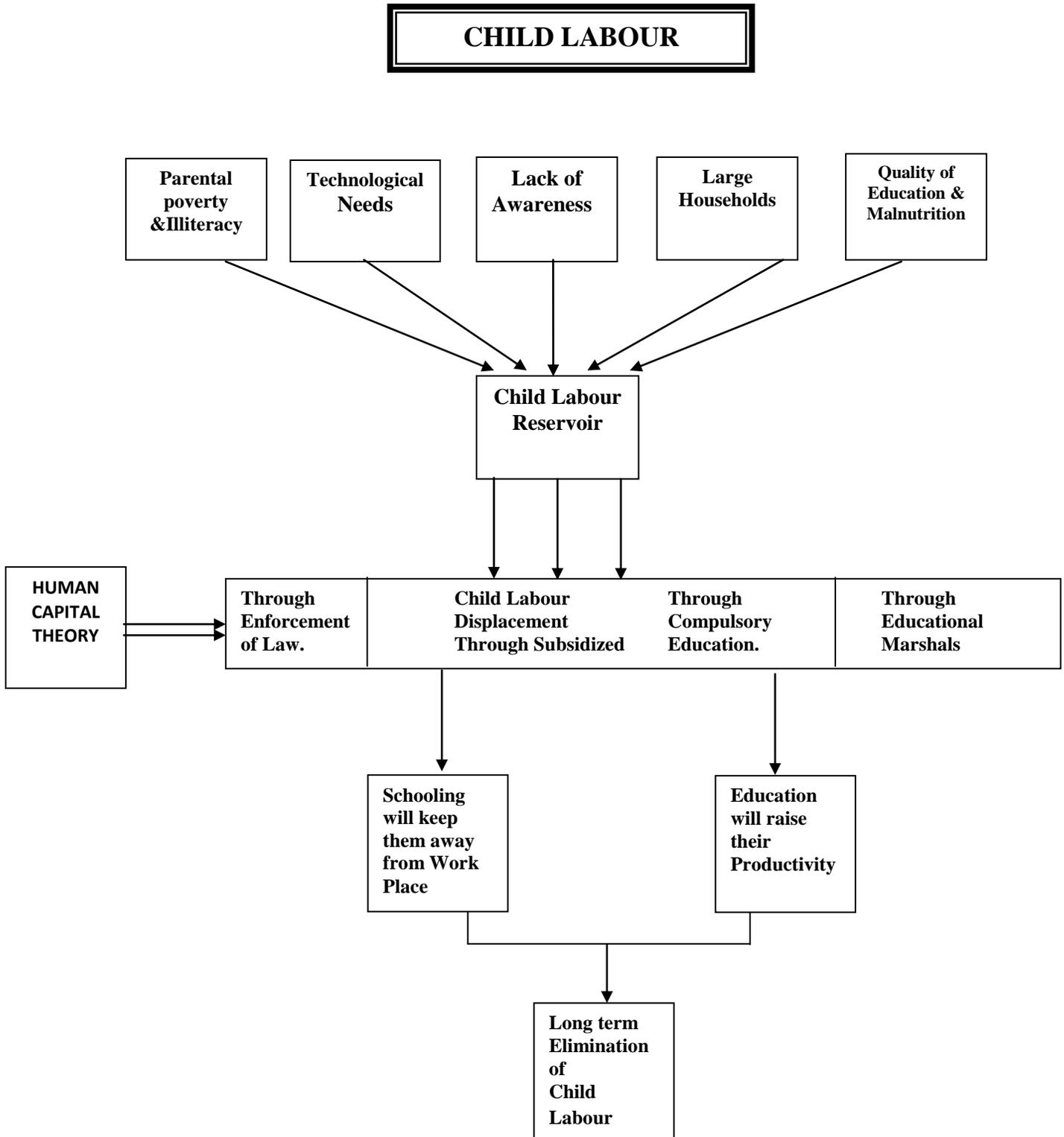
Under sections 1-2 (Part I), the Child Right Act provides that the best interest of the child shall be of primary or paramount consideration in all actions to be undertaken whether by an individual, public or private body, institutions or service, court of law or administrative or legislative authority. Further, the Act provides that necessary protection and care shall be given to the child for his/her well-being, taking into account the rights and duties of the child's parents, legal guardians and other bodies legally responsible for the child.

Part II (Sections 3-20) of the Act provides for the rights and responsibilities of a child in Nigeria. Accordingly, it entrenches the following fundamental rights for the child, namely, the rights to survival and development, to a name, to freedom of association and peaceful assembly, to freedom of thought, conscience and religion, to private and family life, to freedom of movement, to freedom from discrimination, to dignity of the child, to leisure, recreation and cultural activities, to health and health care services, to parental care, protection and maintenance, to free, compulsory and universal primary education, as well as encouragement of the child to attend and complete secondary education.

Conceptual Framework

The conceptual framework for this study illustrates that different factor causing child labour can be eliminated through different interventions. Human Capital Theory suggests that investment in human capital leads increase in productivity and income that will break the poverty and Child Labour trap. Free quality education will keep the child labourers away from work places. This is illustrated by the fig below:

Fig. 1.



METHODOLOGY

Research Design

The design of the study is a correlational study based on the correlational design. This form of design is aimed at collecting data with a view to establishing the degree of relationship between independent variables and dependent variables; as well as predicting which is or are stronger predictor(s). A correlational design is part of the non-experimental research design. The reason it is non-experimental is because it does not involve manipulating the variables of interest. The design simply aims to determine the relationship between two variables, as well as how strongly these variables relate to one another.

Population

The population for this study will comprise of all public secondary school students in the area of study (Delta Central Senatorial District). The total of number of students in this area as at the 2016/2017 academic session is one hundred and one thousand, five hundred and eighty seven (101,587) (*Source: Directorate of Planning and Statistics, Delta State Ministry of Education, Asaba, 2016.*)

Sample and Sampling Technique

The stratified random sampling technique will be employed in this study to select the students that will be in the sample size for the study. The schools will be stratified by local government areas. From each local government area, students will be selected to make up the ten thousand (10,000) students (respondents) which represent ten percent (10%) of the total population in the senatorial district. The choice and adequacy of ten percent (10%) of the population as sample was predicted on Pitteen (2008) assertion that in a population of more than five thousand (5000) 10% sample size is deemed a good representative of all the population characteristics.

Below is the table showing the stratified sample size of the population for the study:

Table 3.1 Population and sample size

S/N	Name OF L.G.A	No. of Schools Available	No. of Teachers Available	10% Sample
1	Uvwie	18	15,890	1500
2	Ughelli North	21	19,230	1900
3	Ughelli South	10	10,074	1000
4	Sapele	16	11,321	1100
5	Udu	09	16,011	1600
6	Okpe	08	9,015	900
7	Ethiope East	10	11,029	1100
8	Ethiope West	09	9017	900
TOTAL		101	101,587	10,000

Source: Directorate of Planning and Statistics, Delta State Ministry of Education, Asaba, 2019.

The data will be analysed based on the research questions and hypotheses formulated for the study. However, mean and standard deviation will be employed to answer the research questions, while the Hypotheses will be tested with the use of t-test analysis at 0.05 level of significance. Also, for adequate and standardizes results, the study will also adopt a regression analysis technique and specifically multiple equation (multiple regressions) models.

Model Specification

In this study an attempt has been made assess socio-economic implications of child’s labour among students in Nigeria on the growth of the Nigerian economy. This model is derived from earlier studies carried out by Kah (2012) and Afolabi (2013).

GDP = f (CL, PI, CI, SE,).....3.1

Though with some modifications, the model is presented in functional form as follow:

GDP = f (CL, PI, SE) 3.2

Where:

the generalization to more than two series. The rule is that variables of different orders cannot be co-integrated otherwise their combinations will not be stationary.

The theory of co-integration arises out of the integrate short-run dynamics with long-run equilibrium. The traditional approach to the modeling of short-run disequilibrium is the partial adjustment model. However, an extension of this co-integration technique is the error correction mechanism (ECM) (Granger & Newbold, 1977).

After determining the order of integration, we then proceed to obtain the cointegration vector in the regression equation.

$$Y_t = \beta_0 + \beta_1 X_t + U_t \quad \dots \dots \dots \quad 3.7$$

And then test if the residuals Y_t are stationary. There are two tests. The first is the co-integration regression Durbin Watson (CRDW) for equation (12) and test then null hypothesis that:

H_0 : $Y_t X_t$ are not co-integrated by testing if DW is significantly greater than zero (using the relevant critical values). The second test examines the estimated residuals from the above regression directly by performing a unit root test of the DF.

$$\Delta \mu_t = U_{t-1} + E_t \quad \dots \dots \dots \quad 3.8$$

Or

ADF type

$$\Delta Y_t = \mu_{t-1} + \sum_{i=1}^p \alpha \Delta \mu_{t-1} + E_t \quad \dots \dots \dots \quad 3.9$$

3.4.3 Johansen Co-integration Test

Johansen developed the VAR based co-integration test. Consider a VAR of the order p .

$$Y_t = A_1 Y_{t-1} + A_2 Y_{t-2} + \dots + A_p Y_{t-p} + B X_t + \varepsilon_t \quad \dots \dots \dots \quad 3.10$$

Where Y_t is a K – vector of non-stationary $I(1)$ variables, X_t is a d -vector of deterministic variables, and ε_t is a vector of innovation.

We can rewrite the VAR as:

$$\Delta Y_t = \pi Y_{t-1} + \sum_{i=1}^p r_i \Delta Y_{t-1} + B K_t + e_t \quad \dots \dots \dots \quad 3.11$$

Where

$$\pi = \sum_{i=1}^p A_i - \mathbf{1}, r = - \sum_{j=i+1}^p A_j$$

Granger’s representation theorem that if the coefficient matrix π has reduced rank $r < K$, then there exist $k \times r$ matrices, α and B each with rank 1 such that $\pi = \alpha B^2$ and $B^1 Y_t$ is $I(0)$ r is the number of co-integration relations (the co-integration rank) and each column of B is the co-integration vector. The element of α is known as the adjustment parameters in a Vector Error Correction (VEC) model. Johansen’s method is to estimate whether π matrix form an unrestricted AR and to test whether we can reject the restrictions implied by the reduced rank of π .

PRESENTATION OF RESULTS AND ANALYSIS

Presentation of Primary Data Results

The primary data obtained for the study were analysed with the use of t-test statistical tool. The data were analysed with respect to the hypotheses formulated for the study. However, the results obtained at the end of the t-test statistical analysis was compared with the analysis of the secondary data that was analysed with multiple regression analysis to check if there was correlation with both forms of analysis.

The following results were obtained at the end of the analysis of the primary data with the aid of the t-test statistical analysis:

Hypothesis One

There is no significant relationship between child labour and socio-economic implications on Delta Central Senatorial District of Delta State

Tab. 1

Variables	Frequency	Mean (X)	Sample size	D.F	t-Cal. Value	t-Tab. Value	Decision
Child Labour (X ₁)	2800	2.8	1000	06	33.3	2.44	<i>P > .05 Rejected</i>
Socio-Economic Implications (X ₂)	1200	1.2					

The table above indicates that the hypothesis one was rejected following the decision rule guiding the study. Thus, it is paramount at this point to note that child’s labour has a serious socio-economic implication in the area of the research study.

Hypothesis Two

There is no significant difference between child labour and poverty

Tab. 2

Variables	Frequency	Mean (X)	Sample Size	D.F	t-Cal. Value	t-Tab. Value	Decision
Child Labour (X ₁)	2742	2.7	1000	06	0.123	2.447	<i>P < .05 Accepted</i>
Poverty(X ₂)	1258	1.3					

The analysis from above indicated that the null hypothesis two was accepted owing to the fact that the t-cal. value was less than the t-tab value. However, this shows that poverty as a variable is negatively related to child’s labour in the sense that poverty is a major influence in the incidence of child’s labour in Delta Central Senatorial District of Delta State.

Hypothesis Three

There is no significant difference between child labour and decline in school enrolment.

Tab. 3

Variables	Frequency	Mean (X)	Sample Size	D.F	t-Cal. Value	t-Tab. Value	Decision
Child Labour (X ₁)	2652	2.8	1000	06	0.054	2.447	<i>P < .05 Accepted</i>
Decline in School enrolment (X ₂)	1348	1.2					

The null hypothesis three was accepted basically following the decision rule guiding the study. The null hypothesis shows that child’s labour is inversely related to school enrolment. The incident of child’s labour has actually brought a decline the in level of school enrolment in Delta Central Senatorial District of Delta State.

Hypothesis Four

There is no significant difference between child labour and students’ academic performance.

Tab. 4

Variables	Frequency	Mean (X)	Sample Size	D.F	t-Cal. Value	t-Tab. Value	Decision
Child Labour (X ₁)	3362	3.4	1000	08	0.001	2.306	<i>P < .05 Accepted</i>
Decline in School enrolment (X ₂)	1638	1.6					

Table 4 above also shows that the null hypothesis four was also accepted following indications from the t-calculated value and that of the tabulated value. This however shows that child labour is negatively related to school enrolment in Delta Central Senatorial District of Delta State.

Multiple Regression Results And Analysis

Unit Root Test

The stationarity status of the selected data series were examined using the Phillips-Perron test. The results which are displayed in Table below show that all the variables are integrated at first difference. In other words, they are found to be stationary at 1(1). This implies that the hypothesis of non-stationarity is rejected for all the variables at their first difference. This justifies the need to test for co-integration.

Table 5: Unit Root Test Results

Variable	Level	First Difference	Order of Integration
CL	0.958806 (0.9950)	-5.338445 (0.0001)	1(1)
PI	0.108867 (0.9611)	-5.360321 (0.0001)	1(1)
SE	-1.508382 (0.5157)	-6.434482 (0.0000)	1(1)
GDP	-1.508382 (0.5157)	-6.434482 (0.0000)	1(1)
5% C.V	-2.963972	-2.967767	

Source: Author Regression Output.

Note: i. Pro-value are reported in parenthesis, ii. The Philips-Perron statistics are compared to 5 per cent critical value (C.V).

Cointegration Test using the Johansen Methodology

The results of the Unrestricted Cointegration Rank test for models I is presented in the Table below. Starting with the null hypothesis that there are no cointegrating vector ($r = 0$) in the models, the results show that there exists at least one cointegrating relationship in both models as both the Trace and Max-Eigen statistics reject the null of $r = 0$ as against the alternative of $r = 1$ at 5 per cent level of significance. Since both tests statistics suggest the presence of one cointegrating vector, conclusion can therefore be drawn that the variables are cointegrated. This means that there is a unique long-run relationship among the variables.

Table 6: Unrestricted Cointegration Rank Test result for model I

Hypothesised No. of CE(s)	Trace Stat.	Critical Value (0.05)	Prob**	Hypothesised No. of CE(s)	Max-Eigen Stat.	Critical Value (0.05)	Prob**
None*	67.56563	63.87610	0.0237	None*	32.78189	32.11832	0.0414
At most 1	34.78374	42.91525	0.2541	At most 1	17.45007	25.82321	0.4205
At most 2	17.33367	25.87211	0.3904	At most 2	10.48840	19.38704	0.5668
At most 3	6.845271	12.51798	0.3609	At most 3	6.845271	12.51798	0.3609

Source: Author Regression Output.

Note: i. r represents number of cointegrating vectors. ii. Both Trace and Max Eigenvalue tests indicates 1 cointegrating equations respectively at the 0.05 level. iii. *denotes rejection of the hypothesis at the 0.05 level and IV. ** Mackinnon-Haug-Michelis (1999) p-values

Error Correction Representation

The result of the error correction representation for the model is reported in the Table below.

Table 7: Error Correction Representation for the Model

Dependent Variable: D(GDP) for the Model				
Regressor	Coefficient	Std. Error	t-Statistic	Prob.
C	168.6783	213.3321	0.790684	0.4366
D(CL)	0.421720	0.208206	2.025497	0.0536
D(PI)	-0.057870	0.052789	-1.096252	0.2834
D(SE)	0.000440	0.075545	0.005821	0.9954
ECM(-1)	-0.438458	0.193263	-2.268713	0.0322

Source: Author Regression Output.

Results from the empirical analysis of the model indicated that only Child Labour is significant in explaining Gross Domestic Product in Delta Central Senatorial District for the sample period. It is significant at 5% level, and also correctly signed in the model. Thus, a 1 per cent increase in Child Labour raises gross domestic product by 42.17% approximately while a unit change in School enrolment raises gross domestic product by 0.000440.

PI was found to be inversely related to GDP, contrary to theoretical expectation. This is not unexpected as most of the instruments and government programmes aimed at alleviating poverty in the region hardly reach the grass root. However, PI is significant in explaining GDP. The negative coefficient of the value -0.057870 for the model, demonstrates that as long as poverty alleviation programmes government does not positively affect the people of the region, gross domestic product decreases continually, which is not good for any country or region.

Finally, The error correction mechanism ECM (-) of -0.438458 is statistically significant and has the appropriate sign. It suggests however, that there is a slow adjustment process in the growth of the GDP since the speed of adjustment to long-run equilibrium is 44%. It is also a confirmation that Child Labour, Poverty Index, School Enrolment and Gross domestic Product are cointegrated.

Diagnostic Test

To confirm the robustness of the model, a diagnostic test was performed as shown in Table 8.

Table 8: Key Regression and Diagnostic Statistics for the Model

R-squared	0.234383	Mean dependent var	354.2473
Adjusted R-squared	0.111884	S.D. dependent var.	1150.409
S.E. of regression	1084.145	Akaike info criterion	16.96598
Sum squared residual	29384243	Schwarz criterion	17.19952
Log likelihood	-249.4897	Hannan-Quinn criter	17.04069
Durbin-Watson stat.	1.695806	F-statistic	1.913350
Prob.(F-statistic)	0.139481		

Source: Author Regression Output.

The coefficient of determination R^2 of 23 and 22 per cent respectively, indicates that the total variation of gross domestic product is explained by Child Labour, Poverty Index, and School Enrolment. The Akaike information criterion, Schwarz criterion and Hannan-Quinn criterion show that the model is correctly specified. Durbin-Watson statistic of 1.695806 from the model implies absence of autocorrelation among the explanatory variables.

Stability Test

Stability test was performed using cumulative sum (CUSUM) and cumulative sum of square (CUSUM Q) of recursive residuals as shown in figures 2 and 3 below. The existence of parameter instability is established if the cumulative sum of the residual goes outside the area between the critical (straight bounded upper and lower) lines. From figure 2 and 3 it was observed that the model at 5 per cent level of significance, CUSUM and CUSUM Q are both stable over time because the observed bound lies between the upper and lower limit. In conclusion, at 5 per cent critical value both CUSUM and CUSUM Q are positive but CUSUM is more stable which means that CUSUM best explains the stability of the model overtime.

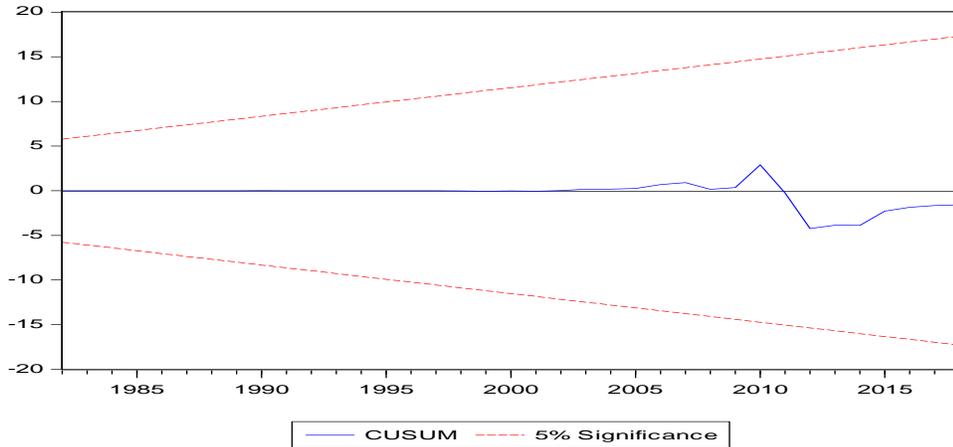


Fig.2: Plot of Cumulative Sum of Recursive Residuals

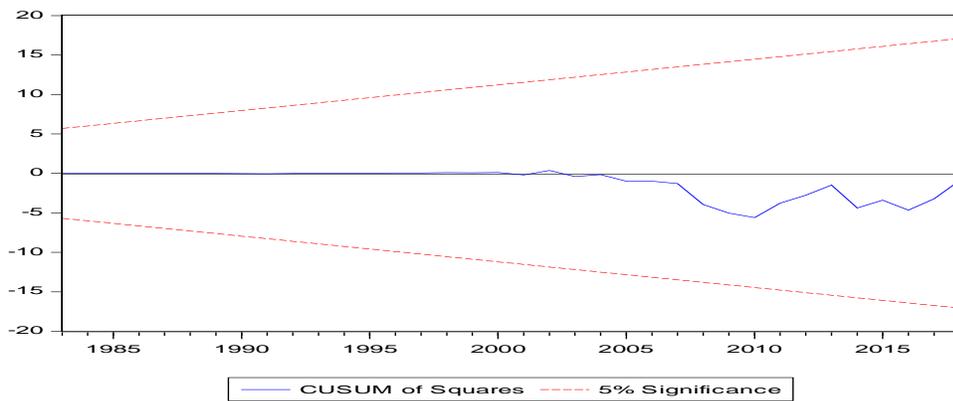


Fig.3: Cumulative Sum of Squares of Recursive Residuals

CONCLUSION AND SUMMARY

This general objective of this study was to investigate the effect of child’s labour on school enrolment in delta central senatorial district of Delta State. Results from the analysis with respect to the objectives and hypotheses for the study reveals that poverty was in the area of study was a significant variable that actually raised the incidence of child’s labour. As such, poverty is an important factor explaining child labour. Less wealthy households in both urban and rural settings are more likely to engage in child labour so as to meet up with daily expectations of feeding and other utility bills.

Also, school enrolment was greatly affected by the incidence of child labour. A lot of students are found in building sites, construction areas and even in shops as sales personnel during school hours. This does not only reduce their school attendance, but degenerate to affect school enrolment in in subsequent new sessions of the school. They prefer to engage in activities that will get them immediate money than investing in education that only guarantees the future. They would rather jeopardize their future just to get immediate benefits.

As a results of constant absenteeism from school by virtue of the fact that engagement in “hustling” in attempt to meet up with daily needs. These students are repeatedly absent from classes and this has an abrupt effect on their academic achievements. Even the few times they attend classes, they still go for work after school and find it difficult to study their books at night because they will be too tired for that. The resultant effect is that at the end of each term of the schooling they continue to diminish in their academic performances.

It is paramount at this point to note that there is a correlation between both analysis by virtue of their separate results and both indication similar end point. These results are in line with the study of Muaire (2019) who concluded that school enrolment in the sub region of the country was grossly affected negatively by the high level and continual increase in the level of poverty. In addition, the study was also correlated with that of Ogeh & Nnana (2019) that said, Child's Labour will continue to be on the increase in most rural and urban communities and also boost the figures of school drop outs until government does something concerning alleviating a good number of her citizens from poverty.

The ability to realize that potential depends critically on the kind of skills and opportunities available to them. Education can provide the desired key to success, not only by enhancing their skills and capabilities, but also through positive externalities in the form of reduced child labour.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were put forward thus:

- i. Child labour may not be totally eradicated, but school heads through their teachers should always build the psychology of the students through constant orientation that Education can provide the desired key to success, not only by enhancing their skills and capabilities, but also through positive externalities in the form of disengaging in child labor.
- ii. The Delta State Education Marshal to be saddled with the responsibility of prosecuting parents of children engaged in child labour especially during schooling hours.
- iii. The government should monitor her poverty eradication programmes to ensure it benefits reaches the grass root.

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