Determinants of Child Labour and Academic Performance in High Schools in Ibadan, Nigeria

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Authors' contributions

This work was carried out in collaboration between both authors. Author KAA designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript and managed literature searches. Author LOEN managed the analyses of the study and literature searches. Both authors read and approved the final manuscript.

Article Information

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ABSTRACT

This study examined child labour and academic performance among students in Nigerian secondary schools with reference to Emmanuel College secondary School, Orita U.I. Systematic random sampling method was employed to collect primary data from 60 respondents through a well-structured questionnaire. The results showed that 83.3% were male and 16.7% were female. Also, 51.7% of the sample population worked after school hours while 13.3% worked during vacation and 35% engage in no economic activities. The regression results showed that level of education of parents, parents' income and family size explained about 83% of the total variation in hours of work. All the coefficients for the socio-economic factors were significant at 5% probability level. The result further showed that a negative relationship exists between average score and hours of work. Also, a negative relationship exists between hours of work and parents' income and level of education of parents but a positive relationship exists between hours of work and family size. Based on the empirical results, the study therefore recommends that creating employment opportunities and increasing income of parents would help parents sponsor their children's education.

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1. INTRODUCTION

Children specialize in schooling early in life. Eventually, they leave school and enter the labour market full-time, whether as children or adults. Many will experience an intermediate period in which they devote some time to work while still in school. Most children who work are engaged in household enterprise activities, whether it is a farm, a home-based manufacturing operation, or a retail enterprise. These productive assets would have mixed impacts on child labour. On the one hand, they may raise a child's opportunity cost of time in school because the child is productive in labour activities. On the other hand, especially in agriculture, adults in the household are also more productive, so the household can better afford allocating child time to schooling activities. This explains why some studies of agricultural households have found that measures of the farm capital stock lower child labour [1] while others find the opposite [2,3].

The phenomenon of child labour has become an increasingly visible and disturbing feature of the contemporary world, especially in the developing countries like Nigeria. ILO [4] has estimated that 250 million children between the ages of five and fourteen years, work in developing countries—at least 120 million on a full time basis. Sixty-one percent of these are in Asia, 32 percent in Africa, and 7 percent in Latin America. Most working children in rural areas are found in agriculture; many children work as domestics servants while urban children work in trade and services, with fewer in manufacturing and construction.

In Nigeria, especially the rural areas, children perform varying tasks, which fall within the category of child labour. Millions of children work under abusive conditions that are dangerous to them. For example, in agriculture, they perform heavy tasks and are exposed to many hazards associated with the introduction of modern machinery and chemicals. Given the fact that 75.1 per cent of Nigerians live in rural areas and only 24.9 per cent in urban areas, majority of working children are found in rural areas in which the dominant occupation is agriculture [5]. Children work in various activities in the agricultural sector, including fishing, cattle herding and farming [6].

The problem of child labour has moved from a matter of regional and national concern to the one of international debate and possible global persuasion and policy intervention. Child labour means work that is essentially exploitative and injurious to the physical, social, cognitive and moral development of the child. The definition of what constitutes child labour varies among professional groups, across cultural, ethnic and religious groups and by geographical location [7,8]. To avoid ambiguity in the use of the term, there is then a need to feel our way through the various definitions. [9] sees child labour as work or employment situation where children are being engaged on a more or less regular basis to earn a living for themselves and families. This work or employment covers children under the age of 15 and the manner of work is exploitative, abusive and dangerous yet children are engaged in it because they just have to get a means of livelihood for themselves or their families. ILO [10] noted that child labour involves all works, which are harmful to a child's health, works that violate children's fundamental right as human beings, works that are dangerous or threatening, that exhaust their strength, damage their bodies, and prevent them from going to school and gaining basic skills and knowledge for their future development.

Child work should be distinguished from child labour. By child work is meant work in which the primary emphasis is on learning, training or socialisation. As such, the work schedule is flexible, tends to be responsive to the developing capacity of the child and encourages his or her participation proportionate to their decision-making process. Child labour is a socio-economic problem. It involves the use of a child as an "economic tool" with little or no regard for the detrimental and negative effects, which such employment may have on the mental or physical health, moral or social development of the child [11].

Owing to present economic situation in Nigeria, many poor parents are forced by circumstance to saddle their young ones with chores like hawking wares in Lagos, Ibadan, Kano, Aba, Port Harcourt including all communities. Children sell everything under the sun; touting, bus conducting and other menial jobs are also done before and after school hours. These children are seen by the roadsides in between cars in hold-ups. They try to outsmart one another in selling their goods. Thousands of urban children also engage in scavenging on garbage heaps for recyclable materials that can be sold to traders.

Past studies on child labour had focused on impact, determinants and perception of child labour on their academic performance. Abraka [12] found that 22% of student's academic performance was influenced by attending classes in secondary schools of Delta State of Nigeria. He therefore identified that increase in attendance will also increase academic performance of students. Muhammed and Adeoye [5] identified that child labour in agriculture is prevalent in Oro with adverse socio-economic effects. It also revealed that children have made tremendous contributions to the development of agriculture. Werner [13] argues in favor of child labor. In his work, he stated that in many impoverished locales, child labor is all that stands between the family and all pervasive, life threatening, destitution. Child labor declines markedly as income per-capita grows. He opined that it is bad to deprive these bread earners the opportunities to lift themselves and their immoral hypocrisy. Just because they are under age does not mean that we should completely reject them, they have a right to survive. Also [14] established that introduction of free education was a crucial way of combating child labor, especially in Sub-Saharan African regions, where majority of the community could not afford to pay school fees for their children. However, for the policy to achieve its objectives, corruption must be fought hard. The aim of this paper is to investigate the determinants of child labour and academic performance in Nigerian secondary schools.

Hypotheses

The following hypotheses were formulated and tested for the study.

There is no significant difference between the academic performance of working students and non working students

Income of parents has no significant relationship with the hours of work of children Level of Education of parents has no significant relationship with the hours of work of children. Family size has no significant relationship with the hours of work of children.

2. MATERIALS AND METHODS

The study was carried out in Emmanuel college secondary school 1, university of Ibadan, Nigeria.

The school was established in September 1980. Abadina and Methodist school were the only schools around the area before the establishment of Emmanuel College secondary school. The total population of the school is 2485 and the total number of teachers 97. Emmanuel College is divided into junior school (JSSI, JSSII and JSSIII) and Senior Secondary School (SSSI, SSSII and SSSIII). The division into group of schools enhances close supervision, efficient teaching, and proper monitoring of the students by the teachers. The total land area of the school is about 5 hectares. Emmanuel College is adjacent to University of Ibadan.

2.1 Data Collection

The data used for this study were mainly primary data collected from the respondents through the administration of a well-structured and detailed questionnaire. The class teachers and the principal were consulted and the students were asked to bring their report card on the particular day to administer the questionnaire. Questionnaires were personally distributed by the researcher who read and explained the purpose of the study to the respondents. The questionnaire was basically to give an insight on children that combine schooling with work.

2.2 Sampling Techniques

A total of 60 questionnaires were administered for the analysis. The sample size is due to the fact that population of students involved in child labour is small in the area. Systematic random sampling method was used. There were 3 classes of 200 students in each class. The students above 15 years were separated and the population reduced to 180 pupils per class. Systematic random sampling method was used to select twenty students from each class by selecting at an interval of 9 in the order 1,10,19,28,..., The total sample population resulted to 60 students.

2.3 Data Analysis

The data collected from this study were analysed by using descriptive statistics and regression analysis. Tabular presentation of results was done to ensure clarity of purpose. Frequency counts and percentages were used to summarise most of the data obtained. The quantitative

analysis was carried out using regression analysis.

2.4 Regression Analysis

The model is as follows:

The model aims at determining the effect of the educational level of parents, occupation of parents family size and hours of work on the academic performance of the students.

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + U$$

Where

Y= Average score which determine child's academic performance
X_1= Level of education of parents (father's level of education)
X_2= Income of parents (income of mother and father are combined).
X_3= Family size measured in terms of number of children of parents
X_4= Hours of work of children

3. RESULTS AND DISCUSSION

The findings of the study are presented thus: Table 1 indicates that the age of the respondents falls between 11 years and 15 years with the highest frequency of 14 years. Table 2 shows that 50 or 83.3% are male, while the remaining 10 respondents or 16.7% are female. There are more male than female in this study. Table 3 reveals that parents who attained secondary education are of higher percentage i.e. 38.3%, followed by parents with tertiary education, 23.3%, vocational education, 16.7%, primary education, 11.7%, technical education, 8.3, and no education, 1.7%, respectively. Table 4 shows the age at which children engage in child labour in the study. It can be observed that fairly large number of respondents started work at age ten (i.e. 66.7%). This is the age children start getting prepared for adult roles. Child labour before or after the age of 10 years is rather too early or too late as can be deduced from the study. Table 5 clearly reveals that 51.7% of the respondents work after school hours while 13.3% work during vacation. 35% of the respondents work both after school period and vacation. Those who work after school hours will have less time for their studies. Table 6 shows that 25 respondents or 41.7% perform domestic chores while 10 respondents or 16.7% work in family enterprises. Percentages of those who work for pay in a

household, work for pay outside the household, self-employed, apprentice (paid) and (unpaid) are small.

Table 1. Distribution of age of respondents

Age (yrs)	Frequency	percent	Cumulative
11	3	5.0	
12	11	18.3	5.0
13	15	25.0	23.3
14	18	30.0	48.3
15	13	21.7	78.3
Total	60	100.0	100.0

Source: Field survey 2004

Table 2. Distribution of parents' level of education

Level of education	Frequency	Percent	Cumulative
No education	1	1.7	
Primary	7	11.7	1.7
Secondary	23	38.3	13.3
Post-secondary	14	23.3	51.7
Vocational training	10	16.7	75.0
Technical	5	8.3	91.7
Total	60	100.0	100.0

Source: Field survey 2004

Table 3. Age at which respondents engaged in child labour

Age	Frequency	Percent	Cumulative
5	2	3.3	
6	1	1.7	6.3
7	2	3.3	9.4
8	5	8.3	15.6
9	7	11.7	31.3
10	30	66.7	53.1
11	1	1.7	90.6
12	1	1.7	93.8
13	1	1.7	96.9
Total	60	100	100

Source: Field survey 2004

Table 4. Distribution of sex of respondents

Sex	Frequency	Percent	Cumulative
Male	50	83.3	
Female	10	16.7	83.3
Total	60	100.0	100.0

Source: Field survey 2004

Table 5. Distribution of when the respondents work

Working period	Frequency	Percent
After school hour	31	51.7
During vacation	8	13.3

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Both	21	35.0
Total	60	100

Source: Field survey 2004

Table 6. Type of labour performed by respondents

Employment	Frequency	Per cent	Cumulative
Work for pay in a household	5	8.3	
Work for pay outside the household	2	3.3	9.1
Self-employment	10	16.6	12.7
Apprentice (paid)	3	5.0	21.8
Apprentice (unpaid)	2	3.3	27.3
Work in a family enterprise/farm	10	16.7	30.9
Domestic chores in household	25	41.7	49.1
others	3	5.0	94.5
Total	60	100.0	100

Source: Field survey 2004

Table 7 presents the regression model analysis result. The coefficient for level of education of parents (X1, -3.261) is statistically significant at 5% probability level showing that level of education of parents has significant negative relationship with hours of work. Thus, parents of high educational level have negative attitude towards child labour. This in turn promotes positive attitudes and ambition towards their children's scholarship which has significant contribution to the academic performance of the children while the parents of children who perform poorly have low educational attainment. The coefficient for parents income (X2, -5.025E-05) is statistically significant at 5% probability level showing that income of parents is important in explaining hours of work. The coefficient is negatively related to hours of work. Hence, the lower the income of parents, the more likely their children participate in child labour. High income enables parents to give their children adequate basic needs such as food, books, etc while children from low income parents are likely to show poorer performance because their basic needs are not likely to be met and they would involve in child labour which will reduce the time they have for studies resulting in poor academic performance. The coefficient for family size is (0.216) is statistically significant at 5% probability level indicating it can explain hours of work of children outside homes. The coefficient is positively related to hours of work. Thus, the bigger the family size, the longer the hours of work of children and the poorer the academic performance while the smaller the family size, the shorter the hours of work of children and the better the academic performance. The results, therefore, reject the hypotheses earlier proposed in the study. The hours of work, X_4 is also significant at 5% level of significance. The regression coefficient for hours of work shows that hours of work is an important factor in explaining changes in average score.

The coefficient of hours of work is negatively related to average score. Thus, students who work for lesser hours are more likely to have better average score (academic performance) than those who work for longer hours. Therefore, child labour as measured by hours of work has significant effect on the academic performance. The joint test of significance of the regression using F- test is statistically significant at 5%. This shows that the model is fit. The test of autocorrelation using the Durbin Watson test shows there is no autocorrelation problem. In conclusion, the longer the hours of work the lower the academic performance measured in terms of average score and the shorter the hours of work, the higher the academic performance.

Table 7. Regression result of model

Independent variable	Parameter	Standard error	t- values	Significant level	
Constant	15.760	6.029	2.164	0.013	R2=0.831
Level of education of parent (X1)	-3.261	1.472	2.216	0.025	R2= 0.801
Parents income(X2)	-5.025E-05	0.000	1.983	0.039	DW= 2.118
Family size (X3)	0.216	0.110	1.972	0.049	F= 13.245
					Sig=0.001
Hours of work (X4)	-0.483	0.216	-2.234	0.031	R2 =0.628

**(Significance level)= 5%
The regression equation: Y= 15.760 - 3.261X1 - 0.000502X2 + 0.216X3 - 0.483X4 + U
(6.029)** (1.472)** (0.000)** (0.110)** **0.216

4. CONCLUSION AND RECOMMENDA-TION

The study examined the determinants of child labour and school performance. This study has brought to the forefront the socio-economic implications of child labour as expressed among secondary school pupils in Ibadan. The conclusion drawn from the study is that poverty was the major factor responsible for secondary school children participation in child labour in the area. It was also discovered in this study that children participation in child labour was very high and have adverse effects on their educational and social development.

5. RECOMMENDATION

The following recommendations are made based on the findings of this study:

1. Income of parents should be increased through poverty reduction programs to improve the standard of living which will lead to reduction in child labour participation. Children should be encouraged to engage fully in schooling rather than engaging in economic activities that will reduce their human capital formation.
2. Government should make education accessible to all, with support system in form of scholarship etc. provided for children who are in specially difficult circumstance
3. Employment opportunities should be created for adults to generate income. This should also include a general macro-level policy to reduce poverty.
4. Family size should be regulated through child birth control to reduce the problem of child labour because the higher the family size, the higher the tendency for the children to work for more hours and the higher the dependency ratio.
5. Government should make and implement laws that will protect children from working until a particular age (e.g. 18 years) so that they can have emotional balance and full concentration on their studies.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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