HOW KNOWLEDGE AFFECTS USE: THE CASE OF USE OF CHILDREN IN FARM LABOUR BY RURAL HOUSEHOLDS IN OGUN STATE, NIGERIA

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ABSTRACT

Agricultural child labour is perceived to be a threat to agricultural and agribusiness development as well as household livelihoods. But it is not clear whether rural farm households are knowledgeable on child labour matters and its dangerous effects, or whether their knowledge influences child farm labour use. This study was conducted to find how knowledge of child labour influences rural households' use of child farm labour. The study was conducted among arable crop farming households in Ogun State, southwest Nigeria. Multistage sampling procedure was used in selecting 131 rural households. Results revealed child mean age of 11 years, with households averaging about 29 hours of child farm labour use in a week. About 52 per cent, 44.3 per cent and 3.8 per cent of households had low, average and high knowledge of child labour, respectively. Analysis of variance (ANOVA) showed that households with low knowledge had significantly the largest mean hours of child farm labour use and households with high knowledge had the least mean hours. Post hoc test showed that households with low knowledge used 5.4 hours more of child farm labour compared to those with average knowledge, and 10 hours more of child labour relative to households with high knowledge. The study concluded that creation of knowledge of child labour among rural households would be a profitable endeavour in the holistic approach towards ending child labour.

Keywords: Children, farm labour, knowledge, rural households, Nigeria

INTRODUCTION

Even though food security is achieved or agribusiness growth is successfully promoted, retaining the success is more challenging due to increasing scarcity of production resources such as labour as well as rising costs of production (Saharawat *et al*., 2010). In order to cope with the scarcity and/or high cost of labour, farm households adopt the use of child labour as it is a cheaper alternative. Apart from on-farm activities, children are also seen in off-farm retail trading and hawking of agricultural produce in order to support inadequate family income. This situation informs the reason millions of school-age children have dropped out of school in Nigeria and the figures on out-of-school children continues to rise (Global Initiative on Out-of-School Children 2012).

It is noteworthy that low or lack of education is a jutting socioeconomic variable combating agricultural and agribusiness innovations and development (Chen and Chivakul 2008; Rahji and Fakayode, 2009; Omonona *et al*., 2010;

Akinwale *et al*., 2016), and the rural, poor farmers who produce more than 85 per cent of domestically supplied and traded foods have remained the worse-off over several decades. The implication here is that, the use of children in the active agricultural labour force may entangle future generations with a more devastating low level of education; which will in turn dangerously impact on developmental efforts to repositioning Nigeria's agriculture to its major role in driving the economy. In this instance, the prospects of agriculture to resolving economic recession might be an incredible mirage, especially as child labour is identified as a source of productivity leakage (Adeoye *et al.*, 2017).

Child labour which generally refers to the use of children for economic activities – farm work within the context of this study – at the expense of schooling time, frustrates child's schooling and human capital formation, perpetuates intergenerational poverty, promotes adult unemployment and abundance of unskilled labour, endangers the health and safety of children - the society's future, and may even hinder modern technology adoption (Galli, 2001; Alimi and Masuku, 2010; ILO 2011; Bassey, *et al*., 2012). Thus, child farm labour threatens any meaningful agricultural development. Yet, there are limited child farm labour studies in Nigeria; where there are, the studies largely dwell on income poverty anocational infrastructure. However, there are limits to the number of hours of work that a child at a particular age should undertake, according to the ILO. Basu and Tzannatos (2003) and Ndjanyou and Djiénouassi (2010) reported these limits: the first category described as economically active, a child between 5 and 11 years of age who does one hour or more of work in a week; the second category refers to children between the ages of 12 and 14 years who do 14 hours or more of work per week; the third category refers to children between the ages of 15 and 17 years who do 42 hours or more of work.

It is rarely known whether rural farm households are informed on those classifications and other child labour-related matters, or whether their knowledge influences their use of children in the farm labour force. While knowledge is an enabling factor and may bridge significant gaps in the decision to participate in an event (Barnett, 1996; Joshi, *et al*., 2004; McGuigan *et al*., 2012; Kumari and Reddy, 2013), it effects among rural households on the use of child farm labour has remained a rare endeavour of empirical studies in Nigeria, and the current study attempts to fill this gap.

From the perspective of total abolishment, researchers (Knight, 1980; Basu and Van, 1998; Ray, 2000; Satz, 2003; Dessy and Pallege, 2005) have cautioned that attempts to out-rightly ban child labour without significantly improving household income may make poor households worse off or lead to the practice of child labour in the informal market in clandestine activities - which is usually in hazardous forms. Thus make banning of child labour counterproductive. However, development efforts to adjust household income to or above the subsistence threshold will take time to mature and make significant impacts. But the negative effect of child labour cannot be held constant for household welfare to adjust: bearing in mind that child labour is both a cause and consequence of poverty (Bass, 2004) and there could also be a weak evidence of income effect on child labour, given the

cultural dimensions (Adeoye *et al*., 2017). Hence, an awareness and understanding of the effects of child labour by rural households might provide a smooth transition from high incidence to minimal, and subsequently zero use of child farm labour.

The study therefore focused on understanding whether rural households' knowledge of child labour has any relationship with their use of child farm labour. The study specifically described the socioeconomic characteristics and hours of child farm labour use by rural households, assessed child labour knowledge among rural households (using household heads as representatives of the households) and investigated households knowledge effect on child farm labour use.

METHODOLOGY

Study Area

The study was conducted in Ogun State, southwest Nigeria. The state lies between latitude 3°30 N and 4°30 N and longitude 6°30 E and 7°30 E. Ogun State has a land area of 16,409 square kilometres, over 70 per cent of which is good for agriculture. Agriculture is the mainstay of the economy with majority of the farmers producing food crops while others are into tree crops, forestry and fisheries. The state is bound to the south by Lagos State. The northern borders are Oyo and Osun States. It is bound to the east by Ondo State and shares an international boundary with the Republic of Benin to the west.

Sampling Procedure

The population of interest was households with children between ages five (5) and seventeen (17) years in rural areas of Ogun State. A multistage sampling technique was adopted in the selection of the rural households from Ogun State Agricultural Development Programmes (OGADEP) zones. The first stage involved a random selection of two zones out of the four OGADEP zones. Second stage was a simple random selection of three Agricultural Blocks from each selected zone. The third stage involved simple random selection of two rural communities each from the (six) blocks. In the fourth stage, 10 to 12 rural households (from each of the selected 12 communities) were selected randomly.

Data and Analytical Procedure

Primary data were obtained from 131 rural households with the use of structured questionnaire between April and July, 2014. Data collected were on socioeconomic characteristics such as age, income, household size, educational level, and child farm labour use - the number of hours devoted to work by a child (5-17 years old) within the period she/he should be in school. Following Alimi and Masuku (2010), where a household had more than one child, the average age and average years of education of the children were used. Data on household heads knowledge on child labour was elicited using a set of 'knowledge test' statements.

Data elicited from the knowledge test on child labour was used to compute knowledge index. This involved a simple 2-step procedure. In the first step, knowledge test was read to household heads in order to reveal their knowledge of child labour. A value of 1 was assigned to each statement where respondent indicated knowledge of child labour and 0, otherwise. In the second stage, the score for individual heads of the households was summed up and related to

the total number of the knowledge test. The mean and standard deviation were used to group households into low, average and high knowledge levels, respectively. Household heads whose knowledge index was below the overall mean (knowledge) index were categorized as having low knowledge level. Those whose index was within the overall mean index and the positive standard deviation were categorized as having average knowledge and those above the overall mean index were categorized as having high knowledge level.

Measures of central tendency (mean) and dispersion (standard deviation and range) and simple percentages were used to describe the households' socioeconomic characteristics and examine their knowledge on child labour. Analysis of variance (ANOVA) and Post hoc test were used to assess the influence of households' knowledge of child labour on their use of children in the farm labour force.

RESULTS AND DISCUSSION

Household Socioeconomic Characteristics

Table 1 shows the distribution of socioeconomic characteristics and hours of child farm labour use by the households. The Table shows that the age of household heads ranged between 28 and 80 years. The mean age was about 48 years: suggesting that many of the heads of the households were within the productive age. The heads of the households were barely educated as an average person had about five years of education while some had no formal schooling experience. Many of the household heads indicated that they were themselves, products of child labour which explains their low level of education. The mean age of the children was 11 years. The dispersion from the mean age of the children suggests that they were on average, below 15 years old. With this finding, it might be expected that the intensity of child farm labour use would be minimal. However, households averaged about 29 hours of child farm labour use in a week, with the least users accounting for more than ten and half hours and the highest using 51 hours. The dominance of children below 15 years old explains the low years of formal education (4.28) observed among children in the distribution.

Table 1: Household socioeconomic characteristics and child farm labour use

Variable	Mean	Std. Dev.	Min	Max
Age of household head	47.95	11.19	28.00	80.00
Education of household head (years)	4.90	4.06	-	17.00
Age of child (years)	11.09	3.17	6.00	16.00
Household intensity of child labour use (hours/week)	28.82	10.55	10.45	51.00
Education of child (years)	4.28	3.12	-	12.00
Household size	7.19	2.60	2.00	19.00
Household income (naira/month)	35600	21550	4110	75000

Source: Computed from field survey, 2014

The size of the rural households was fairly large with an estimated mean of seven persons. The household size ranged between 2 and 19 persons. Average monthly income across the households was ₦35600 ± ₦21550. The income variable shows a large dispersion from the mean: as a household could earn as low as 4110 naira in a month while another earned as high as 75000 in the same period.

Knowledge on Child Labour among Rural Households

The distribution of responses to knowledge test in Table 2 reveals that about half (0.51) of the households were of the opinion that children should work in lieu of schooling to support the family. This confirms the general knowledge on child labour that households use children as economic goods to buffer inadequate income (Olawoye, 2001; Alimi and Masuku, 2010).

Only about one third (0.38) of the household heads knew that child labour is not limited to the use of children outside their household members. Clearly, majority of the household heads (83%) were uninformed of ILO's minimum entry age for a child into economic activity. Surprisingly, more than two-third (0.72) of the heads of the households did not know that lifting heavy loads is unfavourable to the child's growth whose bones may not be strong enough to carry heavy weights. On the contrary, household heads indicated that heavy weights make the child build-up muscular strength.

More than half (0.63) of the household heads knew that child labour is considered illegal by prevailing state regulations. This finding suggests that looking at child labour from the legal perspective alone and banning it may not likely yield desirable outcomes since the households used several hours of child labour despite the prevailing knowledge of its illegality. This finding lends credence to reported potential counterproductive effects of blanket banning of child labour (Basu and Van, 1998; Satz, 2003). The finding is important as the use of state/legal instruments had been a prominent approach of government to stop child labour. Spreading knowledge on child labour and its implications on the child, the sustainability of the households as well as the agricultural sector as a whole is perhaps a more important endeavour.

Less than half (0.44) and (0.45) of the household heads knew that long hours of work may impair the child's health and that some of the ill-health suffered by children may be due to exposure to agrochemicals which could linger into their adulthood. Barely one fifth (0.21) of the household heads knew that child labour could perpetuate poverty and only a quarter (0.25) knew that child labour could lead to adult unemployment.

Table 2: Household heads knowledge test

Knowledge test	Mean	Std. Dev.
A child should work during school hours to support the family	0.51	0.50
It is child labour when you engage your own children in economic work on family farm/enterprise	0.38	0.48
Children below age 14 should engage in economic activity	0.83	0.40
Lifting or carrying heavy loads on the farm builds up the child	0.72	0.45
Long hours of work is health-impairing child labour	0.44	0.50
Agrochemicals handling by children is hazardous	0.45	0.50
Child labour is illegal	0.63	0.48
Child labour affects child's cognitive development	0.24	0.43
Child labour can lead to adult unemployment	0.25	0.44
Child labour leads to poverty	0.21	0.41
Overall index of knowledge on child labour	0.47	0.46

Source: Computed from field survey, 2014

Knowledge Effect on Child Farm Labour Use

Test of homogeneity of variances carried out showed a non-significant (0.302) Levene statistic value of 1.209 with 2 and 128 degrees of freedom. The null hypothesis of no homogeneous variances was therefore rejected and subsequent analysis assumed homogeneity.

About 52 per cent of the respondents had low knowledge of child labour, 44.3 per cent had average knowledge level and only 3.8 per cent had high knowledge level (Table 3). The mean hours of farm work by the child was found to be negatively related to household's knowledge of child labour. Households with low knowledge levels recorded the highest mean hours (31.58) of child farm labour use with households with high knowledge levels having the least mean of 21.55 hours. Children work hours ranged between 10.45 and 51 hours with households with low knowledge levels having the widest range.

Analysis of variance (Table 4) indicated that the observed difference in means between the knowledge levels is significant at the 0.01 level based on the estimated F-statistic. The implication of this result is that households differed significantly in their use of child farm labour given knowledge levels. However, a Post hoc test was necessary to unpack the mean hours of child farm labour use differentials across the knowledge levels.

Table 3: Distribution of households knowledge levels and use of child farm labour (hours/week)

Knowledge Level	N (%)	Mean hours	Std. Deviation	Std. Error	Min hours	Max Hours
Low (< 0.47)	68 (51.90)	31.58	10.36	1.26	12.00	51.00
Average (0.47 – 0.93)	58 (44.30)	26.22	10.16	1.33	12.00	48.00
High (> 0.93)	5 (3.80)	21.55	7.19	3.22	10.45	30.00
Total	131(100.00)	28.82	10.55	0.92	10.45	51.00

Source: Computed from field survey, 2014

Table 4: ANOVA on household knowledge and child farm labour use

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1176.135	2	588.068	5.666	0.004
Within Groups	13285.730	128	103.795		
Total	14461.866	130			

Source: Computed from field survey, 2014

Estimates in Table 5 reveal a significant ($p < 0.01$) mean child farm labour hours difference between households with low knowledge level and average knowledge level and a significant ($p < 0.05$) mean child labour hours difference between low and high knowledge level households. No significant difference in labour hours is however observed between households with average knowledge level and those with high knowledge level.

Households with low knowledge level used more than five hours (5.4 hours) more of child labour relative to those with average knowledge level, and those with average knowledge level used more than five hours less of child farm labour. Households with low knowledge level used 10 hours more of child farm labour compared to households with high knowledge level, and vice versa. These findings suggest that the more knowledgeable the rural households were about child labour, the lesser was their use of children in the farm labour force. Hence, child labour knowledge drove down the intensity of use of child farm labour in the rural areas. This will likely create more time for schooling, since work and schooling, according to Baland and Robinson (2000), are the competing claims on the child's time.

Table 5: Post hoc test using LSD

(I) Knowledge Level	(J) Knowledge Level	Mean Difference (I-J)	Std. Error	Sig.
Low knowledge	Average knowledge	5.366*	1.821	0.004
	High knowledge	10.031*	4.721	0.036
Average knowledge	Low knowledge	-5.366*	1.821	0.004
	High knowledge	4.666	4.749	0.328
High knowledge	Low knowledge	-10.031*	4.721	0.036
	Average knowledge	-4.666	4.749	0.328

Source: Computed from field survey, 2014

*. The mean difference is significant at the 0.05 level

CONCLUSION

Low level of education is a significant factor slowing down the pace of developmental efforts in Nigeria's agricultural and agribusiness innovations and growth, and child labour not only contributes to low education but also to its intergenerational transfer, thus creating a poorly educated future generation and a correspondingly retarded agribusiness growth. Findings from the study revealed that household heads generally did not have adequate knowledge of child labour or know that the practice of child labour causes certain situations that they might otherwise want to avoid. Fifty two per cent (52%) of the household heads had low knowledge of child labour, 44.3 per cent had average knowledge and 3.8 per cent had high knowledge levels. Analysis of variance and Post hoc test showed significant differences in mean hours of child farm labour use among households with low and average knowledge levels, and among households with low and high knowledge levels. This study therefore revealed evidence of knowledge effect on the use of child farm labour. The study concludes that reorientation and creation of knowledge of child labour among rural households would be a profitable endeavour in the holistic approach towards ending child labour in agriculture and fostering a better agribusiness development.

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