Journal of Business and Management Sciences, 2022, Vol. 10, No. 3, 124-130
Available online at http://pubs.sciepub.com/jbms/10/3/3
Published by Science and Education Publishing
DOI:10.12691/jbms-10-3-3

Effects of Child Labor on Academic Outcomes: A Case Study of Child Labor among Junior High School Students in the Fishing Community of Elmina in the Central Region of Ghana

Moses Kwadzo*, James Kofi Annan

Department of Agricultural Economics and Extension, University of Cape Coast, Ghana
*Corresponding author: moses.kwadzo@ucc.edu.gh

Received June 02, 2022; Revised July 10, 2022; Accepted July 17, 2022

Abstract Several concerns have been raised about child labor use in the fishery sector of Ghana. While some have argued that child labor should be abolished because it endangers the lives of children, others maintain that the use of children in agricultural work promotes their socioeconomic development. This study sought to assess the nature of child labor in Ghana and examine its effects on the academic outcomes of students in junior high schools in the Elmina community in the Central Region in Ghana. A total of 242 students from two junior high schools in the Elmina fishing community completed questionnaires for the study. The questionnaire results were analyzed using descriptive statistics and independent-sample *t*-tests. The findings revealed that 104 of the 242 students were involved in various fishery activities, including sorting, selling, dressing, and smoking of fish. The students were found to be working 12.3 hours per week and 3.3 days per week on average. Contrary to expectations, the independent-sample *t*-tests showed no statistically significant difference in aggregate examination mean scores for students involved in and students not involved in fishery activities. This observation could be attributed to the fact that the majority of the students involved in fishery activities engaged mainly in fishery activities that can be described as child work rather than child labor. This study recommends that households engaged in fishing consider limiting their children to light and regular fishing activities if the need arises to engage them, to avoid distraction from their education.

Keywords: *child labor, child work, fishery activities, academic outcome*

Cite This Article: Moses Kwadzo, and James Kofi Annan, "Effects of Child Labor on Academic Outcomes: A Case Study of Child Labor among Junior High School Students in the Fishing Community of Elmina in the Central Region of Ghana." *Journal of Business and Management Sciences*, vol. 10, no. 3 (2022): 124-130. doi: 10.12691/jbms-10-3-3.

1. Introduction

Child labor is a complex phenomenon in developing countries. While some have argued that the use of children in agricultural work is part of their socioeconomic development, others are of the view that child labor cannot be a substitute for child work [1,2]. The UNICEF [3] convention tolerates child work but it does not promote child labor of all forms. The kind of child labor children engage in differs depending on the culture of a country or community and the socioeconomic conditions [4]. According to the International Labor Organization (ILO), child labor is work that deprives children of their childhood potential and dignity and that is harmful to their physical and mental development [5]**.** The ILO [6] reported that in 2016, ten percent of children (152 million) aged 5 to 17 around the world were involved in some form of labor and that 73 million were engaged in hazardous child labor. Approximately 70.9% worked in agriculture, 17.2% worked in services, and 11.9% worked in industry. For children aged 5-14 years involved in some form of labor, 32.0% did not attend school, and the other 68% divided their time between working and studying. Buonomo [7] and the ILO [5] observed that the agriculture, fishing, and artisanal mining sectors are the largest employers of child labor. Adeborna and Johnson [8] observed that child labor is most prevalent in the informal small- and medium-scale operations of capture fisheries, aquaculture and post-harvest fish activities. Small-scale fisheries provide over 90 percent of the 120 million livelihoods derived from fisheries and support more than 500 million people. In the fishery sector, children are engaged in activities such as harvesting and farming of fish in capture fishing and aquaculture [8].

Ghana is one of the countries with the world's largest proportions of working children. In Ghana, 21.8% of children 5-17 years old are engaged in child labor, and more than 14.2% are involved in hazardous forms of child

labor [9]. Child labor in Ghana is deep-rooted in the fishing industry, with the majority of child labor carried out in family enterprises and mostly within the family home, in the form of housework or as non-remunerated work [8]. Child labor has been found to compromise the health and personal development of children. Several studies have showed that children who engage in child labor do not perform well in school. Le and Homel [10] noted that children who engage in child labor do not perform well in school because it affects their concentration in class. It also leaves them with less time for schooling and for engaging in leisure activities [11].

In contrast, Afenyadu [4] and Heady [12] contended that not all child work is dangerous to children's mental well-being. Many families within the coastal fishing communities along the coast of Ghana encourage their children's involvement in their family fishery businesses as a sociocultural practice to preserve family business for the future and to ensure the survival of family members. Elmina is a major coastal fishing community in the Central Region of Ghana. The Elmina fishing harbor is the third largest fish landing site in Ghana and contributes approximately 15% of the country's total fish output [13]. Approximately 75% of the population of Elmina, including children, is involved in fishing and related fishing activities, such as processing and trading of fish, for their livelihood [13]. Although UNICEF's convention allows the use of child work, it discourages the use of child labor of all forms. While children within the Elmina fishing community engage in fishery activities, this kind of child labor can adversely affect the educational development of the children in Elmina. The authors raise the question: what is the nature of the fishery activities in which these children are engaged? This study sought to identity the nature of the child labor in Elmina and examine its effects on the academic outcomes for children in the junior high schools in the Elmina community in the Central Region of Ghana. It was hypothesized that there was no significant difference in academic outcomes between students who were involved and those who were not involved in fishery activities.

2. Literature Review

Child labor is a complex phenomenon that requires examination from social, economic, and cultural perspectives. The current study considered the theoretical orientation of child labor from an ecological systems perspective, which views the environment as being made of systems or factors (economic, social, and culture) that are interactive and interwoven in nature [14,15]. Economic factors are related to resources such as family income and the jobs and education of parents. Social factors are related to structural characteristics such family size and the availability of educational resources. Cultural factors are related to social values and norms regarding child labor.

2.1. Causes of Child Labor

From an economic perspective, variables that relate to child labor supply are household poverty status, family low income, parental unemployment, and other family economic shocks. According to Basu and Van [16], family poverty may be the primary reason for why children engage in labor. While there are laws prohibiting child labor, many children are compelled to work to help their families survive. Parental stress and a lack of parental social support may force children to work to support households in the absence of social assistance schemes [17]. A child's labor contribution could be used as an asset for smooth consumption for the family. Child labor serves as a shock absorber to ease the impact of possible parental job loss, failed harvests, and other shocks to the family's income stream.

Social factors that may provoke child participation in the labor market include illiteracy and ignorance of poor parents, household size, family type, and culture norms that emphasize the tradition of making children learn the family's entrepreneurial skills [18,19]. The educational status of the parents is an important social factor related to child labor. The more education parents (particularly the household's head) have, the less likely they are to let their children work. In general, single-parent families seems to be closely linked with a high prevalence of child labor. Some studies have also demonstrated a relationship between household size and the prevalence of child labor among poor families in developing countries. A culture of any society is shared and preserved from one generation to the next through a process of teaching and learning the various elements of the culture [18,19]. To preserve their culture and endeavor to overcome endemic poverty, fishing entrepreneurs often insist that at least one of their children familiarize themselves with the practice and management of their fishing business to be able to inherit their parents' assets and thereby take over and sustain the family business in future [8]. In doing so, child labor in fishing and fish processing become the sociocultural machinery by which the fishing culture is transferred from one generation to the next. In the Central Region of Ghana, many families within the coastal fishing communities of Gomoa-Fetteh, Nyanyano, Moree, Elmina, Apam, Winneba and Senya-Beraku are noted to encourage their children's involvement in their family business [8].

2.2. Impact of Child Labor

The ILO [5] (2014) reported that child labor is unfavorable and unsafe to children's health and denies them of a proper education. Studies show that children who do not work cope better in school than children who do. Children who combine work and school can experience negative psychosocial effects on their educational progress and performance [20,21,22]. Abdalla et al. [20] affirmed in various studies that child labor adversely affects the health of children, leading to severe health complications that adversely affect their education. A study conducted by Anumaka [23] involving 2,307 pupils who sat for the primary leaving examination in the Nebbi District of North-East Uganda found that many of the children who did not perform well were those who had engaged in labor activities. Rahman and Khanam [24] found that child work had a negative effect on learning attainment in the areas of arithmetic and reading in Ghana. In a study conducted by Al-Gamal et al. [25] in Jordan, children who were not engaged in any form of work were found to perform better in school than those who are engaged in work. Afenyadu [4] contended that not all

work is dangerous to children's mental development and that work improves their basic knowledge and skills. He noted that the damage that child labor may do depends on the intensity and nature of the work. Holgado et al. [26] argued that there is no simple linear association between child labor and academic performance and that multiple factors, including labor conditions, morning work schedules, and the number of hours worked per week, can negatively affect the academic performance of child laborers. Nevertheless, a study by Heady [12] on the effect of child labor on learning outcomes showed that in Ghana, child work, especially that carried out in the home, had a fairly small effect on children's school performance.

3. Methodology

3.1. Research Design and Study Area

This study employed a cross-sectional survey design and was conducted in Elmina (5°5'0"N 1°21'0"W), a major coastal fishing community in the Komenda–Edina–Eguafo–Abrem (KEEA) district in the Central Region of Ghana. Elmina, with a population of 32,819, serves as a center for several fishing-related and commercial activities. The Elmina fishing harbor is the third largest fish landing site in Ghana and contributes approximately 15% of the country's total fish output [13,27]. The harbor provides a landing site for all types of canoes and small semi-industrial boats that engage in traditional fisheries. A study by Amador et al. [28] indicated that there were 2,632 fishermen, 231 canoes, and some semi-industrial vessels involved in fishing operations in Elmina. Another study by KEEA [13,27] reported that approximately 75% of the population of Elmina is involved in fishing and fishing-related activities, such as processing and trading of fish. The landing harbor is reported to be always full of large crowds, including fishing crews, workers, and child laborers [13,27].

3.2. Population and Study Sample

Elmina was chosen for the study because of its economic importance in the fishery sector of the Central Region of Ghana, as well as the involvement of children in Elmina in fishery activities. The population of this study included all junior high school students in Elmina. Multi-stage sampling was used to select the sample for the study. First, simple random sampling was used to select two junior high schools out of six in the Elmina community. In the second stage, all students of the two schools were included in the study, based on the school's enrollment registers.

3.3. Instrument and Data Collection

The study questionnaire covered information on household demographics (the household head's education, employment/economic status, marital status, household size) and personal data of the students (age, sex, class, nature of child labor involvement, health conditions, and academic performance). The questionnaire was administered to students in the two junior high schools selected for the study, with the help of the teachers there. Data were collected from 242 students between July and August 2021. Data on the students' last term examination results were also extracted from the school's records. The data were analyzed using descriptive statistics and independent-sample *t*-tests.

4. Results

4.1. Demographic Characteristics of Respondents

Table 1 shows the descriptive statistics for students involved in and not involved in fishing activities and for the total of 242 students who participated in the study, 104 (43.0%) of whom were involved in fishery activities and 138 (57.0%) of whom were not. The mean ages of the working and non-working students were 7.79 and 6.64 years, respectively. Of the 242 students, 130 (53.70%) were males and 112 (46.30%) were females. With regard to statistics on the heads of the family, 59 (0.57%) of the 104 of the family heads of the students involved in fishery activities and 71 (0.51%) of the family heads of students not involved in fishery activities were found to be married. Approximately 57% of the family heads of the students involved in fishery activities and 62% of the family heads of students not involved in fishery activities were found to have a basic education (junior and senior high school). The majority (61%) of the families of the students involved in fishery worked within the traditional fishery sector and 34% did not. The household sizes of the students involved in and not involved in fishery activities are 7.79 and 6.54 members, respectively.

Table 1. Profile of Surveyed Students

Variables	Results for working students	Results for non working students	Total
Child labor force participation			
Working in fishery	-	-	104 (43.00)
Not working in fishery	-	-	138 (57.00)
Gender			
Male	59 (0.57)	71 (0.51)	130 (53.70)
Female	45 (0.43)	67 (0.49)	112 (46.30)
Age			
Mean (years)	16.076	15.86	
Household size			
Mean	7.79	6.64	
Marital status of head of family			
Married	54 (0.52)	71 (0.51)	125 (51.70)
Single	13 (0.13)	18 (0.13)	31 (12.80)
Divorced	20 (0.19)	23 (0.17)	43 (17.80)
Separated	17 (0.16)	26 (0.19)	43 (17.80)
Education level of head of family			
No formal education	29 (0.28)	27 (0.20)	56 (23.10)
Middle/junior high school	52 (0.50)	61 (0.44)	113 (46.70)
Senior high/vocational school	7 (0.07)	25 (0.18)	32 (13.20)
Tertiary	16 (0.15)	25 (0.18)	
Main occupational sector of head of family			
Formal sector	12 (0.12)	35 (0.25)	47 (19.40)
Fishery sector (local)	63 (0.61)	47 (0.34)	110(45.50)
Other job	26 (0.25)	49 (0.36)	75 (31.00)
No job	3 (0.03)	7 (0.05)	10 (04.10)

4.2. Fishery Activities Undertaken by Students

We examined the nature and types of the students' fishery activities. Table 2 shows the characteristics of fishery activities undertaken by children in the Elmina fishery community. Sixty-one (59.2%) of the students undertake fishery activities in family owned-enterprises, while the rest of the students work outside the family enterprise. Seventy (68%) of these students receive wages or token remuneration from their fishery work, and the rest, 33 (32%), receive no form of remuneration. On average, a working student was paid GHS 97 (19.4 US dollars) per month. Most of the students worked two day per week and four hours per week. However, the students' average working hours and days per week were 12.3 hours and 3.3 days, respectively.

Table 2. Nature of Students' Fishery Activities

	Frequency	Percentage
Location of work engagement		
Home/family work	61.00	59.2
Outside home	42.00	40.8
Remuneration		
Paid wage/token	70.00	68.00
No wage/token	33.00	32.00
Money received per month for working		
Mean (Ghana cedis)	97.5	
Work intensity (no. of days work per week)		
Mean	3.3	
Mode	2.0	
Work intensity (no. of hours work per week)		
Mean	12.3	
Mode	4.0	

4.3. Types of Fishery Activities Undertaken by Students during Child Labor

Table 3 shows the different types of fishery activities undertaken by children in the Elmina fishery community. We categorized the students' fishery activities as light, regular, or harmful work. Light and regular work are by their very nature safer and less stressful**.** Harmful work is work that by its nature or circumstances is likely to harm children's health or safety. As shown in Table 3, light work dominated the fishery activities in which children were engaged. Fifty percent of the working students were found to be engaged in light work, followed by 40.4% engaged in regular work. Only 9.6% of the students were engaged in harmful work.

Table 3. Cross Tabulation of Types of Fishery Activities Engaged in by Children in Elmina

Fishery Activity	Type of Work	Frequency	Percentage
Selling fish	Light work	19	18.3
Sorting fish	Light work	33	31.7
Mending nets	Regular work	7	6.7
Dressing fish	Regular work	8	7.7
Dressing and smoking fish	Regular work	27	26,0
Fishing (in lagoon or on sea)	Harmful work	10	9.6
Total		104	100.0

4.4. Students' Age and Type of Fishery Activities

Age plays important role in determining the nature of the work in which children should be engaged. Under the ILO's conventions on child labor, light work is work that should be carried out by children between the ages of 13 and 14, regular work is work that should be carried out by children between the ages of 15 and 17, and harmful work is work that should be carried out by children aged 18 years or more. As shown in Table 4, 10 students that were involved in fishing in the lagoon or on the sea did not meet the age requirement, being less than 18 years old. In addition, one of those involved in the mending of nets was 12 years rather than the minimum of 13 years old as required for this type of regular work for children.

Table 4. Cross Tabulation of Types of Fishery Activities by Age

Fishery activity	Age Group (years)			
	12	13-14	15-17	18 & above
Selling fish		3	15	1
Sorting fish		9	22	1
Mending nets	**1**	2	2	1
Dressing fish		4	3	
Dressing & smoking fish		5	22	2
Fishing (lagoon or sea)	**1**	**2**	**7**	
Total	2	25	71	5

Age limits: Light work: 13–14; Regular work: 15–17; Hazardous: 18 years and above.

4.5. Effects of Working on Students' Health and Welfare

The respondents were also asked to indicate their perceptions regarding specific effects of child labor on their health and welfare, with response options ranging from strongly disagree (1) to strongly agree (5). As seen in Table 4, the mean score for work relating to students' tiredness was 2.78, implying that students were not sure if their engagement in fishing work makes them tired. The mean scores for having access to money for school and always having access to food were 3.67 and 3.28, respectively. These scores indicate that the working students agree that their fishery work helps to provide them with money and food.

4.6. Effects of Working on Students' Academic Outcomes

It is hypothesized that there was no significant difference in academic outcomes between students involved in and those not involved in fishery activities. The aggregate mean examination scores for the students involved in and students not involved in fishery activities were 54.71 and 50.90 respectively. The results actually show a slightly higher aggregate mean examination score for the students involved in the fishery business. An independent-sample *t*-test was conducted to compare the aggregate examination mean examinations scores for students involved in and not involved in the fishery activities in the Elmina community. The results revealed no statistically significant difference in aggregate mean

examination scores for students involved in fishery activities (M = 54.71, SD = 15.73) and students not involved in fishery activities (M = 50.90, SD = 15.07; *t* (240) = 1.915, p = 0.06, two-tailed). The magnitude of the differences in the means (mean difference = 3.82, 95% CI: -0.1104 to 7.75) was very small (eta squared = 0.007).

Table 5. Students' Perceptions of Effects of Working on Their Health and Welfare

Statement of work effects	Strongly disagree	Disagree	Not Sure	Agree	Strongly agree	Total	Mean score
Working makes me tired in school	33 (33)	19 (38)	9 (27)	24 (96)	19 (95)	289	2.78
I have access to money for school	21(21)	10 (20)	3 (9)	18 (72)	52 (260)	382	3.67
I always have access to food	28 (28)	10 (20)	3 (3)	25 (100)	38 (190)	341	3.28

Table 6. Statistical Test Results for Mean Examination Scores of Students Involved and Not Involved in Fishery Activities

Indicator variable	Levene's test for equality of variances		Two-tailed *t*-test for equality of means				
	F	Sig.	*t*	Sig	MD	95% Lower	C.I. Upper
Overall mean examination score	0.008	0.929	1.915	0.06	3.82	-0.1104	7.75

Note: P value = 0.00 (Sig. at 0.05 alpha level); MD = mean difference.

Table 7. Statistical Test Results for Mean Examination Scores for Girls and Boys Involved in Fishery Activities

Indicator variable	Levene's test for equality of variances		Student's two-tailed *t*-test for equality of means				
	F	Sig.	t	Sig.	MD	95% Lower	C.I. Upper
Overall mean examination score	0.373	0.542	0.924	0.358	2.87	-3.30	9.05

The second null hypothesis was that there was no significant difference in academic outcomes between boys and girls involved in fishery activities. An independent sample *t*-test was conducted to compare the aggregate examination mean scores for boys and girls involved in the fishery activities in the Elmina community (Table 7). The result show no statistically significant difference in scores for boys who were involved in fishery activities (M = 55.96, SD = 15.90) and girls involved in fishery activities (M = 53.08, SD = 15.53; *t* (102) = 0.877, p = 0.38, two-tailed). The magnitude of the differences in the means (mean difference = 2.75, 95% CI: -3.48 to 8.98) was very small (eta squared = 0.008).

5. Discussion

The problem of child labor in the agricultural sector in developing countries has received considerable attention in the economics literature. A particular concern is Ghana, which is one of the countries with the world's largest proportion of working children. Child labor in Ghana is common in the fishing industry, with the majority of children engaged in fishery activities being involved in family businesses. While researchers maintain that child labor should be abolished because it endangers children's lives and deprives them of their rights, others hold the view that child labor should be deliberated within the context in which it occurs, because some child work enables children to acquires basic resources, knowledge, and skills that can prove beneficial in later life [1,4]. The United Nations Children and Education Fund (UNICEF)'s conventions propose that child work and not child labor be used in agricultural work, as it assists in the social development of children [3]. These diverging views can pose a problem for policy enforcement with respect to child labor, and it is therefore necessary to reexamine children's work engagement and its effects on children. Many families in the coastal fishing communities in Ghana promote their children's participation in their family's fishery enterprises to preserve their business culture and the survival of family members. Although less attention is sometimes paid to this type of child labor, it can adversely affect the social and educational development of the child [1,4].

This study was conducted to examine the nature of child labor and its effects on children's academic outcomes in junior high schools in the Elmina community of the Central Region of Ghana. It was hypothesized that there was no significant difference in academic outcomes between students involved in and those not involved in fishery activities. A cross-sectional survey design was conducted, and a total of 242 students completed questionnaires containing information about their demographic characteristics, education, child labor activities, and their effects. The result of the study revealed that 104 of the 242 students were involved in various fishery. These students engaged in fishery activities for many reasons. The majority, 104 (43%), of the surveyed students were found to be involved in fishery work within the traditional fishery sector, with 61(59.2%) engaged in family business. The household sizes of the families of students involved in and students not involved in fishery activities were 7.79 and 6.54 members, respectively. As noted by Adeborna and Johnson [8], people living along the coast regard fishing as an integral aspect of their cultural identity and therefore ensure that their children learn fishing and fish processing. Children work to ensure the survival of their families and themselves. In addition, children in large families with low income are forced to engaged in work to help support their families.

It was hypothesized that there was no significant difference in academic outcome between students involved in and those not involved in fishery activities. The results of an independent-sample *t*-test showed no statistically significant difference in aggregate examination scores for students involved in fishery

activities (M = 54.71, SD = 15.73) and students not involved in fishery activities (M = 50.90, SD = 15.07; t (240) = 1.915, p = 0.06, two-tailed). The magnitude of the effect of differences in the means (mean difference = 3.82, 95% CI: -0.1104 to 7.75) was very small (eta squared = 0.007) (Table 5). This observation could be attributed to a number of factors, including the type and nature of their fishery work and its effects on their health and welfare. The analysis revealed that 104 of the 242 students were involved in various fishery activities, including sorting, selling, dressing, and smoking fish. On average, students were engaged in these activities 12.3 hours and 3.3 days per week. However, the majority of them worked 4 hours and 2 days per week. This confirms findings by Holgado et al. [26] that children working 1 or 2 hours per day may not interfere with schooling, may not make the child too tired to perform, and may even generate sufficient resources to enable the household to afford to send the child to school. According to ILO, "child labor" does not include all economic activity undertaken by children [3]. In the legal framework for child labor in the Children's Act (Act. 560, 1998) of Ghana, the minimum age for engaging a child in "light work" is 13 years, and that for regular work is 15 years. The minimum age for children engaged in harmful work is 18 years. Light work is work that is not likely to be harmful to children's health, development, and/or educational activities, while harmful work is work that poses a danger to the health and safety of children [8]. The respondents were also asked to indicate their perceptions regarding specific effects of child labor on their health and welfare. Generally, the students' perceptions regarding the effects of child labor on their health indicate that students were not sure (2.78 on a five-point Likert scale) whether their engagement in fishing work made them tired. With regard to their welfare, working students reportedly agreed (3.67 and 3.28 on five-point Likert scales) that their fishery work helped to provide them with money for school and food, respectively. These reflections could be attributed to half of the working students engaging in light fishing activities, such as sorting and selling of fish. Forty percent of the working students were involved in regular fishing activities, including mending nets and dressing and smoking of fish, which are light and regular fishing activities and therefore can be described as child work rather that child labor.

6. Conclusion

While several studies have shown that children who engage in work face challenges with respect to their academic performance, our study found no statistically significant difference in aggregate examination scores for students involved in and those not involved in fishery activities. Multiple factors, such as students' engagement in light work and working just a few hours and days per week, did not negatively affect their academic performance. Given that the students involvement in fishery activities in the Elmina community does not have any major negative impact on their academic performance, the authors recommend that fishing extension officers educate households in the fishing community to consider engaging their children in light and regular fishing activities if the need arises, to avoid disrupting their educational endeavors. Although this study provides a great insight into the effects of child labor on students' academic performance in a fishing community, it has a limitation that should be addressed in future research. The findings and conclusion of this study was based on data gathered on individual students' academic performance. Data on schools' performance were not collected and compared. Future studies should include comparison of schools' performance to gain a greater understanding of the effects of child labor on academic outcomes.

Acknowledgements

No grants were received to support this research and publication.

References

[1] Sackey, E.T. (2013), "Children Balancing Work with School: A Sociocultural Conception of Child Work and Schooling in Cape Coast Metropolitan Area, Ghana. (Master Thesis in Psychology) Norwegian University of Science and Technology, Trondheim.

[2] Karikari, I. (2016). Child labor: A critical discourse analysis (doctoral dissertation). Indiana University Purdue University Indianapolis. Https:/scholarwor ks.iupu i.e du/handle/1805/10482.

[3] UNICEF (2002). The state of the world's children 2003. United Nations Children's Fund. New York, USA.

[4] Afenyadu, D. (2010). Child labour in fisheries and aquaculture, a Ghanian perspective, *the FAO Workshop On Child Labour in Fisheries and Aquaculture*, Italy, Rome.

[5] ILO (2014). Global estimates of child labour: Results and trends, 2012-2016 International Labour Office (ILO), Geneva, ILO). Geneva, Switzerland: ILO.

[6] ILO (2017). Global estimates of child labour: Results and trends, 2012-2016. Geneva, Switzerland: ILO.

[7] Buonomo (2011). The impact of child labor on scho Oling outcomes in Nicaragua, *Economics of Education Review, 30* (6):1527-1539.

[8] Adeborna, D. & Johnson, K. (2015). *Child labor literature review and scoping study report. the usaid/ Ghana sustainable fisheries management project.* Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island, Netherlands Development Organization and Friends of the Nation

[9] Ghana Statistical Service (2014). *Ghana living standards survey round 6*. Accra, Ghana: Ghana Statistical Service.

[10] Le, H., & Homel, R. (2015). The impact of child labor on children's educational performance: Evidence from rural Vietnam, *Journal of Asian Economics*, *36*, 1-13.

[11] Hughes K, Bellis M., Hardcastle KA et al. (2017). The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis, *Lancet Public Health, 2*(8), 356-366.

[12] Heady, C. (2003). The effects of child labour on learning outcome, *World Development*, *31*, 385-398.

[13] KEEA (2015). *The Elmina 2015 Strategy: Building on the Past to Create a Better Future; A document prepared by the Komenda-Edina-Eguafo-Abrem (KEEA) District Assembly for the Elmina cultural heritage and management Program. Elmina*. Ghana: KEEA District Assembly.

[14] Bronfenbrenner, U. (1977). Toward an experimental ecology of human development, American *Psycholo gist, 32* (7), 513-531.

[15] Pittenger, S. L., Huit, T. Z., & Hansen, D. J. (2016). Applying ecological systems theory to sexual re-victimization of youth: A review with implications for research and practice, *Aggression and Violent Behavior*, *26*, 35-45.

[16] Basu, K., & Van, P. H. (1998). The Economics of Child Labor, *American Economic Review, 88*, 412-427.

[17] Kumado, Kofi. & Gockel, Augustine (2003). A study on social security in Ghana. Accra, Ghana: Friedrich Ebert Foundation.

[18] Chittambar, J. B. (1993). *Introductory rural sociology: a synopsis of concepts and principles.* New York: Wiley Eastern Limited.

[19] Hillyard, Sam (2007). The sociology of rural life. Berg' New York.

[20] Abdalla I., Salma M., Mohammed, 1, Jihad, A., & Nanne, V. (2021). Child labor and health: a systematic literature review of the impacts of child labor on child's health in low-and middle-income countries, *Journal of Public Health, 41*, (1), 18-26.

[21] Hamenoo, E., Dwomoh, E. & Dako-Gyeke, M. (2018). Child labour in Ghana: Implications for children's education and health, *Children and Youth Services Review 93*, 248-254.

[22] Porter, G., Blaufuss, K., & Acheampong, F. (2011). Filling the family transport gap in sub–Saharan Africa: Young people and load carrying in Ghana. *In L. Holt (Ed.). Geographies of children, youth and families. An international perspective*. London: Routledge.

[23] Anumaka, I. B. (2012). Child labour: Impact on academic performance and social implication: A Case of Northeast Uganda, *Journal of Educational Science and Research, 2(*2), 12-18.

[24] Rahman, M. & Khanam, R. (2012). Child labour: the effects of globalisation. Journal of Applied Business and Economics, 13 (4), 59-71.

[25] Al-Gamal, E., Hamdan-Mansour A.M., and Matrouk, R. et al. (2013). The Psychosocial impact of Child labour in Jordan: A National Study, International *Journal Psychology, 48* (6), 1156-1164.

[26] Holgado, D., Jariego, I. M., Ramos, I., Trespalacios, O. O., Mendoza, V. R., & Aimar, J. (2014). Impact of child labour on academic performance: Evidence from the program Educame Primero Colombia. International Journal of Educational Development, 34, 58-66.

[27] Odotei, I. (2002). The Artisanal Marine Fishing In-dustry in Ghana: A Historical Overview. Accra, Ghana: Institute of African Studies, University of Ghana.

[28] Amador, K., Bannerman, P., Quartey, R. & Ashong, R. (2006). Ghana Canoe Frame Report No. 34. Accra, Ghana: Marine Fisheries Research Division, Ministry of Fisheries.