FISHING ACTIVITIES AND ACADEMIC PERFORMANCE OF SECONDARY SCHOOL STUDENTS IN RACHUONYO NORTH SUB-COUNTY, KENYA

Grace Auma Ojijo[1] and Lucy Wairimu Kibera[2]

ABSTRACT

This study investigated the influence of fishing related activities on the academic performance of secondary school students in Rachuonyo North Sub-County. The specific objectives were to examine the activities associated with fishing and determine how they influenced academic performance of secondary students in the Sub-County. The study targeted students and principals of the 49 secondary schools in Rachuonyo North Sub-county. The research used simple random sampling to select 14 public secondary schools and 20 Form Three students from each of the sampled schools. The total sample size was 292 respondents. Primary data was collected and analyzed using quantitative and qualitative methods and then presented in tables in percentages. Data analysis was done using SPSS and the Microsoft Excel software. The study established that students participated in fishing activities while attending school. Major fishing activities that students engaged in included: actual fishing an agreement index of 82.9% of students; repairing of fishing nets which was supported by 74.2% of students; setting of nets in the lake which was supported by 84.4% of students; and removal of fish from the nets which was agreed to by 83.9% of students. Some (91.7%) of the students believed that their counterparts who engaged in fishing activities tended to perform poorly in their classwork. The study has recommended that parents, School Boards of Management and the communities along the beaches collaborate with each other in order to keep students from engaging in fishing activities for this likely to improve school attendance and academic performance of students. The Government should enforce compulsory basic education as well as provide it free to all children at this level of education.

Key Words: Fishing Activities, Secondary School Students, Academic Performance.

INTRODUCTION

According to Education for All (EFA) Global Monitoring Report (2015) analysis of survey data showed that many countries exhibited persisting rates of part time work by students. This is despite the increased school coverage seen in many countries. The report pointed out that substantial proportion of adolescents continued working alongside their normal schooling activities. For example, in Cameroon, about 70 per cent of students aged 12 to 14 worked in 2001 with little change observed by 2011.

[1] Grace Auma Ojijo, M.Ed., *Teacher in Rachuonyo North Sub County, Kenya*
[2] Lucy Wairimu Kibera PhD, *Professor of Education, Department of Educational Foundations University of Nairobi*

In a study carried out in Thailand by the International Labour Organization (ILO) in 2013, half of those engaged in fishing ranged between the age of 18-28 years old and of a particular note of the sample population was the presence of seven fishers that were below age of 15 and 26 fishers that were between 15 to 17 years of age. The report established that majority of the fishers studied, had little in the way of education with 58 percent interviewed having utmost five years of formal schooling, and only a small proportion had completed secondary school education.

Generally, communities around Lake Victoria in East Africa derive their livelihood mainly from the lake since most of them have no alternative occupation apart from fishing (Omwega, 2000). This is due to the extreme climate events such as flood and droughts which impact on the livelihood activities of communities around it (The United Nations Educational, Scientific and Cultural Organization, 2008 (UNESCO). The fishing industry hires many unskilled workers who reside in landing sites, temporary fishing camps and more permanent fishing villages on the lake shores. These sites are dynamic centers of activity attracting different types of people namely: full-time fishermen, fish traders, and processors, service sector workers in lodges and restaurants as well as commercial sex workers. Many teenagers who are of school going age often work on these sites (Westaway, Barratt& Seeley, 2009).

Previous studies on fishing activities have been diverse with varied focus. Oloo &Atieno, (2011) studied fish farming as a way of boosting economic stimulus. Nora (2013) examined the potential of fish farming to improve the livelihood of farmers in the Lake Victoria region, while another study focused on the prevalence of transactional sex in selected fishing communities. Although K'achieng's study of 2011 on the influence of fishing related activities on pupils' participation in primary school education established that fishing related activities had a negative influence on the academic performance of these pupils, it was important to investigate if fishing activities were carried out by secondary students and if such activities were perceived to contribute to poor academic performance.

The justification for this study is that since 2008 the Government of Kenya has been funding secondary school education in order to boost the transition to secondary education and also reduce school dropout associated with lack of school fees (Ministry of Education, Science, and Technology, 2005). Therefore, it was important to establish if Government's financial inputs to secondary level of education has stopped students from using 'lack of fees' as an excuse to engage in child labour in terms of fishing and related activities such as cleaning, salting, sorting,

loading and off loading fish, mending fish nets among others. This study, therefore, sought to:

1. establish whether secondary school students in Rachuonyo North Sub-County engage in fishing and related activities, and
2. find out whether their engagement in fishing activities affected their academic performance.

THEORETICAL FRAMEWORK

This study was based on conflict theory advanced by Karl Marx et al. (1948). The theory postulates that there is opposition to individuals, groups and social structures. Fundamental to such opposition is the existence of scarcity or limitation of resources for achieving goals (Kibera &Kimokoti, 2007). Conflict theory looks at the nature of resources different people and groups have at their disposal or under their direction. The resources include material benefits, wealth privileges, status, and knowledge. It is in light of this thinking that Karl Marx, the main proponent of conflict theory proclaimed that "the history of all existing society is a history of class struggle." For instance, there is a struggle between the rich and the poor, economically powered and the ruled, educated and uneducated. He claimed that the structure of the industrial society breeds conflict at every stage largely due to inequitable distribution of resources. This theory was adopted for this study because it can be used to interpret the educational outcomes of the school in view of resource inputs (Kilonzo, 2015). There is also a conflict of interest among teenagers between seeking work for immediate financial gain and total commitment to education in anticipation of financial gain from employment on completion of their education (Ligeve, Poipoi & Maragia, 2012). Using Karl Marx theory, the study postulated that fishing activities were likely to affect students' attendance at school, enthusiasm in school, participation in co-curricular activities and academic performance.

RESEARCH METHODOLOGY

The study used a descriptive survey design to address the research objectives outlined earlier. Geneserth (1984) defined descriptive survey as a method of collecting information by face to face interviews or through the administration of questionnaires to a sample of individuals representing the target population. This was a method found to be adequate for the study because it provided both numeric descriptions and qualitative data of the sampled population. This enabled inferences to be made about some characteristics, attitudes, opinions or behavior of the target population.

The study targeted 49 secondary schools in Rachuonyo North Sub-County, out of which 14 schools were purposefully sampled to participate. Some 20 students in Form Three class were randomly selected from each of the 14 schools to be respondents in the study. As a result, 280 students were included in the study. All the 14 principals of the selected schools also participated in the study as they were the administrators and implementers of the curriculum and therefore were well placed to provide information on the impact of fishing activities on the academic performance of secondary school students.

The study used a questionnaire as the main data collection tool. This tool gathered quantitative data through structured question items and also qualitative data by open ended question items. The questionnaires were self-administered, and the main respondents were students and principals. Content validity of research instruments was ascertained by pre-testing the instruments in a pilot study in order to ensure that they were able to yield the required information during the study. The results of the pilot study were used for

correction of ambiguous and wrongly structured questionnaires items. Reliability of the research instruments, on the other hand, was done using the test retest reliability technique.

DATA ANALYSIS AND DISCUSSION OF FINDINGS

In order to contextualize interpretation of findings, the demographic information of students by gender, age, and family size from which they came was analyzed. In terms of age, 4% of student respondents were of 13 to 15 years' age bracket, followed by 16 to 17 years old with 24.2% and 18 to 19 years old with (69.2%) while the rest (6.2%) were above 20 years of age. Since the average starting age for primary school in Kenya according to World Bank report, 2015 is 6years, students who go through the education system normally are expected to have reached Form Three level at 17 years of age. This means that there might have existed cases of grade repetition occasioned by, among other factors, poor academic performance and interrupted attendance to school due to child labor. Older students are more likely to join the labor market on part time and full-time basis compared to younger ones.

With regard to the family size, over 60% of the students came from families with over four (4) children. The number of children in a family is often an indicator of whether children will join the labor force due to the scarcity of resources or not. According to the National Population and Housing Census (2009), the national average household size was 4.40 children. The large household size is often associated with greater need for more resources so as to provide for their basic needs such as food, clothing, healthcare and the like. In an attempt to provide these basic needs resource poor parents seems to have encouraged their children to engage in income generating activities in order to supplement their family income and thus ease their financial burden.

After analyzing the age and the size of the family students came from, results of the first objective which sought to establish whether secondary school students in Rachuonyo, North Sub-County engaged in fishing various activities is summarized in Table 1. The results have been presented in terms of frequencies, percentages, and weighted average of three point scale for which the highest possible level of engagement in any fishing activity was "agree" at (3*3) + total number of responses (2*2) + total number of responses, and 1*1 + (total number of responses).

Table 1: Students responses engaged in various fishing activities in Rachuonyo North Sub-County, Kenya

Scale	3-Agree		2-Don't Know		1-Disagree		Total		Weighted average
Statements on the engagement of students in fishing activities	n	%	n	%	n	%	n	%	%
Setting of nets in the lake	173	72.1	22	9.2	45	18.7	240	100	84.4
Removal of fish from the nets	173	72.1	18	7.5	49	20.4	240	100	83.9
Students engage in actual fishing	166	69.2	25	10.4	49	20.4	240	100	82.9
Repairing of fishing nets	131	54.6	32	13.3	77	32.1	240	100	74.2

Sorting of fish according to their sizes	114	47.5	39	16.2	87	36.3	240	100	70.4
Washing of fish	116	48.3	35	14.6	89	37.1	240	100	70.4
Students are involved in loading fish merchandise from boats into lorries	105	43.8	45	18.7	90	37.5	240	100	68.8
Making of fishing nets	105	43.8	37	15.4	98	40.8	240	100	67.6
Selling of the already processed fish	96	40.1	39	16.2	105	43.7	240	100	65.4
Students are involved in offloading fish merchandise from boats into lorries	92	38.2	43	17.9	105	43.8	240	100	64.9
Salting of fish	96	40.0	30	12.5	114	47.5	240	100	64.2
Repairing of fishing boats	90	37.5	40	16.7	110	45.8	240	100	63.9
Smoking of fish	82	34.1	45	18.8	113	47.1	240	100	62.4
Making of fishing boats	61	25.4	44	18.3	135	56.3	240	100	56.4

The analysis in Table1 indicates that major fishing activities in which students are involved include: the setting of nets in the lake with 84.4%, removal of fish from the nets (83.9%), actual fishing 82.9%, washing of fish and sorting fish according to sizes with 70.4% respectively. The other fishing-related activities such as "loading fish into lorries; making fishing nets, selling fish, offloading fish merchandise from boats, salting fish, repairing fishing boats, smoking fish and making fishing boats" students at between over 60% and 50% respectively. This gives firm evidence that students actually engage in fishing activities. The finding of this study support those of Udo et al (2009) which pointed out net mending, boat making and repair, removal of fish from nets, selecting/sorting of fish according to their sizes, setting and resetting of nets, offloading of fish merchandise from boats into lorries as major activities associated with fishing among school students. Similarly the Food and Agriculture Organization-International Labour Organization (FAO-ILO, 20111) report entitled "Good Practice Guide For Addressing Child Labour in Fisheries and Aquaculture: Policy and Practice" indicates that fishing activities that students engage in include actual harvesting, farming of fish, net-making, boat building, unloading catches, preparing nets and bats, feeding and harvesting fish in aquaculture ponds, sorting, processing and selling.

The second objective investigated the influence of fishing related activities on the academic performance of students. The assumption was that students engaged in fishing activities would have less energy to study due to fatigue as a result of long hours of working as well as less interest in school related activities. The information on the effects of fishing activities on students' school work and academic performance was tapped through ratings of statements related to fishing activities by students'. The pertinent results on the level of agreement with statements on the influence of fishing related activities on academic performance are presented of frequencies, percentages, and weighted average in Table 2.

Table 2: Students' Perceptions on the Relationship between fishing activities and academic performance

Scale	3-Agree		2-Don't Know		1-Disagree		Total		Weighted average
Statements on fishing activities	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**%**
Students who engage in fishing activities tend to perform poorly in their classwork as a result of fatigue	203	84.6	14	5.8	23	9.6	240	100	91.7
Students Sometimes absent themselves from school to engage in fishing activities	196	81.7	16	6.6	28	11.7	240	100	90.0
Students engage in fishing activities during school days	168	70	18	7.5	54	22.5	240	100	82.5
Students not involved in fishing activities do better in academic work than those who are involved.	166	69.1	18	7.5	56	23.4	240	100	81.9
Engaging in Fishing activities meets students tuition requirements	133	55.4	44	18.3	63	26.3	240	100	76.4

The data in Table 2 indicate that 91.7% of students agreed with the opinion that students who engaged in fishing activities tended to perform poorly in academic work compared to their counterparts while 90.0% agreed with the opinion that "students sometimes absent themselves from school to engage in fishing activities." The results strongly suggest that fishing work to a great extent contributes to the possibility of poor academic performance. However, this did not prevent students from engaging in fishing activities. Walakira et al. (2008) observed a similar situation in their study on child labor in the fisheries sector in Uganda where they found out that out of the 59% of students who missed school in their sample of study, 54% due to their involvement in fishing activities.

The results in Table 2 further show that 82.5% of students agreed with the statement that "students engage in fishing activities during school days" and correspondingly, (81.9%) of them agreed with the statement that "Students who engage in fishing activities tend to perform poorly in their classwork as a result of fatigue" compared to those who did not involve themselves with fishing activities. The participating principals of secondary schools also concurred with students that secondary school students frequently engaged in fishing activities at 83.3%. The results seem to suggest that students were driven into fishing activities by the need to assist their parents in paying school.

The current results that fishing and fishing activities affect academic performance negatively agree with those of Udo et al., 2013. Udo, C. Achike, and M.K Pado, (2013) established that teenagers in the same environment who were not engaged in fishing activities had better academic performance compared to their counterparts involved in fishing activities, it was reported that they had an average performance score of 60

percent for those whose positions ranged from rank No. 1 to rank 15 in order of merit. Similarly, Ligeve, Poipoi, and Maragia (2012) in their study entitled "The Influence of Participation in Fishing Activities on Academic Achievement of Primary School Pupils in Suba and Homa-Bay Districts, Kenya" found out that fishing activities had a negative influence on academic achievement.

CONCLUSIONS

Based on the summary of the findings given here above, it can be concluded that students actually engage in fishing and associated activities. These activities include but are not limited to setting of nets in the lake (84.4%) out of the sampled students agreeing with being engaged in fishing activities; removal of fish from the nets (83.9%), actual fishing with 82.9%, repairing of fishing nets (74.2%), sorting of fish according to their sizes (70.4%), washing of fish (70.4%), loading fish merchandise into lorries (68.8%), making of fishing nets (67.6%), selling of the already processed fish (65.4%), offloading fish merchandise from boats into lorries (64.9%), salting of fish (64.2%), repairing of fishing boats (63.9%), smoking of fish (62.4%) and making of fishing boats (56.4%). Other related fishing activities that students participated in included repairing of fishing nets, setting of nets in the lake; and removal of fish from the nets. On the basis of these findings, it can be concluded that participation in fishing activities by students pre-occupied them at the expense of academic work.

RECOMMENDATIONS

Participation of students in fishing activities is detrimental to academic performance. This follows from the results which have shown that students who participate in fishing and associated activities tend to perform poorly as compared to those who did not participate in fishing activities. To ensure that this is done the study proposes that various stakeholders such as school principals, the communities, parents, and the government should be involved in the education of secondary school students. All these stakeholders have a role to play in ensuring that the future of the young generation is not distracted from academic work that is aimed at securing for them a better quality of like through enhancement of knowledge, skills, and values that are necessary for them to lead a productive life in the society.

The government on its part should avail more funds in the form of bursaries to support the needy students. This would curb school dropouts that are attributed to lack of fees and learning materials for those students from resource poor households.

School principals should be more actively engage parents in discussing issues affecting students in fishing communities and on ways to improve academic performance. Parents should in undertake to discipline their children and provide adequate parental advice to their children on the negative effects of fishing activities on academic performance and success in life.

The study identifies the communities along the beaches as one with a crucial role to play in order to curb fishing activities amongst students. It is recommended that the communities should work together with the

school Boards of Management to institute measures that will keep students from engaging in fishing activities. In addition, the Government should offer free basic education and also make it compulsory for all children irrespective of their socio-economic background as enshrined in Kenya Constitution of 2010.

SUGGESTIONS FOR FURTHER RESEARCH

This study can be replicated in other sub-counties within the fishing communities in order to give a reflection of the whole country on the influence of fishing activities on the academic performance of secondary school students. This will ensure better-informed decision making on ways of curbing this problem and may provide motivation in learning process thus helping reduction of dropouts among public secondary school students. In addition gender of students and school, factors should be investigated to establish their influence on students' engagement in fishing activities and attendant academic performance.

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