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THE EFFECT OF FLOODING ON ACADEMIC ACHIEVEMENT OF PRIMARY SCHOOL PUPILS IN OGBA EGBEMA NDONI LOCAL GOVERNMENT AREA OF RIVERS STATE

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Abstract
The research was carried out to examining the effect of flooding on academic achievement of primary school pupils in Ogba/Egbema/Ndoni local Government area of Rivers State, using exposit factor design. The Population of the study comprised of about 70,200 pupils of 78 primary schools in the local government. 4350 pupils from 29 primary schools which were selected using stratified random sampling. The mean scores and standard deviation of the sample was used to calculate for first term period of flooding and third term when there was no flood. The result showed that there was a significant difference in the achievement of pupils for the term that was flooding and the one that there was no flooding. Pupil's achievement in the term that there was no flooding was higher. Interventions to help pupils recover from the effects flooding include palliatives and remedial lessons.

Keywords: Flooding, Primary School, Pupil, Effect, Academic Achievement

Background to the Study

Flooding in Nigeria affected over 3.2 million people resulting in over 600 deaths and not less than 1.4 million person internally displaced coverings over 569,000 hectares of farm lands (Wocha, 2022, Khalid And Maicwan 2022, Eleke, 2022). It is a satiation where large landmass is covered with water up to about a meter or more deep for a reasonable length of time, not for a day, two days, to one mouth or more. The flooding were caused by heavy down pour and the sudden release of water from dams in Nigeria and Cameroon Khalid and Maishman, 2022 which have affected about 27 out of 36 state in Nigeria. There is an alarm that is raised by the federal government over likelihood of another flooding in 2023 (Umoru, 2022) warning Nigerians in the flood prone area to take proactive measure to subvert, stop the devastation that resulted as a resent of flooding in 2022. Poor planning and infrastructure was one of the reasons that serious damage was incurred from the flooding (Khalid Maichman 2022, Umoru, 2022.) Taking proactive measure will help to alleviate the effect of the flooding.

The flooding and its traffic outcome expose the weakness of Nigerian as a country in responding to emergence and disasters (Ominabo 2022, Eleke 2022). The damages caused by flooding are enormous. Health facilities, houses, roads, farm land, business establishments and school buildings were destroyed by flood, leading to sickness, hunger and loss of school sessions (Eleke, 2022) The flooding in Omoku the headquarter of Ogba, Egbema and Ndoni Local Government Area was disastrous. It affects not less than 82% of comminutes in Ogba, Egbema Ndoni local government in similar manner. It was supposed to be seen as an urgent matter that should have drawn the attention of the Rivers state Government because the greater part of the local government was

submerged in water, people were moving in the water that was above their waists in attempt to relocate with their loads while some were paddling in canoes (Lawal, 2022). This is very saddening. The government house seals her mouth and ears of the flood mishap in Omoku. The resident of Omoku lamented displacement, insecurity and illnesses (Adeiye, 2022). There were noticeable cases of kidnapping of children in the internally displaced person (IDP) camps, though the kidnappers were apprehended. The IDP suffers hunger and lack sleeping materials as they were not enough beddings and food (Adeiye, 2022).

The flooding in Omoku was very embarrassing. Some persons houses were ravaged in the mid might as a result, other victims rally around to help the most vulnerable (Ogunyale, 2022). Secondary schools were badly affects by the flood as it entered every part of the compound and the students and staff has no alternative accommodation to move into (Amadi, 2013) Ahon, Davies and Iheanachor (2012), lamented that heavy flooding have cut off some communities and has caused the drowning of a three year old girl and five others in Omoku and other communities located along the Orashi River are worst hit by the rampaging flood. Omokuugba, (2022) Observed among other communities which includes Abua/Odual, Ahoada-west and Ahoada-East but the situation in Omoku is worst as over 20 communities and farms, schools and bridges were covered/submerged by water.

Lack of adhering to warning and poor dredging of Orashi River are what worsen the situation of flooding in Ogba, Egbema and Ndoni local government Area (Asinobi, 2022; Bibor, 2012). The fundamental thing is that the steps that was supposed to be taken to prevent the flooding was abandoned by the Government leaving people to suffer (Ogba, 2022, Olonimiran, 2022). The proper dredging of Rivers channel, construction of dams, channeling of flood prone areas as well as providing of deep dry lakes would help reduce the impact of flood in affected areas The impact of flooding on education was discussed by Timisia (2017), Munsaka and Matasa (2020) and Ezekwesalli (2022) and they all confirm that flooding affect student academic performance. Definitely, they expected to be spiral effect of flood on pupil's achievement but to what extent. The statistical measure in which flooding affect pupils academic achievement is the focus of this research

Statement of the Problem

Flood has ravaged many communities in Nigeria and not less than twenty communities in Ogba, Egbema and Ndoni Local Government Area was affected. This led to closure of school abruptly. The sudden suspension of learning have serious effect on learn outcomes, though no one cares. This study examines the effect of flooding on academic achievement of primary school pupils.

Hypotheses I

There is no significant difference in academic achievement of primary school pupils in term interrupted by flood and before flooding.

Hypothesis II

There is no significant difference in the achievement of pupils in Primary Science during the term interrupted by flood and before flooding.

Hypothesis III

There is no significant gender difference in the achievement of pupils in Primary Science on the period interrupted by flood and before flooding.

Purpose of the Study:

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Flooding has cause a colossal upset in all facet of life, including education in the affected communities. It remains a mirage the extent to which flooding affect the achievement of pupils who suddenly stop going to school and moved into the IDP camps for not less than two to three weeks. This study reveals the gravity or degree which the academic achievement of pupil in primary school is affected by flooding. It established the differences that existed between the achievements of pupils during the term that there is flooding and the term that there is no flooding.

Significance of the Study:

Flooding has been a major problem of most communities in Nigeria and other parts of the world. It is a serious issue that affects education. The reason is that during flooding, schools shot down and teaching and learning interrupted. In the period or terms where flooding take place, learning abnormal. This affects learner's achievement in all the subjects when the school resumes. This is due to loss of time which are not compensated for. It becomes obvious that study should be carried to examine the effect of flooding on the achievement of pupils in science. It is prepared to reveal the extent flooding affects the achievement pupils at primary school level. It also wishes to study the effect of flooding on the achievement on gender bases, to reveal if there is difference between the achievement of boys and girls on primary science. It will benefit the educational society by giving the details which will form the bases for provision of remedial programme for flood affected children as well as the need or palliatives for children affected by flood. Additional research result will be made available to the world on effect of flooding on education.

Research Design

The research is an ex-post facto or causal comparative study where the mean achievement series of pupils during the period that school terms are not interrupted by flooding and the terms that are interrupted by flood. The data are collected from the school result broadsheet and used for analysis.

Population of the Study

The population of the study comprises of about 70,200 pupils from 78 primary schools in ogba, Egbema, Ndoni Local Government Area of Rivers State. This comprise pupils from 55 primary schools in Ogba, 10 primary schools in Egbema and 13 primary schools in Ndoni which were all affected by flooding.

Samples and Sampling Technique

Considering all the primary schools in Ogba, Egbema, Ndoni LGA that shut down because of flooding, a stratified random sampling was used to select 20 primary schools out of 55 primary schools in Ogba, 4 primary schools out of 10 in Egbema and 5 primary schools out of 13 in Ndoni 3,000 primary 6 pupils from the 20 primary schools in Ogba, 600 pupils from 4 primary schools in Egbema and 750 from 5 primary schools in Ndoni were used for the study. A total of 4,350 pupils in primary 6 were used for the study.

Instrumentation and Date Collection

The instrument used for the study were the examination broadsheet of third term in primary five of the pupils who currently in primary first term and the six first terminal examination broadsheet of the same pupils. The mean scores in all the subjects in the third term in primary five were collected and their ground mean (mean of the means) were compute together with the standard deviation for their third term in primary five and first term in primary six. These were used in testing the hypotheses

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Method of date analysis

The analysis of data was carried out using mean standard deviation and random of samples. They were used to test the hypothesis employing T-ratio at 0.05 level of significance.

Data Analyses and Result Hypothesis I

There is no significant difference in academic achievement of primary school pupils in term interrupted by flood and before flooding.

The result of Data analysis is given in the table 1 below

Table 1: t-ratio of mean achievement of primary school pupil during term interrupted by flood and before flooding.

Term	N	Mean	Standard deviation	t-ration	Decision
Term interrupted by flooding	4,350	43	16	125.73	Reject
Before flooding	4,350	78	9		

The mean achievement score of 78% before flooding with standard deviation of or against mean achievement score of 43 and standard deviation of 16 shows that there is a significant difference in achievement of pupils during and before the flooding in the term-that schools were affected by flood, the mean achievement 43% was very low as against the term that was not affected by flood t= 125.73> 1.96 which is the critical value at 0.05 level of significance show that there is a significant difference in the achievement of pupils before and during flooding.

Hypothesis II

There is no significant difference in the achievement of pupils in Primary Science during the term interrupted by flood and before flooding.

The result of the data analysis is given in table II below:

Table II: t-ratio of mean achievement scores of pupils in primary science during the term interrupted by flood and before flooding.

Term	N	Mean	Standard deviation	t-ration	Decision
Term interrupted by flood	4,350	41	18	93.84	Accepted
Before flooding	4,350	68	6		

The mean scores of 68% as against 41% show that there was a decline in the achievement of pupils in primary science during the term that was interrupted by flooding. The t-ratio of 93.84>1.96 which is the critical value at 0.05. Level of significance also reveal that there existed a significant difference between scores. The pupil's

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achievement in primary sciences Declined during the period interrupted by flooding and reduces from 68% to 41% on the average.

Hypothesis III

There is no significant gender difference in the achievement of pupils in Primary Science on the period interrupted by flood and before flooding.

The result of the data analysis is given in table II below:

Table III: t-ratio of the mean score of male and female pupils in Primary Science

Gender	N	Mean	Standard deviation	t-ration	Decision
Male	2,175	42	21	1.53	Accepted
Female	2,175	41	22		

Mean score of 42% for boys as against 41% for girls' shows that there is no significant gender difference. T-ratio of t=1.53<1.96 confirmed that there is no significant difference in their scores. Hence, flood affects both male and female equally.

Discussion:

The effect of flooding in education is enormous and devastating. The fact that flooding have a lot of serious adverse consequence such as destruction of farmlands and crops resulting in hunger, its consequence in education intend to be ignored, flooding occur most after school terms was started leading to closure of schools in the communities affected by flood (leval, 2022, Adeiye 2022). This lead to serious disruption in academic activities in these communities while learners in other part of the state that are not affected by flooding are still going to school. This abrupt closure is not compensated in any way when the flood is over. The learners do not only loss time but also moral, self-concept and motivation. Those that are not in school suffered as a result of displacement due to flooding, equally affect their attitude toward school and a lot of other activities in life. As a result of flood recedes and when school resume the learners (pupils) went in for the terminal examination after losing quality learning time and also suffering disconnection in acquired contents, their academic achievement becomes woefully Low. This evidence in the mean score of 78% as against 43% for term that there was no flooding and term that pupils experienced flooding respectively, the effect of flooding on the performance of children were studies by chardburg & Tamsin (2017) the result shows that in a survey of 100 secondary students, flood has negative effect of students performance. The finding was confirmed by Mankaka and Matesa (2020) as well as Ezekwasilli (2022) though they did not use academic achievement records, or attitude test of any form. The finding of this study reveals the effect of flooding on academic achievement using statistical records.

Recommendation:

From the finding of the study it is recommended that pupils from communities that are affected by flood should be given remedial programme to cover lost learning hours and palliatives to overcome the psychological trauma that occur to them due to the effect of flooding. The parents, family, communities and the Government should

ensure pupils are given proper incentives to overcome the effect flooding on their psychological and attitudinal life, which have inactively impacted on the academic achievement

Summary:

The research is an esfacto or causal comparative study seeking to achieve the statistical result of the effect of flooding in academic achievement of primary school pupils. Stratified random sampling of 4350 pupils from 29 out of 28 primary schools in Ogba, Egbema Ndoni local Government Area of Rivers State was conducted. The mean and standard deviation of their achievement in third term of their primary five which was flood free and first term of primary six that was with flooding, there result revealed that the pupils academic achievement were significantly different at 95% confidence interval using t-ration

Conclusion:

Flooding is a disaster that has negative impact in all levels which affected communities. It adversely affects education also. The achievements of pupils in primary schools during and before the flooding are significantly different. Primary school pupils whose achievement is high in the terms before the flooding showed a decline in the terms that flooding occurred.

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