Parenting Education: Impact of Modeling on Learning Outcomes of at-risk children

Victoria I. Iroegbu

Abstract

This study investigated the effect of parental involvement in English language achievement of at-risk children at the junior basic level of education. The study adopted a quasi-experimental design. Three groups of pupils used for the study were at risk pupils whose parents were trained, at risk pupils whose parents could not be trained and non risk pupils. The sample size involved in the study was sixty. The treatment consisted of two weeks training, given to the parents, and six weeks teaching for the pupils. The at risk pupils whose parents were trained and those pupils whose parents were not trained were given supporting reading materials. The non-risk pupils were used as control for the experiment. English language test as well as a confidence scale were used to evaluate the outcomes of the experiment. The results of the study showed that a significant treatment effect was obtained:
$$F_{(2,59)} = 7.088, P < .05, w^2 = 0.213$$
At-risk pupils whose parents were trained improved their mean score to equal that of non-risk pupils, while at risk pupils whose parents were not trained had a mean achievement which was significantly below the grand mean. Data from the confidence scale showed that at risk pupils whose parents were trained exhibited a highly improved confidence towards completing nine years of basic education with most of them even indicating aspiration to go to higher education. The results also showed that the use of parental support and intervention with at-risk pupils can change their achievement level and confidence from depressed to confident achievers. The study therefore recommended greater parental involvement in the school work of at-risk children.

Introduction

The term at-risk has been found in literature to be a generic one. It is used variously to describe a wide range of problems encountered by some young children of school age (Barr and Parrett, 1995), as well as youths in mid and late childhood who may be at risk of school failure. In Melbourn, the Victorian Government views at-risk children as vulnerable babies, children and young people who are at the risk of harm from abuse and neglect (Melbourne, 2006). The authors contend that vulnerable children who are victims of abuse and neglect experience detrimental effects in their physical, cognitive, emotional behavioural and social development, to the extent that the child's capacity to develop trust, intimacy, agency and sexuality are undermined.

Many people have the disposition to view at risk children as those who are already tagged failure to thrive; or that they are children who face much higher risks than other children to thrive. Reasoning similarly Land and Legters (2002) viewed at-risk children as those who are likely to be of low socio-economic status, educationally disadvantaged, academically under prepared and poor English language learners. Going by Land and Legters (2002) definition, children born to teenage mothers are more likely to fall under at-risk children. This is because teenage mothers are more likely to live in one parent home at or below poverty level. Such a mother will most likely be unemployed or if employed will be earning a poor wage. Without any experience by such a mother, her child's life would be very stressful (Melbourne 2006). Such a child will in most circumstances experience inadequate care, will be poorly nourished and may develop health problems and complications. Such children truly fall under Land and Legtens (2002) description of at-risk children.

Nigeria belongs to the sub-saharan African region which is one of the regions of the world with the lowest Human Development Index (HDI) (UNDP, 2011). The United Nations Department of Economic and Social Affairs (DESE) (June 2006) had observed that 44.0 percent of the population of the people in sub-saharan Africa live in extreme poverty, existing on incomes of less than $1 a day. With this level of poverty, children are forced to undertake different forms of menial jobs in order to supplement the family income and up keep. Activities such as odd jobs and hawking keep the children out of school and place them at-risk of harm.

Nigerian people unfortunately share in this poverty and poor health status Obanya (2002). With a population of 170 million people and poor economy, the lives of a large number of the citizens are hard. Demographic records show that 40.9 percent of the Nigerian populace are children between 0 and 14 years of age. This is the group that contains the children of interest to this study. Children between the ages of six years and fifteen years are expected to benefit from the state free education policy of the Nigerian government. However, many state schools lack quality teachers and other facilities. Udosen (2006) had observed that many pupils leave the primary school without acquiring basic literacy skills for future development. Thus the rich send their children to special fee paying private schools where better quality staff and facilities exist. The poor send their children to state schools with poorer facilities and inadequate staff.

Generally most of the children enrolled in state schools could be classified as at –risk because their parents are poor and cannot provide sufficiently for their well being and education. Many of the children leave school, to do menial jobs or hawk various items along the busy high ways or markets. Some terminate their schooling to join and learn some trade. Thus the drop out level is generally high (Ayodele 1996; Akinbote , Kolawole and Kolawole 2008).   More often than not, these children get exposed to various kinds of child abuse. Ikonta and Ilogu (2012) believe that if the parents or guardians of these children could devote some time attending to the school needs of these children such as by providing them with school materials and supervising their home work, the children would develop greater commitment to school work and would remain in school.

How best can the parents/guardians of these at risk children be helped so that the children remain in school during school hours and benefit from classroom instruction? The Parent-Teachers Association of many of the schools have joined hands in response to

this question, by providing auxiliary PTA teachers while some state Governments provide free school buses for school children in uniform to ride. In conjunction with UNICEF, some state Governments are now providing one free meal per school day.

All these strategies have not significantly impinged on the tendency of at-risk children to leave school periodically to seek menial paying jobs such as hawking wares etc. Ikonta and Ilogu (2012) have suggested that a more suitable intervention strategy which should involve the children and their parents should be tried. Based on this recommendation a model of parental intervention in the school work of their children was explored.

Objectives of the study
At risk children had been characterized by irregular class attendance, poor academic performance, inadequate provision with essential school materials, and poor parental involvement in their educational well being. This study therefore sought to find out:
  (a) the effect of a model of parental involvement in the home –work and school work of their children on their English Language achievement.
  (b) How the group achievement of treated at –risk pupils compared with that of at-risk children whose families were not given the training
  (c) How the group achievement scores of treated at-risk children compared with those of non-risk children sharing the same class, at the end of treatment.

Null Hypotheses
Two null-hypotheses were tested at the end of the study.
Null hypothesis I: There is no significant difference in English Language achievement of at-risk children whose parents were trained and those whose parents were not trained.
Null Hypothesis 2: There is no significant difference in English Language achievement of at-risk pupils whose parents were trained and non-risk pupils in the same class.
Hypothesis 3: At –risk pupils whose parents were trained will show negative confidence toward completing 9 year compulsory school education.

Significance of the study
This study is considered significant in that it will provide some information on possible impact of parental intervention on the learning outcomes of at-risk children. The study hopes to provide a reference point for future researches of this topic for school based studies which are relatively few in Nigeria.

Methodology
This study is a quasi-experiment involving the use of primary three (Basic 3) pupils in two neighborhood primary schools. Three categories of pupils were identified for this study.
Group A: At-risk pupils whose parents could be reached and trained
Group B: At-risk pupils whose parents could not be reached
Group C: Non-risk pupils who predominate.
The sample was purposive and consisted of equal number of pupils in each group. The final sample size was sixty (60).

Research Procedure

The school records of the Basic three pupils were first examined to locate the pupils who were not regular to classes as well as those who were not doing well in their academics and those whose parents find it difficult to provide them with basic school materials. The school counselors assisted the researcher in identifying at-risk children. Twenty at-risk pupils whose parents had at least basic literacy in English and had agreed to work with the researcher were trained individually for two weeks. One research assistant was attached to each family to monitor their use of the model training guide and provide assistance when needed. All the pupils took a pre test and the scripts of the target group were selected after scoring for further action.

The researcher trained three early childhood language education teachers to handle instruction in the classrooms where the identified at-risk pupils were registered. They were made to teach those classes for the six weeks of the study. The researcher provided the instructional materials, the reading materials and answer booklets for exercises. Non-risk pupils who were members of the Basic 3 classes also benefitted from the teaching. The parents of the at-risk pupils, who were trained, were also provided with equivalent materials to use at home. At the end of six weeks, a post test was given on reading and comprehension in English to everybody in the classes used.

Instrumentation

The instrument used for data collection was a researcher constructed Basic 3 English Language test (B3EL) with a Cronbach's alpha coefficient of 0.80. B3EL had three sub-tests: a reading test, grammar test and comprehension test with a combined score of 70, in the ratio 20:20:30 respectively. The instrument was administered to all pupils who completed the study but the scores for final sample were sifted for analysis. The at-risk pupils whose parents were trained were given a Basic Education Confidence scale to complete after the post test. The completed scale was collected immediately for analysis.

Results

The descriptive statistics of the data obtained from this experiment is presented in: Table 1:

Table 1: Descriptive statistics of the Pre and Post test scores on Basic 3 English Language Achievement Test.

Treatment Gip	Statistics	Post-test Score	Pre-test Score
Group A = At-risk/Parents trained	Mean	42.150	18.850
	N	20	20
	Std. Dev.	5.668	7.161
Group B = At-risk /No Parent training	Mean	35.25	24.250
	N	20	20
	Std. Dev.	8.322	6.155
Group C = Non-risk/No Parental training	Mean	48.550	26.750
	N	20	20
	Std. Dev.	8.0228	9.651
Total	Mean	43.317	23.283
	N	60	60
	Std. Dev.	8.290	8.353

The data in table 1 reveals that after class instruction and training of Group A parents, the post test scores of the entire sample improved. The improvement is as follows: The grand mean for the combined group rose from 23.283 to 43.317.

The group mean achievement scores for Group A rose from 18.85 at pretest to 42.15 at posttest.

Group B mean scores rose from 24.25 at pretest to 35.25 at post test.

For normal children Group C, mean score rose from 26.75 at pretest to 48.55 at post test. In order to find answer to null hypothesis I, analysis of variance was conducted. (See table 2).

Table 2: Analysis of the Post-test achievement scores using pretest scores as covariate

Source of Variance	Type III Sum of Sqs	Df	Mean square	F	Sig.
Corrected Model	1025.813[a]	3	341.938	6.321	.001
Intercept	8775.348	1	3775.348	162.229	.000
Pretest	120.079	1	120.079	2.220	.142
Group	766.763	2	383.381	7.088	.002
Error	3029.171	56	54.092		
Total	116635.000	60			
Total	4054.983	59			

a =[R squared = .253],   (Adjusted R squared = .213),

Table 2 shows the result of the analysis of variance of the English Language test scores for the various treatment groups. The results in Table 2 are used to evaluate null hypothesis 1.

Null hypothesis 1: States that there is no significant difference in the English language achievement of pupils whose parents were trained and those whose parents were not trained. From the ANOVA table $F_{(2,56)} = 7.088$, $p< .01$, $R^2 = .213$.

This obtained F – ratio is significant. Therefore we reject null hypothesis 1. The table shows that the treatment (grouping) accounted for 21.3% of the variation in achievement when the effects of pre-tests were controlled.

The order of treatment effect was group C > group A > group B.

Table 3: Post-hoc comparison for the significance of Pairs of means for treatment groups

Groups	A	B	C
A	-	1.29[NS]	0.55[NS-]
B		-	2.14*
C			-

Ns = Not significant, P > .05
*   = Significant, p < .05

Hypothesis 2: Null hypothesis 2 compared the means scores for groups A and C, which was not significant. Null hypothesis 2 was therefore accepted.

The post-hoc comparison contained in table 3 shows that group B is significantly different from group C. There are no other significant pairs of means. This implies that the mean score for group A was not statistically different from the mean score for group C. This fact reveals that the treatment given to group A parents motivated their at-risk children to achieve improved scores to the point that their scores could equal those of non-risk pupils.

The at-risk pupils whose parents were trained to offer supervision and assistance in their home work were given a fifteen item confidence scale to complete after the post-test.

The results are presented in table 4:

Table 4: Analysis of at-risk pupil's confidence scale towards completing nine years schooling.

Item No	Items	Response frequency		Analytic Compilation	
		Yes	No	+ve	-ve
1	Improved performance encouraged me to be regular at school	14	6	14	6
2	Classroom studies drives me away from school	4	16	16	4
3	I am now happy to continue my education until junior High school	15	5	15	5
4	Family tutoring makes class work easy	14	6	14	6
5	Extra study materials makes learning interesting	17	3	17	3
6	I feel happy to compete with the best pupils in my class	11	9	11	9
7	Extra reading materials make me afraid	8	12	12	8
8	I get higher marks when I study more	14	6	14	6
9	I prefer hawking fruits to school work	3	17	17	3
10	I know I go beyond junior High school level	15	5	15	5
11	The fear of failure makes me leave school	7	13	13	7
12	I am looking forwards to my years in the senior high school	10	10	10	10
13	I am confident that I will with a class price this year	6	14	6	14
14	I will rise to be one of the best pupils in my school	8	12	8	12
15	My aim is to enter senior high school with distinction	13	7	13	7
	Totals			195	105

The data in Table 4 shows that at-risk pupils positive responses to the scale was a total of 195 or 65 percent; while the negative responses totaled 105 or 35 percent. The maximum total, response was 300. This indicates that the training given to the parents of at-risk pupils encouraged them to aspire to higher levels in their academic studies, implying that children felt relatively more comfortable with the training to continue with schooling.

Discussion

The results of this study has revealed that parental involvement in their children's homework could go a long way in promoting the school achievement of children to greater levels than can be imagined. In this study, when the parents of low achieving at-risk pupils were trained on a strategy of supervising their children's home work and provided with relevant supporting materials for a period spanning only six weeks, significant improvements were observed in the performance of their children. Poor achieving at-risk pupils transformed to become high achievers, obtaining marks similar to those earned by their non-risk mates. This finding is similar to the ones documented in Ikonta and Ilogu (2012).

Although parental involvement have been credited with producing encouraging outcome in learning achievement of at-risk pupils, it should be noted that at the background was a structured approach for parental guidance and support, coupled with the provision of essential learning materials as well as supervision of such parents by people who were trained in early childhood methods. The contributions of these indirect strategies must have played important roles as catalysts (Iroegbu, 2006).

The results from the confidence scale portray a positive incline by the pupils to strive to complete junior high school and go even higher. Items 3 and 10, seventy five percent of at-risk pupils whose parents were trained were optimistic that they would finish their basic level or junior high school programme, while in items 12 and 15, ten percent and sixty five percent

respectively of the pupils were focusing already at more senior level of education. It will therefore be seen that the treatment has not only improve the achievement level of the at-risk pupils whose parents were trained but had also conferred on the pupils the self will to compete with non-risk pupils in class.

Conclusion

This study has revealed that it is possible to use parental involvement in their children's learning to create opportunity for higher learning outcomes and also improve the learners confidence in their ability to learn especially when the learner finds out that his/her parents are concerned and involved in building him/her up to become one of the best if not the best in an activity. The contribution of additional and illustrative supporting materials should be noted. Parents should therefore find out what content materials that the children are taught at school and make efforts to supplement those materials with others that could be illustrative or supportive. The use of trained early childhood specialists to teach the group produced a noticeable increase in the grand mean of the group. This observation might have been responsible for upward improvement of the group mean scores of the three groups separately. This observation lends support to the demand that specialist teachers who had been prepared for early childhood education should always be provided to handle school learning at this early state.

It is recommended that parents should support their children's school learning by showing interest in their daily school work. The parents should try as much as possible to provide essential supporting materials that may promote their children's desire to go on learning. Parental love, concern and encouragement for improvement may transform a child to become a much better person in the future.

Reference

Akinbote, R.O., Kolawole,C.O.O and Kolawole, A.O (2008): The Problem of Teaching Reading Skills in the lower classes of Primary school in Ibadan, Nigeria. *Topical Issues in Literacy, Language and Development in Nigeria.* New York, USA: International Reading Association: 165-175.

Ayodele, S.O. (1996): Varieties of English used across comparable primary and secondary levels: A factor of pedagogic, socio-economic or location differences?" Ayodele S.O. (ed) *Education in Service of Humanity.* Ibadan Educational Study and Research group 1. 248-262.

Barr, R. and Parrett W. (1995): *Hope at last for at-risk youths*: Allyn and Bacon.

Ikonta, N.R. and Ilogu, J.U. (2012): Parental Involvement in Children's Language and Literacy Development in Lagos Metropolis in Nigeria: *In Cross-Disciplinary Perspectives in Literacy and Language Studies*. Owerri Africa-Link Books vol 1: 12-29.

Iroegbu, V.I. (2006): Effects of Modeling and Picture-based instructional strategies on Primary School Pupils' Learning Outcomes in English Language. *Unpublished Thesis.* University of Ibadan.

Land, D and Legters, N. (2002): The extent and consequences of risk in U.S. education. *Educating at risk students,* vol 2, Chicago: University of Chicago Press.

Obanya, P (2002): *Educating for the knowledge Economy.* Ibadan Nigeria: Monsuro Publishers.

Olude, L (2001): *Laying School Foundation for Life reading habit.* Paper presented at the 2nd PAN- African Reading for All Conference held at the National Centre for women development, Abuja Oct. 7.

The United Nations Department of Economic Affairs (DESE) 2006. *Sub-Saharan Demographics.*

The Victorian Government (2006): *Department of Human Services, Melbourne, Victoria:* Children at Risk.

Udosen, A.E.(2006): Teachers' Perception of factors responsible for high illiteracy among primary school leavers on Akwa Ibom State. *Nigerian Journal of Curriculum Studies* 13 (6) 33-43.

United Nations Development Programme (2011): *Sustainability and Equity:* A better life for all.

United Nations Educational Scientific and cultural Organisation (UNESCO) (2013). *Institutes of statistics. Primary school Enrollment for 2010.*