



Effect of Phonics Method on Reading Among Primary Four Pupils With Reading Problems in Zone B Senatorial District Yobe State

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ABSTRACT

This study was carried out to determine the effect of the phonics method of teaching on reading of students with reading difficulties in some selected primary schools in Yobe south. The study employed a mixed method/mixed model design. 25 students were identified and screened and 15 purposively selected and satisfied to be exhibiting problems related to reading difficulties who served as the sample of the study. Three research questions and one hypothesis were formulated to guide the study. Data was collected during the eight week long duration of treatment. The data was analyzed using t-test of dependent samples and showed the efficiency of the phonics method in improving the student's reading skills and reading fluency. The post-test reading fluency performance of the students with the mean of 19.5 was higher than their pre-test reading fluency scores with the mean 11.2 and the mean difference of 8.3. Meanwhile, the calculated t value obtained was 2.81 higher than the critical t value of 2.145 at the 0.5 level of significance. This rejects the null hypothesis stated, therefore showing the efficiency of the phonics method. The study, therefore, recommends that the phonics instructional strategy should be part of every literacy teacher's repertoires and a routine part of literacy teaching, especially in the early grades.

Keywords: phonics method, literacy teaching, reading fluency

INTRODUCTION

Of all the skills children learn, reading is arguably the most important. Bock (2014). It is the means of gaining knowledge about many different subjects and of understanding the world. Unlike any other ability, the capacity to read allows children access to all collective knowledge, history and experiences of our shared symbolic humanity. Cogne, Kameenui & Carnine (2007). Owing to the significance of reading at the basal level, the Nigerian National Policy on Education (2004 revised) adopts the inculcation of permanent literacy as a matter of priority the first goal of primary education. The World Bank (2013) reported that pupils who had completed literacy causes tend to be more willing to take initiatives in their livelihood. The UNESCO (2017) observed that individuals with literacy and numeracy skills are more productive, understands family planning, and have better qualities of life. Eldred (2008) argued that literacy is linked to particular job skills and contributes to development of critical thinking and problem solving. It is sickening to observe that pupils in the Nigerian Primary Schools and Yobe State in particular fall victims of reading difficulties during or at the end of their literacy years in school. Santhanam, Babu. Sugandhi and Rao (2008) provides the following characteristics of dyslexic readers to include: Sequencing difficulties: Many dyslexic readers have problem perceiving things in a sequence and also remembering things in their sequence. This naturally affects their ability to read and spell correctly. After

all, every word consists of letters in a specific sequence. In order to read, one has to perceive the letters in sequence. The following are some of the symptoms that indicate sequencing problems:

- a. When reading, they may put letters in the wrong order, read felt as left, act as cat, reserve as reverse, expect as except.
- b. Put syllables in the wrong order, reading animal as aminal, enemy as emeny.
- c. He may put word in a wrong order, reading therefore for there are.
- d. Omit letters, i. e read wet for went, sign for string.

They may have difficulties with little words. The dyslexic learner may get the big words but keep making mistakes on all the little ones. Certainly, the poor reader gets stuck on difficult words, but many do seem to make things worse by making mistakes on simple words they should be able to manage-like if, to, and. The following are some of the problems with little words:

- Misreads little words such as from for for, then for there, were for with.
- Omits or reads twice the little words like the, and, but, in.
- Adds little words which do not appear in the text.

Other characteristics include:

- Reading very slowly and hesitantly.
 - Loses orientation on a line or page while reading.
 - Tries to sound the letters of the word, but is then unable to say the correct words e. g sound the letters c-a-t but then say cold.
 - Mispronounce word or puts stress on a wrong syllable.
 - Reads only in the present tense although the text is in the past.
 - Foreshortens word, for example, portion for proportion.
 - Substitutes another word for similar meaning, e. g dog for pup.
 - Omits a prefix, suffix or adds a suffix.
 - Reads with poor comprehension.
 - Spell words as they sounds e. g. rite for right.
 - Cannot write or match the appropriate letters when given sounds.
- Often ignores punctuation

The focus is therefore on which best practice to inculcate these skills? Phonics method emphasizes the identification of words and by association of letters or combination of letters with sounds. Beveridge, Conti-Ramsdeen, and Lauder (1989). Logsdon (2004) observed that Phonics skills are important for a child to be able to read fluently. Shepherd (2013) stressed that unlike the conventional methods, phonics instruction is the best method of teaching early reading. The National Reading Panel NRP (2000) posits that phonics instruction produces biggest impact on recovery and growth in reading at the basal state.

Researchers in favor of the phonics approach to reading instruction are not all in agreement with one another. Much research has been designed to determine which specific type of phonics instruction is the most effective.

Synthetic phonics: Also known as explicit phonics. Shepherd (2013) refers to an approach to the teaching of reading in which the phonemes associated with particular graphemes (letters) are pronounced in isolation and blended together (synthesized). For example, students are taught to take a single syllable word, such as “cat” apart into its three letters, pronounce a phoneme for each letter in turn /c/ /a/ /t/ and blend the phonemes together to form a word. She cited Johnston (2011) to have argued that synthetic phonics is an approach that can be taught in a few months and to those who are identified having difficulty reading. She further maintained that, in England in 2006, the “Rose Report: recommended that reading instruction should include synthetic phonics. That the Rose Report recommendation mostly came from evidence created by a seven year longitudinal study of the impact of a synthetic phonics in schools in Clackmananshire , Scotland, in which learners reading skills were greatly improved. However, the criticism of the Rose Report was that of lack of stated evidence to support the push to synthetic phonics.

Osborn and Chard (2014) argued that explicit and early instruction in phonics leads to better reading: better accuracy of word recognition, decoding, spelling and oral and silent reading comprehension. They further maintained that the most effective type of instruction, especially for children at risk of reading difficulties, is explicit phonics instruction.

Analytic phonics: Also known as implicit phonics. Mathews (1997) observed historically that analytic phonics is a modern system given many names. It was called the new method, the word method, the look-and-say method, the experience method, whole-word recognition and probably other names as well. It is the opposite of synthetic phonics. It teaches children essential letter-sound relationships by analyzing words they already recognize. For example, the sound of letter “t” is taught from words like “*tin; top; tip*”. or the consonant blend “cl” might be taught from the words like “*class; clap; clip*”, and so forth (Westwood 2009). As Watson and Johnston (2000) explained in Shepherd (2013) analytic phonics breaks down the whole to parts, where- as synthetic phonics build up from parts to whole.

Johnston (2011 in Shepherd 2013) discussed a six-year longitudinal study of ten-year-old Scottish children who were taught either synthetic phonics or analytic phonics. The analytic group had better word reading, spelling and reading comprehension skills. However, he concludes: after six years at school, children taught by synthetic phonics approach read words; spelled words shared reading comprehension skills significantly in advance of those taught by the analytic phonics method. The study showed that boys performed better when taught synthetic phonics. The girls who were taught synthetic phonics performed better on all the tests except reading comprehension skills that were the same, regardless of the type of phonics instruction.

Systematic phonics: Also known as the mixed method. According to Mathews (1967), it partakes of both the synthetic and the analytic approaches, predominantly the analytic in the beginning. Systematic phonics, according to Shepherd (2013), includes both synthetic and analytic phonics. It refers to the fact that the letters and sounds are taught in a specific sequence and not on a when-I-need-know bases.

Statement of the problem

Reading disabilities can occur despite normal intellectual ability and teaching. It is independent of socio-economic or language background. Reading difficulties can be devastating to a child’s education and self-esteem and can dramatically limit what the child can achieve both in school and his later life. Most of these students are consistently impaired in memory of letters, phonological processing, word decoding, spellings and comprehension. These difficulties discourage children to read therefore, limiting their access to literature and their future academic pursuit.

Children with reading disabilities often do not have many opportunities to engage in reading during school and do not choose reading as a leisure-time activity. This seriously impedes the child’s opportunities to participate in reading programs among his mates and open up to the world of literature. Reading problem have become a cause of concern among teachers. Either they work as co-teachers with the nursery primary or secondary, providing intensive, small group instruction, or teaching English or reading. Special education teachers spend a great deal of their time teaching reading at the expense of other school subjects.

Purpose of the study

1. To find out whether there are students who have reading problems among Primary four Pupils in the selected Primary Schools in Yobe State
2. To find out the reading areas that pose threat to the identified pupils in the selected Primary Schools
3. To determine the effectiveness of the Phonics method in ameliorating reading problems among the pupils in the selected Primary Schools
4. To find out the ratio of boys to girls who have reading difficulties in the selected schools

Research Questions

1. Are there students with reading difficulties in the selected primary schools?
2. What are the specific types of reading difficulties among the students in the selected primary schools?

3. What is the ratio of boys and girls who have reading difficulties in the selected primary schools?
4. Is the phonics method effective in remediating reading difficulties?

Research hypothesis

There is no significant difference between the pre-test and post-test mean scores of students remediated with the phonics method of teaching reading.

RESEARCH METHODOLOGY

This study employed descriptive survey and experimental designs, thus makes it a mixed method/mixed model design, where data was collected for the identification and determination of the subject areas of reading difficulties, as well as the gender ratio for the determination of the effectiveness of the phonics method of teaching reading. The entire sample and their performance in reading assessment were recorded as pretest, and after an intervention period the test was repeated as a posttest and the difference was determined.

RESULTS

The results obtained upon the analysis of data collected are presented below:

Table 1: Showing the number of students who have reading difficulties.

(N= 15)

Class	Total number of students identified	Students with reading difficulties	Percentage
J s s one	650	15	2.31%

Table 2 Show the result of reading areas that pose challenges to the students.

(N= 15)

Areas of reading difficulties	Total score	Mean	Standard deviation	Percentage	Percentage difference
Identification of similarities and differences between letters and words	107	7.1	1.02	26%	7
Identification of similarities and differences in letter sounds and spoken words	141	9.4	2.3	33%	8
Understanding meanings of words sentence and directions	170	11.3	3.0	41%	5

Table 3 shows the ratio of boys to girls who have reading difficulties and their performance at pre-test.

(N= 15)

Gender	N	Test	Scores	mean	Percentage	Difference	Ratio
Males	9	Pre-test	76	8.44	45%	12%	
Females	6	Pre-test	92	15.33	55%		3:2

Table 4: Summary Table for the t- test analysis for dependent samples of remediated on phonics method of teaching reading.

Test	N	Mean	Mean difference	SD	Df	Level of significance	Calculated t	Critical t
Pre-test		11.2	8.3	9.47	14	0.05	2.81	2.145
Post-test	15	19.5		18.64				

DISCUSSION ON FINDINGS

The first research question concerned with the number of students with reading difficulties. However, the research revealed that students with reading difficulties make up only 2.30% of the total students of 650. This echoes with Catts and Kamhi (1999) who found out that depending on how reading was measured and the age of children, students with reading difficulties makes up 2.3%, 3.1% and 4.4%. They conclude that, regardless of the way in which reading abilities were defined or the grade at which they were examined, students with reading disabilities do not present a distinct group, they are simply at the lower end of the reading ability continuum.

The second research question concerned the specific areas that pose difficulties to the students. The analysis discovered that they have much more problems related to understanding the meaning of words sentences and directions. This is evident in the fact that their mean score in the area (11.3) exceeds that of the other areas. This tallies with Boss and Vaughan (2006) where they reported Filip (1984), Ellis (1996), Palincsar and Brown (1987), Presley (1998), and Wong 1987 (1996) who conclude that students with learning disabilities have difficulty with metacognitive skills of comprehension monitoring. A Similar conclusion was reached when Richman, Elison and Lindgreen (1988) reported a study that compared students' performance in the areas of word reading and comprehension. When the children's individual scores were examined, those with word reading scores exceeded comprehension scores by more than 10 points, especially at the younger age.

The analysis of the research also shows that students manifest significant difficulties in the areas of phonological processing than the areas of letter identifications in words. This is evidenced from the higher mean of 9.4 over 7.1 in the letter identification area. This agrees with Catts and Kamhi (1999) where they reported Torgeson (1996), Bradley and Bryant (1983), Fletcher, Shawitz, Shankweiler, Katz, liberman, Stuuebing, Francis, Fowler and Shaywitz (1994) that dyslexic students are consistently impaired in phonological processing than almost all the other areas of reading.

The research also revealed that student with reading difficulties manifest lesser problems with the identification of letters and letters in words as inherent in the second Table, with the list mean of 7.1. This agrees with Veluntino et-al (1976 in Catts and Kamhi 1999) who asserted that apparent problems in memory for the letters in words led some early investigations to propose that poor readers have generalized deficits in visual memory, that student with reading difficulties perform poorly because of verbal memory than visual memory deficit that poor readers score comparably as good readers on visual memory tasks.

The third research question concerned the ratio of boys to girls who have reading difficulties. It is found that boys are much more in the higher chances to be dyslexic than their girl counterparts. This is evident in the number of boys and girls found with reading difficulties. The ratio shows 3 boys to 2 girls. Also, their performance score on pre-test show that girls scored 55% and boys 45%. This resonates with what Catts and Kamhi (1999) reporting Naidoo (1972) say that dyslexia is reported to be higher in boys than in girls with a ratio of 3:3:1 Rutters, Tizert and Whitmoore (1970), 4:1and 5:1.

The result of this study indicated that students taught reading using the phonics method of reading instruction performed significantly better in reading fluency (speed and accuracy). This conforms with the view of Logsdon (2014) where she discovered that phonics skills are important for students to be able to read fluently. She maintained that students who master phonics skills learn to recognize individual sounds and how to blend them together to read words correctly. The findings of this research also correspond

with Perfetti (2005) reported by Osborn and Chard (2014), who asserts that most children with reading difficulties benefits from organized instruction that centers on sounds, letters and the relationship between letters and sounds.

This finding corresponds to the empirical research findings reported by Lo-ming (2011), where students were assigned to one of the four conditions; phonics only, big book only, combination of phonics and big book and treatment control group. The pre and post-test assessment of the students shows the superiority of the phonics group over the other groups. A similar conclusion was reached by Ehri et al (2001) as reported by Togerson, Brooks and Hall (2006). Ehri's objective was to retrieve and synthesize the experimental research based for the evidence of relative effectiveness of systematic phonics instruction and unsystematic phonics instruction and reading instruction without phonics. Ehri et al found an overall statistically significant positive effect size of 0.41. This means that 16 children out of 100 would succeed in standardized reading accuracy test with the mean of 50 than children who do not receive phonics.

Similarly a conclusion was reached when Togerson, Brooks and Hall (2006) reported a research by Hatcher (2004) where he concludes that there were no selective effect of the different experimental teaching program for normally developing children. However, for children identified at risk of reading disabilities, training in phonemic skills resulted in selective gains in phonemic awareness and in reading skills. He maintained that a reading program that contains a highly structured phonics is sufficient for most children to master alphabetic principles and to learn to read effectively.

Shepherd (2013) reported a pre-test/post-test experiment that involved Jolly phonics and non phonics instruction in Akwa Ibom state. The study concluded from the Burt reading assessment test of the pupils that phonics was effective in enhancing pupil's reading skills. EkeChukwu and Uzu (2010) wrote about a similar study based on Obio/Akor region of Rivers State, involving 200 pupils. The study used the same synthetic phonics lessons and the Burt reading test. It was the intention of the study to determine if there were any specific differences between the effects of synthetic phonics instruction on the reading skills of males and females. There is a high positive relationship between synthetic phonics and early reading among female pupils in primary schools in the area. The same was found in the male side.

CONCLUSION

The result of the study revealed that the stated null hypothesis was rejected as the students showed a significant improvement in their reading skills after being exposed to phonics treatment. Precisely, the analysis of the results revealed that the use of the phonics method of teaching reading has strong effects in improving the academic performance of students than the conventional approach. For students to understand and go along with the rapidly growing world of literature and technology, a strong reading foundation has to be built in them for not only reading texts, but for comprehension analysis and the utilization of the acquired knowledge in problem-solving. We are, therefore, left with the task of finding the effective means of inculcating these skills, which this research sought to accomplish, yet a lot is left undone.

RECOMMENDATIONS

The following recommendations are offered:

- 1 Phonics instruction should be part of every literacy teacher's repertoire and a routine part of literacy teaching.
- 2 Owing to the effectiveness of phonics instruction, it should be used with both children with reading difficulties, those at risk and the so-called normally developing children.
- 3 The Phonics instruction in a judicious balance with other elements should form part of every literacy teacher training.
- 4 There should be a more intensive study with a larger size in investigating the efficiency of phonics instruction.

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