



## A STUDY ON READING ACHIEVEMENTS OF CHILDREN WITH BILINGUAL MEDIA OF INSTRUCTION

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### **ABSTRACT:**

Examined the level of performance of children on measures of decoding and comprehension in two different languages; such as, English and Kannada. Sixty children from Grade 3 of the State School of Mysore, whose medium of instruction was both English and Kannada, were taken. Four tests of decoding and comprehension in English and Kannada languages were administered. Results revealed better word reading in English language but better comprehension in Kannada language. Categorization of pupils into High achievers, General under-achievers, True dyslexics and Instructional failure indicated an average performance for majority of the pupils in reading achievement in both the languages.

### **INTRODUCTION:**

Reading is a complex cognitive skill which plays an important role in scholastic achievement. The importance of reading lies in the fact that the child must first learn to read so that he can later read to learn. Reading is the process of constructing meaning from the printed text through a dynamic interaction among the reader, the text, and the context of the reading situation (Lerner, 1990). It involves a complex set of coordinated processes based on perceptual, linguistic, and conceptual operations. Current research has focussed on the processes of reading, i.e., what the reader does while reading rather than on the products of reading.

A child's reading achievement consists of both the process of identification or recognition of words, independent of any context, and the process of comprehending a sentence or paragraph. The former is termed reading decoding and the latter, reading comprehension.

A child who faces difficulty in reading—called poor readers or less-skilled readers—usually scores lower than his grade level on tests of reading (Morrison, Foster & Wolford, 1981). Such reading disabled children show poor reading achievement score despite having normal intelligence and conventional instruction. Compared to skilled readers less-skilled readers are characterized by difficulty in decoding, slow speech rate and a shorter memory span. Further, they are context-dependent, have poor linguistic ability and poor visual information processing. They exhibit deficiency in applying appropriate information-integration strategies to a reading task (Das & Snart, 1982).

The two aspects of reading achievement, decoding and comprehension, are not unrelated. To comprehend something accurately and effectively, one needs to process the individual words with sufficient speed and accuracy (Vellutino, 1977). In other words, if a child has difficulty in recognition of words, then he will have difficulty in reading the text and understanding its meaning. Thus, the ability to comprehend depends upon the ability to identify or recognize words well. However, successful word reading may or may not lead to good comprehension performance.

Specifically poor readers exhibit a deficit in the phonological coding ability (Stanovich, 1988). Thus, such readers with comprehension problems, render a secondary problem. However, if a child has

a low reading comprehension score, it does not necessarily mean a problem with decoding. It is therefore, important to find out where does the child's difficulty lie; whether in word decoding or in comprehension or in both. Diagnosis of these problems will enable the teacher to take appropriate and effective remedial measures.

The present study attempts to examine the reading performance of children who have two languages as their medium of instruction in their school. Therefore it is assumed that knowledge of one language will facilitate the acquisition of the cognitive processes of decoding and comprehension in another language. Hence it will be interesting to find out if there is any symmetry in the level of performance of children or, measures of decoding and comprehension in two languages. Thus. the purpose of the study is to examine children's reading achievement in two languages; namely, English and Kannada.

#### **METHOD:**

##### **Sample:**

Sixty subjects from Grade 3 in the age range of 7-9 years ( Mean age = 7.57) whose medium of instruction was both English and Kannada were taken randomly from the State School of Mysore (Orissa). The subjects were given four tests of decoding and comprehension in English and Kannada languages: (1) Word Identification (English), (2) Passage Comprehension (English), (3) Word Decoding (Kannada), and (4) Passage Comprehension (Kannada). Out of a total of 60 children taken, 44 were Oriya, 8 were Bengali, 4 were Kannada, 2 were Marathi and one each belonged to Kannada and Malayalam mother-tongue language.

##### **Tests:**

Word Identification and Passage Comprehension tests in English included in the Woodcock Reading Mastery Tests—Revised ( Form G) (Woodcock, 1987) were used. For Kannada, decoding and comprehension tests developed in Kannada by Das, (1995) on the line of the English tests were used. The tests are described below.

##### **Decoding :**

Tests—The word Identification (English) test consisted of 106 items whereas the word Decoding (Kannada) test consisted of 100 items. In each, 'S' was asked to read the words, arranged in an increasing order of difficulty, one by one. Correct response was scored '1' and a wrong response '0'. For a response to be considered correct, the 'S' had to produce a natural reading of the word in about 5 seconds. However Ss were not penalized for mispronunciation resulting from speech defects, dialects, or regional speech patterns. The test was discontinued after six consecutive failures.

##### **Comprehension:**

Tests—Both the English and Kannada Passage Comprehension tests consisted of 68 items. The Ss were asked to read each sentence or item and suggest an appropriate word in the blank space. A correct response was scored '1' and a wrong response '0'. Only single-word responses were acceptable and the test was discontinued after six consecutive failures.

#### **Results and Discussion**

The objective of the study was to find out the reading performance of pupils in English and Kannada. The mean score obtained by the pupils on measures of reading decoding and comprehension in English and Kannada are given in Table 1.

**Table - 1**  
**Means and Standard Deviations of Grade 3 Children on Measures**  
**of Decoding and Comprehension (N = 60)**

	English		Kannada	
	Word Decoding	Passage Comprehension	Word Decoding	Passage Comprehension
Mean	53.39	12.54	44.44	21.85
SD	14.14	5.04	14.42	7.9

Table-1, shows that the subjects' decoding performance was good in English compared to Kannada. However, they performed better in Kannada comprehension than in English comprehension. Thus, it can be said that a person may be good in identifying words in a language he knows other than his mother tongue, but he may not have good comprehension ability in that language.

The finding can be interpreted in the light of the extent to which the two languages are used by the children. In Grade 3, English is used to teach many subjects while Kannada is used to teach only one subject (Social Science) besides the language subject. The better performance of children in English, word decoding may be attributed to their greater exposure to English. English is used as the primary formal mode of instruction. However, the verbal interactions of the children with the teachers and the peers at school are regulated by Kannada. This explains their better comprehension performance in Kannada than in English. Moreover, the mother-tongue of the majority of pupils is Oriya, which is closer to Kannada language than English language. The process of verbal communication at school and home is, thus, governed by Kannada and Oriya, as a result of which comprehension is found to be better in Kannada as compared to English.

#### **Categorization of children on the basis of their Reading Achievement in English & Kannada:**

The main purpose of the study was to examine the level of performance of pupils on measures of decoding and comprehension in English and Kannada. For this, all the children were categorized into four groups on the basis of standard (z) scores (scores of each 'S' obtained on the four measures of decoding and comprehension were converted to z scores) such as :

- High Achievers:** Children whose performance was good in decoding and comprehension tasks both in English and Kannada were called high achievers. In terms of z scores, they obtained a score of  $> 0.5z$  in both English and Kannada measures.
- General Under-achievers:** Children whose performance was poor in decoding and comprehension tasks both in English and Kannada were classified as general under-achievers. They obtained a score of  $< -0.5z$  in both English and Kannada measures.
- True Dyslexics:** These children had difficulty in word decoding but their performance in comprehension was good. They obtained a score of  $< -0.5z$  in decoding and  $> 0.5z$  in comprehension. If this is found for both English and Kannada, then the child is definitely a dyslexic.
- Instructional Failure:** These children performed well in decoding but showed poor comprehension performance. They obtained a score of  $> 0.5z$  in decoding but  $< -0.5z$  in comprehension. These categories of children are described in Table 2 on page 29.

Analyzing the data, we find that 3 children are classified as high achievers, 5 as general under-achievers, and 1 as dyslexic. In the English measures, only one child was included under instructional failure category, while five children were classified as instructional failures in Kannada measures. The rest of the children can be said to have shown average performance. These children were neither very

good nor very poor in their performance. They also did not show instructional failure. Their scores fell between -0.5z to +0.5z. Thus, we can say that the majority of children exhibited an average performance on both the languages.

The average performance of the children on the four measures of decoding and comprehension can be discussed from a perspective of bilingualism. Cummins' (1979) theory of Linguistic Interdependence advocates that the school-related aspects of proficiency in two or more languages are common or interdependent across all languages of the bilingual at the underlying level. Thus, the skills in scholastic use of language, such as reading and comprehending text materials will generalize from one language (L<sub>1</sub>) to the other (L<sub>2</sub>) provided the level of development in L<sub>1</sub> is adequate. The average performance of children in this study might be taken to indicate that their proficiency in L<sub>1</sub> (their mother tongue, which in most cases is Kannada) is not so highly developed as to generalize to and develop high literacy skills in L<sub>2</sub>.

Since the problem of language of instruction in India cannot be viewed from the monolingual perspective, the schools have the major responsibility of ensuring a smooth transition from regional to the state language and to national link language (Mohanty, 1994). Thus a bilingual multilingual programme can be followed which will not only help in mother-tongue maintenance but also will facilitate acquiring efficiency in other languages.

**Table -2**  
**Reading Performance of the Four Categories of Children**

	Z Score in English Tests		Z Score in Kannada Tests	
	Decoding	Comprehension	Decoding	Comprehension
High Achievers	2.16	2.87	2.05	2.42
	1.88	1.08	2.05	0.91
	0.54	1.88	2.74	1.03
General Under-achievers	-1.23	-0.5	-1.28	-0.61
	-0.59	-1.69	-1.00	-0.61
	-1.51	-1.1	-1.42	-1.63
	-2.57	-1.69	-1.35	-1.63
	-0.73	-1.69	-1.28	-2.01
Dyslexics	-0.88	0.49	-0.93	0.65
Instructional Failures	0.68	-0.70	-0.52	0.65
	-0.73	-0.11	0.87	-0.99
	1.88	0.09	0.94	-0.61
	2.02	0.69	0.87	-0.87
	0.26	1.08	0.73	-0.74
	0.11	0.09	0.87	-1.37

Comparison of children's reading achievement in two languages will help us in the remediation process of the poor readers. If a child fails to read successfully, then it can mean two things:

- a. The child has difficulty in the underlying processes of reading, i.e., he has difficulty either in decoding or in comprehension or in both.

b. The child has the ability to decode and comprehend, but he is unable to manifest it due to poor instruction of the teacher.

Now, if we test the child's reading performance in another language, we can know where the difficulty of the child lies. The child can be said to have a process deficit if he performs poorly in both the languages. From Table-2, we can see that five children can be said to have process deficit. They have performed poorly both in English as well as Kannada measures.

Results indicate that most of the children have shown average performance in reading tasks. From Table-2, we find that five children have been classified under instructional failures in Kannada whereas only one child conforms to the criterion of good decoding and poor comprehension in English. Poor comprehension performance of these children might be attributed to inappropriate or faulty instruction. The teacher thus, can help the children in comprehension skill. However, if some children had performed poorly both in English and Kannada comprehension though good in reading words both in English and Kannada, then we would not have attributed it to an instructional failure. In such a case, the children could have been said to have a basic difficulty in the process of comprehension itself.

In the light of these interpretations, the implication of the study can be said to be practical-oriented. Knowledge of the nature of reading difficulty in children will help us in formulating appropriate remedial strategies. Identification of the nature and kind of language difficulties of the children, one could either decide to train the decoding and/or comprehension processes, or design an appropriate educational environment suitable to the child's needs.

The classification of children into four categories have shown consistent performance across the two languages, i.e., they have performed similarly in English as well as Kannada decoding and comprehension tests, they must be following more or less identical strategies.

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