

The Fourth Grade Slump: Late Emerging Poor Readers

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Introduction

Educators often report a “slump” around 4th grade in which some children who have had no difficulties learning to read in the early grades begin to experience significant problems. It is assumed that these problems arise from changes in the demands of reading in later elementary school grades. Whereas emphasis in the early grades is on learning to accurately recognize words, reading achievement by 4th grade turns more to comprehension. As such, problems can arise from children’s difficulties in language comprehension skills. In addition, individual differences in speed of word recognition (i.e., fluency) could have a particular impact on reading achievement at this level. In this study, we sought to determine the prevalence of later developing reading problems and the factors that are related to these problems.

Method

A sample of 570 children participating in a longitudinal study was available for this investigation. This sample was not a representative one, but was drawn from a larger epidemiologic sample. As such, we were able to weight the data to assure that our results could be generalized to the population at large.

Participants were given a battery of reading and language tests in 2nd and 4th grades (see Table 1). Children were placed in 4 groups on the basis of performance on a composite measure of reading comprehension. Groups included children who were poor readers in 4th grade only (late poor readers), 2nd grade only (early poor readers), both grades (persistent poor readers), and neither grade (good readers).

To be classified as a poor reader at a single grade (late or early), a participant had to score at least 1 SD below the mean on the reading comprehension composite measure at that grade and score higher than -.5 z-score (1/2 SD below mean) at the other grade. Accordingly, persistent poor readers scored more than 1 SD below the mean at both grades, while good readers scored above -.5 z-score at both grades.

Results

Table 2 shows the number of children who met the criteria for each of the 4 reading groups. The weighted percentage of each of these groups in the overall sample is also provided. Additional analysis indicated that late poor readers represented 19.5% of all those with reading problems in 4th grade, whereas early poor readers represented 18.1% of those with reading problems in 2nd grade.

Figure 1 displays the 2nd grade reading and language z scores for each of the four reading groups. These data showed that late poor readers had adequate skills in word recognition and fluency and did not differ significantly from good readers. Early poor readers, on the other hand, had significant problems in word recognition and fluency. In the case of language abilities, both late and early poor readers demonstrated mild deficits in vocabulary, grammar, and text comprehension abilities.

In 4th grade (Figure 2), late poor readers continued to show good word recognition and fluency skills. However, they demonstrated more pronounced deficits in language, especially in text comprehension. Notably, in 4th grade, late poor readers performed significantly less well than early poor readers and comparable to persistent poor readers in text comprehension.

Discussion

Our results indicate that approximately 3% of children may show a 4th grade slump. This represents about 20% of all poor readers in 4th grade. Further results show that these children have deficits in text comprehension. These deficits may be mild in 2nd grade, but become more apparent by 4th grade. In addition, our results provided no evidence of word recognition or fluency problems in these poor readers. Finally, in contrast to late poor readers, early poor readers appear to have particular problems with word recognition and fluency, especially in 2nd grade.

Figure 1: Second Grade

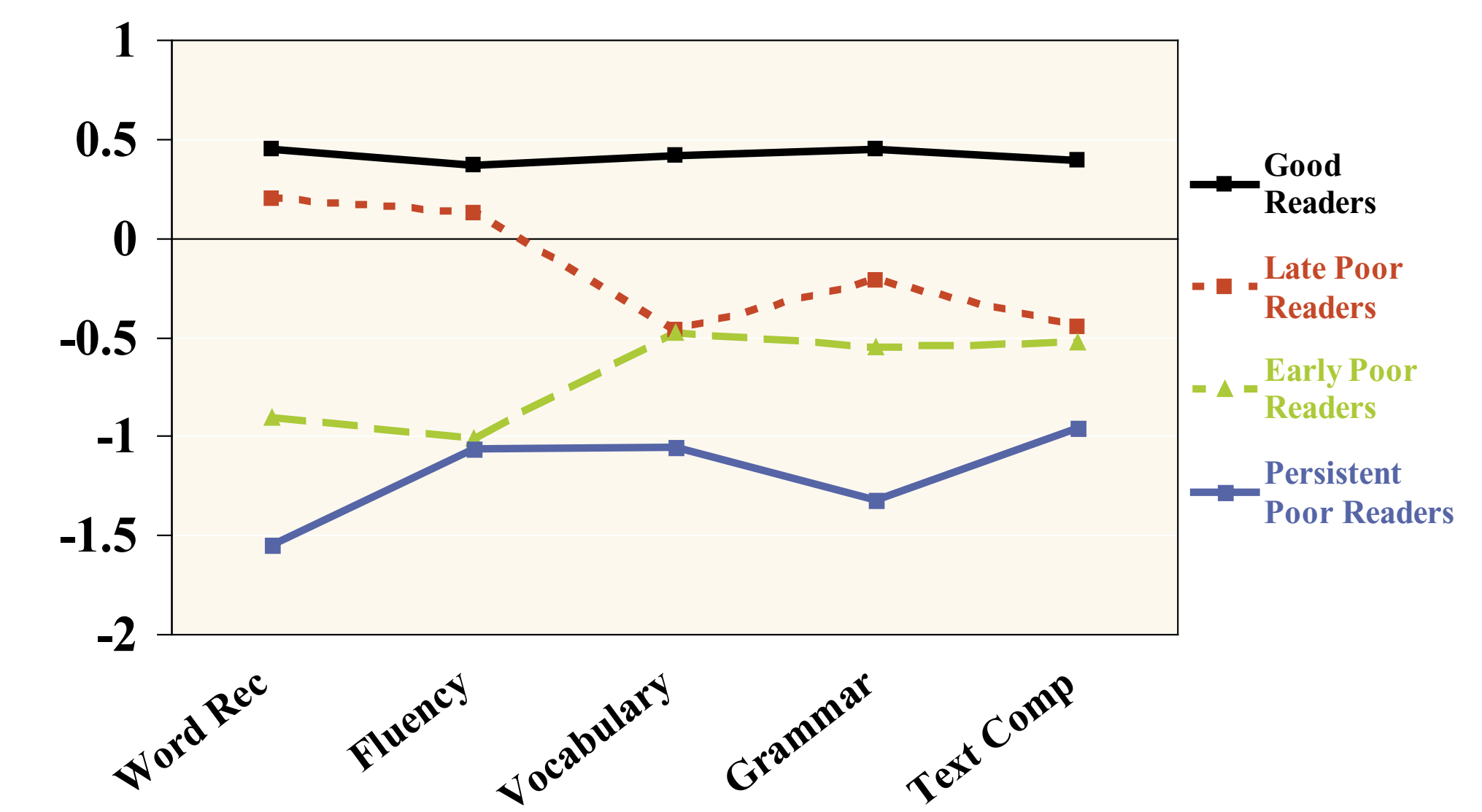
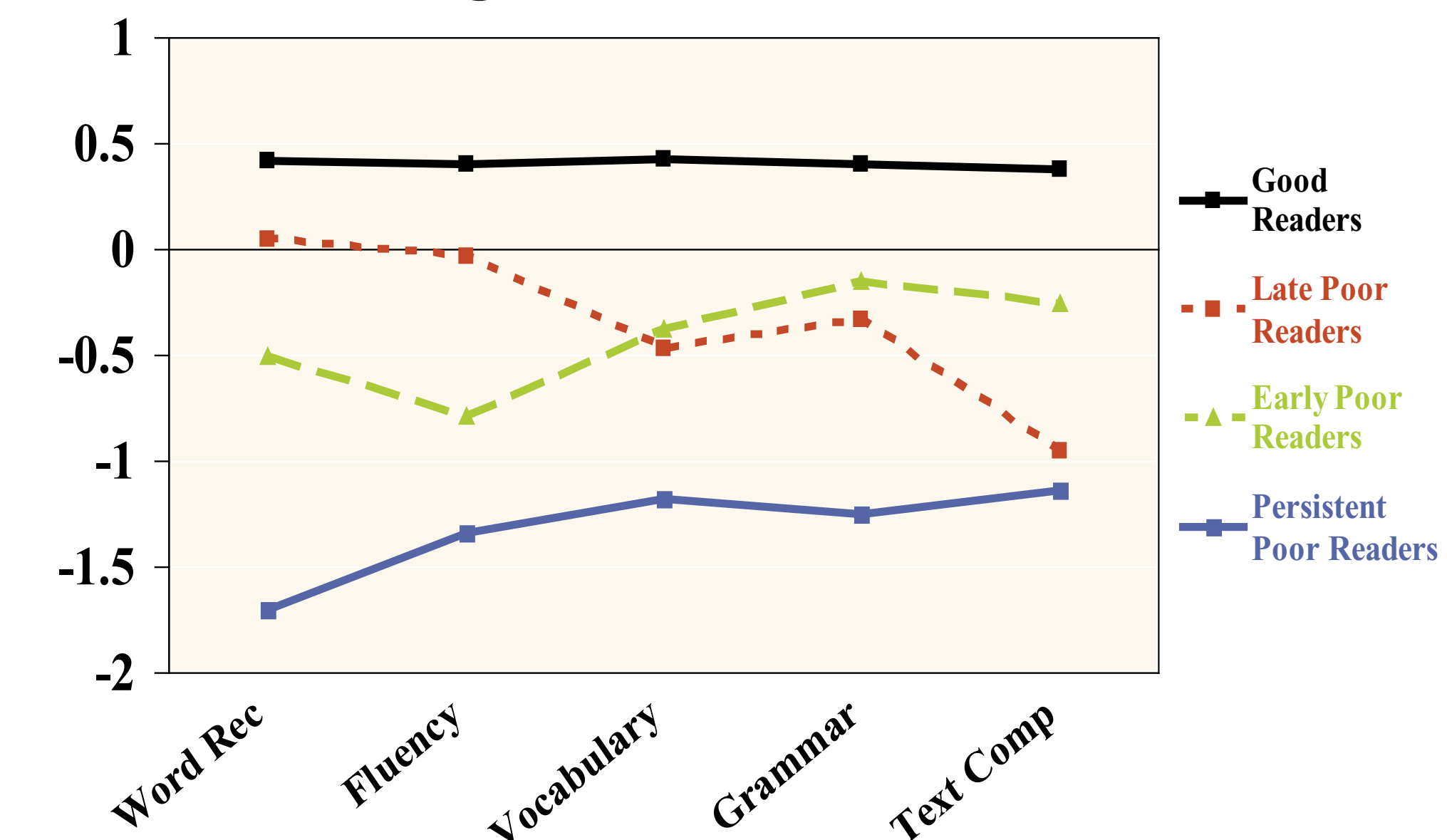


Figure 2: Fourth Grade



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Table 1: Test battery administered in 2nd and 4th grades

Area of Reading or Language	Materials
Reading Comprehension	WRMT-R Passage Comprehension GORT-3 Comprehension DAB-2 Reading Comprehension
Word Recognition	WRMT-R Word Identification WRMT-R Word Attack
Fluency	GORT-3 Rate
Vocabulary	Peabody Picture Vocabulary Tests-R
Grammatical Understanding	CELF-3 Concepts and Directions
Text Comprehension	CELF-3 Listening to Paragraphs

Note: WRMT-R = Woodcock Reading Mastery Tests-Revised, GORT-3 = Gray Oral Reading Test-3, DAB-2 = Diagnostic Achievement Battery-2, CELF-3 = Clinical Evaluation of Language Fundamentals-3.

Table 2: Prevalence in terms of number and weighted percentage of participants in the four reading groups.

Reading Group	Number in the Sample	Weighted Percentage in the Sample
Late Poor Readers	18	2.8%
Early Poor Readers	19	2.9%
Persistent Poor Readers	104	8.6%
Good Readers	244	62.2%

