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DECODABLE TEXTS: LOW OR HIGH PROPORTION OF PHONICALLY DECODABLE WORDS TO ENHANCE EARLY READING ACQUISITION?

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INTRODUCTION

Specialists recommend the use of solely decodable texts in initial reading instruction (Castles et al., 2018; HMSO, 2005).

BUT meta-analyses have a more nuanced opinion:

Pugh et al. (2023)
Children with reading difficulty

Murphy Odo (2024)
Children without reading disabilities

Same conclusion: Proposing both decodable and non-decodable texts may be the most effective.

METHOD

14 first grade teachers
Phonics method

222 French student
Mean age: 6.5

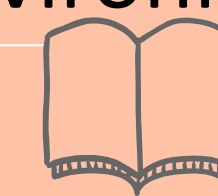
We followed the actual practices of teachers during the first weeks of first grade.

- Septembre → Every day for 10 weeks → Novembre
- Test 1**
- Reading
 - Comprehension
- Collection of decodability rate**
- Texts read by children
 - Graphemes taught
 - Calculation of the decodability rate with Anagraph (Rioux, 2018)
- Test 2**
- Reading
 - Comprehension

OBJECTIVES

- Describe how do the decodability rates of text evolve at the really beginning of the school year.
- Study whether the **decodability rate** and its **range**, in terms of intercept and slope over the first weeks of learning to read, impact the pupils' progress in reading and comprehension.

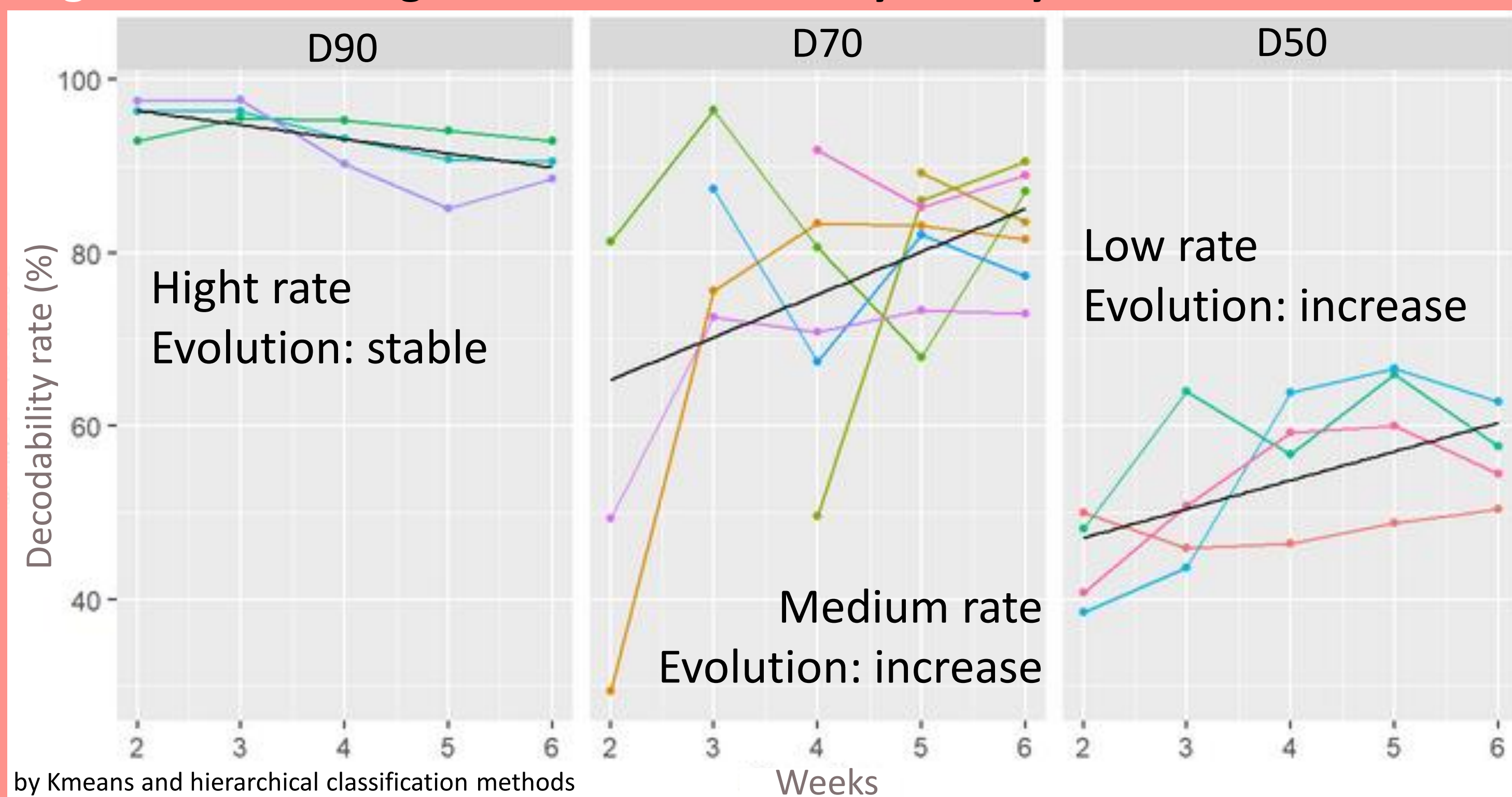
Ecological environment



French language

RESULTS

Figure 1. Linear regression of decodability rate by cluster

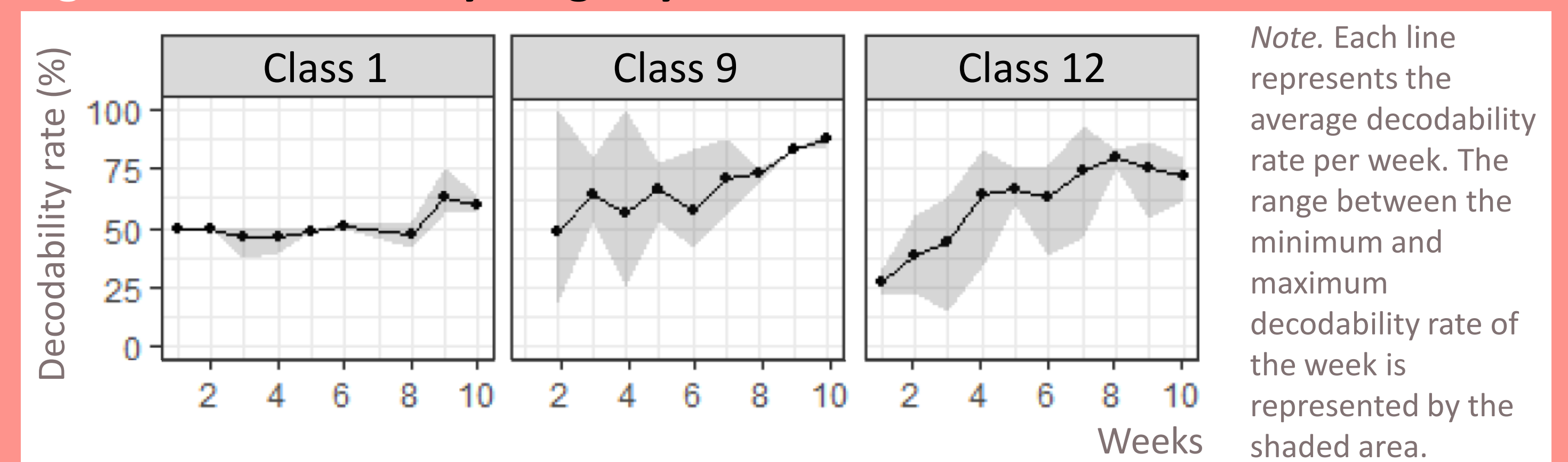


by Kmeans and hierarchical classification methods

Question 1: Description

- High variability across classrooms, but 3 patterns emerged
- After 6 weeks, the gap reduces and the rate concentrates between 70 and 90%

Figure 2. Decodability range by class in cluster D50



Note. Each line represents the average decodability rate per week. The range between the minimum and maximum decodability rate of the week is represented by the shaded area.

Question 2: Decodability rate impact

- Reading** – More decodable = Less decodable
 $reading_T2 \sim interceptCluster + penteCluster + reading_T1 + (1 | CLASS) + (1 | ITEM)$
 No effect of intercept ($\beta = 0.008$; $p = .258$) or slope ($\beta = 0.007$; $p = .886$).
- Comprehension** – More decodable < Less decodable
 $comprehension_T2 \sim interceptCluster + penteCluster + comprehension_T1 + (1 | CLASS) + (1 | ITEM)$
 The higher the initial decodability rate (intercept : $\beta = -0.017$; $p = .004$), and the higher the evolution of decodability (slope : $\beta = -0.13$; $p = .001$), the less progress is made in comprehension.

Question 2: Decodability range impact

- Reading** – More variability = Less variability
 $reading_T2 \sim interceptRangeClass + slopeRangeClass + reading_T1 + (1 | CLASS) + (1 | ITEM)$
 No effect of intercept ($\beta = -0.004$; $p = .641$) or slope ($\beta = 0.008$; $p = .786$).
- Comprehension** – More variability > Less variability
 $comprehension_T2 \sim interceptRangeClass + slopeRangeClass + comprehension_T1 + (1 | CLASS) + (1 | ITEM)$
 The greater the initial range in decodability, the better the progress made in comprehension ($\beta = 0.02$; $p = .01$).
 No effect of the evolution in the decodability range on reading acquisition ($\beta = 0.046$; $p = .12$).

CONCLUSIONS

- Teacher practices:** Observations show that none of the 14 teachers used solely decodable texts, despite recommendations.
- Reading performance:** Providing only decodable texts does not impact students' reading abilities.
- Comprehension performance:**
 - Less decodability rates are more effective.
 - Decodability rates should not increase too quickly over weeks.
 - A mix of decodable and non-decodable texts is beneficial.
- Consistency with Research:** Findings align with Pugh's meta-analysis and Murphy's conclusions.

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