Reading prosody development: Pausing and breathing while reading

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Introduction
Pausing when reading aloud is essential to comprehension of both listeners and readers. This skill evolves from the early stage of reading acquisition to reading expertise. The placement and duration of respiratory pauses tell us about the breath-voice coordination and so the planning when reading aloud.

Method
Participants: 61 2nd graders (age: 7y11m, 27 girls), 63 5th graders (age: 10y11m, 23 girls), 20 adults (age: 29y5m, 10 women)
Protocol: Recording voice and breathing while reading a 174 words narrative text.
Analysis: Control for fluency, comprehension, vocabulary, non-verbal reasoning

Results
Breathing
• 2nd graders breathed more often and longer than 5th graders and adults
• Children planned less their breathing, 2nd graders less than 5th graders
Pausing
• 2nd graders pause made more frequent and longer pauses than 5th graders and adults.
• Children relied less on punctuation than adults.

Discussion
Learning to breath while reading is mostly implicitly acquired. Young children need to breath often and don’t plan their pauses, they make more hesitation pauses. Then they tend to choose speed over phrasing, and comprehension and have less, shorter pause, even if more grammatical. We suggest that interventions to train reading-breathing coordination would be beneficial for poor readers/poor comprehenders.

Objectives
Describing pausing acquisition from the beginning of reading acquisition to expertise, including breath-voice coordination while reading aloud

Conclusion
2nd graders spent more time pausing, with more breathing and hesitations. Breathing-reading coordination was not acquired. 5th graders paused less and shorter than adults, relying less on punctuation marks, planning their respiratory pauses

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