

Electrophysiological correlates of phonological and temporal regularities in speech processing

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Propositions of the doctoral dissertation

Electrophysiological correlates of phonological and temporal regularities in speech processing

- 1. Compared to typically reading adults, dyslexic readers show reduced sensitivity to variations in phonotactic probability during speech perception.
- 2. Dutch speaking adults did not show sensitivity to variations in syllable stress in pseudowords in passive speech perception.
- 3. Phonological and rhythmic regularities in speech are processed via independent mechanisms in sublexical speech processing.
- 4. Regularities in the phonological and temporal structure of speech are exploited differently during perception and production.
- 5. Good science takes time. Pilot data from adapted EEG paradigms should be carefully inspected to resolve possible design issues before collecting a full dataset.
- 6. Using EEG to investigate speech processing in passive paradigms can provide insights that might otherwise be confounded by explicit task demands.
- 7. Studies investigating neurodevelopmental disorders such as developmental dyslexia should include a sample with diverse educational and socioeconomic backgrounds.
- 8. Theories of typical and atypical speech processing must include a crosslinguistic perspective to account for the diversity of human language.
- 9. Expanding our understanding of speech processing at a basic level can lead to a better understanding of atypical speech processing and inform future interventions.
- 10. The backbone of a good scientist is to want to solve a problem.
- 11. There is no reason to stop doing it until the results are boring. Kasthuri et al., 2015

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