

University of Groningen

Neurophysiological studies of reading fluency

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1. The flourishing of neuroimaging techniques over the past few decades has significantly advanced our understanding of the neural substrates of reading and reading disorders. Such knowledge is key to identifying early precursors of dyslexia, and may eventually give rise to highly-targeted intervention programs (Chapter 2).
2. The N170 print-tuning effect (i.e., enhanced, left-lateralized N170 response for print over visual baseline) is a valid neurophysiological marker of dyslexia, one that can be readily elicited by implicit reading tasks and robustly detected at the individual level (Chapter 2).
3. The auditory discrimination deficit as indexed by an attenuated mismatch response is seemingly restricted to a subset of individuals with dyslexia, and is highly dependent on a wide range of methodological factors (Chapter 3).
4. Similar to alphabetic words, logographic characters elicit enhanced, left-lateralized N170 responses, suggesting that similar visual specialization processes underpin reading in both alphabetic and logographic scripts (Chapter 4).
5. To identify early precursors of dyslexia, it is advisable to research basic aspects of perceptual processing that constitute critical first steps in deciphering visual/oral language codes (Chapter 5).
6. Generalized additive modelling provides an innovative way of analysing ERP data, one that assesses the complete, nonlinear shape of the ERP signal over the entire timespan wherein the effect of interest might emerge.
7. Having a very small study sample can motivate one to learn sophisticated statistics. There are no negatives in life, only challenges to overcome that will make you stronger.
8. Doing a PhD dissertation is no easy task; it is impossible without loved ones who back you up.