

Research Seminars „General Psychology and Cognitive Neuroscience“

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Phonological and Auditory Processing in Dyslexia as Studied with EEG and fMRI

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To study psychological phenomena like basal perceptual and complex cognitive processes electrophysiological and neurofunctional methods are indispensable. In order to identify neural structures and hence the substrate of cognitive and perceptual abilities in subjects with dyslexia we used these methods.

In addition to mainly phonological processing deficits in dyslexia there is always a subgroup of subjects with difficulties in auditory language perception. Detailed findings about coherences in auditory and phonological processing in dyslexia are nonexistent and it is only possible to fill this gap in combination of behavioral, neurophysiological, and neurofunctional data.

We studied children with and without dyslexia during auditory and phonological processing and compared different levels of data.