

COGNITIVE FATIGUE AND MULTIPLE SCLEROSIS

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Multiple sclerosis (MS) has traditionally been researched from a medical viewpoint, and it is only during the last decades that the cognitive aspects of MS have drawn attention (LaRocca & Kalb 2006), even though according to some studies up to 50–66 % of MS patients show cognitive difficulty (Peyser et al. 1990). The research on communicative disorders, on the other hand, has largely concentrated on the motor disorders of speech and not on the language disorders due to cognitive disorders (Murdoch & Theodoros 2000). MS researchers Murdoch and Lethlean (2000, 115) acknowledge the need for a more specific methods in studying the language disorders in MS: "...there exists a need for more specific assessment of high-level language abilities in the MS population using tests specifically developed for that purpose so as to describe fully the proposed language disorder."

Particularly little research has been done on cognitive fatigue. It is reported to be one of the three most disabling symptoms of for persons with MS in many studies (Krupp 2004; Krupp & Elkins 2000; LaRocca & Kalb 2006). No research has thus far been done on the relationship between cognitive fatigue and language disorders in MS (Krupp & Elkins 2000).

In my PhD study on language disorders in MS, my first objective is to profile language disorders in spontaneous speech of MS patients. My second objective is to find out what kind of, if any, effect, cognitive fatigue has on the language of MS patients. As subjects, I have interviewed 20 MS patients with definite MS (10 relapsing remitting and 10 secondary progressive), and 20 healthy controls matched for age, gender and education. In addition to recording speech based on picture material previously used in aphasia research (for example, Mayer 1969), the subjects have been assessed on neuropsychological test batteries to measure subjects' cognitive and linguistic abilities to be used as background information in linguistic analysis.

In this paper, I will investigate whether there is a correlation between cognitive fatigue and speech in MS patients. I will analyse the data looking at differences in word fluency and length of the stories in different phases of the oral interview. I will also investigate whether these linguistic features correlate with self-perceived fatigue in speech production, and other results from the neuropsychological assessment of linguistic and cognitive ability.

Preference: Oral presentation

Session: 2. Language disorders in monolingual and bilingual speakers

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