

The Contribution of Perceived Memory and Information Processing Deficits on Multiple Sclerosis Cognitive Difficulties

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ABSTRACT

MS is one of the major causes of disability in young adults within western countries. More than half of people with MS develop a cognitive impairment, which might be considered as the major quality of life determinant. Although there have been developed several cognitive batteries, cognitive impairment is often overlooked. Information processing speed (IPS) and memory difficulties are the most common cognitive impairments in MS. The Multiple Sclerosis Neuropsychological Questionnaire (MSNQ) is a valid self-report measure of global cognitive difficulties for people with MS. The Attentional Functional Index (AFI) and the Prospective and Retrospective Memory Questionnaire (PRMQ) are self-report measures for perceived cognitive functioning assessing perceived effectiveness in common activities which require attention/IPS and memory. However, it is little known about MS variability between these patterns isolated and co-occurring cognitive deficits. This study aimed to analyze how information processing and prospective and retrospective memory deficits contribute to self-report of cognitive difficulties on the MSNQ and the nature of this relationship. 76 participants with MS completed a series of MS, demographic, and cognition questionnaires along with the MSNQ, the AFI, and the PRMQ on-line. A within-subjects correlation and multiple regression analysis with MSNQ as the dependent variable and AFI and PRMQ as the independent variables were undertaken. The results indicated a significant correlation ($p < .01$), with a good prediction for the model ($p < .05$, $R^2 = .73$). It was concluded that perceived memory ($p < .001$), and IPS ($p = 0.5$) deficits contribute to self-report of cognitive deficits on the MSNQ separately within the MS population. Findings, limitations, and future implications were discussed.

Keywords: Multiple sclerosis, Cognition, Memory, Information processing, Self-report, Cognitive battery

Abbreviations

MS: Multiple Sclerosis; MSNQ: Multiple Sclerosis Neuropsychological Questionnaire; PRMQ: Prospective and Retrospective Memory Questionnaire; AFI: Attentional Functional Index; IPS: Information Processing Speed

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