

# **The cognitive impact of chronic low back pain: positive effect of multidisciplinary pain therapy**

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**Abstract:** Die Identification of cognitive deficits may contribute to the therapy success. The present study compares cognitive function of patients with chronic low back pain (cLBP) before and after multidisciplinary pain therapy (MDTP). 32 patients with cLBP and 25 healthy controls were assessed with the Cambridge Neuropsychological Test Automated Battery (CANTAB). The Trail Making Test (TMT), Wechsler Adult Intelligence Scale (WAIS) and multiple choice vocabulary test (MWT-B) were used to evaluate the intelligence quotient (IQ) in parallel. Before MDTP, patients needed significantly longer time in TMT-A and TMT-B, in comparison to HC. Three weeks and 6 months after MDTP, the reaction time in TMT-A and MWT-B results of patients was significantly improved after MDTP. These findings provide new insights into impairment in information processing and executive function in people with cLBP and dysfunction of working memory. The MDTP showed clearly long-term effect on cognitive impact of patients with cLBP.