

P-539 - A META-ANALYSIS OF EXECUTIVE DYSFUNCTIONS IN UNIPOLAR MAJOR DEPRESSIVE DISORDER (MDD) WITHOUT PSYCHOTIC SYMPTOMS AND THEIR CHANGES DURING ANTIDEPRESSANT TREATMENT

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Objective: In patients with MDD, empirical evidence supports the existence of moderate but significant neuropsychological deficits as compared to non-depressed controls. With respect to cognitive domains, impairment has been reported for executive functioning in particular, whereas less significant deficits have been found for psychomotor speed, attention and memory. Additionally, studies reported a substantial improvement in neuropsychological functioning during the course of an antidepressant treatment in patients with MDD. Nevertheless, the effect size of executive dysfunctions in unipolar, non-psychotic MDD as well as their relationship to antidepressant treatment is ambiguous.

Method: Meta-analytic methods were used to assess the severity of executive dysfunctions in unipolar, non-psychotic MDD as compared to healthy controls and to investigate their course during antidepressant treatment.

Results: 15 studies comparing the executive functions of 375 patients with DSM-IV MDD and 481 healthy controls were analysed. Furthermore, in 3 studies including 122 MDD patients the Stroop test performance was examined before and after antidepressant treatment. MDD patients performed 0.439 up to 1.18 ($p < 0.0001$) standard mean differences worse than healthy controls. The Stroop performance improved during the course of treatment ($p = 0.0001$).

Conclusion: We revealed significant executive dysfunctions in unipolar, non-psychotic MDD patients compared to healthy controls and an improvement of the Stroop performance during the course of treatment. However, the results of our longitudinal analysis are not transferable to other components of executive functioning. Future studies with different test procedures are needed to further investigate the influence of antidepressant treatment on executive functions.