

P01-174 - EXECUTIVE DYSFUNCTIONS IN DISORDERS CENTRAL IN CHILD AND ADOLESCENT PSYCHIATRY

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Many cognitive operations are needed for the successful completion of goal-oriented behaviour. These operations are commonly referred to as executive functions (EF). It is assumed that the prefrontal cortex has a central role in EF. Given its many connections to other parts of the brain, it is in an excellent position to coordinate processing across wide regions of the central nervous system. EF enable the individual to shift attention, inhibit pre-potent response, generate goal-directed behaviour, and solve problems in a planned, strategic way (Goldman-Rakic, 1993). Patients with frontal lobe damage fail on tests that tap these abilities (e.g. Damasio, 1994). Another deficit is their inability to calculate 'chance'.

Concerning many disorders in child and adolescent psychiatry it has been assumed, that EF deficits are essential in their etiology. For instance it has been proposed, that such deficits are central in autism (Ozonoff, Pennington & Rogers, 1994; Pennington & Ozonoff, 1996; Ozonoff, 1997), and that this deficit may underlie the social (mentalising) deficit in autistic individuals (Hughes, Russel & Robbins, 1994). EF deficits can also be found in individuals with ADHD, but these deficits are supposed to show a different 'profile' than the EF deficits in autism. In adolescence the brain undergoes a major transformation, and in this stage the EF deficits may lead to disruptive behaviors (e.g. Spear, 2007).

In this presentation there will be an emphasis on results of research by the author concerning EF deficits in autism and in adolescence.