

**Cognitive Functioning of Depressed Patients with History of Suicidal Attempt**

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**Introduction:** Major Depressive Disorder (MDD) is a complex disease characterized by cognitive dysfunctions. The subgroups of MDD show different cognitive profile.

**Aims:** The aim of this study to examine whether depressed suicide attempters show impaired executive functions.

**Objectives:** We hypothesised that patients from this subgroup have decision making, cognitive inhibition and verbal working memory deficits.

**Methods:** 17 depressed patients with history of suicide attempt and 13 healthy subjects completed the reward and punishment-related versions of a decision making task (Iowa Gambling Task, IGT), an irrelevant-respond inhibition task (Stroop Task), a respond inhibition task (Stop Task) and a measure of verbal working memory (Digit Span).

**Results:** Depressed patients showed impairment in the reward-related version of IGT (ABCD) and higher error-interference effect in the Stroop Task. There was a tendency toward higher reaction time-interference in Stroop Task and worse performance in Digit Span. Their performance did not differ from healthy controls in the punishment-related version of IGT (EFGH) and in the Stop Task.

**Conclusions:** Reward-related decision making, irrelevant-respond inhibition and verbal working memory dysfunctions were more frequently found among the patient group. They perform normally in the punishment-related version of IGT, while preliminary studies show that patients who attempt suicide within 72 hours perform poorly in this task. Further studies should examine whether punishment-related version can differentiate high-risk suicide attempters.

Tests	Depressed patients (N=17)		Comparison subjects (N=13)		T-test		
	Mean	SD	Mean	SD	Z	p	
Stroop interference (reaction time)	0,56	0,455	0,25	0,204	-1,862	0,065	
Stroop interference (errors)	7,10	5,641	3,69	6,365	-2,456	0,014	
Stop-signal (reaction time)	0,31	0,172	0,29	0,133	-0,858	0,408	
Digit span	8,76	2,538	10,46	1,330	-1,933	0,059	
					ANOVA		
					F	df	p
IGT ABCD	-7,65	30,921	10,46	22,777	2,614	4	0,039
IGT EFGH	16,47	28,351	24,77	27,344	0,828	4	0,51