

Deficit in semantic clustering of category examples generated by people with bipolar disorder

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Abstract: Semantic fluency tasks have been used to assess the functioning and content of one's semantic system. Impairments of productivity or semantic clustering are thought to reflect dysfunction of the semantic system. The productivity of individuals with bipolar psychosis (BP) is much less impaired compared to those with schizophrenia (Schretlen et al 2007). However, clustering patterns have not been investigated in BP. We adapted Singular Value Decomposition methods to examine semantic clustering in 98 stable adult outpatients with BP and 98 matched healthy controls on two semantic fluency tasks (naming animals and supermarket items). Patients with BP showed mildly impaired productivity on supermarket item naming and normal productivity on animal naming. In contrast, they showed clearly abnormal semantic clustering patterns in both tasks. Details of their word clustering patterns suggest that the semantic knowledge of patients with BP may be intact, but the way it is utilized (retrieval/access) may be compromised.

References

Schretlen DJ et al. 2007. Neuropsychological functioning in bipolar disorder and schizophrenia. *Biol Psychiat* 62:179-86