

MODALITY SHIFT EFFECT IN SCHIZOPHRENIA, MANIA AND DEPRESSION

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Introduction: The effect of a shift of sensory modality on the serial reaction times of patients with schizophrenia was first reported in 1961. Zubin & Spring (1977) argued that the modality shift effect (MSE) might be a vulnerability marker for schizophrenia. A MSE has, however, also been observed in patients with depression, brain damage, alcoholism etc.

Objectives: To examine if patients with schizophrenia can be differentiated from patients with mood disorder on the basis of the MSE to light and tone stimuli.

Aims: To evaluate if MSE measures could be useful in the diagnostic process.

Methods: 58 patients with schizophrenia, 55 patients with mood disorder, and 30 healthy controls participated in a computer-based reaction time experiment. The stimuli were short visual and auditory signals presented in a randomized sequence. Participants were instructed to press a button each time they saw or heard a signal.

Results: The MSE to both light and sound stimuli of the patients with schizophrenia and mood disorder was significantly longer than the control group's. There was no significant difference in the patient groups' MSE to light stimuli; but patients with schizophrenia had a significantly longer MSE to tone stimuli than patients with mood disorder. No clear or consistent differences were observed when comparing subgroups of schizophrenia patients with positive, mixed, and negative symptoms, and mood disorder patients in manic, neutral, and depressive phases.

Conclusion: The MSE to visual and auditory stimuli is not specific for schizophrenia as it can also be observed in mood disorder.