

**S43** *Longitudinal and dynamical perspectives of schizophrenia*  
Time Series Models of First Manifestation Schizophrenia

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**OBJECTIVE:** A dynamical systems approach to schizophrenia is proposed to investigate the temporal relationship of symptoms. **METHOD:** The temporal evolution of psychotic symptoms was studied in a sample of young patients suffering from manifestations of schizophrenia. Using a rating scale composed of 9 subscales of various negative and positive symptoms, mental status was estimated on a daily basis (for up to 180 days). In each subject we fitted a model of the lagged interrelations between symptoms by the state space approach. The parameters which quantify the strength of these interrelations can be tested for statistical significance in the single cases and in the sample. The same procedure was applied to the time series of the three factors. **RESULTS:** Principal component analyses of over 3.000 ratings give evidence of three independent factors (psychoticity, excitation, withdrawal; cf. Kay & Sevy, 1990). 'Excitation' and 'withdrawal' reliably precede positive psychotic symptoms, while 'psychoticity' decreases 'withdrawal' on average. **CONCLUSION:** The sequence of "first negative symptoms, then positive symptoms" found in cross-section is also seen at the time scale used in our study. The findings are interpreted as further evidence for our assumption that schizophrenia should be discussed as a 'dynamical disease'.

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Coping style predicts one year outcome in early psychosis

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**Abstract**

A prospective study for evaluation of relations between coping style and illness course was conducted in thirty-two first- and second-episode psychotic patients who met DSM-IV criteria for schizophreniform or schizophrenic disorder. During post-acute phase of index episode, all patients were rated with the Osnabrück Inventory of Strains and Coping (OISC) and the Questionnaire on Coping (SVF) in order to measure their coping style. After twelve months, course of illness was assessed. In 18 patients, the coping style could be re-evaluated after six and twelve months. An explorative logistic regression approach yielded significant predictive values for the items "problem-solving", "flexibility", and "social withdrawal" relating the first item positively and the other two negatively to one year outcome. The longitudinal analysis of the subgroup showed that the assessment of stressful situations and the coping style were interactively linked. These variables were interrelated with psychosocial adaptation and with negative symptoms. A tendency towards unfavourable coping was related to an initial deterioration in psychosocial adaptation, perception of failure and negative self-concept. Resulting loss of social relations seemed to contribute to an increasing accentuation of certain negative symptoms. The therapeutic implications of these findings are discussed with a newly developed cognitive-behavioural treatment programme.

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**COGNITIVE DYSFUNCTIONS PREDICTING THE OUTCOME OF REHABILITATION IN SCHIZOPHRENIA**

U. Giebler, D. Georgescu, M. Niethammer, C. Thiel

**Objective:** Besides pharmacotherapy, there are a multitude of cognitive behavioural therapies with different aims for schizophrenics. The allocation of these dissimilar therapies following the diagnosis of "schizophrenia". Predictors for the rehabilitation-outcome are guided by the behaviour of the patient and are constant only after a number of hospitalizations. This study intends to predict the outcome earlier and select the most effective therapy.

**Method:** Assuming the three factor model of schizophrenic impairment by Spaukding developed by a computer-aided test battery (Coglab), the method has been modified by adding acoustic stimuli. In this way, the model is extended and describes an "Indicator of therapeutic improvement".

**Results:** 20 schizophrenic in-patients were tested with the modified Coglab every two weeks. The data were correlated with scales such as BPRS, NOSIE, and FBS, assembled at the same time. The results show that there are different degrees of cognitive disorders during the therapy though the diagnosis and treatment are similar for all patients.

**Conclusions:** The outcome of rehabilitation can be assessed in a very short time and more exactly with the help of the modified Coglab.

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**Effects of a group format treatment programme on the course of schizophrenia and schizophrenic disorders**

Karl Andres, Franziska Schindler, Hans Dieter Brenner

**Objective:** The aim of this contribution is to describe the effects of a coping orientated treatment programme and supportive therapy on the course of the illness, aspects of differential indication, and some relations between changes in dependent variables.

**Methods:** A total of 30 patients were treated in 24 sessions on the average. The variables include psychopathology, cognitive performance, knowledge about the illness, subjective theory of the illness, compliance, and rehospitalisation. Assessments were performed before and after treatment as well as 6-, 12-, and 18-month follow-ups. **Results:** Preliminary analyses show that in the coping orientated group the number of days spent within an inpatient setting decreased markedly when 18 month-periods before and after treatment are compared. In this condition knowledge about the illness increased significantly during therapy. An increase of knowledge correlated with the patients' attitude that the disorder is not controlled by chance. **Conclusion:** The prerequisites and processes leading to positive outcomes remain to be illuminated. In this study, preliminary data emphasise the role of the patients' theories about prevention of relapse.

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