Comprehensive testing of patients with depression and schizophrenia confirms the presence of cognitive impairments.

Diagnosis: New focus on cognition
A diagnosis of depression or schizophrenia is usually based on the criteria of ICD10 or DSM-IV and arrived at by means of a structured interview with the patient or short paper-and-pencil tests. The patient’s statements about his or her subjective experience, observation of the patient during the investigation and information from relatives are all incorporated into the assessment. Treatment, like assessment, is usually also based on the classical methods of drugs or psychotherapy. The assessment and treatment of cognitive impairments has on the whole played little part in the classical diagnosis and treatment process, even though cognitive performance is a major determinant of the patient’s everyday functioning. The assessment process carried out by many doctors and psychologists does not cover cognitive impairments. This is partly because the limited time available does not permit the use of lengthy additional tests; the standard assessment tools involve long testing times, frequently measure different functions and are not normed in a uniform way.

Comprehensive and objective assessment of impairments
The simplest way to obtain an objective assessment of cognitive deficits is to use appropriate tests. A group of researchers led by Prof. Weisbrod, Dr. Aschenbrenner, Dr. Roesch-Ely and a team of experts from SCHUHFRIED used SCHUHFRIED’s COGBAT test set (Cognitive Basic Testing) to assess cognitive impairment in patients with schizophrenia and depression. COGBAT covers the relevant cognitive dimensions: attention, memory and executive functions. As expected, significant cognitive impairments were found in both patients with depression and those with schizophrenia, with the impairment being considerably more marked in the group of schizophrenia patients. These impairments could impact adversely on patients’ everyday lives and on the course of the illness. An interesting point that emerged was that patients with depression tend to underestimate their cognitive abilities, while patients with schizophrenia overestimate them. More specifically it was noted that people with depression have problems in the areas of figural memory,
working memory and response inhibition. People with schizophrenia also have deficits on other subdimensions, including cognitive flexibility, planning and processing speed.

**Targeted testing of cognition with COGBAT**

The COGBAT test set (Cognitive Basic Testing) was the ideal tool to use for this investigation, because it measures the relevant aspects time-sensitively and in accordance with the concept, and because the paradigms used have been normed. COGBAT is a modern test battery made up of objective tests and a questionnaire on subjectively experienced ability (add-on test). COGBAT is an efficient test in terms of time since it takes on average 50 minutes to complete; overall scoring is possible because special overall norms are provided for this purpose. The study showed that COGBAT is a sensitive test that assesses individual cognitive deficits and can depict differences between the patient groups.

**Therapy using cognitive training**

“It is now possible to pay more attention to cognitive impairments in patients with depression and schizophrenia,” says Marco Vetter, head of the psychological development department at SCHUHFRIED. Cognitive deficits can be measured simply and quickly using predominantly objective tests such as those in the COGBAT test set. Using COGBAT, deficits on the most important dimensions can be identified and – if the results so indicate – hypotheses can be clarified by administering further tests. The COGBAT results can show how severe the impairments are as well as whether or not patients perceive them and are adversely affected by them.

Of course this also means that comprehensive therapy of depression and schizophrenia will no longer only involve treating the classical symptoms; cognitive impairments will also be addressed. To supplement the very frequently used therapy options of psychotherapy and drugs, greater attention will be paid in future to the possibility of cognitive training. In this context the “test-training-evaluation” concept can be a systematic aid to therapy: tests are used to identify the specific dimensions that are impaired, the corresponding training programs are used to improve performance and the effectiveness of training is monitored using parallel forms of the original test. Including cognitive impairments in the treatment and rehabilitation program has many advantages for both therapist and patient: impairments that affect everyday life can be specifically addressed and the patient’s well-being can be improved.

Prof. Weisbrod: “It makes sense to make greater use of our knowledge of the major importance of cognitive functions for the everyday functioning of psychiatric patients to understand our patients’ problems and improve our therapeutic practices. Reliable, precise and economic assessment of cognitive functions is an important requirement for this.”

**Further reading**

**Depression:**

**Schizophrenia:**


**Test and training validation study:**

Request the COGBAT study from: info@schuhfried.at