

## AS19-04 - IMPAIRED FACIAL EMOTION RECOGNITION: BEHAVIORAL AND NEUROBIOLOGICAL TREATMENT EFFECTS

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**Aims:** Impairments in facial emotion recognition have proven to be a trait-like characteristic in schizophrenia mostly unaffected by traditional treatment. This raised the question whether cognitive remediation strategies may be a treatment option for these impairments.

**Methods:** A special Training of Affect Recognition (TAR) was evaluated in three consecutive studies using pre-post-control group designs with either an active control treatment (studies 1 and 2), a „passive“ treatment as usual group (study 1), or a waiting group (study 3). The active control treatment consisted of a Cognitive Remediation Training (CRT) aiming at improvement of basic neurocognitive functioning. Outcome measures comprised facial and prosodic affect recognition, basic cognitive functioning and social interaction.

**Results:** Analyses revealed specific training effects in the form of a double dissociation both in studies 1 and 2: the TAR improved facial and prosodic affect recognition as well as understanding of social scenes, but had no effects on memory, attention and executive functioning. Patients under CRT and those without training did not show improvements in affect recognition, though patients under CRT improved in some memory functions. Positive effects of the TAR on facial affect recognition could also be replicated in forensic schizophrenia patients (study 3) and proved to be stable for at least 4-6 weeks after the end of training (studies 2, 3).

**Conclusions:** According to these results, improvements in disturbed facial affect recognition in schizophrenia patients are not obtainable with a traditional cognitive remediation program like CRT, but need a functional specific training like the newly developed TAR.