Egopharmacology: Social Cognition and Interaction in Stimulant Users

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Abstract

Beyond impairments in attention, memory, and executive functions, chronic users of stimulant drugs also display specific disturbances in social cognition, which are contributing to social dysfunctions in their daily life. Recent studies have shown overlapping alterations in fear recognition from faces, emotion recognition from complex visual stimuli, emotional empathy, and mental and emotional perspective-taking (Theory-of-Mind) in stimulant users. Additionally, stimulant users often have smaller social networks and show less prosocial behaviour in game-theoretical social decision-making tasks. In social interaction and social feedback tasks during functional imaging cocaine users revealed decreased activation of the medial-frontal reward system. In conclusion, training of social reward and social cognition might improve social functioning including therapeutic relationships and, thus, enhance treatment success in stimulant addiction.

Biography

Boris B. Quednow studied psychology at the University of Bonn. He wrote his dissertation on the neuropsychobiological consequences of “Ecstasy” (MDMA) use at the Ruhr-University of Bochum and worked as a research assistant at the Department of Psychiatry of the University of Bonn. At present, he is an Associate Professor for Experimental and Clinical Pharmacopsychology at the Department for Psychiatry, Psychotherapy, and Psychosomatics at the Psychiatric Hospital of the University of Zurich. His main research interests are the behavioral neurotoxicology and neuroplasticity of illegal drug use, genetics and neurochemistry of cognitive functions, as well as disturbed information processing and decision-making in psychiatric diseases, particularly in schizophrenia and substance use disorders.