Obsessive-compulsive disorder (OCD) has been one of the main research topics of our unit for several years. We are interested in many different aspects of the disorder, from basic research (e.g., memory, information processing, cognitive biases), which aims at a better understanding of the etiology and maintenance of OCD, to the development and evaluation of specific interventions.

The therapeutic and self-help interventions developed by our unit are based upon the findings of basic research. For the results of completed projects, please see the reference list below. Selected projects are outlined in the following sections.

**Memory, Metamemory, and Responsibility**

In a research project supported by the German Research Foundation we investigated a possible link between visuospatial dysfunctions and nonverbal memory with OCD symptomatology. The results provided no evidence for the existence of specific spatial or non-verbal memory deficits in OCD (Moritz et al., 2005; see also Jelinek, Moritz, Heeren, & Naber, 2006). Further studies were based on the theory that OCD patients display abnormalities in metamemory (e.g., response confidence, subjective appraisal of one’s performance skills) rather than in memory accuracy. In these studies, OCD patients and healthy controls did not differ with regard to source memory (i.e., memory of the source of information), response confidence, or subjective vividness of stored memory episodes (Moritz, Jacobsen, Willenborg, Jelinek, & Fricke, 2006; Moritz, Kloss, Jahn, Schick, & Hand, 2003; Moritz, Ruhe, Jelinek, & Naber, 2009). A decrement of metamemory occurred only under conditions in which subjective responsibility was inflated (Moritz et al. 2007).

**Information Processing**

Negative priming is usually regarded as a parameter of cognitive inhibition. In contrast to previous reports by others, we did not find reduced negative priming in OCD (Moritz, Kloss, & Jelinek, 2010). Moreover, we found similar processing of subordinate local vs. higher-order global structures using a local-global paradigm (Moritz, Wendt, Jelinek, Ruhe, & Arzola, 2008). Further studies employed tests that are thought to be sensitive to the orbitofrontal cortex (e.g., the delayed alternation task (DAT); Moritz, Hottenrott, et al., 2009; the object alternation task (OAT); Moritz, Jelinek, Hottenrott, Klinge, & Randjbar, 2009).

To further assess the characteristics of information processing in patients with OCD, we used the following paradigms: inhibition of return paradigm (IOR) (Moritz, von Mühlenen, Randjbar, Fricke, & Jelinek, 2009), emotional Stroop test (EST) (Moritz, Fischer, et al., 2008), retrieval-induced forgetting paradigm (RIF) (Jelinek, Rietschel, Kellner, & Moritz, 2012), and directed forgetting paradigm (DF) (Moritz, Rietschel, Jelinek, & Bäuml, 2011).

Moreover, we were able to find initial evidence in an online study that OCD participants are more likely than healthy controls to process ambiguous words (i.e., homographs) in an OCD-related or negative context (Jelinek, Hottenrott, & Moritz, 2009).

These characteristics of biased information processing in OCD are addressed in “association splitting”, a technique developed by our group designed to reduce obsessive thoughts (Moritz, Jelinek, Klinge, & Naber, 2007). For more information, please click on the Therapy tab above.

**Thinking Styles/ Cognitive Biases in OCD**
Cognitive biases (e.g., inflated sense of responsibility or overestimating the probability of danger) and personality styles (e.g., perfectionism, intolerance of ambiguity) play a special role in the development and maintenance of compulsions. We have developed a self-help manual consisting of 14 modules addressing these cognitive biases as well as typical OCD-related concerns. In the manual, we use results of our own studies on OCD-relevant thinking styles (e.g., Moritz, Alpers, et al., 2011; Moritz & Jelinek, 2009) as well as recent metacognitive approaches in the treatment of cognitive biases. The self-help manual has been positively evaluated in comparison to a waitlist control group in an online study (Moritz, Jelinek, Hauschildt, & Naber, 2011), and the second edition is now available (Moritz & Hauschildt, 2011). A subsequent study, funded by the Bundesministerium für Bildung und Forschung, confirmed the feasibility and effectiveness of the program (Hauschildt, Schröder & Moritz, 2016). For more information, please click on the Therapy tab above.

**Latent aggression in patients with OCD**

Various studies carried out by our unit explored whether patients with OCD have interpersonal attitudes characterized by high ambivalence. Specifically, we have sought to understand to what extent prosocial attitudes (e.g., having high moral standards) compete with antisocial impulses (e.g., mistrust, latent aggression; Moritz, Kempke, Luyten, Randjbar, & Jelinek, 2011; Moritz, Niemeyer, Hottenrott, Schilling, & Spitzer, 2013; Moritz et al, 2009) in these patients. To test this hypothesis, we developed the Responsibility and Interpersonal Behaviors and Attitudes Questionnaire (RIBAQ; Moritz et al., 2009), which is comprised of three subscales: excessive responsibility, distrust and latent aggression. As hypothesized, patients with OCD obtained higher scores on items regarding responsibility and concerns for others (mainly close relatives or friends). At the same time, latent aggression and mistrust were also more pronounced in patients with OCD compared to healthy subjects (Moritz et al., 2011; Moritz et al., 2009), as well as patients with an anxiety disorder or depression (Moritz et al., 2009). In order to address the limitations of explicit (self-report) measures in detecting latent aggression (especially restricted introspection and social desirability), in subsequent studies we investigated aggressive self-concepts in patients with OCD using implicit measures. Correlations between compulsive checking and implicitly aggressive basic concepts, as measured by the Implicit Association Test (IAT), were found, such that patients with OCD exhibited more peaceful self-concepts in comparison to a healthy control group (Cludius, Schmidt, Moritz, Banse, & Jelinek, 2017). In follow-up studies, we plan to investigate latent aggression in patients with OCD using different implicit measures. Such studies may help determine whether OCD is characterized by overcompensation for increased latent aggression or by an exaggerated self-awareness of normal aggressive impulses.

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References

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Information Processing


**Thinking Styles and Cognitive biases**


Latent Agression


