ELSEVIER

Contents lists available at ScienceDirect

## Journal of Obsessive-Compulsive and Related Disorders

journal homepage: www.elsevier.com/locate/jocrd



# A test of the metacognitive model of obsessive-compulsive disorder



J. Hansmeier a,\*, C. Exner b, W. Rief a, J.A. Glombiewski a

- <sup>a</sup> Department of Clinical Psychology, University of Marburg, Marburg, Germany
- <sup>b</sup> Department of Clinical Psychology, University of Leipzig, Leipzig, Germany

#### ARTICLE INFO

Article history: Received 26 November 2015 Received in revised form 11 May 2016 Accepted 21 May 2016 Available online 24 May 2016

Keywords:
Obsessive-compulsive disorder
Metacognitive model
Fusion beliefs

#### ABSTRACT

The question of the relative importance of dysfunctional cognitive beliefs and metacognitions in the development and maintenance of obsessive-compulsive (OC) symptoms is still a matter of debate. This study aims to investigate the relevance of OC-specific metacognitions, such as thought fusion beliefs, beliefs about rituals and stop signals for OC symptoms. Patients with obsessive-compulsive disorder (OCD) (n=71), anxiety disorders (n=51), and depressive disorders (n=81), and a nonclinical sample (n=300), were assessed for (meta)cognitive beliefs and OC symptoms. Analyses of variances indicated that the OCD group reported significantly more positive beliefs about rituals and stop signals than did the other three groups, also when controlling for comorbidity of depression disorder. No differences were found with regard to thought fusion beliefs. In regression analyses in the OCD sample, OC-specific metacognitions such as thought fusion beliefs explained incremental variance in OC symptoms, when controlling for cognitive beliefs and general, non OC-specific metacognitions. Overall, these findings provide further evidence for the relevance of specific metacognitions to OCD. Metacognitive therapy might address these metacognitive beliefs and thereby lead to a reduction of OC symptoms in OCD patients.

© 2016 Elsevier Inc. All rights reserved.

#### 1. Introduction

According to cognitive models of obsessive-compulsive disorder (OCD), dysfunctional cognitive beliefs and responses to these beliefs contribute to the development and maintenance of the disorder. Different belief domains, such as inflated responsibility (Salkovskis, 1985), perfectionism (Frost, & Steketee, 1997) and beliefs about the significance and need to control thoughts (e.g., Rachman, 1997, 1998), have been proposed to play a central role in the disorder and have been found to be related to obsessivecompulsive (OC) symptoms in previous studies (e.g., Rheaume, Freeston, Dugas, Letarte, & Ladouceur, 1995; Salkovskis et al., 2000; Steketee, Frost, & Cohen, 1998; Wu & Cortesi, 2009). While a great deal of empirical evidence supports the cognitive model, the metacognitive approach takes a different perspective. Metacognition refers to beliefs about thinking and strategies used to regulate and control thinking processes (Flavell, 1979). According to Wells (1997), dysfunctional cognitions about cognitive processes and maladaptive metacognitive regulatory strategies are the most important factors contributing to OC symptoms, whereas dysfunctional cognitive beliefs are only a by-product of metacognitive

E-mail address: jana.hansmeier@staff.uni-marburg.de (J. Hansmeier).

processes. General metacognitions, such as positive beliefs about the usefulness of worry and negative beliefs about the uncontrollability of thoughts, are believed to be relevant for a wide range of psychiatric conditions (Cartwright-Hatton & Wells, 1997; Wells & Matthews, 1996). However, specific metacognitive models have been developed for different anxiety and mood disorders (Wells, 1997, 2000).

The specific metacognitive model of OCD was proposed by Wells and Matthews (1994) and Wells (1997, 2000), and defines two levels of metacognitions. The first level, fusion beliefs, incorporates beliefs about the meaning and power of intrusive thoughts and includes three types of fusion. Thought-Action Fusion (TAF) is the belief that a thought alone can cause a person to carry out an action. Thought-Event Fusion (TEF) involves believing that having a thought can cause events or is evidence that an event has occurred, while Thought-Object Fusion (TOF) refers to the belief that thoughts and feelings can be transferred onto objects. The second level of metacognition refers to beliefs about rituals, and has two components: declarative beliefs about rituals are assumptions about the need to carry out rituals, while subjective stop signals (e.g., an internal feeling that signals it is safe to stop) are used for monitoring and controlling the actions. According to the metacognitive model, the fusion beliefs are activated by a trigger (i.e., normally occurring intrusive thoughts), leading to negative appraisals of the thought as dangerous and important, which in turn activate beliefs about rituals and stop

<sup>\*</sup> Correspondence to: Department of Clinical Psychology, University of Marburg, Gutenbergstr. 18, 35032 Marburg, Germany.

signals that guide the individual's response to the appraisal.

Although the metacognitive model of OCD is meant to be distinct from cognitive models, traditional cognitive models also incorporate metacognitions to some extent. The belief domain of TAF has been originally introduced by Rachman (1997,1998) in his cognitive-behavioral model of obsession and extensively studied in regards to obsessional problems (for a review, see Berle & Starcevic, 2005). In addition, the Obsessive Compulsive Cognitions Working Group (OCCWG), an international research group, has not only focused on non-metacognitive beliefs (e.g., perfectionism) but also included the metacognitive factor of importance and control of thoughts in the cognitive model (e.g., Obsessive Compulsive Cognitions Working Group, 2005), However, when considering the essentially different theoretical perspective of the metacognitive theory focusing on processes and not contents of appraisals, the belief domain of TAF is not only extended by the metacognitive belief domains of TEF and TOF but also conceptualized differently in Wells' model, namely as metacognitive beliefs about thoughts that activates appraisals of intrusions and how to respond and cope (see also Fisher, 2009). In addition, there is empirical evidence that, when controlling for the non-metacognitive and metacognitive factors of the cognitive model, reductions in metacognitions according to Wells' model remain as predictors of behavior treatment outcome (Solem, Haland, Vogel, Hansen, & Wells, 2009), and fusion beliefs were a prospective predictor of OC symptoms (Myers, Fisher, & Wells, 2009b). Hence, despite of some conceptual overlap between both approaches, the metacognitive theory offers a broader definition of metacognitions compared to these incorporated in traditional cognitive models and might thereby hold substantial explanatory power.

There is empirical evidence for the relevance of metacognitions to OCD (for a review, see Fisher, 2009). Cross-sectional studies have shown that metacognitions, such as fusion beliefs, are positively associated with OC symptoms, even when controlling for worry and responsibility beliefs (e.g., Gwilliam, Wells, & Cartwright-Hatton, 2004; Myers & Wells, 2005). In addition to prospective studies (Myers et al., 2009b), an experimental study (Myers & Wells, 2013) supports the causal role of metacognitions in OC symptoms by showing that the experimental induction of fusion beliefs leads to more intrusive thoughts and greater discomfort associated with these thoughts. In addition to fusion beliefs, beliefs about rituals have been found to be related to OC symptoms (McNicol & Wells, 2012). The relevance of stop signals for OC symptoms is supported by the findings of Wahl, Salkovskis, and Cotter (2008), who found that obsessional washers reported using subjective criteria (e.g., feeling 'just right') more frequently and rated these criteria as more important for stopping their washing procedures compared to control participants. With respect to treatment, the metacognitive therapy (Wells, 1997, 2009) based on the OC-specific metacognitive model has shown promising results in pilot studies (e.g., Fisher & Wells, 2008). In addition, changes in fusion beliefs and beliefs about rituals emerged as better predictors of recovery than cognitive belief change after a multimodal behavioral treatment in one study (Grotte et al., 2015).

Two studies have directly investigated the metacognitive model of OCD. Myers, Fisher, and Wells (2009a) found that fusion beliefs, beliefs about rituals, and stop signals all explained incremental variance in OC symptoms when entered in the hypothesized causal sequence (fusion beliefs → beliefs about rituals → stop signals) in hierarchical regression analyses in a student sample. These incremental relationships remained significant when typical dysfunctional cognitive beliefs (e.g., perfectionism, responsibility) were controlled. Solem, Myers, Fisher, Vogel, and Wells (2010) replicated these findings in a Norwegian community sample using the same approach. In addition, the authors found that participants suffering from OCD had significantly higher

scores on measures of fusion beliefs and beliefs about rituals compared to controls. OC symptom severity was significantly correlated both with fusion beliefs and with beliefs about rituals among participants with OCD. However, the full metacognitive model has not yet been tested in a sample of participants with OCD. The use of predominantly student populations in both previous studies may reduce the generalizability of the findings to clinical populations due to differences in age, socioeconomic status, symptom severity, and general functioning compared to clinical samples of individuals with OCD.

The metacognitive model mentioned above has been specifically developed for OCD, whereas other specific metacognitive models have been proposed for other mental disorders (e.g., depression) (e.g., Papageorgiou & Wells, 2003; Wells, 2009). However, there is little research investigating whether the proposed disorder-specific metacognitions are truly specific across mental disorders. With regard to Thought-Action Fusion, previous studies found differences between clinical and nonclinical samples (O'Leary, Rucklidge, & Blampied, 2009; Rassin & Merckelbach, 2001), but failed to find differences between participants with OCD and other clinical groups (e.g., Abramowitz, Whiteside, Lynman, & Kalsy, 2003; Rassin, Diepstraten et al., 2001). In one study (Amiri Pichakolaei et al., 2014), patients with OCD showed higher scores in fusion beliefs than did patients suffering from major depression disorder or healthy controls. The study samples sizes have been quite small ( $n \sim 20$ ) and differences in fusion beliefs incorporating Thought-Event Fusion and Thought-Object Fusion have not been compared among patients with OCD and patients suffering from other disorders than depression. With regard to beliefs about rituals and stop signals, differences among patients suffering from different emotional disorders or healthy controls have not been investigated yet.

The current study aims to test the validity of the OC-specific metacognitive model for OCD. First, we compared OC-specific metacognitions among participants with OCD, anxiety disorders, depressive disorders, and nonclinical controls, with the highest ratings expected in the OCD group. Secondly, we applied the approach used in previous studies of healthy participants (Myers et al., 2009a; Solem et al., 2010) by using hierarchical regressions to test the metacognitive model among a large sample of participants with OCD. In addition, in order to test the contribution of OC-specific metacognitions to OC symptoms above and beyond the contribution of general metacognitions and dysfunctional cognitive beliefs, we controlled for general metacognitions and cognitive beliefs. Contrary to previous studies (Myers et al., 2009a; Solem et al., 2010), the metacognitive factor of the cognitive model was also considered in the regressions, in order to apply a more stringent test of the OC-specific metacognitive model and to identify unique metacognitions in OCD. We hypothesized that OCspecific metacognitions would explain significant additional variance in OC symptoms above and beyond cognitive beliefs and general metacognitions. To our knowledge, this is the first study to (1) investigate the metacognitive model in a clinical sample of participants with OCD; and (2) compare levels of fusion beliefs (including TAF, TEF, and TOF) as well as beliefs about rituals and stop signals among different clinical samples.

### 2. Method

#### 2.1. Participants

The clinical sample included a total of n=203 participants with the main diagnoses OCD (n=71), anxiety disorders (n=51), and major depressive disorder (n=81) (see Table 1). The specific diagnoses of the participants with anxiety disorders were

## Download English Version:

# https://daneshyari.com/en/article/912172

Download Persian Version:

https://daneshyari.com/article/912172

<u>Daneshyari.com</u>