



The role of metacognitive beliefs about thoughts and rituals: A test of the metacognitive model of obsessive-compulsive disorder in a clinical sample

Samuel G. Myers^{a,*}, Torun Grøtte^b, Svein Haseth^c, Ismail C. Guzey^b, Bjarne Hansen^d, Patrick A. Vogel^b, Stian Solem^b

^a The Israel Center for the Treatment of Psychotrauma, Jerusalem, Israel

^b Norwegian University of Science and Technology, Trondheim, Norway

^c St. Olav University Hospital, Trondheim, Norway

^d University of Bergen, Bergen, Norway

ARTICLE INFO

Keywords:

Obsessive-compulsive disorder

Metacognitive model

Beliefs

ABSTRACT

The metacognitive model of obsessive-compulsive disorder (OCD; Wells, 1997) emphasises the role of metacognitive beliefs about both thoughts and rituals. The current study tested hypotheses that emerge from the model concerning three domains of these metacognitive beliefs: thought fusion beliefs, beliefs about rituals, and stop signals, in an OCD sample ($N = 210$). Results showed that each type of metacognitive belief significantly and positively correlated with two different measures of obsessive-compulsive symptoms. Additionally, in hierarchical regressions, with worry, and non-metacognitive beliefs linked to OCD in other theories controlled, each of the metacognitive domains, when entered in their hypothesised order of activation, incrementally predicted each obsessive-compulsive symptom measure. Results provide further support for the role of these three metacognitive belief domains as hypothesised in the metacognitive model.

1. Introduction

The metacognitive model of obsessive-compulsive disorder (OCD; Wells & Matthews, 1994; Wells, 1997, 2009) emphasises the role of two types of metacognitive beliefs: 1) metacognitive beliefs concerning thoughts and feelings and 2) metacognitive beliefs concerning rituals. The first domain consists of beliefs fusing thoughts and feelings with reality. Three forms of thought fusion are identified in the model: Thought-Event fusion (TEF) i.e. the belief that thoughts on their own can cause events to happen or signify that events have happened, Thought-Action Fusion (TAF) i.e. the belief that intrusive thoughts/feeling/impulses can make a person carry out actions they do not want to commit and Thought-Object Fusion (TOF) which refers to beliefs that thoughts and/or feelings can pass into objects.

These fusion beliefs lead intrusions to be appraised negatively, either as being dangerous in themselves or as having significant negative meaning. This activates the second domain: metacognitive beliefs concerning rituals, as the person attempts to regulate the distress caused by his/her negative appraisal. Metacognitive beliefs concerning rituals have two components: 1) beliefs concerning the need to carry out rituals e.g. “I have to carry out rituals otherwise I will never have peace of mind” and 2) a metacognitive plan that guides how

rituals should be carried out. This plan includes a stop-signal, such as a feeling of calm, which indicates to the person that the ritual can be stopped. Although activated as a way of self-regulating, metacognitive beliefs about rituals lead to an exacerbation of symptoms. Beliefs about rituals reinforce beliefs that intrusions are important and need to be acted on while the metacognitive plan used to carry out rituals is often counterproductive and difficult to carry out. For example, the stop signals used are often internal or idiosyncratic criteria which are hard to achieve and lead to a prolongation of rituals (Wells, 2009).

Evidence for the role of metacognitive beliefs about thoughts and rituals comes from a number of studies that have tested the model. These studies have tested three central hypotheses concerning these metacognitive beliefs:

- 1) They should be related to obsessive-compulsive (o-c) symptoms and OCD.
- 2) They should predict o-c symptoms independently of non-metacognitive beliefs linked to OCD in other models. According to the metacognitive model, non-metacognitive beliefs implicated in other models of OCD, such as responsibility (Salkovskis, 1985) and perfectionism (Frost & Steketee, 1997), may be present in OCD but are a by-product of the activation of metacognitive beliefs and

* Correspondence to: The Israel Center for the Treatment of Psychotrauma, Hasadna, 4, Talpiot, PO Box 3900, Jerusalem 91035, Israel.

E-mail address: s.g.myers2013@gmail.com (S.G. Myers).

the subsequent perseverative processes caused by it. This implies that when examining their relative independent contribution to o-c symptoms, metacognitive beliefs should emerge as independent and stronger predictors than non-metacognitive beliefs.

- 3) These metacognitive beliefs should have specific additive effects in explaining o-c symptoms. According to the model the different domains of metacognitive beliefs are activated in a particular sequence with each step leading to a further exacerbation of symptoms. Thought fusion beliefs are activated first, these activate beliefs about rituals which then activate the plan for carrying out the ritual culminating in the stop signal which indicates that the ritual can be stopped. If this is correct, beliefs about rituals should explain additional variance in symptoms beyond thought-fusion, and stop signals should explain additional variance in symptoms beyond beliefs about rituals.

Evidence for Hypothesis 1 comes from a number of questionnaire studies that have used measures designed to assess the specific metacognitive beliefs about thoughts and rituals implicated in the metacognitive model of OCD. These questionnaires have been shown to be significantly and positively related to o-c symptoms in a number of cross-sectional studies using non-clinical and clinical samples (Grøtte, Solem, Vogel, Guzey, Hansen & Myers, 2015; Gwilliam, Wells, & Cartwright-Hatton, 2004; McNicol & Wells, 2012; Myers & Wells, 2005; Myers, Nassif, Edozien, & Wells, 2016; Myers, Fisher, & Wells, 2009a; Solem, Myers, Fisher, Vogel, & Wells, 2010). A causal relationship between thought fusion and o-c symptoms is supported by two experimental studies that demonstrated that manipulating thought fusion leads to corresponding changes in o-c symptomology (Fisher & Wells, 2005; Myers & Wells, 2013). It is also supported by a prospective study in a student sample (Myers, Fisher, & Wells, 2009b) that showed that with worry (which overlaps with o-c symptoms e.g. Tallis & de Silva, 1992) and non-metacognitive beliefs controlled for, thought fusion predicted changes in o-c symptoms over a three-month period. This study also supports Hypothesis 2 by demonstrating specific metacognitive beliefs implicated in the model predicted o-c symptoms independently of non-metacognitive beliefs, a result found in a number of cross-sectional studies in non-clinical populations (Gwilliam et al., 2004; Myers & Wells, 2005; Myers et al., 2009a; Solem et al., 2010) as well as a study examining predictors of changes in o-c symptoms in OCD patients following treatment (Grøtte et al., 2015).

Hypothesis 3 is supported by McNicol and Wells (2012) who found that a measure of beliefs about rituals explained additional variance in o-c symptoms with both worry and thought fusion controlled. Solem et al. (2010), using a small sample of OCD patients, found that beliefs about rituals explained additional variance after controlling for thought fusion but worry was not controlled for in this analysis.

Three studies have made a more comprehensive test of the metacognitive model of OCD by examining the role of stop signals as well as thought fusion and beliefs about rituals. Myers et al. (2009a) and Myers et al. (2016) both found that, with worry controlled, each of these metacognitive beliefs, when entered in their hypothesised temporal sequence of activation, explained additional variance in regressions predicting o-c symptoms. Myers et al. (2009a) and Solem et al. (2010) carried out a rigorous test of the metacognitive model by additionally controlling for non-metacognitive beliefs in their analysis. Both found that thought-fusion beliefs and beliefs about rituals explained significant additional variance on their steps after controlling for worry and non-metacognitive beliefs. However, stop signals, entered on the final step of the equation, only emerged as significant in one analysis in Myers et al.'s study. Although supportive of the metacognitive model, these studies are limited by the use of non-clinical samples. Although there is evidence for a continuum in o-c symptoms from non-clinical to clinical samples (Abramowitz, Fabricant, Taylor, Deacon, McKay & Storch, 2014; Gibbs, 1996), it

is important to test that predicted relationships hold in samples with OCD. The current study aimed to carry out the rigorous test of the metacognitive model carried out by Myers et al. (2009a) and Solem et al. (2010) but to extend their findings by the use of a clinical sample. In so doing we used the largest clinical sample to date that has been used in any investigation of the specific metacognitive beliefs identified in the metacognitive model of OCD.

The two central hypotheses tested were:

- 1) Thought fusion, beliefs about rituals, and stop signals would all be positively and significantly correlated with o-c symptoms.
- 2) In regressions predicting o-c symptoms, with worry and non-metacognitive beliefs linked to OCD controlled, each metacognitive domain when entered in their hypothesised temporal sequence of activation would explain additional variance on their respective steps. This sequence is 1) thought fusion, 2) beliefs about rituals, and 3) stop signals.

2. Method

2.1. Participants

Participants were 212 patients with OCD as their primary diagnosis as assessed by clinicians at a mental health clinic in a major city in Norway. Following data analysis, discussed below, the data from two participants were removed as they contained outliers, leaving a total of 210 participants. The clinic from where participants were recruited specializes in treating OCD and is part of the public health system. GPs and other mental health clinics refer patients to the OCD clinic for both inpatient and outpatient treatment. Patients were diagnosed using the Anxiety Disorder Interview Scale-IV (Brown, DiNardo, & Barlow, 1994). Patients were included in the study if they were 18 or over, had OCD as their primary diagnosis, were not suicidal, and signed informed consent. Primary diagnosis was assessed as the disorder causing the most severe impact on the patient's life. Where more than one disorder was assessed as equally severe the disorder that developed first was rated as primary. We did not exclude patients with secondary diagnoses. OCD is associated with high levels of comorbidity (Ruscio, Stein, Chiu, & Kessler, 2010) and excluding patients with secondary diagnosis would have made the sample unrepresentative.

Of the 210 participants, 127 (60.5%) were women and 83 (39.5%) were men. A total of 159 (75.7%) were inpatients and 51 (24.3%) were outpatients. Ages ranged from 18 to 67 with a mean of 33.6 (SD = 11.45). Of the participants, 61 (29%) were in work, 40 (19%) were students, 103 (49.1%) were either on sick leave or on some form of disability allowance, 2 (1%) were unemployed, and for 4 (1.9%) working status was missing.

2.2. Procedure

Questionnaires were either sent by mail or a link to a secure website containing the questionnaires was sent to participants, prior to their first appointment at the OCD clinic. If they had not completed the questionnaires before arrival, participants were given the opportunity to complete them during the assessment interview. Data collection was carried out between April 2009 and September 2014.

2.3. Measures

2.3.1. Obsessive Compulsive Inventory-Revised (OCI-R; Foa et al., 2002)

This is an 18-item measure that assesses distress caused by a range of o-c symptoms. It has six subscales which measure washing, checking, doubting, ordering, obsessing, hoarding and mental neutralizing. The total score was used in the present study as a measure of general o-c symptoms. The total score has good internal consistency

Download English Version:

<https://daneshyari.com/en/article/5039307>

Download Persian Version:

<https://daneshyari.com/article/5039307>

[Daneshyari.com](https://daneshyari.com)