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Metacognitive Therapy for Generalized Anxiety Disorder: Nature, Evidence and an Individual Case Illustration

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Metacognitive therapy (MCT) is based on over 25 years of research focusing on the processes that contribute to the development and maintenance of psychological disorders. The approach identifies a common set of processes in psychopathology, and MCT shows promising results in effectively treating a range of disorders. This paper presents the central theoretical tenets of MCT and uses a clinical vignette to illustrate the structure and techniques of treatment based on Wells's (2009) manual as they relate to a specific case of generalized anxiety disorder.

What Is Metacognition and Why Is It Important?

This paper provides a general introduction to the theory of metacognitive therapy (MCT) and a more specific outline of how to use MCT for generalized anxiety disorder (GAD), illustrated with the clinical case of William. In the final part of the paper the scientific evidence for MCT in GAD is presented. MCT was developed to address the control of cognition and the strategies and knowledge that govern thinking. It contrasts significantly with the theory and focus of standard CBT.

Metacognition refers to cognition applied to cognition and may be defined as any knowledge or cognitive processes involved in the appraisal, control, and monitoring of thinking (Flavell, 1979). In short, metacognition is thinking about thinking. Metacognitive theory has distinguished between metacognitive knowledge, which is information that individuals have about their own thinking and about strategies that affect it, and metacognitive regulation, which are the strategies used to change the nature of processing. In the metacognitive theory of psychological disorder (Wells, 2009; Wells & Matthews, 1994), metacognition is central in determining the maintenance and control of negative and biased thinking styles. According to Wells, most people have negative thoughts and beliefs and in most cases these thoughts and beliefs are transitory mental experiences. The negative thoughts become a problem because of the way an individual responds to them. Thus, an important tenet of metacognitive therapy, and one of the features distinguishing it from traditional CBT, is that neither the content nor the subjective validity of thoughts and beliefs are the central source of disorder. In basic terms, according to metacognitive theory, an individual's metacognitions monitor and control their responses to thoughts, which cause persistence or perseveration of ideas and maintain psychological and interpersonal problems.

This supposition can be clearly illustrated in the situation of GAD, where the content of worry shifts around. The content of worry in GAD is not dissimilar from everyday worries experienced by most people. However, people with GAD experience their worry as uncontrollable and excessive, and it is associated with marked distress. The metacognitive model provides an explanation of this in terms of differences in the way individuals relate to, appraise, and control their worry

The theoretical grounding of MCT is the Self-Regulatory Executive Function Model (S-REF), which emphasizes the similarities in maladaptive cognitive processing across all psychological disorders (Wells, 2000, 2009; Wells & Matthews, 1994, 1996). The S-REF model postulates a thinking style called the cognitive attentional syndrome (CAS). In MCT the CAS is a universal feature of psychiatric disorders and is responsible for prolonging and intensifying distressing emotions. The CAS is a thinking pattern of inflexible self-focused attention (the focus is on self–observation and monitoring of thought processes), perseverative thinking (in the form of worry and rumination), threat monitoring, and coping behaviors that backfire and

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interfere with effective mental control and adaptive learning.

The CAS is considered to be a problem for psychological well-being because it maintains threat-focused processing and fails to provide information that can modify the individual's maladaptive appraisals and beliefs. In addition to this, the CAS uses attentional resources that might otherwise be directed toward more adaptive responses, and biases perception and automatic processing in a negative way. There is a large evidence base supporting the presence and effects of the CAS in emotional disorders (see Wells, 2009, for a review).

The CAS is driven by metacognitive beliefs and metacognitive knowledge stored in long-term memory, and MCT implies that all disorders are linked to this higher level of metacognitive beliefs about thinking. These beliefs fall into either positive or negative domains. Positive meta-beliefs concern the advantages of worrying, ruminating, threat monitoring, and controlling cognition (e.g., "Worrying about the future helps me be prepared"). Having positive meta-beliefs alone is not in itself pathogenic but increases the tendency to worry as a coping strategy, which does not provide the most effective way of managing negative affect and thoughts. According to MCT, psychopathology develops when negative meta-beliefs about loss of control and danger are activated. These beliefs concern the uncontrollability of worries and rumination and beliefs about the dangerousness or importance of thoughts. An example of a negative metacognition is: "Worrying is out of control and will make me lose my mind." The patient with GAD can hold both positive and negative beliefs about worrying, which cause conflicting motivations to sustain or try to avoid negative thoughts. However, the negative beliefs are most important and lead to worry about worry resulting in elevated and persistent distress. The negative beliefs about the uncontrollability of the process contribute to the use of unhelpful forms of control or no control at all.

Metacognitive Model of GAD

The metacognitive model of GAD (Wells, 1995, 1997) proposes that when experiencing a negative thought (also called trigger thoughts; e.g., "What if I can't cope with my work?"), patients with GAD use extended negative thinking in the form of worry (Type 1 worry) to anticipate and work out ways of how to cope or avoid problems. Most people have positive beliefs about worry, but this is not the proximal feature of GAD. In MCT, the negative beliefs about worrying are considered to be the main cause of pathology, although the overuse of worry as a means of dealing with triggers may produce longer-term difficulties of impairing emotional processing and be unhelpful in the down-regulation of emotion. The metacognitive model proposes that GAD develops when negative meta-beliefs are formed and/or activated. These beliefs fall into two domains: that worry is *uncontrollable* and that worry is *dangerous* for mental or physical well-being. When these beliefs are triggered the individual begins to worry about worry (Type 2 worry or meta-worry), which leads to an increase and prolongation of anxiety symptoms. Anxiety can escalate rapidly due to Type 2 worry and occur as panic attacks because of the more imminent threat considered to be posed by worry itself. In response to meta-worry, the individual engages in thought-control strategies and different behaviors aimed at reducing worry and/or the threat it presents. Many of these responses have paradoxical effects that interfere with effective mental control and the development of more adaptive meta-beliefs. For example, a person with GAD may ask a partner for reassurance, which effectively transfers the control of worry to someone else, thus depriving the individual from learning that he or she has control. In some cases the person will search the Internet for information in an attempt to assuage worry or anxiety, but this can actually increase exposure to ambiguous and threat-related information—a further trigger for worrying (e.g., natural disasters, accidents, crime rates, information on specific diseases and accompanying symptoms). Other unhelpful strategies include trying to suppress thoughts that might trigger worrying and/or having to sustain thinking in order to "think oneself out of worry." These strategies, described above, simply extend the person's engagement with negative thoughts. As a consequence, such responses reinforce or maintain meta-beliefs about loss of control and an inability to cope. The MCT model is illustrated in Figure 1.

Empirical Support for the Model

There is substantial empirical evidence supporting this model. This section provides a brief summary of the evidence (see Wells, 2009, for a more detailed review).

The negative effects of worrying for emotional and cognitive self-regulation have been demonstrated. Borkovec, Robinson, Pruzinsky, and DePree (1983) showed that brief periods of worrying led to greater anxiety, more depressive symptoms, and more negative thoughts in high compared with low worriers. It was also demonstrated that despite suffering with the negative consequences of worry, people with GAD had positive beliefs about worry (Borkovec, Hazlett-Stevens, & Diaz, 1999; Borkovec & Roemer, 1995). York, Borkovec, Vasey, and Stern (1987) also demonstrated that participants had more negative thought intrusions after the induction of worry than after a neutral condition.

Following exposure to the stress of watching a distressing video, brief periods of induced worrying have been shown to be associated with an increase in intrusive thoughts about the stressor over 3 days (Butler, Wells, & Dewick, 1995; Wells & Papageorgiou, 1995). The use of