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Mechanisms of change in cognitive therapy for panic disorder with agoraphobia

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Abstract

The purpose of this study was to test the predictions of an integrated cognitive and behavioral model of agoraphobic avoidance in patients with chronic panic disorder and agoraphobia during the process of observed therapeutic change. Treatment was residential with the majority ($n = 165$, 88%) receiving cognitive therapy, while the remaining 23 (12%) received guided mastery therapy. The results of latent variable path modeling of the changes occurring over the course of this treatment suggested that the anxiety elicited by bodily sensations influenced catastrophic beliefs, which, in turn, increased avoidance. Avoidance increased the anxiety elicited by bodily sensations.

Keywords: Panic disorder with agoraphobia; Cognitive therapy; Mechanisms of change

1. Introduction

Cognitive models of panic disorder—with or without agoraphobia—assume that panic attacks result from and are maintained by catastrophic misinterpretations of bodily and mental events, such as interpreting chest pain as a sign of a heart attack and feelings of unreality as a sign of going crazy (Clark, 1986). Consequently, the person becomes afraid of the interpreted sensations. Cognitive theorists may differ in their view of agoraphobic avoidance, but when construed within cognitive models of panic disorder, the function of avoidance is to prevent exposure to the possibility of the catastrophic consequences

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described above (Salkovskis, Clark, Hackmann, Wells, & Gelder, 1999). In this perspective, it is neither anxiety/panic attacks nor the situation *per se* which are primarily avoided, but the catastrophy which the person believes is about to occur. Thus, avoidance is construed as safety seeking behavior. However, it is acknowledged that other factors such as beliefs about coping with the threat (self-efficacy) and the perceived presence of rescue factors may modulate avoidance (Hackmann, 1998). In addition to being maintained by catastrophic beliefs, avoidant behavior is also assumed to maintain these beliefs by preventing patients from benefiting from disconfirmatory experiences (Salkovskis et al., 1999). According to the cognitive models, change occurs through a shift in the way one interprets feared bodily and mental events and through stopping safety seeking behavior.

In contrast, behavioral models assume that panic attacks constitute a conditioned fear response to bodily sensations (Wolpe & Rowan, 1988). From a behavioral perspective, catastrophic cognitions that are associated with panic attacks may be viewed as attempts by the person to rationalize what has happened to him/her and as arising after the attacks have occurred (Wolpe & Rowan, 1988). Thus, no functional importance is attributed to catastrophic beliefs in the development and persistence of panic attacks. Rather than seeing agoraphobic avoidance behavior as safety-seeking, it is seen as a way of reducing anxiety and panic according to the principle of negative reinforcement (Thyer & Himle, 1985). Once avoidance has developed, it retards the extinction of anxiety. Thus, anxiety generates avoidance, which in turn serves to maintain anxiety and perpetuate further avoidance. From this perspective, the essential elements of treatment are exposure to feared sensations and situations to decondition anxiety responses.

Barlow (1988) proposes an integrated cognitive-behavioral model of panic disorder with agoraphobia, where it is assumed that avoidance behavior is maintained both by the anxiety or panic conditioned to bodily sensations and catastrophic beliefs about loss of control and physical danger.

Consistent with the cognitive model, cognitive therapy has been proven effective for panic disorder (Clark et al., 1994) and panic disorder with moderate and severe agoraphobia (Hoffart, 1998). Telch, Brouillard, Telch, Agras, and Taylor (1989) found that anticipated panic and loss of control as a perceived consequence of panic attacks, contributed independently to agoraphobic avoidance. In contrast, however, Craske, Rapee and Barlow (1988) found that catastrophic beliefs were largely unrelated to avoidance. Clark et al. (1994) obtained evidence that catastrophic beliefs at posttreatment in patients with panic disorder with or without agoraphobia were related to symptomatic change during a one-year follow-up period across different treatment modalities. Arntz (2002), on the other hand, found that catastrophic beliefs after treatment predicted symptoms at follow-up among patients with panic disorder in cognitive therapy, but not in interoceptive exposure.

Consistent with the behavioral model, interoceptive exposure treatment has been found to be effective for panic disorder (Arntz, 2002; Bouchard et al., 1996; Griez & van den Hout, 1986). Bouchard et al. (1996), Ito, de Araujo, Tess, de Barros-Neto, Asbahr, and Marks (2001), and Arntz (2002) found that interoceptive exposure among patients with panic disorder produced changes in catastrophic thoughts related to panic, despite an absence of cognitive restructuring instructions. Furthermore, Wolpe and Rowan (1988) examined the sequence of people's experiences at the time of the first panic. They found–consistent with the behavioral but inconsistent with the cognitive model–first a