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Pushing the Envelope on Treatments for Phobia

Michael J. Telch¹

Barlow *et al.* provide a thoughtful review of the evidence on empirically supported treatments and factors that predict treatment response in patients with phobias. Not surprisingly, exposure to fear-eliciting cues appears as a common therapeutic strategy across phobia types. In this commentary, I raise the following question: “What does our science tell us about how to conduct therapeutic exposure more effectively?”. Although Barlow *et al.* cite selected studies investigating several exposure parameters

¹ Laboratory for the Study of Anxiety Disorders, University of Texas at Austin, 108 Dean Keaton, Austin, TX 78712, USA

(i.e. spacing and intensity), recent studies [1,2] that have experimentally manipulated other exposure parameters provide additional guidance on the procedural dos and don'ts for enhancing the effects of exposure therapy.

Manipulation of cognitive parameters. Two recent investigations with claustrophobics have shown that, after controlling for total duration of exposure, patients who are instructed to focus on their identified core threats during exposure and provided brief guidance in threat re-evaluation between exposure trials fare significantly better than those who receive exposure without threat focus and re-evaluation [3,4]. In contrast, recent data suggest that having phobics engage in a demanding cognitive load task during exposure significantly weakens therapeutic efficacy [3–5]. Moreover, treatment process analyses showed that the cognitive load task exerted its disruptive effects by interfering with between-trial habituation as opposed to fear activation or within-trial habituation. These data help to resolve the mixed findings that have been reported on the effects of distraction during exposure [6], namely it is not distraction *per se* but the extent to which the distracter task makes attentional resources less available for cognitive processing during exposure.

Feedback manipulations during exposure. Recent evidence suggests that providing relevant feedback during exposure may facilitate its therapeutic efficacy. In one study, claustrophobics who were provided audio heart-rate feedback during exposure fared significantly better than those who received either no feedback or audio feedback unrelated to heart rate [7]. In a study just completed, social phobics who received video feedback of their performance following each of 15 three-minute public speaking exposure trials displayed significantly greater fear reduction than those receiving exposure with no feedback [8].

Manipulation of safety behaviours during exposure. Ironically, the safety strategies that patients engage in during exposure therapy may inadvertently impede their recovery. Barlow *et al.* note the importance of fading safety behaviours during exposure. There is now compelling evidence from well-controlled experiments attesting to: (a) the disruptive effects of safety behaviours on fear reduction during exposure [4,9,10], (b) the beneficial effects of fading safety behaviours during exposure [11–14], and (c) the potential mechanisms through which safety behaviours undermine therapeutic exposure [10].

Clinical implications. One common therapeutic principle may help explain the above-mentioned findings and offers a heuristic for clinicians in working with phobic patients. The principle could be crudely stated as: exposure interventions will be maximally effective when they include procedural elements that maximize the salience of threat disconfirmation. Carrying out this strategic principle requires that the clinician identify the specific core phobic threat(s) of the individual patient and creatively design

exposure interventions that are likely to provide potent disconfirmation of those threats.

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