

**Comorbid Posttraumatic Stress Disorder and Major Depressive Disorder: The  
Usefulness of a Combined Treatment Approach**

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## Abstract

**Objective:** This thesis examined the utility of targeting depressive symptoms in those with comorbid posttraumatic stress disorder (PTSD) and major depressive disorder (MDD). Working from the perspective that MDD interferes with PTSD treatment efficacy by impeding optimal emotional engagement during therapy, this thesis tested a therapy approach that first addressed MDD, followed by cognitive processing therapy (CPT) for PTSD. The possible mechanisms through which MDD reduces optimal PTSD treatment outcomes were also examined. It was predicted that inhibited (i.e., underengagement) and elevated (i.e., overengagement) levels of emotional engagement would predict reduced PTSD and MDD outcomes.

**Method:** A randomised control, crossover design was used. Fifty individuals with comorbid PTSD and MDD were randomised to receive either CPT alone, CPT then behavioural activation (BA) for MDD, or BA then CPT. Participants were assessed at pre-, mid-, posttreatment, and at 6-month follow-up. PTSD and MDD symptom severity was further assessed every second session. PTSD and MDD symptoms were the main outcome variables of interest; emotional engagement, trauma cognitions, rumination, and emotional numbing were assessed as hypothesised mechanisms of change. Imputations were made for missing posttreatment, and follow-up data, and mixed, repeated-measures ANOVAs were run on each imputed dataset and results pooled. Emotional engagement was also assessed through therapy session coding based on the Client Expressed Emotional Arousal Scale-III. Specifically, all therapy sessions were coded for levels of under-, over-, and optimal emotional engagement. Mixed-effect models were used to analyse the relationship between under-, over- and optimal level of emotional engagement and PTSD and MDD outcome over the course of treatment.

**Results:** All conditions evidenced significant improvements on primary (PTSD and MDD) and secondary treatment outcomes (trauma cognition, rumination, emotional

numbing) from pre- to posttreatment, and pre- to 6-month follow-up. Effect sizes for the intent-to-treat sample were good with within group effect sizes ranging from 1.25 to 2.84 for PTSD symptoms, and 0.56 to 1.51 for depressive symptoms. At posttreatment, compared to CPT and BA/CPT, CPT/BA evidenced significantly greater improvements on all measures other than emotional numbing. At 6-month follow-up, compared to CPT and BA/CPT, CPT/BA evidenced significantly greater improvements on measures of rumination, and meaningfully larger improvements on measures of PTSD, MDD, and trauma cognitions. Further, CPT/BA demonstrated greater participant retention than CPT and BA/CPT.

Condition differences in the effects of under- and optimal emotional engagement emerged. For CPT and CPT/BA, elevated levels of underengagement predicted elevated PTSD (but not MDD) symptoms over the course of treatment, and elevated levels of optimal engagement predicted reduced PTSD and MDD symptoms over the course of treatment. However, this was not the case for BA/CPT, and BA/CPT participants appeared less sensitive to the effects of under- and optimal engagement. For all conditions, elevated levels of overengagement predicted elevated PTSD and MDD symptoms.

**Conclusion:** Findings support modifications to CPT and indicate that there is *added* benefit in targeting MDD in the treatment of comorbid PTSD/MDD. However, treatment order is imperative, with superior treatment outcomes only achieved when PTSD is targeted *prior* to MDD. That is, CPT/BA appeared to be the treatment of choice. Results also suggest that optimal levels of emotional engagement are critical to the therapeutic process in CPT, and that under- and overengagement are detrimental to achieving good treatment outcomes.

## Declaration

‘I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.’

A handwritten signature in cursive script, reading "Samantha Angelakis".

Samantha Angelakis



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research is what allows us to continue to learn more about posttraumatic stress disorder, and is what allows us to ensure that people in similar situations are provided with the best available treatments.