A cross-sectional study assessing single session training in emotional attentional control and trait worry influences in training ability

Amanda Brickstock

University of Liverpool, UK

Background:

Worry is referred to as an intrusive stream of thoughts and is a prominent feature in general anxiety disorder. Attentional control is a cognitive function surrounding a person's ability to shift and focus attention. Worry has been found to reduce attentional control. Studies have found that training increased levels of control using either non-emotional/emotional training can have benefits for high worriers. This study aims to train emotional control using an adaptive flanker task to determine if this helps worry. We predict that those trained to increase attentional control after being exposed to threat ("threat" group), will have quicker reaction times compared to those not exposed to threat ("non-threat" group). We also predict that since high worriers will have the least attentional control at pre-assessment, they will benefit more from training.

Method:

This was a cross-sectional study recruiting 44 participants. Participants were randomly assigned to "threat" and "non-threat" training groups. Worry (PSWQ), mood (PHQ-9), anxiety (GAD-7), attentional control (ACQ) and rumination (RRS) were assessed before the study via the internet. On the day, participants completed two mood ratings, an attentional control assessment task before and after training, a training task, a sentence comprehension filler task, a booster task, an emotional Stroop task and a stop-worry task.

Note: the pre-transfer task, post-transfer task and PSWQ will be focused on in this study.

Results:

When controlling for baseline attentional control, there was an increase in the "threat" group indicating less attentional control. Regression showed that when looking for baseline attentional control, a non-significant trend was shown in the "threat" training group representing poorer control than the "non-threat" group. Hypothesis 1 stated that those in the "threat" training group would have quicker reaction times compared to those in the "non-threat" group, after experiencing threat. Hypothesis 2 stated that group differences would be extenuated in high worriers. All three hypotheses were rejected and regression controlling for worry showed there was no significance of PSWQ.

Interpretation:

The current study tried to explore whether we can train emotional control and if so, are higher worriers more easily trained? Results failed to show training effects and if anything showed a shift to the opposite of original hypothesis predictions. Further research could adapt the tasks to consider randomisation which seemed to affect the results in this study.