SUPPLEMENTAL DATA

Attention Allocation to Threat: Gaze-Tracking Assessment

This assessment task was found to exhibit high internal consistency and acceptable 1-week test-retest reliability for mean dwell-time on threat (15). Color photographs of 16 male and 16 female actors, each providing a disgusted and a neutral facial expression were used (Karolinska Directed Emotional Faces database (26)). Stimuli were divided into two sets of eight male and eight female actors each, ensuring similar average disgust expression scores in the two sets. Participants within each treatment condition were randomly assigned to either being measured with set A and treated with set B, or visa-versa. Participants observed 60 different matrices, in two blocks of 30 each, with 1-minute break between them. Each face appeared 15 times per-block. Each block was preceded by an eye-tracking calibration to deviation below 0.5 degrees on the X and Y axis. Task did not ensue until calibration parameters were achieved.

Change in Social Anxiety Symptoms Following Treatment: Primary Outcome (LSAS-Fear Sub-Scale)

A main effect of time, *Wald*=69.40, *p*<.0001, was subsumed under a significant time-by-group interaction effect, *Wald*=19.10, *p*<.0001. Follow-up analyses indicated a significant reduction from pre- to post-treatment in the gaze-contingent music reward therapy (GC-MRT) group, *p*<.0001, but not in the placebo control (PC) group, *p*=.09. Reduction in social fear from pre- to post-treatment was significantly larger in the GC-MRT group relative to the PC group, *Wald*=19.09, *p*<.0001. Modeling change in symptoms from post-treatment to 3-month follow-up
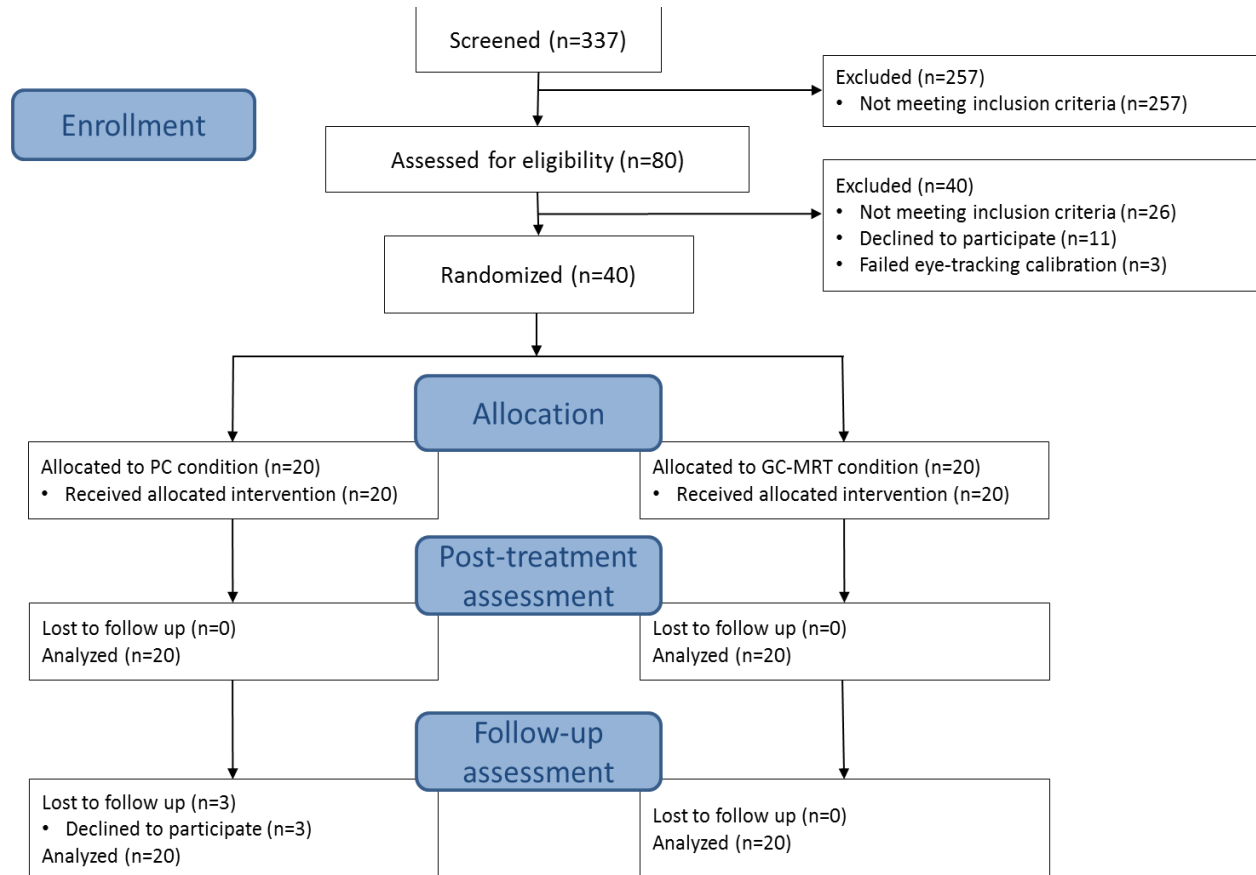
reveled no change in symptoms in the GC-MRT group, *p*=.35, and in the PC group, *p*=.06. However, reduction in fear from post-treatment to 3-month follow-up was larger in the PC group relative to the GC-MRT group, *Wald*=4.25, *p*=.04.
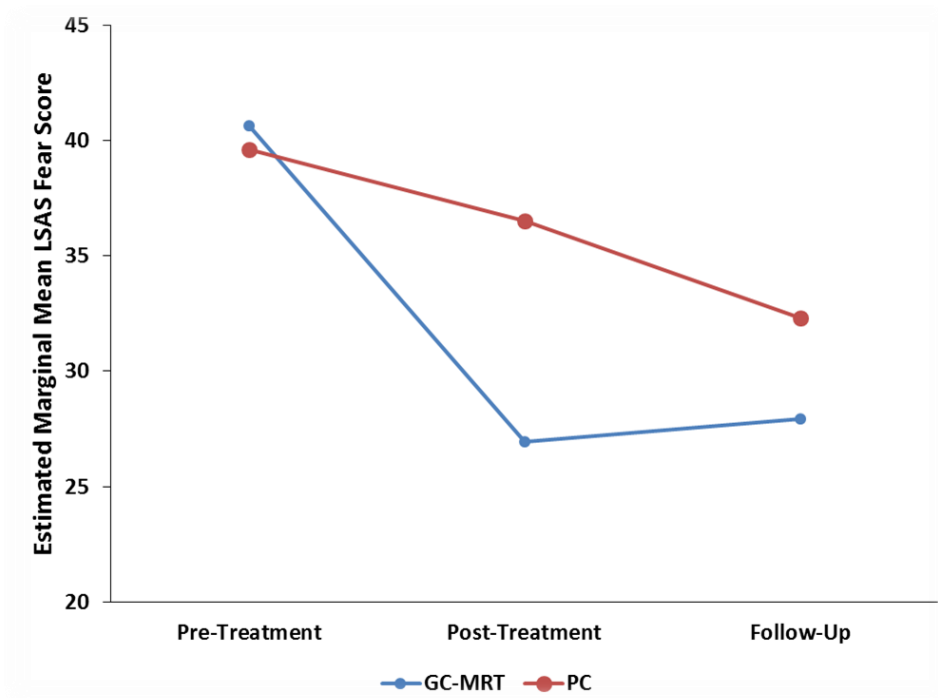
Change in Social Anxiety Symptoms Following Treatment: Primary Outcome (LSAS-Avoidance Sub-Scale)

A main effect of time, *Wald*=70.91, *p*<.0001, was subsumed under a significant time-by-group interaction effect, *Wald*=14.21, *p*<.0001. Follow-up analyses indicated significant reduction in social avoidance from pre- to post-treatment in both groups, *p*<.0001 for GC-MRT, and *p*=.04 for PC. However, reduction in social avoidance was significantly larger in the GC-MRT group relative to the PC group, *Wald*=14.21, *p*<.0001. Modeling change in symptoms from post-treatment to 3-month follow-up reveled no significant time-by-group interaction, *Wald*=3.24, *p*=.07.

FIGURE S1. CONSORT Diagram in a Study of Gaze-Contingent Music Reward Therapy for Social Anxiety Disorder

Screened (n=337)

Excluded (n=257)
- Not meeting inclusion criteria (n=257)

Enrollment

Assessed for eligibility (n=80)

Excluded (n=40)
- Not meeting inclusion criteria (n=26)
- Declined to participate (n=11)
- Failed eye-tracking calibration (n=3)

Randomized (n=40)

Allocation

Allocated to PC condition (n=20)
- Received allocated intervention (n=20)

Allocated to GC-MRT condition (n=20)
- Received allocated intervention (n=20)

Post-treatment assessment

Lost to follow up (n=0)
Analyzed (n=20)

Lost to follow up (n=0)
Analyzed (n=20)

Follow-up assessment

Lost to follow up (n=3)
- Declined to participate (n=3)
Analyzed (n=20)

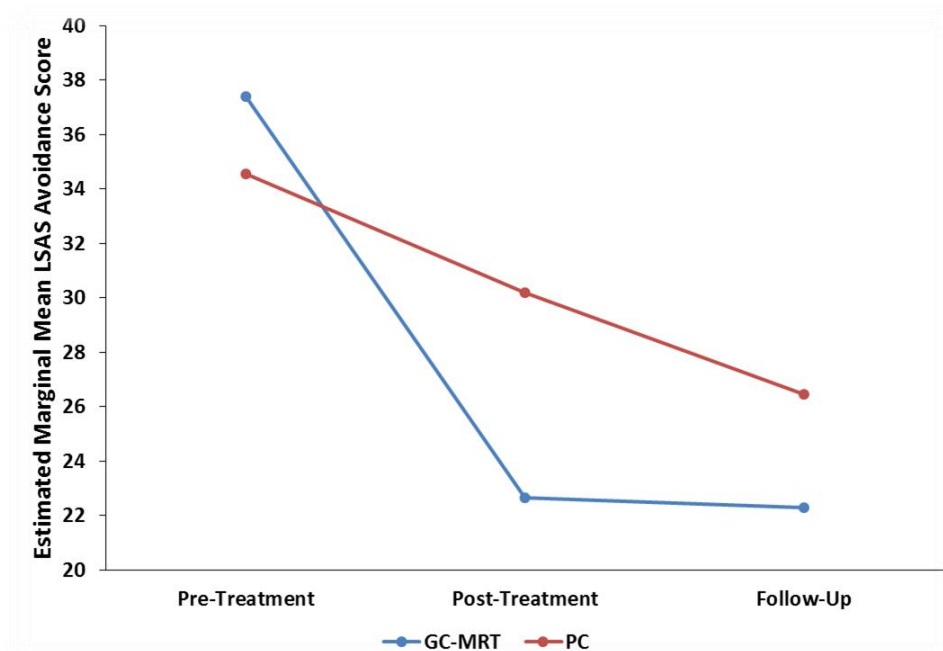Lost to follow up (n=0)
Analyzed (n=20)

FIGURE S2a. Social Anxiety Fear Scores by Group and Time[a,b]

[a] Social anxiety fear scores by group (GC-MRT, PC) and time (pre-treatment, post-treatment, 3-month follow-up).
[b] Social anxiety fear scores using the fear subscale of the LSAS = Liebowitz Social Anxiety Scale

FIGURE S2b. Social Anxiety Avoidance Scores by Group and Time[a,b]

[a] Social anxiety avoidance scores by group (GC-MRT, PC) and time (pre-treatment, post-treatment, 3-month follow-up).
[b] Social anxiety avoidance scores using the avoidance subscale of the LSAS = Liebowitz Social Anxiety Scale