

INTRODUCTION

- Functional Neurological Disorder (FND) is characterised by motor, sensory, and/or seizure symptoms that may be influenced by dysregulated autonomic, affective, and neurocognitive processes. Despite increasing recognition of these potential mechanisms, few existing interventions target them directly.
- Somatic yoga, a body-based practice using gentle movement, interoceptive awareness, and breath regulation, promotes gradual cognitive, affective, and autonomic activation without overloading the nervous system, making it particularly suitable for FND.
- This study examined the immediate effects of a single session, marking the start of a larger 6-week intervention in a feasibility randomised controlled trial. Pre- and post-session assessments evaluated immediate changes in FND.

METHODS

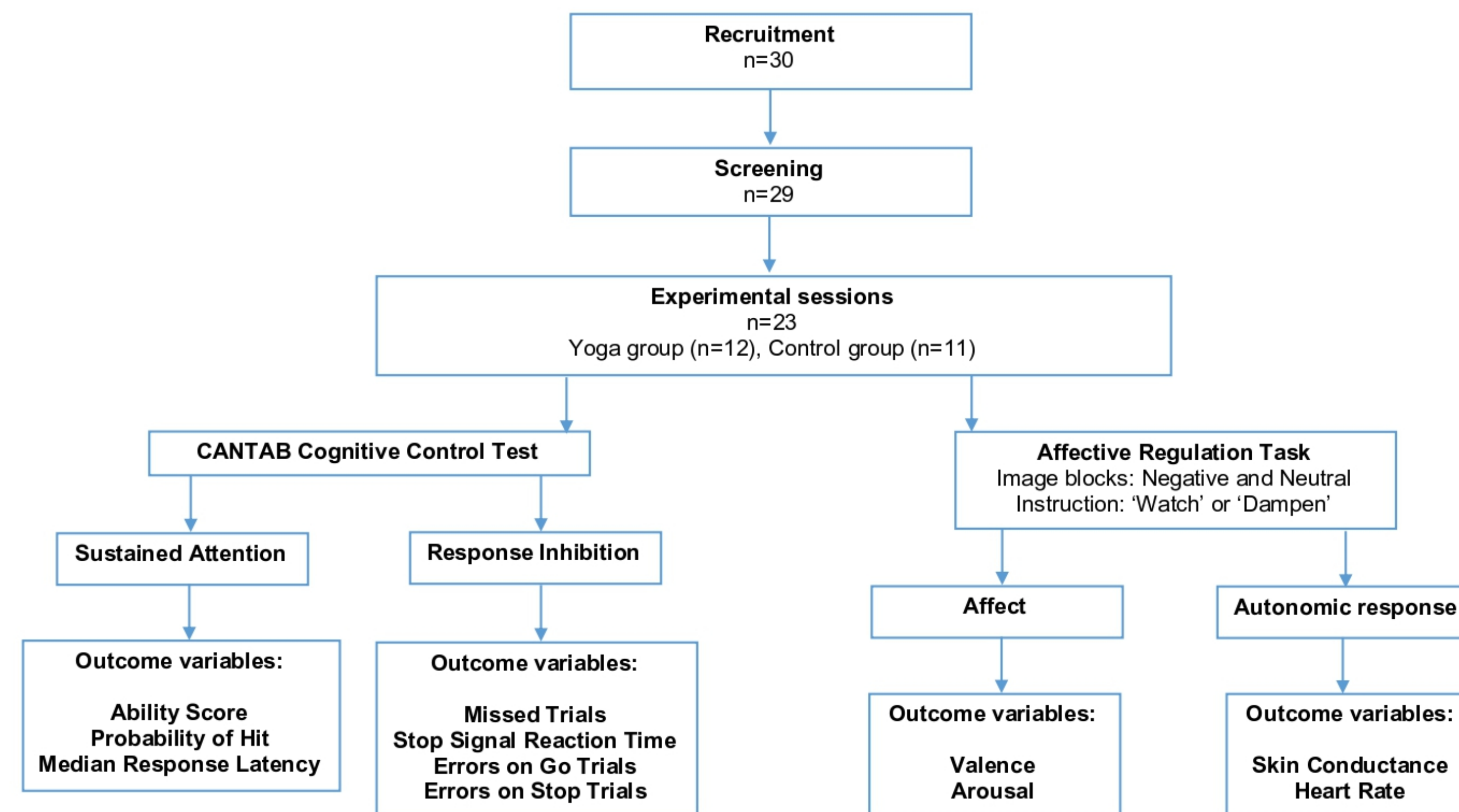


Figure 1. Diagram of participant recruitment and testing procedure. The flowchart outlines the stages from recruitment and screening to experimental sessions, tests, and assessment of outcome variables.
Key: CANTAB, Cambridge Neuropsychological Test Automated Battery.

RESULTS

Cognitive Control

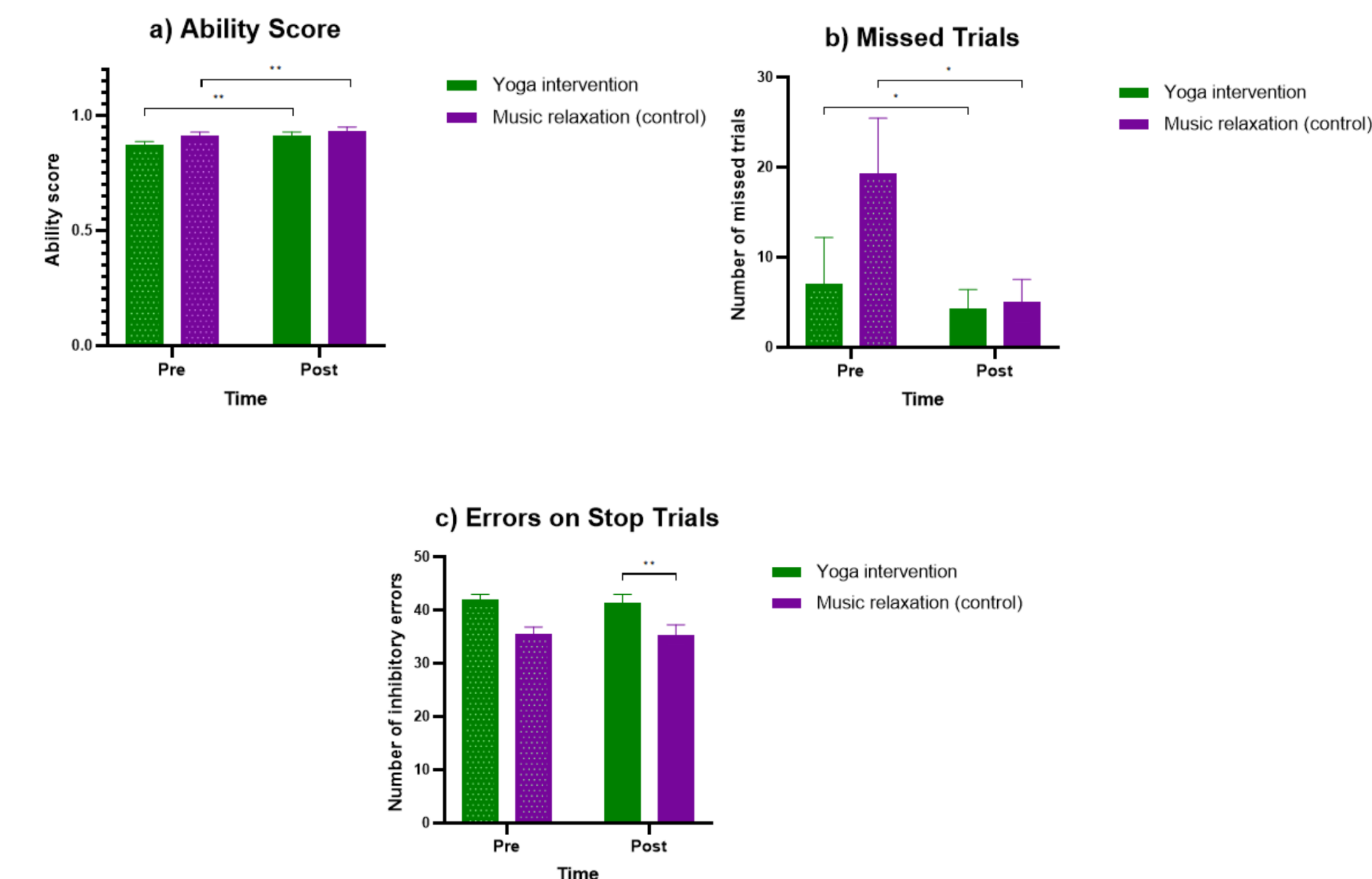


Figure 3. CANTAB Cognitive Control Test. a) Ability Score increased post-session ($p < .001$) in both groups, b) Missed Trials decreased post-session ($p = .042$) across the entire sample, and c) The music relaxation group was significantly better ($p = .005$) at inhibiting Errors on Stop Trials. All graphs display pre- and post-session data across both groups. Bars with pattern represent data collected pre-session, while solid bars indicate post-session measurements.
Key: CANTAB, Cambridge Neuropsychological Test Automated Battery.

DISCUSSION

- A single session of somatic yoga or music relaxation can produce immediate changes in cognitive, affective and autonomic regulation in FND.

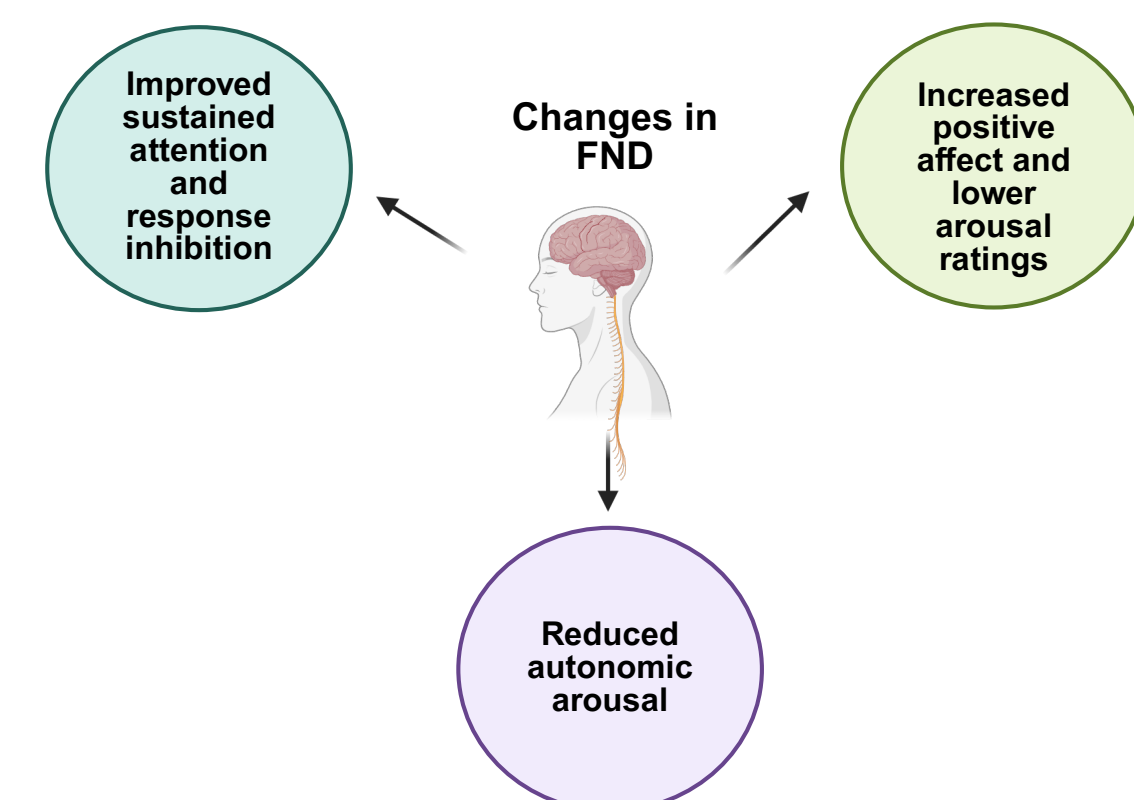


Figure 5. Changes in cognitive, affective and autonomic regulation following a single intervention session in FND patients.

CONCLUSION

- Brief, body-based interventions may have the potential to target core pathophysiological mechanisms in FND.

Future directions

- These interventions should be examined further in larger-scale, fully powered studies.

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AIMS

Aims

- To evaluate whether a single session of somatic yoga induced immediate changes in cognitive, affective and autonomic regulation in patients with FND, compared to a music relaxation control.
- To assess the association between autonomic and affective responses.

Hypotheses

- The single session will enhance cognitive control in the yoga group by improving performance on response inhibition and sustained attention tasks, while participants in the yoga group will report increased positive affect and lower arousal ratings, along with reductions in autonomic arousal (heart rate and skin conductance), all measured post-session compared to the control group.
- A relationship between affect and autonomic response variables is hypothesised.

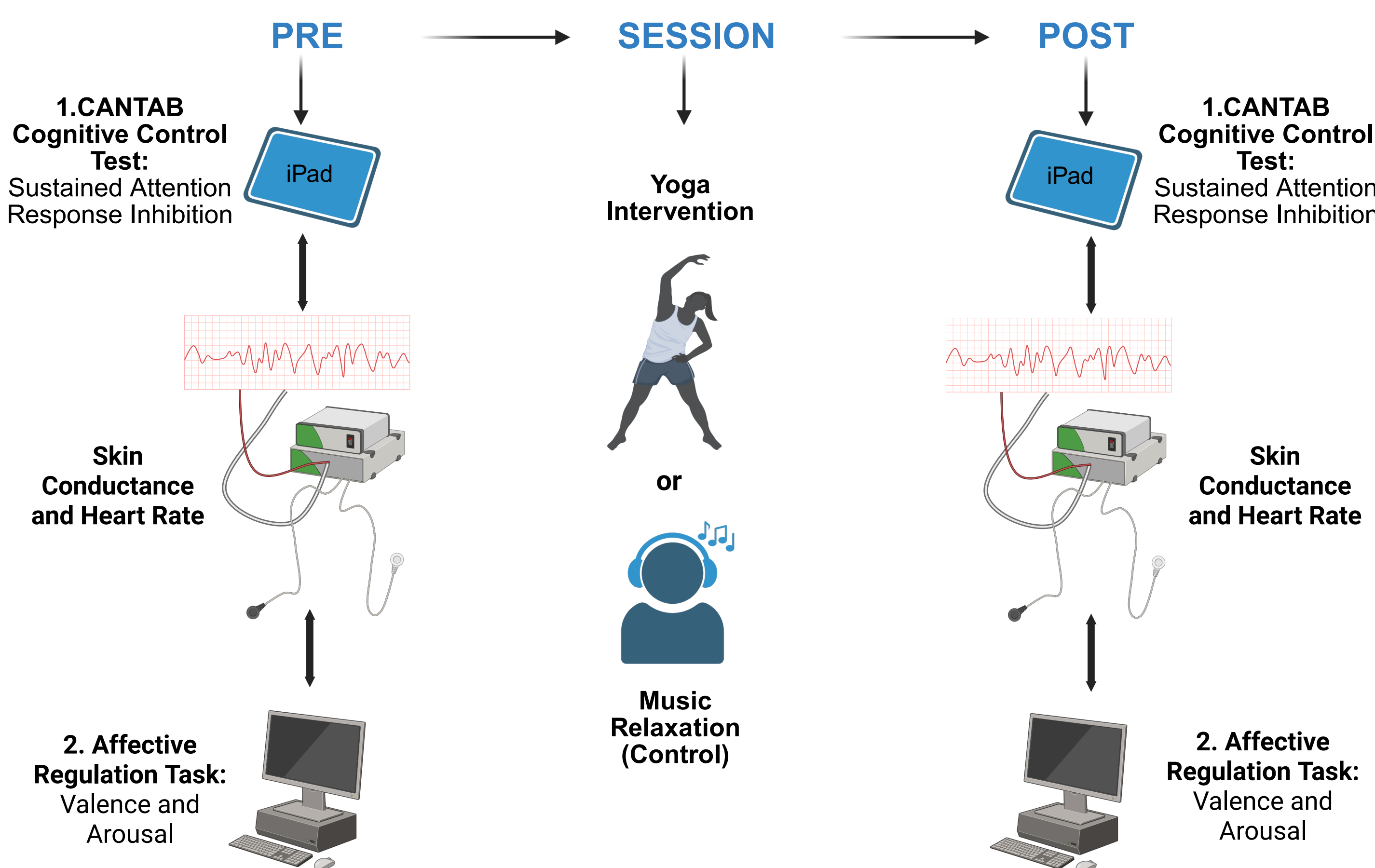


Figure 2. Schematic overview of study methodology. This diagram illustrates the sequential study design, including pre-session measurements, the intervention session (yoga or music relaxation), and post-session measurements.
Key: CANTAB, Cambridge Neuropsychological Test Automated Battery.

Affective Regulation

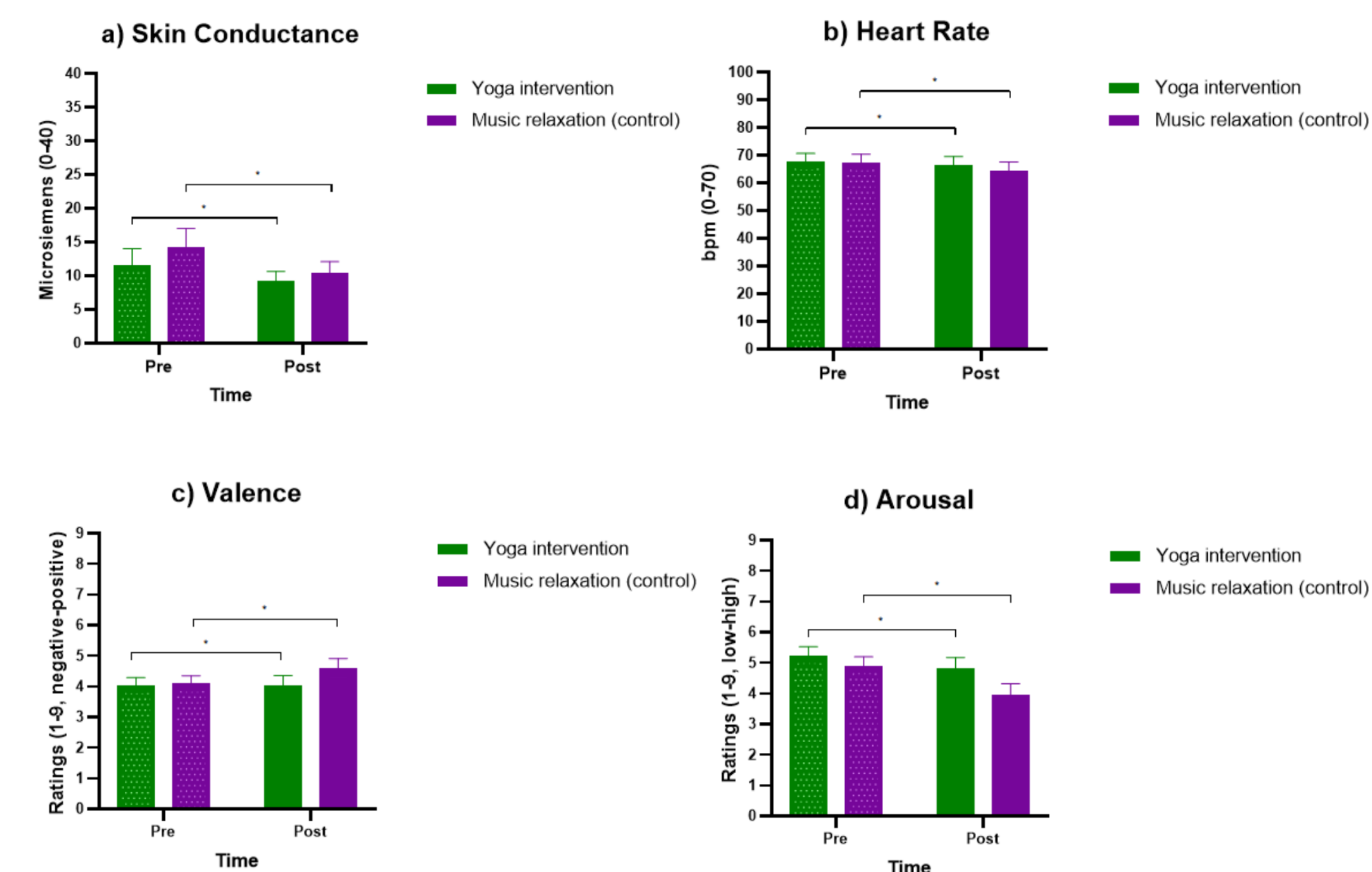


Figure 4. Affective Regulation Task. a) Skin Conductance decreased post-session ($p = .014$) in both groups, b) Heart Rate declined following the session ($p = .036$) across the entire sample, and c) Higher valence ($p = .033$) and lower arousal ($p = .016$) ratings were shown post-session in both groups. Data displayed pre- and post-session. Bars with patterns indicate data collected pre-session.
Key: bpm, beats per minute.

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