

# Study Protocol

Clinical Trial: FIS-2024-01

Version 2.1

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Official Title of the study: Effect of a sequence of manual therapy techniques on the autonomic nervous system in healthy adults.

## **Introduction**

Manual therapy has been proposed as a potential intervention to modulate autonomic nervous system activity. However, current evidence remains limited and heterogeneous, particularly regarding immediate autonomic responses as measured by heart rate variability.

## **Objective**

To investigate the immediate effects of a manual therapy sequence on cardiac autonomic regulation compared to a sham intervention

## **Study Design**

Randomized, double-blind, parallel-group clinical trial with single-dose intervention.

## **Methods**

Every subject were measured before and after the intervention with a chest band for root mean square of successive differences of heart rate variability, high frequency power of heart rate variability, and heart rate; and visually by the evaluator for the breath rate. The subjects and the evaluator were blinded.

## **Participants**

96 healthy adults aged 18–65 years, recruited from Universitat Internacional de Catalunya.

## **Intervention**

Treatment group receives specific sequence of manual therapy techniques. Control group receives simulated techniques.

## **Outcomes**

Primary Outcome:

- RMSSD of HRV
- Heart Rate

Secondary Outcomes:

- HF band of HRV
- Respiratory Rate
- Adverse Effects