Supplementary files

## Supplementary Table 1 - Exercise sessions – 45 minutes total

|  |  |
| --- | --- |
| Category | Exercises |
| Cardiovascular warm-up (standing)    (2 x 30 sec/exercise; 15 mins total) | \*Walking in place  \* High knees  \* Punches  \* Butt kicks  \* Chop and lift  \* Trunk rotations  \* Dance steps (front, back, side) |
| Resistance training with elastic bands - main muscle groups    (2 x 8 reps/exercise; 20 mins total) | \* Squat (on chair)  \* Elbow flexion  \* Hip flexion  \* Side steps  \* Shoulder abduction |
| Stretches and relaxation    (30 sec/stretch; 10 mins total) | \* Shoulder flexion  \* Scapular elevation, protraction, depression and retraction  \* Wrist circumduction  \* Trunk flexion (sitting)  \* Lateral trunk flexion with shoulder abduction  \* Knee extension with ankle dorsiflexion  \* Ankle circumduction  \* Cervical flexion and lateral flexion |

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## Supplementary Table 2 - Analysis of NRS results (tables 2, 3 & 4 in the main text) without exclusion of pain-free participants

### Supplementary Table 2b - Average Hypoalgesia per Session

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Experimental group | | | | | | | | |
| **Session** | Session 1 | Session 2 | Session 3 | Session 4 | Session 5 | Session 6 | Session 7 | Session 8 |
| Mean hypoalgesia (absolute) | 0.7 | -0.2 | 1.6 | 1.6 | 1.0 | 1.4 | 1.6 | **3.0** |
| Mean hypoalgesia (relative) | 21% | -13% | **35%** | **33%** | 22% | **33%** | **48%** | **82%** |
| *n=* | *7* | *6* | *7* | *8* | *7* | *7* | *7* | *3* |
| Control group | | | | | | | | |
| **Session** | Session 1 | Session 2 | Session 3 | Session 4 | Session 5 | Session 6 | Session 7 | Session 8 |
| Mean hypoalgesia (absolute) | 0.9 | 0.4 | 0.6 | 0.4 | 1.0 | -0.3 | 0.0 | 1.2 |
| Mean hypoalgesia (relative) | 14% | 7% | 11% | 10% | 20% | -6% | 0% | 18% |
| *n=* | *8* | *7* | *7* | *5* | *5* | *7* | *4* | *3* |

Table 2b. Absolute and relative hypoalgesia induced in each group over each session (n = number of participants for each session).

### Supplementary Table 3b - Average Hypoalgesia per Participant

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Experimental group | | | | | | | | | |
| **Subject** | E1 | E2 | E3 | E4 | E5 | E6 | E7 | E8 | E9 |
| Mean hypoalgesia (absolute) | 0.0 | -1.3 | 0.0 | **2.0** | **3.5** | **3.0** | 1.6 | 0.5 | **2.5** |
| Mean hypoalgesia (relative) | 0% | -13% | -7% | **36%** | **40%** | **77%** | **36%** | 13% | **40%** |
| *n=* | *6* | *4* | *6* | *7* | *4* | *5* | *8* | *8* | *4* |
| Control group | | | | | | | | | |
| **Subject** | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 |
| Mean hypoalgesia (absolute) | 0.3 | -0.1 | 0.3 | **4.0** | 0.3 | 0.5 | 0.3 | 0.3 | 1.4 |
| Mean hypoalgesia (relative) | 8% | -4% | 4% | **50%** | 24% | 6% | 4% | 4% | 29% |
| *n=* | *7* | *7* | *3* | *1* | *7* | *4* | *3* | *7* | *7* |

Table 3b. Average hypoalgesia (absolute and relative) induced in each participant (n= number of sessions attended for each participant).

### Supplementary Table 4b - Average Hypoalgesia per Participant per Session

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Average hypoalgesia per participant per session | | Proportion of hypoalgesia-inducing sessions | | |
|  | Absolute | Relative | ∆ pain score ≥ 2 | ∆ pain score ≥ 30% | ∆ pain score  ≥ 50% |
| Experimental group | 1.3 | 24% | 42% | 46% | 25% |
| Control group | 0.5 | 11% | 11% | 13% | 9% |

Table 4b. Average hypoalgesia across all sessions and all participants (left); proportion of hypoalgesia-inducing sessions for each group (right).