# Abstract submission for 2<sup>nd</sup> BPS Young Researchers Day 2023

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#### Title

#### Self-induced cognitive trance reduces subjective pain perception in healthy volunteers

#### Authors

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## **Presenting author**

Last and first name. The presenting author is expected to attend the BPS Young Researchers Day.

X PhD student Dostdoc Junior clinician and other healthcare professionals

## Abstract

Maximum 250 words. The abstract should be understandable for a multidisciplinary audience. Choose a structured abstract with sections Background and Aims, Methods, Results (if available) and Conclusions (or hypotheses and possible implications). Protocols of ongoing or future studies are welcome. Acronyms should be defined. Generic names of drugs should be used. Please do not add references, tables, figures or graphs.

**Background:** People who practice self-induced cognitive trance (SICT) anecdotally report a modification of pain perception. SICT is defined as a state of voluntary non ordinary state of consciousness, characterized by a different awareness of the environment, combined with a flow, and increased internal imagery, alteration in somato-sensory processes, self, and time-space cues.

**Aims:** To rigorously investigate these anecdotal reports of modified pain perception during SICT in healthy volunteers all experts in SICT.

**Methods:** We compared pain perception (i.e., intensity and unpleasantness) in 19 SICT experts (age:  $42,6 \pm 13.4$  yrs.; 14 women, regular practice) in three conditions: ordinary consciousness (OC), SICT, post-SICT. Each condition was performed with eyes closed, and started with 5 minutes of rest without stimulation, followed by 10 minutes of electrical nociceptive stimulation during which 60 stimuli were manually administered with random inter-stimulus intervals (8-12 sec.). The order of the sessions (i.e., OC and SICT/post-SICT) was

counterbalanced between participants with a 1-hour washout period in between, allowing the participants to fully exit the SICT state. At the end of each session, participants were asked to assess, on a scale 0-10, their pain intensity and pain unpleasantness.

Results: Results indicated that both pain intensity and unpleasantness were significantly lower in SICT compared to OC and post-SICT. Pain unpleasantness was also lower in post-SICT compared to OC.

**Conclusion:** These results suggest that SICT might be an effective approach to reduce pain, paving the way for clinical application in chronic conditions such as chronic pain.

## Word count

Count and report here the number of words for abstract title and body. Title: 10 words Abstract body: 245 words

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