

A pilot randomised control trial assessing the impact of Sophrology in people with chronic pain.

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Oral presentation at the International Sophrology Federation Conference, 11th December 2021



Background

- Chronic pain is estimated to currently impact 43% of the UK population, with this figure rising with the ageing population (Fayaz, Croft, Lanford, Donaldson and Jones, 2016)
- Chronic pain can have a serious impact on various areas including quality of life, disability, mental health, and employment level (Strand et al., 2019; Mills et al., 2019)
- It can be very difficult to treat and pain medications are often ineffective and can result in complicated side effects, therefore alternative treatments are increasingly being recommended (Tennant, 2019; Kissin, 2013; Klimas et al., 2019)

Review of sophrology for pain management

- A systematic review of three bibliographic databases identified 8 papers related to the use of sophrology for pain management Five studies supported the use of sophrology for pain management
- Two studies found sophrology was not effective as the authors hypothesised One study found sophrology increased anxiety, and reduced physical functioning and quality of life
- In summary: there is potential for sophrology to be beneficial, however the mix of results means further research is needed

The present study

- Aim: to assess the impact of an online sophrology intervention for adults in the UK living with chronic pain
- A pilot randomised controlled trial was used to compare participants taking part in an 8-week sophrology intervention with a waitlist control group
- The study received ethical approval from the University of West London. It was conducted in accordance with the British Psychological Society ethical standards

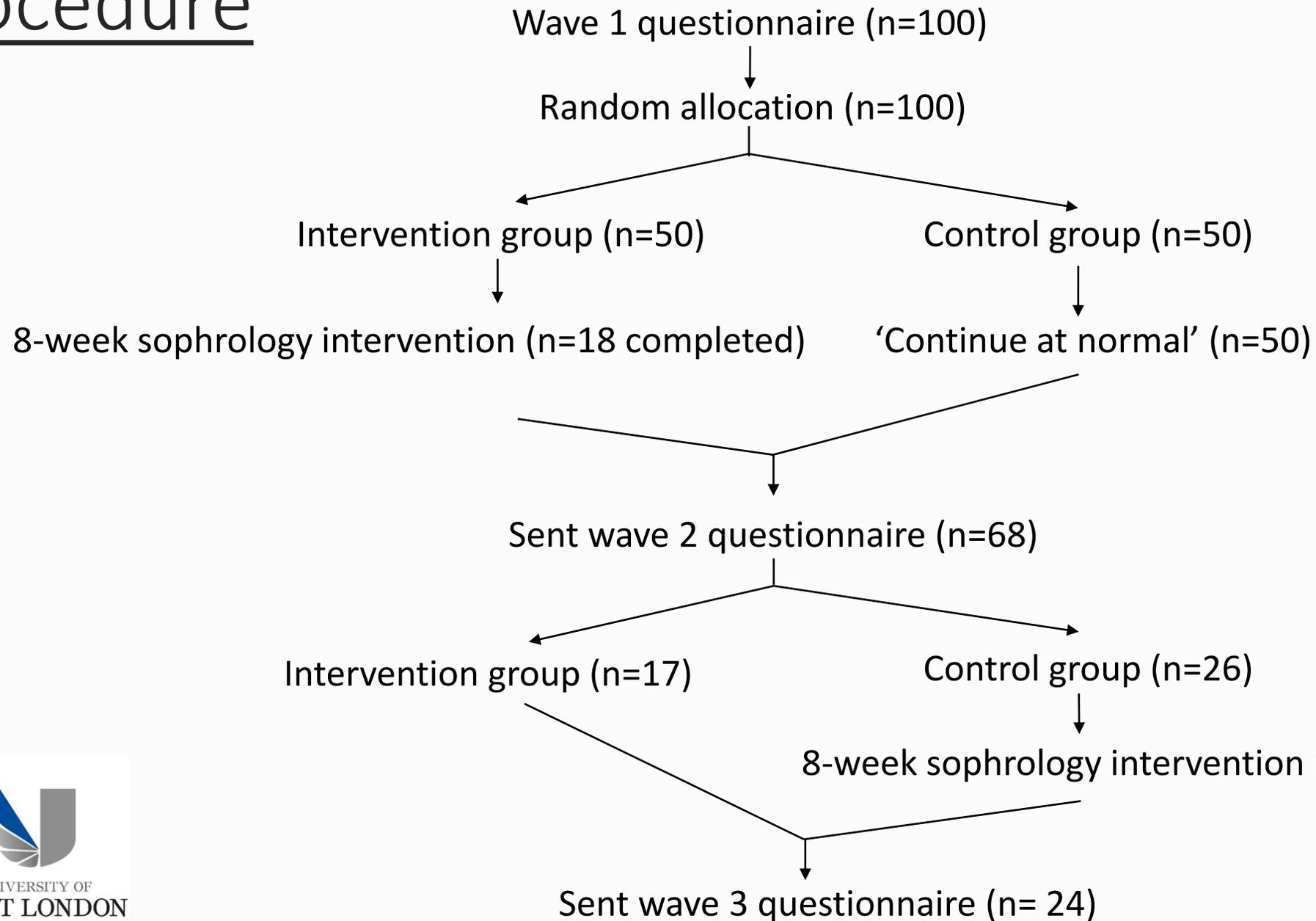


Participants

- 100 participants were recruited from a range of chronic pain and chronic condition support groups (such as Pain UK, Shingles UK and Crohns and Colitis Network)
- Chronic pain was defined as pain lasting over 3 months; therefore, this was the inclusion criteria for participation
- The participants were randomly assigned to the control or intervention group, via a computer programme



Procedure



Measures

- Level of pain

- Rated their pain on 0-10

- Pain management

- Use of pain medication
- Use of alternative treatments
- Treatment satisfaction

- Pain catastrophising

- Pain Catastrophising Scale

- Pain related disability

- Pain Disability Index

- Sleep

- Pittsburgh Sleep Quality Index

- Depression

- Patient Health Questionnaire 9-item (PHQ-9)

- Anxiety

- Generalised Anxiety Disorder 7-item (GAD-7)

- Life satisfaction

- Satisfaction with life scale

- Resilience

- Brief resilience scale

- Questions about the intervention groups experiences of sophrology

- Open and closed questions used to gauge an understanding of their experiences of sophrology

Demographic profile of the participants

- 92% female
- Mean age: 39.11
- Mean years in pain: 14.05
- 88% had a diagnosis to the cause of their pain
 - 16% = Ehlers Danlos Syndrome
 - 13% = Fibromyalgia
 - 12% = Complex Regional Pain Syndrome
 - 8% = Other
 - 39% = Multiple Diagnosis
- Statistical tests showed there was no significant difference between the demographic profile of the control and intervention group

Baseline responses of the participants

- These are some of the key baseline responses of the participants
 - Mean rating of their level of pain – 6.27 out of 10
 - Participants on average used pain medication 18.29 times a week.
 - 99% were rated as having poor sleep quality
 - 60% were rated as having severe or moderately severe depression
 - 57% were rated as having moderate or severe anxiety
- Statistical tests showed there was no significant difference between the baseline responses of the control and intervention group

Results

- Compared to the control group, the intervention group had a significantly bigger change in the following variables:

	Intervention group	Control group
Level of pain	- 1.19	- 0.77
Pain medication	- 5.29	+ 0.88
Treatment satisfaction	+ 2	+ 0.31
Rumination	- 3.47	- 1.12
Magnification	- 2.35	- 0.81
Disability	- 6.22	+ 0.58
Sleep	- 2.82	- 0.46
Depression	- 5.35	- 1.5
Anxiety	- 4.71	- 0.42

Results

- There was no significantly different change between the groups for the following variables:

	Intervention group	Control group
Use of alternative treatments	- 0.11	+ 0.69
Overall pain catastrophising	- 11.65	- 4.23
Helplessness	- 5.83	- 2.3
Life satisfaction	+ 2.89	+ 0.46
Resilience	+ 0.39	+ 0.16

Feedback about the sophrology intervention

- The mean rating for how helpful they found the intervention was 7.82 out of 10
- The mean rating for how likely they would be to continue sophrology was 7.82 out of 10
- The mean rating for how likely they would recommend sophrology to others was 7.82 out of 10



Feedback about the sophrology intervention

- Thematic Analysis was used to analyse the open questions and found:
- What the participants liked most about the sessions
 - The sessions being done in a group
 - The sessions providing them a routine
 - The guidance and relaxing presence of the practitioner
 - The positive changes they have felt since sophrology
- What the participants liked least about the sessions
 - The reliance on technology to complete the sessions
 - The set timings were challenging with other commitments
 - The initial struggle they felt with understanding and completing some of the exercises

Strengths and Limitations

- ✓ Use of a randomised controlled trial enables comparison between the intervention group to control groups, so the changes seen in questionnaire responses can be attributed to the sophrology
- ✗ 66% of the intervention group and 48% of control group dropped out between wave 1 and 2
- ✗ Daily fluctuations in participants conditions could have impacted how they responded to the questionnaires
- ✗ There was no blinding, so participants knew if they were in the control or intervention group which may lead to bias in responses

Implications

- The results show benefits of sophrology for people with chronic pain, demonstrating that it is a valuable method in helping the growing number of people living with chronic pain
- The results found sophrology reduced participants medication use, which could help in reducing participants' reliance and potential of side effects
- If sophrology can reduce pain-related disability, then it can result in an array of benefits, such as increasing exercise levels and employment levels
- With mental health issues being higher among people in chronic pain, then sophrology could help to reduce these
- Finding sophrology delivered over zoom is especially helpful since the surge in telehealth in response to the COVID-19 pandemic

Conclusions

- The study shows sophrology has the potential to be an effective method of pain management and improve the quality of life of adults in the UK living with chronic pain
- Further research is needed to confirm these results, and it would be beneficial to test sophrology against other treatment methods