Background:
- Neck pain is 4th leading cause of disability in US 1
- Contributing factors include:
  - Sedentary work 2
  - Overuse of superficial neck muscles 3
  - Forward head posture 4

Intervention:
- Alexander technique (AT) is a non-exercise approach to reducing musculoskeletal pain by improving awareness and decreasing excessive muscle co-contraction during everyday life activities 5

Methods:
Design
- Single group
- 5 weeks of AT classes twice a week
- Multiple baselines + retention
  - 5 weeks between each testing session

Participants
- 8 women, 2 men; highly educated
- Neck Disability Index > 16%
- At least 6 months of pain
- Not receiving treatment

Measures
Electromyography (EMG):
- Record SCM muscle activity during:
  - Accepted Voluntary Contraction (AVC)
  - Cranio-Cervical Flexion Test (CCFT):
    - Amplitude assesses overuse of superficial neck muscles
    - Frequency analysis assesses muscle fatigue

Forward Head Posture (FHP):
- Angles were recorded as participants play a 5-minute computer game

Analysis & Results:

Conclusions & Next Steps:
- AT class led to:
  - Reduced activation of surface neck muscles
  - Reduced neck muscle fatigue
  - Reduced pain
  - More upright posture
- Absence of improvement between baselines suggests that the effects were due to the intervention.
- Reduction in pain and fatigue were retained better than posture.
- We plan to seek funding for a larger study with a control group.

References: