

MINDFULNESS TRAININGS DECREASE ACUTE PAIN INTENSITY AND PAIN UNPLEASANTNESS IN CHRONIC PAIN PATIENTS

INTRODUCTION

Chronic Pain

- Chronic pain, defined as pain that persists for at least three months, affects approximately 50.2 million adults in the U.S. (Yong et al., 2022).
- Because of the often crippling nature of chronic pain, many chronic pain patients struggle with managing their symptoms and become dependent on pharmaceuticals for pain relief (Volkow and McLellan, 2016).

Mindfulness: A Potential Way to Manage Chronic Pain

- Mindfulness trainings, particularly those that promote self-transcendent experiences, have shown promise as a more affordable and sustainable means of managing chronic pain (Hanley et al., 2024).

Preliminary Results from an Ongoing Trial

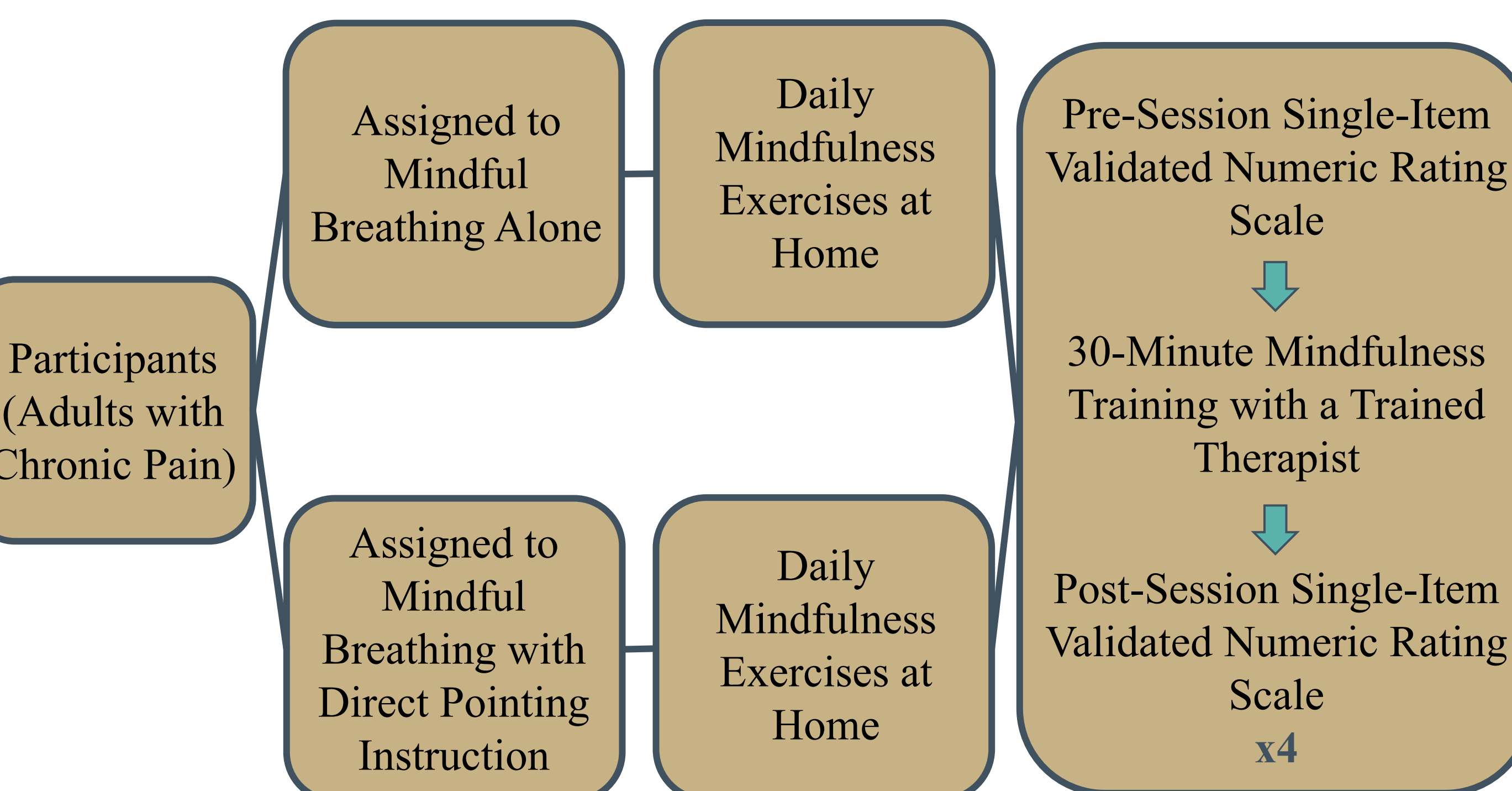
- The present study provides preliminary results from an ongoing randomized controlled trial. The ongoing trial considers whether different forms of mindfulness training (mindful breathing alone vs. mindful breathing with direct pointing) differentially impact self-transcendent experiences and what effect those differences could have on pain outcomes for chronic pain patients.
- For the present study, between-group differences were not compared due to a small sample size, but differences in acute pain intensity and pain unpleasantness were analyzed for chronic pain patients immediately before and after mindfulness trainings.

METHODS

Participants

- Participants were 18 years or older with pain ratings of at least 3 (0-10 scale) for the majority of days over the previous three months.

Mindfulness Interventions and Data Collection



Data Analysis

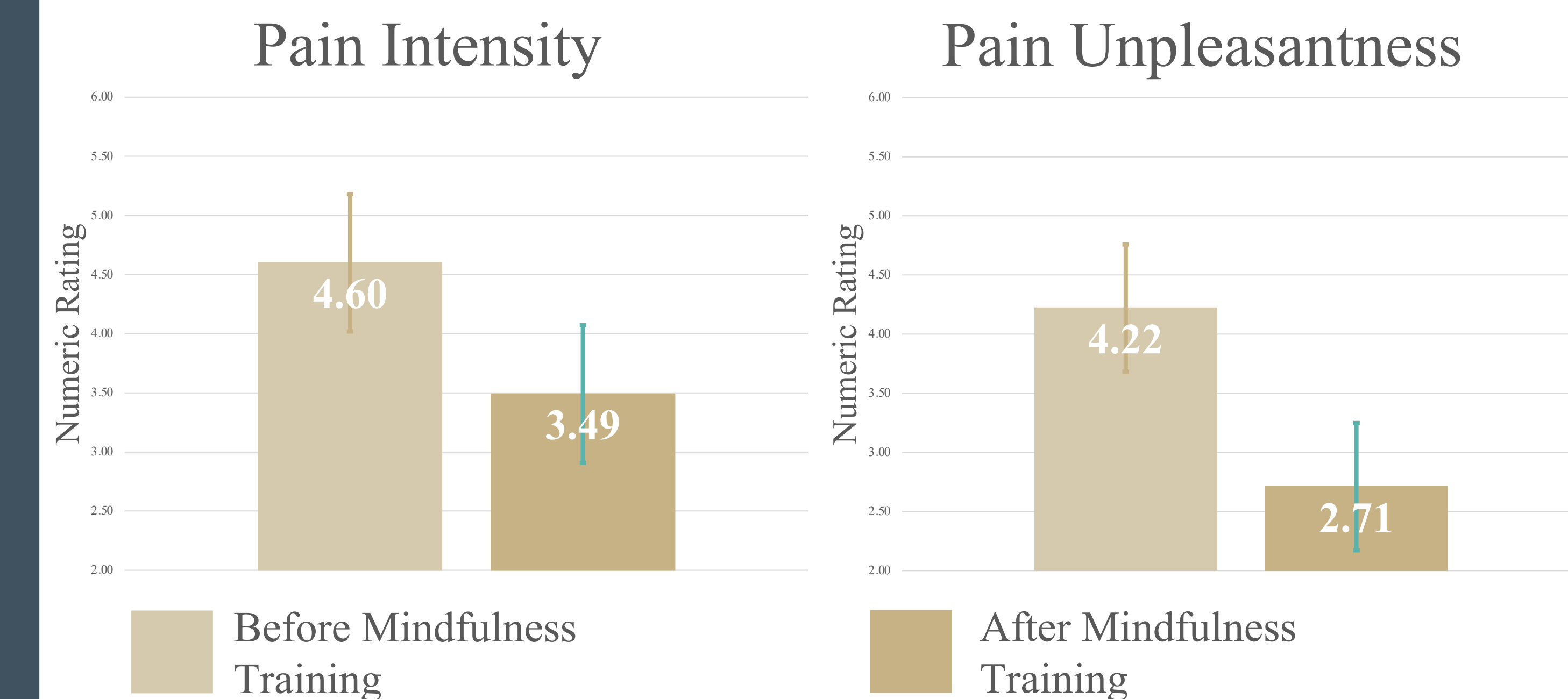
- Generalized linear mixed modeling was used to evaluate the extent to which participating in mindfulness training sessions affected participant ratings of acute pain intensity and pain unpleasantness.

Adults with chronic pain reported **significantly lower ratings of pain intensity** ($F=12.92, p < 0.001$) and **pain unpleasantness** ($F=17.30, p < 0.001$) **after 30-minute mindfulness training sessions.**

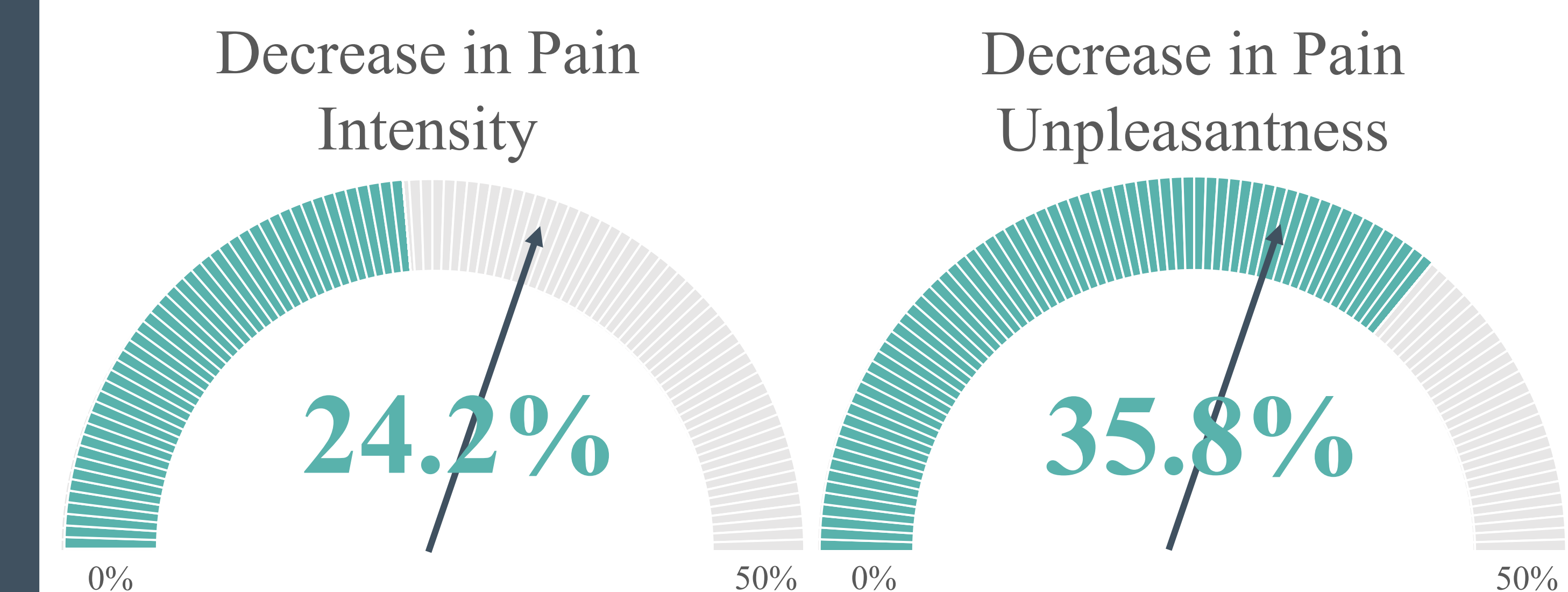


In 26 of the 35 mindfulness trainings, participants experienced at least minimally clinically significant decreases (10%) in pain intensity (Smith et al., 2020).

RESULTS



- The preliminary results reported here reflect data from 10 different participants who completed a total of 35 treatment sessions.
- Overall, the percent decrease in pain intensity (24.2%) and the percent decrease in pain unpleasantness (35.8%) were close to the cutoff for clinically significant percent decreases (30%) (Smith et al., 2020).



DISCUSSION

Mindfulness Trainings Are Effective

- The preliminary results of this randomized controlled trial suggest that mindfulness trainings are effective in reducing acute pain intensity and pain unpleasantness for chronic pain patients, strengthening existing evidence for including mindfulness trainings in chronic pain treatment plans.
- These results also reveal that, regardless of the specific style of mindfulness training, chronic pain patients experience consistent reductions in acute pain intensity and pain unpleasantness after mindfulness training sessions.

REFERENCES

