

“Power Breaks” and Mental Health: Can mindfulness interventions improve student wellbeing?

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BACKGROUND

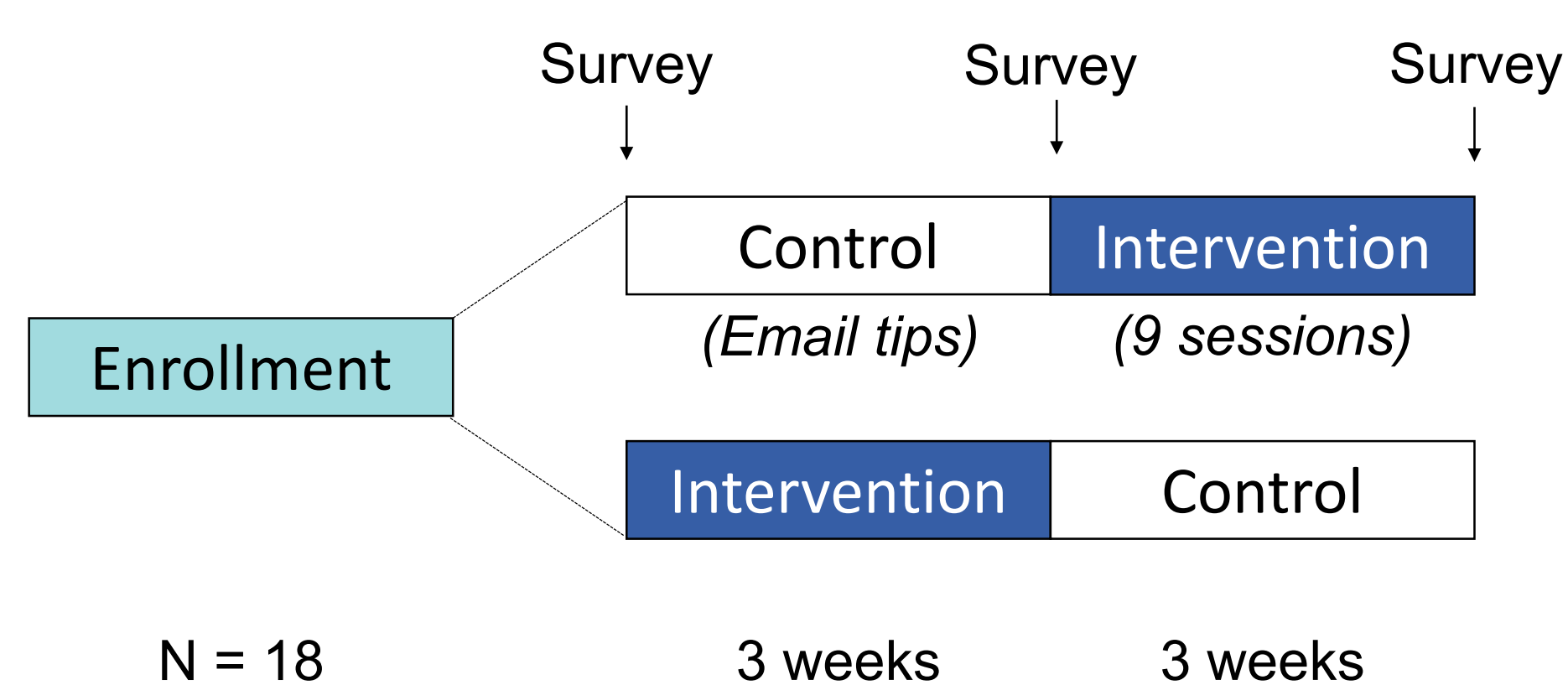
- The advent of new stressors in the last two decades has changed the landscape of adolescent mental health care.
- The rise of socially challenging multinational, multicultural environments and the perpetual self-comparison to others in social media have contributed to this metamorphosis¹⁻².
- Taking a few minutes out of one’s day to relax can help alleviate perceptions of stress³⁻⁵.

Aim: determine if 5-min interventions can positively affect:

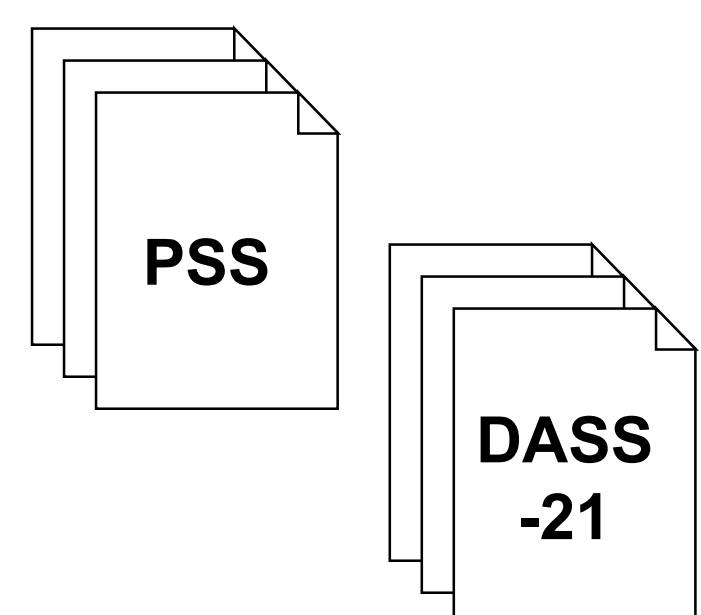
- perceptions of stress, depression, and anxiety
- heart rate and oxygen saturation levels

METHODS

○ Randomized controlled crossover study



○ PSS and DASS-21 surveys (adapted)



○ Oxi-Pulse finger pulse oximeter



○ Focus group discussions



RESULTS

Moderate, self-reported stress levels decreased after the three-week-long intervention.

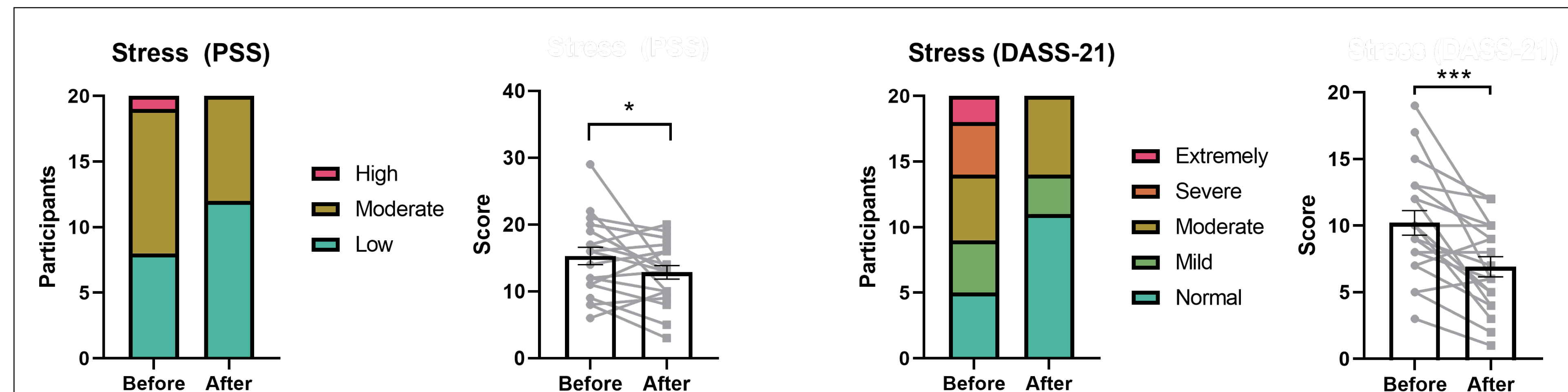


Fig. 1. Improvement in perceived stress as self-reported with the PSS survey.
Left: PSS stress scoring breakdown. Right: PSS stress scores. Paired, two-tailed t-test: * $p < .05$. Score data are expressed as mean \pm s.e.m.

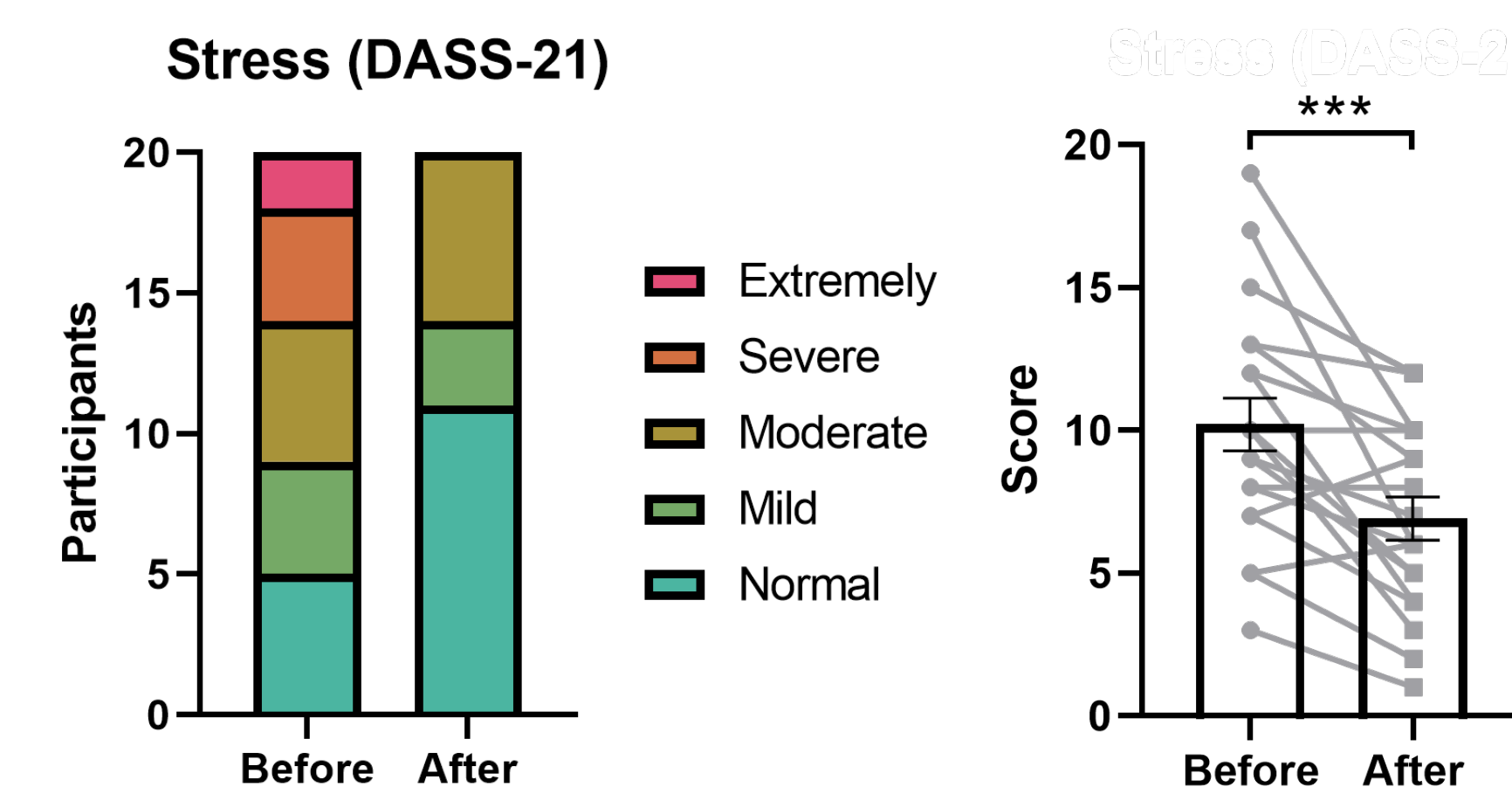


Fig. 2. Improvement in perceived stress as self-reported with the DASS-21 survey.
Left: DASS-21 stress scoring breakdown. Right: DASS-21 stress scores. Paired, two-tailed t-test: *** $p < .001$. Score data are expressed as mean \pm s.e.m.

Moderate, self-reported depressive mood improved after the intervention.

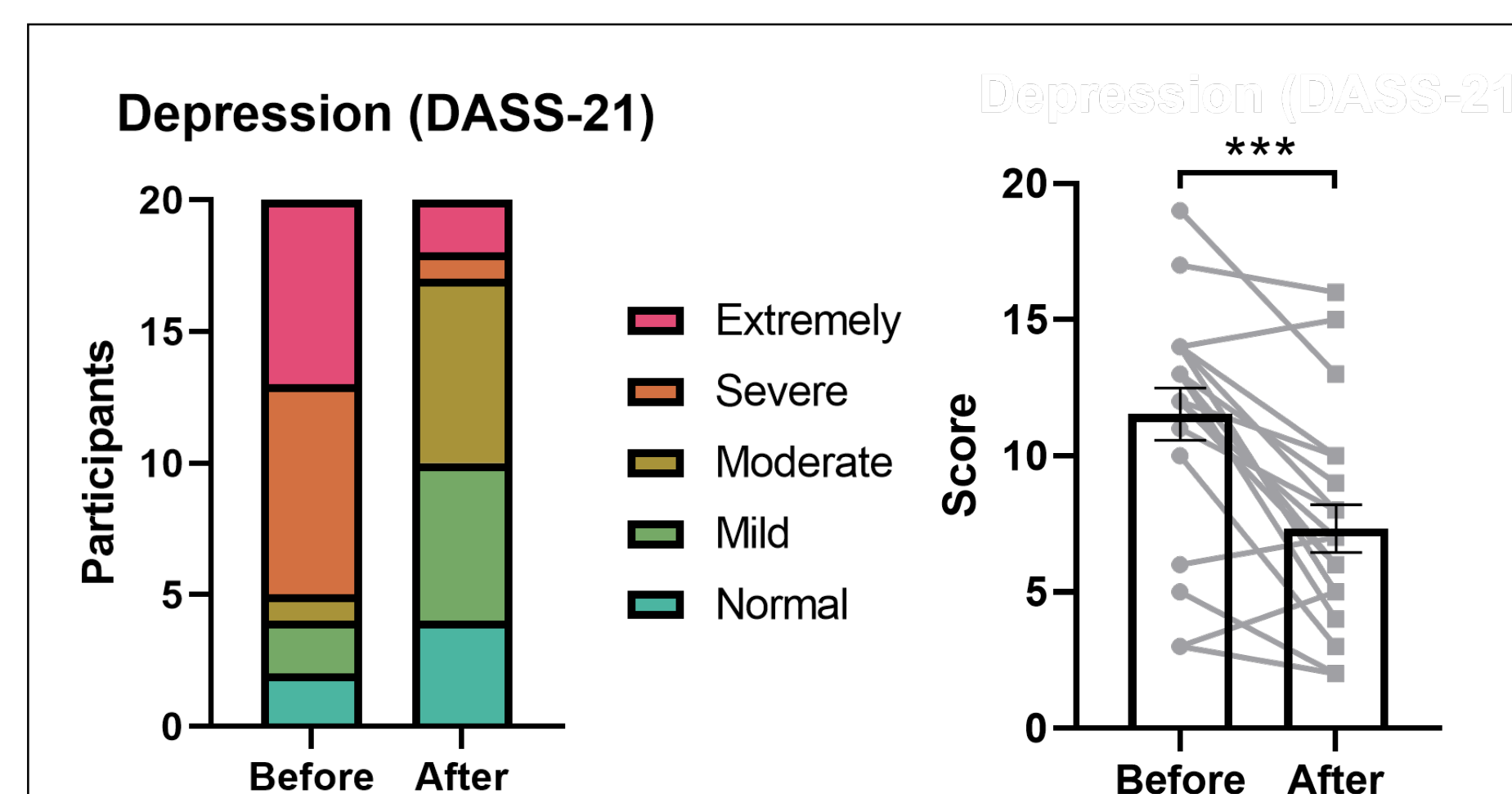


Fig. 3. Improvement in perceived depressive mood as self-reported with the DASS-21 survey.
Left: DASS-21 depression scoring breakdown. Right: DASS-21 depression scores. Paired, two-tailed t-test: *** $p < .001$. Score data are expressed as mean \pm s.e.m.

Mild, self-reported anxiety levels did not change after the intervention.

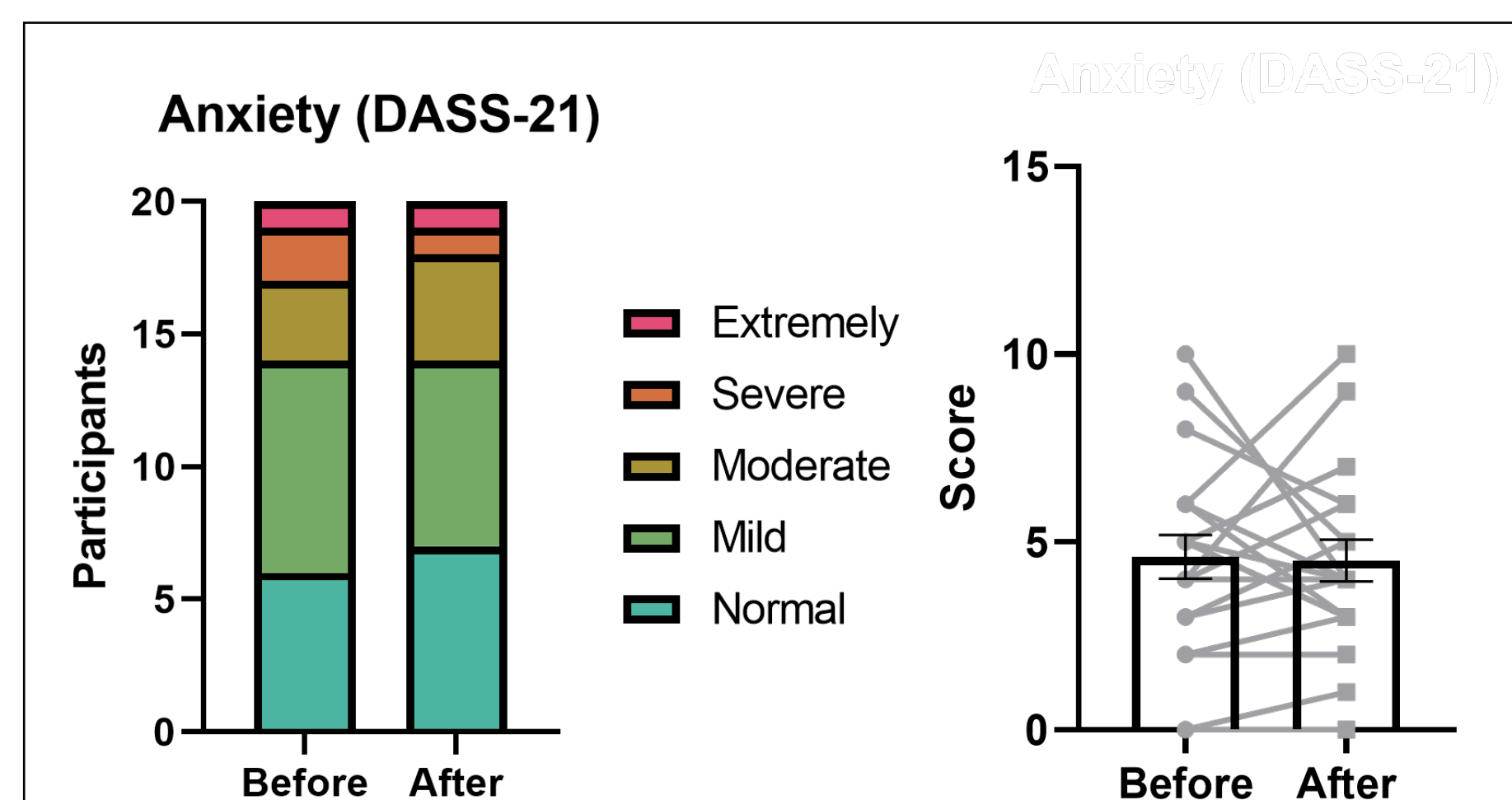


Fig. 4. Perceived anxiety levels did not change as self-reported with the DASS-21 survey.
Left: DASS-21 anxiety scoring breakdown. Right: DASS-21 anxiety scores. Paired, two-tailed t-test: n.s. Score data are expressed as mean \pm s.e.m.

Focus group discussions uncovered a desire to incorporate “power breaks” in routines and classes.

Benefits

- Gain in perspective
- Slowing the hassle
- Stress management
- Increase in focus

Drawbacks

- Too relaxed to work
- Overthinking
- Felt need to rush
- Social anxiety

CONCLUSIONS

- ✓ “Power breaks” significantly reduce perceived stress and depressive mood. PSS and DASS-21 self-reported data suggest that “power breaks” may improve mental health among student participants.
- ✓ “Power breaks” did not significantly affect heart rate and oxygen saturation levels.
- ✓ Students wish they could incorporate “power breaks” as a part of their routine. They reported a need to change the culture of thought around mindfulness and wish that these sessions could be incorporated in long academic classes.

REFERENCES

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