

Effect of a 6-week Yoga & Meditation Program on Medical Students' Stress Levels & Sense of Well Being Prior to Taking Exams

Introduction



Stress amongst medical students is an essential response for academic achievement. Beyond certain levels and with continued exposure to various stressors, the physical and mental health of medical students may be negatively impacted. Yoga & meditation have proven to be effective in stress management.

The primary aim of this study was to determine whether incorporating the practice of yoga in the medical school curriculum for the duration of a 6 week period, would enable medical students to reduce perceived stress and experience an improvement in personal well being prior to taking their exams.

Methods

This was a prospective case-control study performed at an academic institution between 2013-2015.

Recruitment

First through third year medical students were recruited by email.

2. Intake Process

Subjects were eligible to participate if they had engaged in less than one year of yoga and meditation and if they hadn't practiced weekly in the preceding three months.

3. Fitness

Participants met wellness criteria determined by the physical activity readiness questionnaire.



4. Participation

Consent forms were completed on initial contact. Participants attended 2 one hour sessions/week for 6-weeks led by a certified yoga instructor. This included:





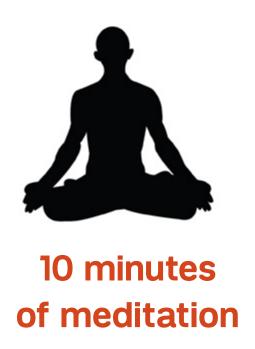
breathing exercises

5. Surveys

Perceived stress was measured pre- and post- the 6 week intervention, with the latter completed right before their written exam using the Perceived Stress Scale. A Self Assessment Survey was completed pre- and post- the 6 week intervention to measure sense of well being. Components of this survey assessed happiness, peace, focus, endurance, positivity, personal satisfaction, self confidence, patience & fatigue.

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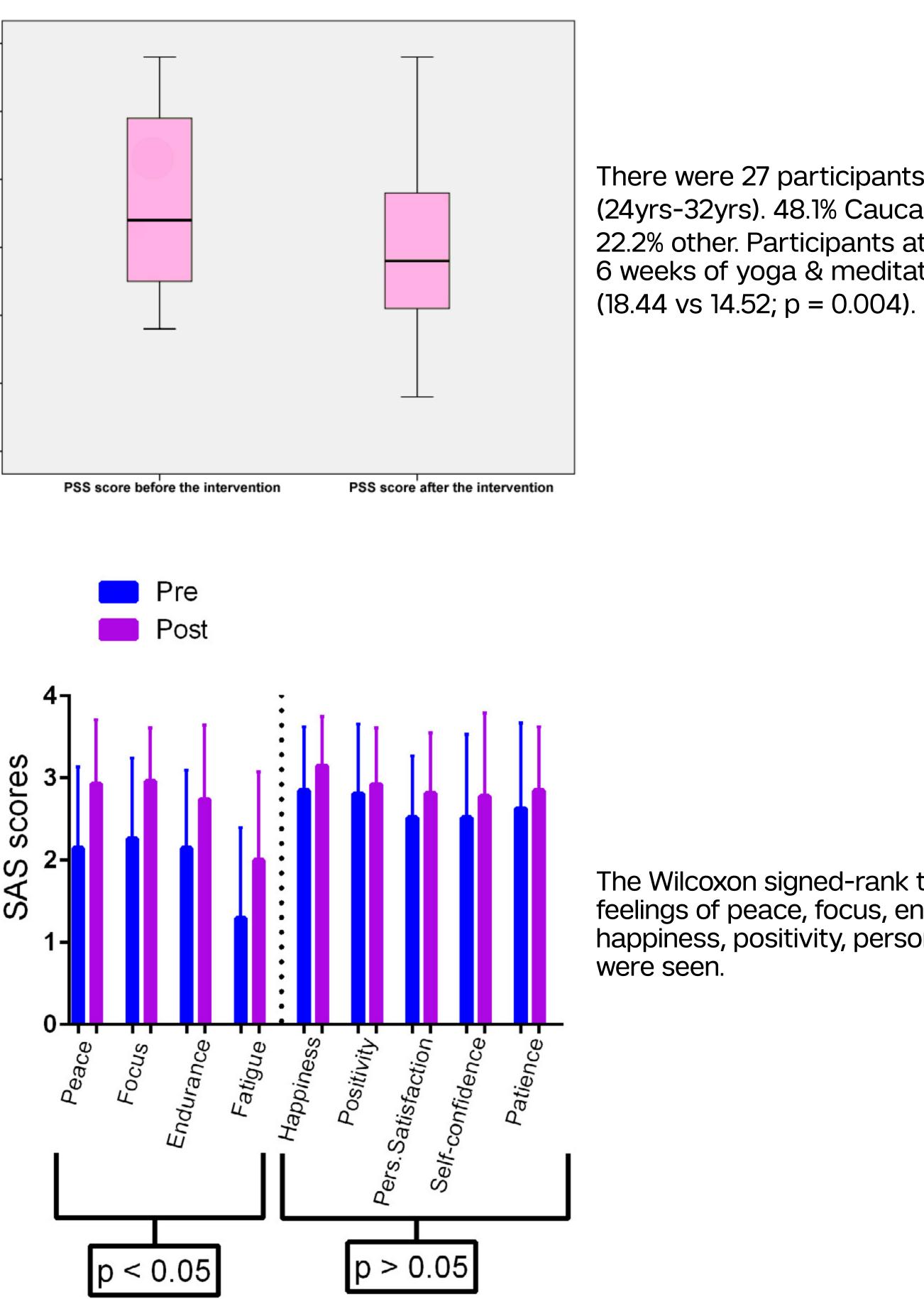
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peaceful feeling	Strongly Disagree / Disagree/ Neither Agree
he ability to be attentive/focused	Strongly Disagree / Disagree/ Neither Agree
ncreased endurance	Strongly Disagree / Disagree/ Neither Agree
a positive outlook	Strongly Disagree / Disagree/ Neither Agree
personal satisfaction	Strongly Disagree / Disagree/ Neither Agree
uelf confidence	Strongly Disagree / Disagree/ Neither Agre
patience	Strongly Disagree / Disagree/ Neither Agre
fatigue	Strongly Disagree / Disagree/ Neither Agree
I feel less stressed before taking this exam than I have before taking similar exams In the past	Strongly Disagree / Disagree/ Neither Agree

Results



The Wilcoxon signed-rank test showed a significant improvement in feelings of peace, focus, endurance & fatigue. No significant changes in happiness, positivity, personal satisfaction, self confidence or patience

Conclusion

• Yoga & meditation positively affected stress levels & improved aspects of personal well being in the sample population.

• A yoga & meditation program may enable medical students to decrease perceived stress, potentially improving their performance in training.

• A future larger study incorporating a control group may help validate these results.

References Malathi et al. Indian J Physiol. Pharmacol. 1999;43(2):218-224. Simard et al. Medical Teacher. 2009;31:950-952.

Disclosure Information The authors have nothing to disclose.

Smith et al. Complementary Therapies in Medicine. 2007;77-83.

There were 27 participants; 13 female & 14 male. Median age was 28 (24yrs-32yrs). 48.1% Caucasian, 7.4% Black, 11.1% Hispanic, 11.1% Asian & 22.2% other. Participants attended 12 sessions. Paired t tests showed 6 weeks of yoga & meditation significantly lowered perceived stress