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The Use of Aromatherapy to Reduce Test Anxiety Among Nursing Students

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Rationale

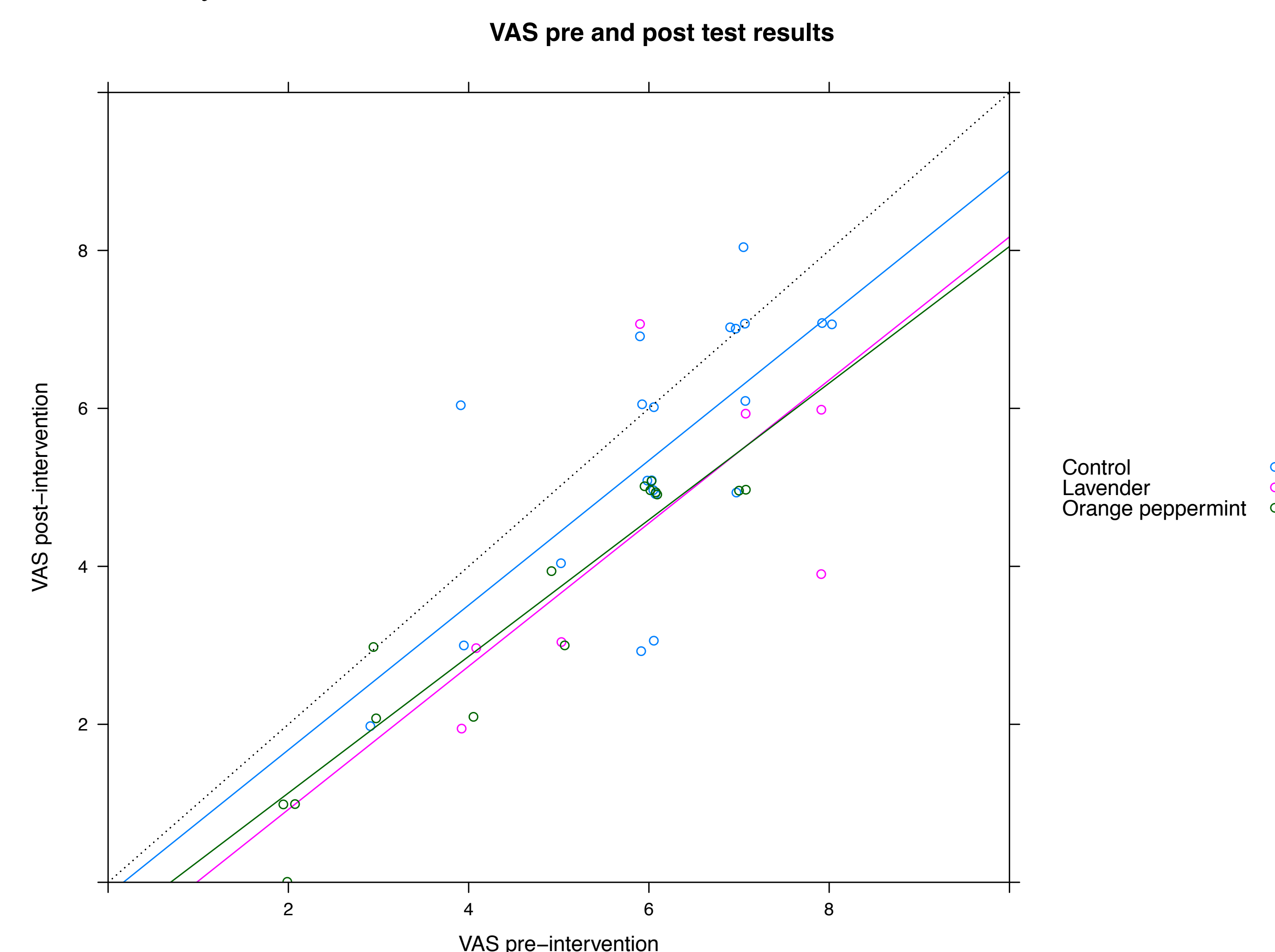
- While approximately 17% of the general population suffers from test anxiety, research demonstrates that a greater proportion of nursing students typically fall in this category.
- Test anxiety can lead to higher cortisol levels in the bloodstream, inducing a full physiological response, which can negatively affect performance.
- Lavender and orange-peppermint are both aromas that have demonstrated an ability to decrease cortisol levels and perception of stress.
- Other aromas have previously reduced anxiety in undergraduate nursing students.
- No research has been done to assess the effects of lavender and orange-peppermint on test anxiety in undergraduate nursing students.

Purpose/Aims

The purpose of this study was to examine the effects of aromatherapy on test anxiety in undergraduate nursing students and to compare the efficacy of lavender and orange-peppermint aromas on this population.

Methods

- A quantitative quasi-experimental design was used.
- The sample included nursing students ($N=46$) who were required to pass a high-stakes exam.
- Participants were randomly assigned to the control group ($n=21$) or one of the two intervention groups: lavender ($n=8$) or orange-peppermint ($n=17$) aromatherapy.
- The intervention was given directly before the test.
- The Visual Analog Scale (VAS) was used before and after the intervention to determine state anxiety.
- The Westside Test Anxiety Scale (WTAS) was used before the intervention and after the test to evaluate general levels of test anxiety.
- A repeated measures analysis of variance was used to analyze data.



Results

- Results demonstrated a statistically significant ($p=0.045$) decrease in VAS scores when comparing the combined treatment against the control group by 1.3 versus 0.7, respectively.
- There was no significant difference between the combined treatment and control groups for change in WTAS scores.
- When evaluating each treatment group individually, there was also no significant difference against the control group in VAS or WTAS.
- A factor in the data was the orange-peppermint intervention group had significantly lower WTAS scores initially than the control group and significantly lower VAS scores initially than either the control group or the lavender group.

Clinical Relevance

- Aromatherapy has the potential to significantly decrease state anxiety in nursing students immediately before an exam.
- Reduction in anxiety can occur when students spend time to stop what they are doing and focus on something other than studying before taking a test.
- Further research should investigate other aromas, as well as utilize a larger sample size.