



# Testing Anxiety in Nursing Students



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## Abstract

- Objective: To determine the effect of aromatherapy on the level of test anxiety in nursing students
- Design: Quantitative Experimental
- Setting: University in Northwest Kansas nursing program
- Participants: 30 nursing students enrolled in the nursing program
- Methods: Effectiveness of lavender aromatherapy will be evaluated by student participant's self-report of anxiety
- Results/Conclusion: Pending data collection and analysis

## Introduction

When it comes to nursing school, the major obstacle of testing anxiety can potentially hinder student success. Turner and McCarthy (2017) state, "Stress negatively impacts students' physical and mental health and hinders academic performance and completion rates" (p. 21). Turner and McCarthy reviewed interventions, including aromatherapy, used for testing anxiety in nursing students.

### Purpose

The purpose of this study is to investigate the effect of aromatherapy on testing anxiety in nursing students

### Key Terms & Definitions

- IV – lavender aromatherapy vs. no aromatherapy
- DV - testing anxiety
- Aromatherapy - infused oils to improve psychological and physical well-being
- Anxiety - feeling of uncertainty and helplessness, measured by the Westside Test Anxiety Scale



<http://aromawrap.com/product/lavender-aromatherapy-essential-oil>

## Framework

Sister Callista Roy's Adaptation Model serves as the theoretical framework of this study. In this model, the four major components are person, health, environment, and nursing. Roy's model frames this study because the goal of nursing in this model is promotion of adaptation in the individual (Petiprin, 2016). In this study, adaptation is promoted by providing the intervention of aromatherapy to decrease anxiety in the person's environment.

## Methodology

### Research Design/Interventions

Quantitative experimental design with random assignment

### Proposed Research Question

What is the effect of aromatherapy on the level of testing anxiety in nursing students?

### Literature Sources

Quinn and Peters (2017) describe how testing anxiety affects nursing students while taking examinations. A prior research study in which 39 sophomore level nursing students were randomized into a control and intervention group was reviewed. Lemon essential oil was diffused into the classroom of the intervention group during an exam.

### Sample

Randomly assigned to groups by simple random sampling

N = 30

n = 15 (lavender aromatherapy)

n = 15 (no aromatherapy)

### Inclusion criteria:

Educational status: must be enrolled in nursing program

No allergies to lavender

### Ethical Considerations

IRB approval pending from University in Northwest Kansas

Student participants will read and sign an informed consent handed out when the students are randomly selected



[https://www.youngliving.com/en\\_US/products/c/diffusers-accessories](https://www.youngliving.com/en_US/products/c/diffusers-accessories)

### Data Collection

- Study will begin on August 20, 2018 and end on December 14, 2018 for NURS330 exams
- On August 20, 2018 students will complete the Westside Test Anxiety Scale in NURS330
- Anxiety will be rated by the students on a scale of 0-10 prior to and after exams
- Control group will take their exam in a standard classroom with no lavender aromatherapy
- Experimental group will take their exam in a classroom with lavender essential oil
- Young Living's Dewdrop™ Diffuser will be placed in two corners of the experimental classroom
- Results will be entered into an Excel spreadsheet under a protected password

## Results/Findings

### Projected Data Analysis Method

T-test (independent)  
IV LOM: nominal  
DV LOM: interval/ratio  
Comparison of two independent groups

### Literature Findings

Quinn & Peters (2017) utilized the Cognitive Test Anxiety Survey, students rated their anxiety prior to and after the exam. The results of this study showed no significant changes in the level of anxiety in the control group. However, significantly lower anxiety scores were found in the intervention group.

## Discussion

### Implications For Nursing

Based on the findings from this study, alternative therapies such as aromatherapy can be incorporated into student therapy and potentially enhance quality of care.

## Conclusion

The results from this study are pending data collection and analysis. Quinn & Peters (2017) concluded that test anxiety will continue to increase, therefore additional research for interventions is needed.

Recommendations for future research

- Different oil use
- More than one university

## References

- Petiprin, A. (2016). Roy Adaptation Model. Retrieved from <http://www.nursing-theory.org/theories-and-models/roy-adaptation-model.php>
- Quinn, B. L., & Peters, A. (2017). Strategies to reduce nursing student test anxiety: A literature review. *Journal of Nursing Education*, 56(3), 145-151. <http://dx.doi.org.ezproxy.fhsu.edu:2048/10.3928/01484834-20170222-05>
- Turner, K., & McCarthy, V. L. (2017). Stress and anxiety among nursing students: A review of intervention strategies in literature between 2009 and 2015. *Nurse Education in Practice*, 22, 21-29. <http://dx.doi.org.ezproxy.fhsu.edu:2048/10.1016/j.nep.2016.11.002>



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