



# Evaluation of Dog Presence as a Therapeutic Classroom Intervention

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## Background and Need

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- Nursing Education – known as a stress producing major  
(Crary, 2013; Thomas, 2022)
- Mental health concerns have increased in college students  
(Li & Hasson, 2020; Thomas, 2022)
- AACN has called for increased support for student mental health concerns.  
(AACN, 2020)



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# Animal Assisted Therapy

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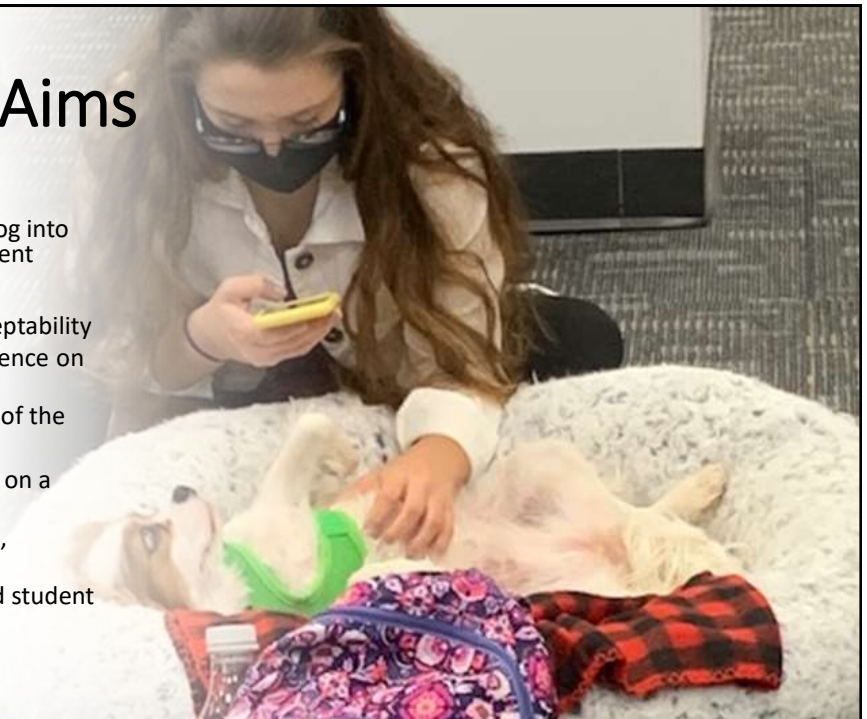
- Positive mental health benefits related to animal-assisted therapy (House et al., 2018; Norton et al., 2018)
- Academic settings have been using animal visit programs to address mental health, stress, and anxiety for college students (Jarolmen & Patel, 2018; Ward-Griffin et al., 2018)
- Nursing students have benefited from animal assisted visit programs
  - Reduction in test anxiety
  - Reduction in negative mental health feelings (Delgado et al., 2018; Hall, 2018)
- Little to no information exists on the benefits of integrating a certified therapy dog into the classroom environment



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## Purpose and Aims

- Purpose: Explore the effects of integrating a certified therapy dog into the nursing classroom environment
- Phase 1--Pilot
  - Evaluate feasibility and acceptability
  - Examine effects of dog presence on anxiety, stress, happiness
  - Assess student perceptions of the intervention
- Phase 2—Follow up information on a larger sample
  - Evaluate outcomes of stress, anxiety, happiness
  - Further evaluate effects and student perceptions



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# Jessie— the Therapy Dog

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- Cavalier King Charles Spaniel
- 3 years old at the start of the study. Now is 4 years old.
- Certified as a Therapy Dog through the Alliance of Therapy Dogs
- Known as a gentle, calm dog with a friendly face
- She is a relaxed temperament.
- In the classroom during class
  - Remained in her spot, did not roam the room.



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## Methods

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- IRB approval—a couple things to note
- Phase 1—Pilot
  - Pre-post-test design with control and intervention group
    - Control group—No dog in classroom
    - Intervention group—Dog in classroom for weeks 4-11
  - Participants—sophomores, traditional 4 year BSN, pathophysiology class
    - 2 sections of the course was taught
- Phase 2—Follow up
  - Non-experimental convenience sample
  - Post-test only at the end of class
  - Variety of students and nursing classes

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# Tools and Measures

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- Demographic questionnaire
- Perceived Stress Scale (PSS): Measures perceptions of stress.
  - 10 item questionnaire that uses a 5-point Likert scale
  - 2 sub scales—Perceived helplessness and perceived self-efficacy (Cohen et al., 1983; Taylor, 2015)
- \*Personal rating scales—not validated
  - Anxiety (1 low anxiety -10 high anxiety)
  - Stress (1 low stress -10 high stress)
  - Happiness (1 extremely unhappy -10 extremely happy)
- \*Researcher designed questionnaires to obtain qualitative feedback



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# Results—Phase 1

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- 67 participants (36 intervention; 31 control)
  - Mean age 19.5 years, primarily female, primarily white
  - More than half in each group had a pet and most were dogs
- At baseline, intervention group did have higher stress and anxiety from the start.
- Post intervention—Intervention Group
  - Significant decreased stress ( $t(21) = 3.70, p = .001, d = .79$ )
  - Significant decreased anxiety ( $t(14) = 3.64, p = .002, d = 1.39$ )
  - Significant increased happiness ( $t(21) = -2.67, p = .014, d = -0.57$ )
  - Decrease in in PSS, but not significant ( $t(21) = 1.27, p = .22, d = 0.29$ )
- Post intervention—Control Group
  - Nonstatistically significant improvement in stress, anxiety, happiness and PSS



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# Results—Phase 1

- Overwhelmingly positive attributes of incorporating dog into the classroom.
- Comments related to
  - Reducing stress and anxiety
  - Creating comfort and a therapeutic environment
  - Providing joy and happiness
  - Dog as beneficial
  - Feelings of excitement when the dog was present
- Intervention group not concerned about distraction
- Control group had some concerns the dog would be a distraction



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## Phase 2—Larger sample

- Reach out to faculty and bring the dog to other classrooms.
- Procedure in place to ensure safety and agreement of class
- Went to 5 different nursing classes (over 300 students)
- Used the 1 question rating scales at the end of class
  - Anxiety
  - Stress
  - Happiness
- Asked about distraction
- Opportunity for comments



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## Results—Phase 2

- N= 143 completed the survey at the end of the class
- Decreased stress ( $t(132) = 9.445, p = <0.001, d = 1.018$ )
- Decreased anxiety ( $t(129) = 10.162, p = < 0.001, d = 1.098$ )
- Increased happiness ( $t(131) = -8.949, p < 0.001, d = -0.585$ )
- 99.2% did NOT find the presence of the dog distracting
- 94.4% indicated the presence of the dog improved the classroom atmosphere
- 43 comments received; all positive in nature
  - Indicated dog was a general positive benefit to classroom, made the students feel happier and improved mood.
  - 2 comments noted they did not even notice the presence of the dog.



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## Discussion—What does this mean?

- Small samples, single institution, self selection related to completion of surveys and into intervention group, convenience samples, non-validated measures
  - Therefore, not exceptionally generalizable data.
- However!
  - It's feasible and acceptable
  - Does not seem to have negative effects; does not seem to be distracting
  - Positive feelings and outcomes
  - Does not appear to be harmful or hurtful
  - May have some benefits for mental health



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# Next Steps

- Collect more data—explore further
- Take to more classes, try non-nursing
- Develop policies at the University level
- Develop procedures that protect students AND support students who benefit from animal presence.



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**Student Wellness Tip: Therapy Dogs Ease Academic Stress for Nursing Students**

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