

# Therapy Dogs as a Wellness Incentive for Stress Management on a College Campus

Daniela Mercado, Sophie Barbagallo, & Olivia Downey

Mentors: Dr. Dawn Melzer & Dr. Deirdre Yeater

## Abstract

There are a variety of studies which show the benefits of animal assisted therapy on mental health but the effectiveness of on-campus animal program interventions has not been as well investigated. In the current study, college students' stress and self-efficacy levels were measured before and after interacting with a therapy dog or after participating in a control condition. It was found that there were significant differences for both the Perceived Stress Scale and General Self-Efficacy pre- and post-tests but no differences between the animal and control conditions.

## Introduction

- Due to the vulnerability of college students to anxiety and depressive disorders, pets are becoming a more familiar sight on college campuses.
- Barker, Barker, McCain, and Schubert (2016) found that perceived stress was reduced for students on a college campus before final exams after interaction with therapy dogs.
- In the current study stress and self-efficacy levels were measured and compared between students who interacted with therapy dogs and students who do not interact with dogs.
- It was hypothesized that undergraduate students who interact with a therapy dog will show decreased stress and increased self-efficacy scores compared to students in a control group.

## Methods

### Participants

- Thirty-five SHU undergraduates and one therapy certified dog.

### Procedure

- Students were randomly placed in one of three groups.
  - Group 1: Students interacted with the therapy dog for five minutes.
  - Group 2: Students interacted with the therapy dog for ten minutes.
  - Group 3: Students watched a ten-minute stress neutral video.

### Measurements

- Students were given the Perceived Stress Scale and the Self-Efficacy Scale before the session and again forty eight hours after the session concluded.

## Results

- A repeated measures ANOVA revealed that there was a significant difference between the Perceived Stress Scale (PSS) pre-test and post-test but no differences between the conditions,  $F(1,31) = 8.55, p = .002$ ;  $F(2,31) = .13, p > .05$ , respectively. On average participants scored two points lower on the post-test compared to the pre-test. See Figure 1
- A repeated measures ANOVA revealed that there was a significant difference between the General Self-Efficacy (GSE) pre-test and post-test but no differences between the conditions,  $F(1,31) = 4.4, p = .044$ ;  $F(2,31) = .21, p > .05$ , respectively. On average participants scored 1.5 points higher on the post-test compared to the pre-test. See Figure 2
- Multiple paired t-tests revealed significant overall differences between the pre- and post-tests for the PSS and GSE but not for specific conditions,  $t(33) = 3.53, p = .001$ ;  $t(33) = 2.16, p = .038$ , respectively.



## Discussion

- Contrary to the hypothesis all groups displayed decreased stress levels and increased self-efficacy.
- It is possible that the stress scores improved on the post-test in all groups because the participants knew they had been involved in a study about stress. They also may have been influenced by the belief that the researcher would expect decreased stress levels after the study.
- Although self-efficacy scores only increased by 1.5 points it was still significant. A possible explanation as to why this occurred in the control group post-study could be because they assumed that since they signed up for a "stress study" it made them more mindful and cognitively aware of their emotions which may have helped them manage their stress after the session (Het et al., 2009).
- One possible limitation included having too few participants. More participants will be added in the future.
- Further research is important in this area to investigate if animal therapy programs on campus are effective at decreasing stress and increasing self-efficacy or if other activities result in similar positive outcomes.

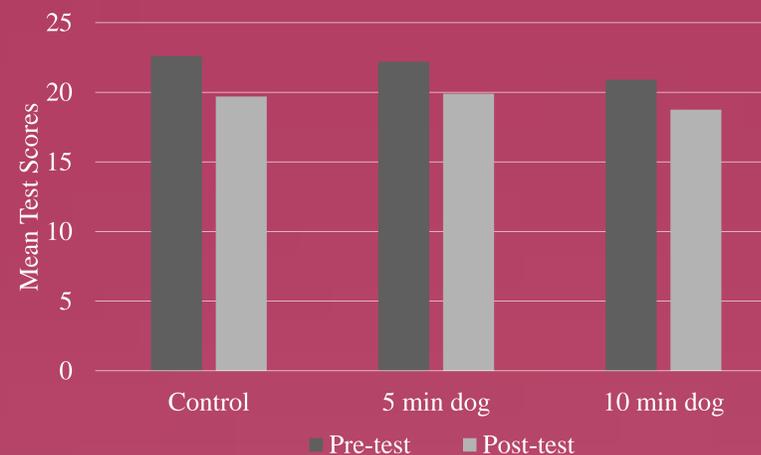


Figure 1. Mean Pre- and Post-Test Perceived Stress Scale Scores for the Three Conditions

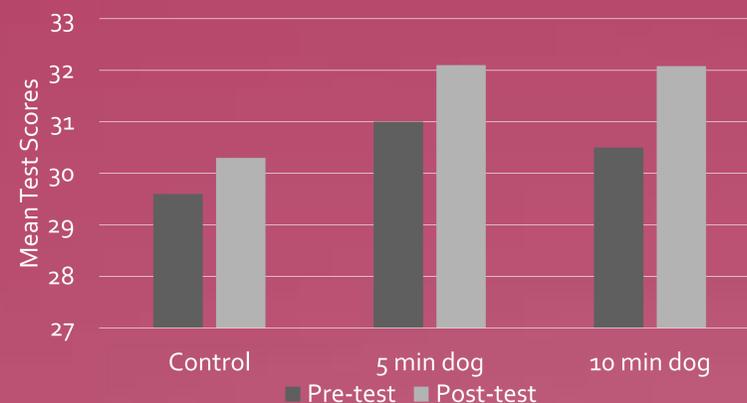


Figure 2. Mean Pre- and Post-Test Self-Efficacy Scores for the Three Conditions

## References

- Barker, S., Barker, R., McCain, N., & Schubert, C. (2016) A randomized cross-over exploratory study of the effect of visiting therapy dogs on college student stress before final exams. *Anthrozoös*, 29, 35-46.
- Coiro, M., Bettis, A., & Compas, B. (2016). College students coping with interpersonal stress: Examining a control-based model of coping. *Journal of American College Health*, 65, 177-186.
- Het, S., Rohleder, N., Schoofs, D., Kirschbaum, C., & Wolf, O. (2009). Neuroendocrine and psychometric evaluation of a placebo version of the 'Trier Social Stress Test'. *Psychoneuroendocrinology*, 34, 1075-1086