Effect of Caressing Dogs on College Students’ Stress

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Introduction

We wanted to know if dogs had a stress reducing effect on students. We ran a pre-test post-test to see if dog interaction significantly reduced stress levels.

We measured stress level among other things, particularly happiness, on a Likert scale. We also ran a pre-post test on happiness levels.

In a study by Crump, C., & Derting, T. (2015) they used therapy dogs to measure stress and arousal levels in first year female students. They found that the decrease in psychological stress for the with-dog group was 23% greater compared to the without-dog group. They also found the with-dog group exhibited an increase in psychological arousal level while the without-dog group exhibited a decrease.
Introduction

Another study by Thodberg, K. et al. (2016) looked at different therapeutic effects of dog visits in nursing homes. In their study, a significant decrease was found in the Geriatric Depression Scale for those in the experimental group, meaning that depressive symptoms decreased during the study.
Participants

39 people

19 female

20 male

Ages 18-23 (M=20.28, SD=1.38)

All UNCW students

Randomly assigned to condition using coin toss

Recruited outside of Fisher Student Center
Materials and Measures

Materials:
Pretest survey, posttest survey, writing utensil, coin, dog fact paragraph sheet, dog

Measures:
IV: Dog Interaction

DV: Self-reported Happiness Level and Stress Level

Operational Definition - Likert scale
0 - Not Happy/Stressed to 3 - Extremely Happy/Stress
**Procedure**

Between Subjects Pretest - Posttest Design

**Experimental Group**
- Took pretest and rated happiness and stress levels
- Read dog paragraph containing neutral facts about dogs
- Pet and interacted with dog
- Took posttest and rated stress and happiness levels

**Control Group**
- Took pretest and rated happiness and stress levels
Results

In SPSS we created our own variable called Stress and Happiness. We created them by taking Pre-test score and the Post-test score and divided them by 2 for the control and the dog groups. We then ran an Independent Sample t-Test between the control and dog groups for Stress Level and Happiness Level.
Results

For Stress Level the $t(37)=1.47; p=0.150$ which was greater than our alpha level at .05. We did not find a significant difference between the control and dog groups for Stress Level.
Results

For Happiness Level our $t(37) = -2.82; p = .008$, which was less than our alpha level of .05. We did find a significant difference between the happiness levels of the dog and control group.
Discussion

Hypothesis was not supported

Post-hoc explanation: Not enough time with dog.

Dogs did not significantly reduce stress; however, surprisingly, happiness was increased.

Crump & Derting (2015)

Bias/Limitations:

Experimenter bias

Not all participants treated the same

Participants easily figured out purpose of study

Lack of experience running experiments