

The Mental Health Effects of Pet Ownership in Elders



Introduction

The purpose of the study is “to investigate the effects of companion animals on the physical and mental health of older adults” (Michael J. Hughes, Martie-Louise Verreynne, Paul Harpur & Nancy A. Pachana (2020)).

Older individuals often experience a decline in their mental along with their physical changes. This is why it is important to seek appropriate approaches that can benefit mental health during the aging process. This also allows researchers to address mental health requirements for elders in order to decrease the negative effects that come with aging. Pet ownership has been linked to increase positive mental health nonetheless “there is limited research on the lived experience and meaning derived from pet ownership” (Genieve Zhe Hui Gan, Anne-Marie Hill, Polly Yeung, Sharon Keesing & Julie Anne Netto (2020)).

Introduction Cont.

This experiment will be measuring the change in blood pressure and mood in elders (50+) when petting a preferred animal (dog, cat, rabbit or snake) for 15 minutes.

Blood pressure and mood will be measured prior and after the encounter. This will be done by a blood pressure monitor and a 10 multiple choice questionnaire.

Hypotheses

There will decrease in blood pressure in comparison to blood pressure measured upon arrival after petting the chosen animal.

In addition, there will be an increase in mood score in comparison to questionnaire answered upon arrival after petting the selected animal.

Methodology

Research Design:

Measuring the blood pressure of an elder before and after petting an animal of their choice (dog, cat, rabbit or snake) for 15 minutes and comparing the values. Additionally, having the individual fill out a 10 multiple choice questionnaire to measure their mood before and after petting their selected animal.

Study Sample:

Selecting 500 people at random ages 50 and above.

Measurements:

- 1. Blood Pressure*
- 2. Mood Questionnaire*

Methodology Cont.

Workflow:

- 1. Once the participants have been selected at random they will be given a date and time for their session after filling out the consent form.*
- 2. Upon arrival they will sit down and their blood pressure will be measured.*
- 3. They will then fill out a 10 multiple choice mood questionnaire.*
- 4. After they will be given a choice of preferred animal (dog, cat, rabbit and snake).*
- 5. The timer will be set for 15 minutes and the participant will be given the animal to pet.*
- 6. After the timer is up, the participant's blood pressure will be remeasured.*
- 7. Lastly, the participant will once again fill out the 10 multiple choice mood questionnaire.*
- 8. The results will be calculated and compared.*

Methodology Cont.

Facilities:

- *Research Lab*

Personnel:

- *Researcher*
- *Researcher Assistant*

Budget:

- *Blood pressure monitor: \$23*
- *Tablet (10 multiple choice questionnaire): \$50*
-Analysis program (Mood score): \$50
- *Animal Rental (month): \$1000*
- *Participants: \$5000 (\$10 per participant)*
- *Research Assistant: \$0 (Intern)*

Expected Results

Data Analysis Plan:

- *The blood pressure data will be inputted into an excel sheet and presented in a bar graph.*
- *After the analysis program compiles the mood scores, the result will also be presented in a bar graph.*

Expected Results:

- *A decrease in blood pressure from arrival to after petting the animal.*
- *An increase in mood score from arrival to after petting the animal.*

Discussion

In 500 elders the studies will examine how “companion animals positively contributed to the mental and/or physical health of older adults. With respect to mental health, involvement with a companion animal improved participant quality of life. In relation to improvements in blood pressure and heart rate variability were the only consistent physical health improvements observed from companion animal interactions” (Michael J. Hughes, Martie-Louise Verreynne, Paul Harpur & Nancy A. Pachana (2020)).

Conclusion

The results will be analysed both using the blood pressure monitor and the mood analysis program. Both methods will be measured before and after the participant has interacted and petted the selected animal. “These findings suggest that the role of pet ownership may benefit community-dwelling older adults by providing companionship, giving a sense of purpose and meaning, reducing loneliness and increasing socialisation. These benefits may also increase resilience in older adults against mental health disorders, which may positively influence their mental health outcomes” (Genieve Zhe Hui Gan, Anne-Marie Hill, Polly Yeung, Sharon Keesing & Julie Anne Netto (2020)).

References

Genieve Zhe Hui Gan, Anne-Marie Hill, Polly Yeung, Sharon Keesing & Julie Anne Netto (2020) Pet ownership and its influence on mental health in older adults, Aging & Mental Health, 24:10, 1605-1612, DOI: 10.1080/13607863.2019.1633620

Michael J. Hughes, Martie-Louise Verreynne, Paul Harpur & Nancy A. Pachana (2020) Companion Animals and Health in Older Populations: A Systematic Review, Clinical Gerontologist, 43:4, 365-377, DOI: 10.1080/07317115.2019.1650863