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2020 OTD Capstone Symposium

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Spring 4-23-2020

## Animal-Assisted Therapy and Quality of Life of Patients with Dementia

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### Recommended Citation

Thomson, Karissa D.; Collins, Kayla; and Shotwell, Mary P., "Animal-Assisted Therapy and Quality of Life of Patients with Dementia" (2020). *2020 OTD Capstone Symposium*. 15.

<https://soar.usa.edu/otdcapstonespring2020/15>

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# Animal-Assisted Therapy and Quality of Life of Patients with Dementia

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## BACKGROUND

Isolation, rejection, loneliness, depression, and low self-esteem are common feelings people with dementia who live in a nursing home report experiencing (Fick, 1993). 47.8% of people diagnosed with dementia will live in a nursing home at some point in their lives (CDC, 2016). This will cause an increase in demand for social and recreational activities to maintain current function and quality of life (QOL). Animal-assisted therapy (AAT) has been shown to provide therapeutic effects associated with quality of life, social engagement, and depression (Lundquist et al., 2017). However, there is limited evidence available regarding the use of AAT in conjunction with OT for this population.

## PROBLEM

There is lack of statistically significant evidence available to support AAT as an effective intervention for people who have dementia.

## PURPOSE

To conduct a quantitative research study to evaluate the effectiveness of AAT on quality of life for patients with dementia.

### Outcome objectives:

- (A) Conduct a quantitative study on the impact of AAT on patients with dementia
- (B) Analyze the effects AAT has on blood pressure, as evidenced by readings recorded pre and post sessions.

## METHODS

This study was conducted as a quantitative research design with a cognitive-behavioral approach. Participants were randomly selected for the study based upon a list obtained from the nursing manager.

### Assessment Tools:

1. Mini Mental State Exam (MMSE)
2. World Health Organization Quality of Life- BREF (WHOQOL-BREF)
3. Beck's Depression Inventory (BDI)
4. Blood Pressure Recordings
5. Clinical Observations for Behaviors

### Inclusion Criteria:

- Over 65 years old
- Interested in animals
- Diagnosed with mild or moderate dementia

### Exclusion Criteria:

- Under 65 years old
- Allergic to animals
- Fearful of animals
- Not interested in animals
- Scored a 12 or below on the MMSE

### Participants:

- 13 participants agreed to participate
- 2 passed away; 4 decided to not participate
- 7 participants attended sessions (2 male; 5 female)

### Sessions:

- Six one-hour sessions over six weeks
- Divided into 2 groups: mild (2) & moderate (5)
- Activities: brushing, petting, talking, lap-sitting, and interacting with others

## RESULTS

### Research Question:

- In patients diagnosed with dementia who reside in a nursing home, how does AAT impact depressive behaviors, social interactions, and blood pressure? How do these factors impacted by AAT contribute to this patient group's overall QOL?

### Hypothesis:

- AAT will improve depressive behaviors, social interactions, and blood pressure resulting in an improved QOL for people who have dementia living in a nursing home.

### Theoretical Framework:

1. Cognitive- Behavioral Frame of Reference

### Statistical Analysis Test:

1. Wilcoxon Signed-Rank Test
  - Critical Value: 2

### Goals of Sessions:

1. Increase social engagement of older adults with dementia using AAT as demonstrated by participant's increased desire and participation in social activities.
2. Decrease depressive behaviors of people with dementia through AAT, as evidenced by the participant's increased rate of laughter, smiling, and spontaneously engaging with others.

### Results of WHOQOL-BREF:

- All data collected for each domain did not produce statistically significant data. The test statistic value was higher than the critical value, therefore, the null hypothesis was accepted for all four domains of the assessment.

### Results of BDI:

- Although pre and post AAT scores did decrease for most participants it was not significant enough to accept the hypothesis; therefore, the null hypothesis was accepted. The test statistic was 8 which means it is higher than the critical value.

### Results of Blood Pressure:

- Blood pressure results were grouped based upon normal, stage 1: hypertension, stage 2: hypertension, and extreme hypertension. The test statistic was 0 which means the null hypothesis was then rejected.

### Clinical Observations:

- Decreased agitation in those who were observed to be agitated
- Laughter, smiling, signing
- Negative behaviors subsided when dog was brought over to them
- Reminiscing about previous dogs they owned
- Mild cognitive group was able to associate research with day or week and activity

