Pet Therapy, Stress & Exam Performance

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- Lee Honors College, Scholarship
- My parents, Dan & Stephanie Bajorek
Background & Literature Review

- Shown to reduce anxiety and stress
  - Cancer patients (Johnson, Meadows, Haubner, & Sevedge, 2008)
  - Children with separation anxiety (Weston, 2010)
  - Elders (LeRoux & Kemp, 2009)
  - Inpatient & outpatient setting (Coakley and Mahoney, 2009)
- Spark
- Young (2012)
Purpose of the Research

◦ Research gap

◦ Studying the effect pet therapy can have on nursing students’ perceived stress and exam performance
Tested Hypotheses

1. Exposure to pet therapy will reduce perceived stress rating.

2. Exposure to pet therapy will increase exam scores.
Design & Methods

◦ Experimental Research design
  ◦ Control & Experimental groups
  ◦ Randomization
  ◦ Independent variable: Exposure to pet therapy; dependent variables: perceived stress & exam performance

◦ Sample & Recruitment
  ◦ Junior level WMU Nursing students
  ◦ Assembly Day
  ◦ Inclusion & Exclusion Criteria
Instruments & Measures

- Demographics Survey
- 10-item Perceived Stress Scale
- Likert Scale
- Exam Scores
Data Collection Procedure

- Students met before each exam in their respective groups.
- Enjoyed a light breakfast provided by the researchers.
- Interaction with the dog (pet therapy group only).
- Quiet studying was allowed – no group study sessions.
- Students filled out the scales during the last 5 minutes of the session.
Sample Characteristics

- Intervention group (3) vs. control group (4)**
- 6 females; 1 male
- (5) 21-25 year olds; (1) 26-30 year old
- 7 Caucasian
- (4) single; (3) living with significant other
- All preferred dogs (1 liked both cats & dogs)
- (3) owned pets
  - (1) dog, (1) cat, (1) dog & cat
Missing Data

- Missing Data
  - Collection #2: 4 complete data sets; 3 incomplete data sets
  - Collection #3: 2 complete data sets; 5 incomplete data sets

- Communication error – no pet therapy dog
  - Collection #1
## Pet Therapy & Perceived Stress

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
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</thead>
<tbody>
<tr>
<td>Intervention Group</td>
<td>20.3333</td>
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<tr>
<td>Control Group</td>
<td>22.5000</td>
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## Pet Therapy, Perceived Stress & Exam Performance

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
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<th>Mean Square</th>
<th>F</th>
<th>Significance</th>
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<tbody>
<tr>
<td><strong>PSS Data Collection #4</strong></td>
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<td>8.048</td>
<td>7.101</td>
<td>0.045</td>
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<td>Within groups</td>
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<td>1.133</td>
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<tr>
<td><strong>Score of Exam #4</strong></td>
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<tr>
<td>Between groups</td>
<td>0.762</td>
<td>1</td>
<td>0.762</td>
<td>0.057</td>
<td>0.821</td>
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<tr>
<td>Within groups</td>
<td>66.667</td>
<td>5</td>
<td>13.333</td>
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</tbody>
</table>
Discussion

- Students in the intervention group reported a lower mean PSS.
- Students were less stressed in the intervention group when compared to the control group.
- There was no impact found on exam performance – scores ranged the same across the groups.
Limitations

- Sample size – attrition
- Incomplete/missing data sets
Nursing Practice

- Needs to continue to expand into more clinical areas and settings
  - Increase the number of licensed pet therapy dogs and pet therapists
- More research needs to be conducted
Future Research

- Larger sample size
  - Increases the power of the study
- Tracking throughout the program
- Expanding to other programs
References


Questions?