Mechanical Animal Sessions: A Mean for Support for Dementia
Huntington University OTD Program
OTD 770: Capstone Experiential Component
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HUNTINGTON UNIVERSITY — Doctoral Program in Occupational Therapy

Project Description and Sites

Capstone Locations
- Immersion with Population at Joyful Journey (Adult day center)
  - Early to moderate dementia
- Immersion with Population at Westminster Village
  - Early, Moderate, and late stages of Dementia
  - Lead sensory group
  - Lead one-on-one mechanical animal sessions
  - Participated in Opening Minds Through Art (OMA)
  - Shadow with Occupational Therapy Department
- Purdue University
  - Research and Presentation on Dementia to Purdue OT/PT club

Student Responsibilities
- Complete finalized Learning agreement by week two of capstone
- Communication with expert mentor, faculty mentor, and capstone coordinator
- Student required to complete 80% of total hours as onsite hours

🐾 Mechanical Animal and Sensory Tools

Figure 1. Mechanical Cat and Sensory Tools The student's Mechanical animal and sensory tools selected to facilitate a multisensory experience of color, sound, texture, and smell.

Project Completion and Learning Objectives

- LO: The student will provide a questionnaire for a staff member regarding potential for robotic animals at the facility.
- LO: The student will create and educational materials on the potential benefits of robotic pets and how they can be implemented
- Deliverable: The student will provide a resource regarding robopets for staff.
- LO: The student will provide a protocol(s) for staff, for early, middle, and late stages of dementia, that can be used as a potential guide during the robopet sessions.
- LO: The student will assess current behaviors of residents with dementia through observation and documentation review.
- LO: The student will be immersed in facility with older adults as well as older adults with dementia. The student will assist with various activities and communicate with the older adults
- LO: The student will review educational resources on the topic of older adults and/or dementia.
- LO: The student will complete a minimum of 3 continuing education courses on dementia.

Mission and Vision Statements

- Population: Older Adults with Dementia

- Area of Focus: Program policy and development, advocacy, and education

- Mission: to use animals, specifically, mechanical or robotic animals as a support for individuals with dementia

- I will be making a guide for my facility so they can have one-on-one sessions with individuals with dementia. The goal of the one-on-one sessions are to allow for a social and/or sensory interaction with the potential for increased socialization and reduced agitation.

- Meaningful one-on-one sessions
  - Multisensory Experience
  - Reminiscing Experience

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Needs Assessment | Literature Review

- Individuals with dementia may feel socially isolated or present with depression as well as secondary behaviors of wandering, aggression, and agitation (Gustafsson, Mullersdorf, & Svanberg, 2015).

- In addition, they may not be getting enough sensory input in their everyday interactions. Sensory input includes (auditory or sound, taste, touch, smell, and what you see).

- Currently, there is no cure for dementia and multiple approaches encouraged to increasing enjoyment and quality of life for those with dementia (Gustafsson et al., 2015).

Reminiscing Experience
- For the individuals in the early to moderate stages of dementia, I will a reminiscing approach. Reminiscence can be an appropriate behavioral intervention for individuals in the earlier stages of dementia (Lancioni, 2015, p. 2).

Multisensory Experience
- Individuals who are in the late stages of dementia may benefit more from this sensory based experience. I will be integrating a multisensory component for one-on-one sessions.

- Multisensory environments provide the individual with dementia the freedom to explore sensory tools through tactile, visual, and auditory exploration (Baker et al., 2011). I will integrate concepts of sensory exploration with the use of sensory tools and the mechanical animal.

Conclusions and Future Implications

- Expanded knowledge of dementia: through with population at Westminster Village, Joyful Journey, attending Teepa Snow conference, Continuing education, reviewing literature, and completing literature review

- Advocacy of mechanical animal session as a support for dementia by the production of a resource for staff on the topic of mechanical animals and dementia

- Education and advocacy through academic presentation for individuals with academic interests

- Program/policy development through the creation of guide/protocol for one on one mechanical animal session using the multisensory and/or reminiscing approach

- I provided my facility with the necessary tools and guide to continue mechanical animal sessions for individuals with dementia.

- My future OT plans include working in a hospital setting, pediatrics, skilled nursing facility, or an inpatient rehabilitation hospital. My capstone experience helped build my leadership, advocacy, research and communications skills which will carry over into whatever setting I work in.

Want to learn more about the author? Take a photo of the QR Code to look at the author's portfolio. You can also reach me at Lacydeitrick@gmail.com

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References

Baker, R., Bell, S., Baker. E., Gibson, S., Holloway. J., Pearce. R., Dowling. Z., Thomas. P., Assey. J., & Wareing, L. (2001). A randomized controlled trial of the effects of multi-sensory stimulation (MSS) for people with dementia. *British Journal of Clinical Psychology, 40*(1), 81. https://doi-org.elibrary.huntington.edu/10.1348/014466501163508

Berk, L. E. (2018). *Development through the lifespan* (7th ed.). Boston: Pearson.

Gustafsson, C., Müllersdorf, M., & Scanberg, C. (2015). Using a robotic cat in dementia care a pilot study. *Journal of Gerontological Nursing, 41*(10), 46-56. https://doi.org/10.3928/00989134-20150806-44

Lancioni, G., Singh, N., O'Reilly, M., Sigafoos, J., D'Amico, F., Ferlisi, G., Denitto, F., De Vanna, F., & Belardinelli, M. O. (2015). Patients with moderate Alzheimer's disease engage in verbal reminiscence with the support of a computer-aided program: A pilot study. *Frontiers in Aging Neuroscience, 7*(109), 1-7. doi: 10.3389/fnagi.2015.00109