

Effects on Caregivers and Clients During Participation in Occupational Therapy Intervention Involving Animal-Assisted Therapy

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Background

In 2018, there were 16 million unpaid dementia caregivers in the U.S. those numbers continue to rise rapidly (Alzheimer's Association, 2019). Families are tackling enormous challenges providing care for increasingly dependent loved ones (Friedman, Shih, Langa, & Hurd, 2015). Caregivers who struggle to access scarce resources are at risk for burn-out and the loss of ability to keep loved ones in the home (Peluso et al., 2018).

To enhance client welfare and provide a better quality of life for this population, we must develop therapeutic interventions that offer meaningful and relevant group activities that offer social engagement and introduce therapeutic skills to manage both occupational deficits and challenging behaviors. Participation in activities that deliver the "just right challenge" and promote a sense of solidarity with others can reduce caregiver distress and improve attitudes towards dementia (Boots et al., 2015). Ultimately, caregivers who develop new skills and knowledge can achieve a better quality of life for themselves and their loved ones (Nay et al., 2015).

A challenge to delivering these opportunities lies in the fact that clients with Neurocognitive Disorders (NCDs) resist attempts at external engagement. They can become anxious and agitated and refuse to leave the home (Batson, 1998). Caregivers burdened by competing demands on their time often hesitate to add to existing commitments (Nay et al., 2015). Therefore, it is important to find avenues to encourage participation that are perceived as valuable and enjoyable and provide relevance in a non-judgmental forum.

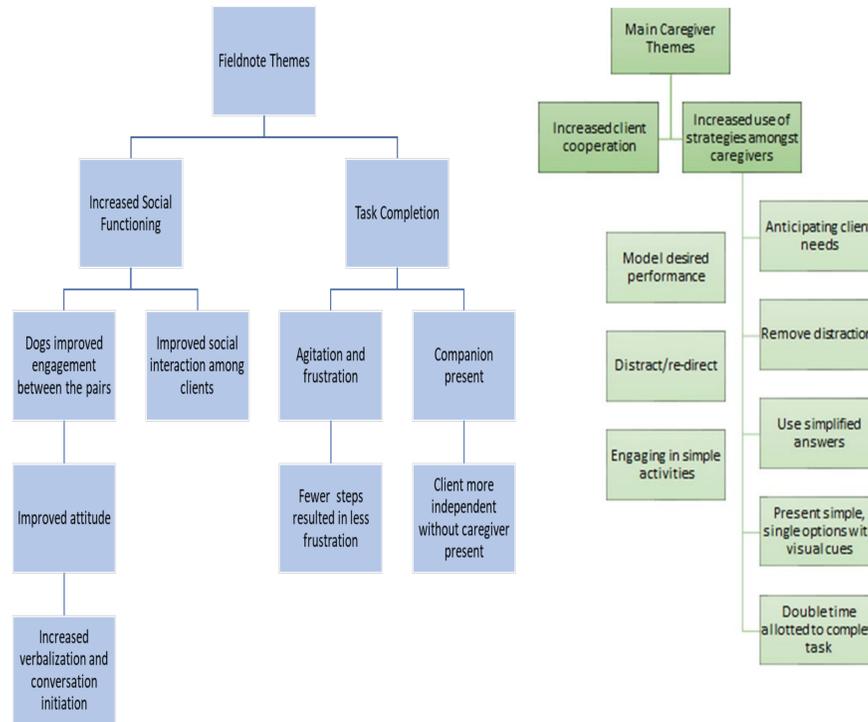
We hypothesize that providing an Animal Assisted Therapy (AAT) Occupational Therapy (OT) program for clients with NCDs and their caregivers enhances interest in participation in therapy (Peluso et al., 2018). We further hypothesize that modeling therapeutic intervention skills during AAT sessions can carry over to caregivers, and translate to enhanced caregiver abilities delaying nursing home placement and reducing the cost of formal care (Brodaty & Arasartnam, 2012).

Methods

This exploratory intervention study consisted of OT AAT sessions designed for clients with NCDs who scored at least a 3.0 on the Allen Cognitive Level Screen (ACLs-5) (Allen et al., 2007). A purposive sample was comprised of clients who frequent the Alvin A. Dubin Alzheimer's Resource Center. Initial information was collected via semi-structured interviews and through demographic questionnaires. Clients and their caregivers then attended a one-hour weekly AAT session over the course of six weeks. OT students documented functional performance during each session on a Behavior Observation Scale (BOS) and kept fieldwork journals. Caregivers participated in weekly feedback sessions with the research primary investigator and completed weekly feedback forms documenting any changes noted in performance at home.

Each session began with chair yoga and was followed by an activity selected to match the needs of the clients. These activities included donning/doffing dog clothes, making dog treats, shopping in a simulated shopping environment, and dog-related arts and crafts activities. Each client/caregiver pair was assisted by one OT student who modeled appropriate therapeutic intervention skills (re-directing; anticipating needs; grading activities; reducing stimulus; providing hand over hand assist; and applying errorless learning techniques).

Results



Themes from fieldwork journals included increased social participation, interaction, sharing and task completion. Researchers noted increased social functioning during AAT tasks (increased eye contact, touch, vocalization). There was greater interaction and engagement between client/caregiver and among pairs. Pairs made note of how the dogs were reacting to other pairs. Attitudes improved during engagement and socialization when dogs were present. Clients initiated more verbal communication centered around dogs. Agitation and frustration levels decreased over time between caregivers and clients as caregivers began to model therapeutic intervention skills. Qualitative results consisted of caregiver feedback and researcher fieldnotes. Major themes identified by caregivers included increased client cooperation and initiation and implementation of strategies modeled during interventions.

Behavior Observation Scale (BOS)

Item	1	2	3	4
Global Mental Functions				
1. Oriented and alert	0	1	2	3
2. Comprehends and understands	0	1	2	3
3. Responds to verbal activity	0	1	2	3
4. Responds to non-verbal activity	0	1	2	3
5. Responds to touch	0	1	2	3
6. Responds to pain	0	1	2	3
7. Responds to smell	0	1	2	3
8. Responds to taste	0	1	2	3
9. Responds to sound	0	1	2	3
10. Responds to light	0	1	2	3
11. Responds to temperature	0	1	2	3
12. Responds to humidity	0	1	2	3
13. Responds to air pressure	0	1	2	3
14. Responds to magnetic field	0	1	2	3
15. Responds to gravity	0	1	2	3
16. Responds to time	0	1	2	3
17. Responds to space	0	1	2	3
18. Responds to color	0	1	2	3
19. Responds to shape	0	1	2	3
20. Responds to texture	0	1	2	3
21. Responds to smell	0	1	2	3
22. Responds to taste	0	1	2	3
23. Responds to sound	0	1	2	3
24. Responds to light	0	1	2	3
25. Responds to temperature	0	1	2	3
26. Responds to humidity	0	1	2	3
27. Responds to air pressure	0	1	2	3
28. Responds to magnetic field	0	1	2	3
29. Responds to gravity	0	1	2	3
30. Responds to time	0	1	2	3
31. Responds to space	0	1	2	3
32. Responds to color	0	1	2	3
33. Responds to shape	0	1	2	3
34. Responds to texture	0	1	2	3
35. Responds to smell	0	1	2	3
36. Responds to taste	0	1	2	3
37. Responds to sound	0	1	2	3
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39. Responds to temperature	0	1	2	3
40. Responds to humidity	0	1	2	3
41. Responds to air pressure	0	1	2	3
42. Responds to magnetic field	0	1	2	3
43. Responds to gravity	0	1	2	3
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45. Responds to space	0	1	2	3
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47. Responds to shape	0	1	2	3
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