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Animal Assisted Activity with Older Adult Retirement Facility Residents: The PAWSitive Visits Program

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Animal assisted activity (AAA) programs offer widespread physiological, social, and emotional benefits to recipient populations, particularly older adults. While AAA is common in nursing homes, it is less common in retirement residences where individuals are often suffering from the stress of relocating and transitioning to a more dependent lifestyle. PAWSitive Visits (PV) is a weekly AAA visitation program conducted in a group-setting at a Midwestern retirement residence that brings an array of domestic and exotic animal species for the residents to interact with. PV strives to provide educational opportunities for the residents, facilitating their social engagement, eliciting memories of previously owned pets, and offering intergenerational activities. It also provides meaningful learning experiences for students (e.g., nursing and veterinary medical students) who affiliate with the program. The conceptual model for PV is the threefold notion of attachment, reciprocity, and unconditional acceptance that animals offer older adults. PV is a unique and successful program, coordinated in a

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manner that ensures the health and safety of both animal and human counterparts, while providing residents with experiences that enhance their well-being.

KEYWORDS animal assisted activity, attachment, human-animal interaction, older adults, unconditional acceptance

Her gnarly fingers moved briskly as she buttoned her blouse to get dressed so she would not be late. It was Tuesday afternoon and Mrs. B was excited about the chance to visit with an animal today. What would it be like to visit with a dog weighing over 100 pounds? Would he look anything like the dog she loved as a girl? Would he be happy to meet her? As she entered the family room at TigerPlace retirement residence, she greeted friends who also attended the weekly sessions. There she spotted the lovely black Newfoundland who had come to visit with her and the other residents. “Teddy” came to greet her with a joyful face and wagging body. He was beautiful, eyes kind, lips parted in a smile; he exuded love. She petted his soft hair and felt the warmth of his body as he leaned toward her. This was exactly what she needed today.

The experience of Mrs. B reflects what has become a common occurrence in nursing homes—animal assisted activity visits (AAA). A friendly visit from a well-trained, groomed, and socialized companion animal is often part of the programming milieu. However, it is less common for this activity to occur in retirement residences in which older adults are maintaining independent lifestyles. These facilities provide varying degrees of assistance to their residents with the goal of promoting dignity and independence. In many instances, animals are not allowed in the facility either as residents or visitors. This presents yet another challenge for older adults who have an affinity for companion animals and could benefit from keeping them and/or interacting with them. This interaction may be especially important for the residents given that they have relocated from their previous, often long-term homes to a more communal environment based on needing regular assistance with activities of daily living. This relocation can be associated with anxiety, depression, sleep disturbance, withdrawal, and loneliness (Johnson, 2013b). Interventions to relieve these symptoms are generally aimed at social engagement and interaction.

Therapeutic Recreation for Older Adults

Therapeutic recreation is an intervention modality designed to provide meaningful daily activities that support an individual’s psychological and social needs, as well as to rehabilitate them and promote their wellness (Lowry & Ryan, 1993). Examples of therapeutic recreation include art, music, dance,

and play therapy. These interventions have successfully been implemented with older adults in residential and nursing home facilities. Literature demonstrates that art therapy provides sensory stimulation and could increase resident's self-care abilities (Ferguson & Goosman, 1991). Music therapy has been shown to promote body and mind relaxation for older adults with depression and anxiety, as well as social engagement and communication among people with Alzheimer's disease (Sorrell & Sorrell, 2008). Play therapy, although typically used with children, has been found to help provide an environment of acceptance for older adults, reduction of forgetfulness, increase in self-esteem, decrease in depression, and increase in activities outside of the therapeutic setting (Ledyard, 1999). These avenues of therapeutic recreation, not only provide a creative outlet for older adults, but an activity that is enjoyable, meaningful, and purposeful. In addition, therapeutic recreational activities encourage social engagement, which may lead to older adults experiencing an increased sense of well-being and happiness. Findings demonstrate that older adults who participate in therapeutic recreation have greater confidence levels, life satisfaction and better physical functioning (Everard, Lach, Fisher, & Baum, 2000; Kahlbaugh, Sperandio, Carlson, & Hauselt, 2011). Furthermore, engagement in these activities may be especially helpful to older adults while they face challenges associated with aging, such as transitioning into a residential facility. For those who like companion animals, AAA may be a beneficial form of therapeutic recreation to ease transitions, facilitate engagement, and promote well-being.

Psychological Benefits of AAA

Previous research has demonstrated emotional benefits of AAA programs among older adults in residential facilities. Quality of life can begin to decline during the transition from a life of independence, as greater assistance may be needed from family members (Kawamura, Niyama, & Niyama, 2009). Individuals who participated in AAA experienced decreased anxiety and depression (Kawamura et al., 2009; Reel & Kleiber, 2008). Interactions with animals during visitation programs have elicited positive emotions, including laughter, smiling, and happy memories of past pets in the participants (Kawamura et al., 2009). These interactions have also been shown to decrease feelings of loneliness (Banks & Banks, 2002, 2005; Prosser, Townsend, & Staiger, 2008). In a study by Kawamura et al. (2009), participants reported a connection with the dogs that visited them. In another study, Banks and Banks (2002), conducted AAA sessions with residents of three long-term care facilities. Individual sessions were held in which the same animal visited the resident once or three times per week over six weeks. Findings revealed a significant decrease in loneliness among those who participated in animal visitations. A second study by Banks and Banks

(2005) concluded that the more lonely an older adult was, the more they benefited from AAA sessions.

Berry et al. (2012), observed the frequency of smiling in AAA participants. Participants interacted with visitor dogs for the same time that they interacted with other humans; participants spent significantly more time smiling during activities with the dogs than they did during interactions with the humans. In addition, AAA has been viewed as a stress reliever, and allows participants to have a break from their normal routine (Kawamura et al., 2009).

Physiological Benefits of AAA

Physiological benefits of AAA have also been reported, specifically through reductions in blood pressure (Friedmann et al., 2003). Two studies led by Kawamura, Niiyama, and Niiyama (2007, 2009) investigated the experiences of elderly Japanese women living in a nursing home after an animal visitation program twice a month for two years. Semi-structured interviews were conducted about the women's perceptions of AAA, relationship with the AAA dog, and daily habits. The women reported the experiences as pleasurable, having a positive impact on their sleep cycles and increasing their sense of self-confidence and stress relief. Significant increases in oxytocin, prolactin, beta endorphin, and phenylethylamine have been reported in response to interacting with a dog (Odendaal, 2000). These physiologic responses are widely accepted as facilitating a sense of well-being and joy. Conversely, Odendaal (2000) found that cortisol levels decreased significantly in response to a quiet interaction with a dog. Taken together, these findings suggest that AAA may through physiologic mechanisms, provide a sense of well-being and relaxation.

Social Benefits of AAA

AAA has also been found to provide social benefits, such as a vehicle for social engagement, which is often viewed as a vital component of successful aging (Reel & Kleiber, 2008). Socialization is important for reducing feelings of isolation and loneliness. In a study by Prosser et al. (2008), it was observed that older adults who participated in visits with animals showed an increase in social interactions and communication with other residents and nursing staff. Improvements in well-being, quality of life, functional independence, and memory have also been shown in those who regularly participated in AAA (Reel & Kleiber, 2008). Furthermore, the increased socialization of participants with each other during AAA resulted in decreased feelings of depression (Berry et al., 2012). Kawamura et al. (2007, 2009)

further demonstrated that Japanese women engaged in long-term AAA programs experienced greater interactions with staff, other residents, and facility volunteers.

An investigation of group versus individual AAA sessions in residents of long-term care facilities supported the benefits of both individual and group based interactions. In this study, a certified therapy dog engaged in individual AAA sessions in resident's rooms and in a group (2–4 people) setting where participating residents were seated in a semi-circle. While both types of AAA sessions resulted in decreased loneliness for the residents, individual AAA was significantly more effective in lessening feelings of loneliness. Group AAA was associated with increased socialization (Banks & Banks, 2005). Taken together, extant findings support the potential benefits of AAA for older adults. The purpose of this article is to describe the process and outcomes of a systematic AAA program that takes place in a retirement residence.

Conceptual Model

The conceptual model for the animal visitation program described herein consists of the commonly known attributes of the human-animal bond: (1) attachment, (2) reciprocity, and (3) unconditional acceptance. While these attributes are widely accepted in a pet ownership context, they have been less well articulated in an AAA context. Applying the constructs to AAA is helpful not only for program evaluation, but also to enable more in-depth study of the phenomenon of AAA visits and how to implement it to optimize outcomes in older adults. Examples of the attachment construct include “The visitor dog has become my friend” and “The dog helps me feel secure.” The construct of reciprocity can be operationalized as “The dog understands what I say,” “The dog visitor tries to comfort me,” and “The dog takes my mind off my troubles.” The third construct in the model underpinning our AAA program, unconditional acceptance, can be exemplified as “The dog accepts me just the way I am,” and “The dog doesn't judge me.” (Johnson & Meadows, 2003). This model formed the basis of an instrument used by the authors to assess the outcomes of AAA programs (Johnson & Meadows, 2003).

The PAWSitive Visits program was designed to facilitate and to induce the previously reported outcome of AAA, social interaction among older adults through the social lubrication effect articulated in the extant literature on AAA (McNicholas & Collis, 2000). The purpose of this article is to describe outcomes of the PAWSitive Visits AAA program taking place in a retirement residence in the Midwestern United States.

The PAWSitive Visits Program

PAWSitive Visits (PV) is an AAA animal visitation program developed in 2006 by the Research Center for Human-Animal Interaction (ReCHAI) at the University of Missouri, College of Veterinary Medicine. PV provides weekly AAA sessions from August to May to the residents of TigerPlace, a pet-encouraging retirement residence built in collaboration between the MU Sinclair School of Nursing and Americare Systems, Inc. The main objective of the PV program is to help facilitate successful aging for the residents, by providing them opportunities to interact with and learn about various animals that visit. PV brings a wide range of species to TigerPlace, including dogs, cats, miniature horses, alpacas, exotic mammals, birds, and reptiles. Some exotic animals include rabbits, chinchillas, pot-bellied pigs, hedgehogs, and owls. The residents are able to stroke or hold the visitor animal if it has a demonstrated docile temperament and prior experience interacting with strangers. Otherwise they observe the animal while its handler describes the animal's characteristics, origins, and behavior. The program engages the older adults' minds as they learn about each animal, posing questions to the PV leader and to the animal handler. It also stimulates multiple senses because the attendees see, hear, smell, and if appropriate, touch the animal. The visitor animals provide a source of entertainment, comfort, relaxation, and often stimulate animal-related memories in the residents.

The PV program coordinator, an undergraduate student, is responsible for scheduling animal visitors and conducting the weekly sessions. During each visit, the PV coordinator shares information about the species and/or breed of the animal with the residents who attend. The animal's handler describes individual characteristics of the visitor animal, including tricks or tasks that the animal can perform. Many residents ask questions about the animal visitors and draw similarities with pets that they have owned in the past by sharing stories. On average, 10 residents participate in each weekly session, in addition to TigerPlace staff. Attendance is often greater during sessions with exotic animal visitors and when demonstrations, such as dog agility activities, are given.

Because ReCHAI and TigerPlace are both university affiliated, providing educational opportunities for students plays a role in all programs. In this case, the experience of coordinating the PV program affords the undergraduate student a unique opportunity to interact with older adults in a positive context. The program also engages other students who are completing service learning experiences, clinical practica, class projects, or independent study courses. So PV provides not only learning for the older adults and the chance to reminisce about their previous animals or experiences with animals, it also adds to the milieu of TigerPlace by facilitating trans-generational interaction and providing valuable learning experiences for students.

The PV program has grown in popularity among the TigerPlace residents. Individuals often inquire about favorite animal visitors and the animals' handlers enjoy bringing their animals. The PV coordinator and several student volunteers maintain a scrapbook with mementos, photographs, and stories of previous animal visitors. This scrapbook is left on display for TigerPlace residents, guests, and prospective residents to look at and is continually growing with each new AAA visitation season. On regularly conducted facility satisfaction surveys completed by TigerPlace residents, the PV program is universally identified as the favorite program. An example of one TigerPlace resident's personal story has been documented by Johnson and Gayer (2008). In this example, owning a dog was vital for the engagement of a TigerPlace resident who had newly relocated to the residence. Not only did pet ownership give the resident a strong purpose for her daily routine, but the fact that she regularly brought her dog to the PV sessions expanded the dialogue between her and other residents at the PV sessions. They delighted in seeing the positive ways in which the dog responded to the animal visitors.

Some of the highlights of the PV program are visits from the Raptor Rehabilitation Project and the Mule Team, two programs at the MU College of Veterinary Medicine (CVM). The Raptor Rehabilitation Project combines service and education, with the goals of rehabilitating injured birds of prey, providing opportunities for veterinary medical students to learn about avian medical care, and educating the public about birds of prey. During the Raptor Rehabilitation visits, about 25 TigerPlace residents enjoy a 45-minute program in which they can view and learn about several types of predator birds, which are permanent residents of the Raptor Program due to previous injury. The birds are experienced visitors, remain tethered to the handlers, and are conditioned to tolerate groups of people observing them in the same room. Many residents have never seen exotic birds, such as the barred owl, "Ebenezer," and this session is highly enjoyable for them.

Well-known across the state of Missouri, the Mule Team (2 male mules) is cared for by veterinary medical students and provides mule-drawn wagon rides making appearances at more than 50 venues per year. The visit by the CVM Mule Team involves a short presentation on the history and importance of the mule in Missouri and culminates in a wagon ride pulled by the mules. The facility makes this a special family event by providing refreshments and assisting residents in and out of the wagon for rides. Residents invite their families to join them for this visit and enjoy watching younger generations ride in a very beautiful mule-drawn wagon. Residents consistently enjoy riding in the wagon, perhaps for some, raising memories from their childhoods. The mule team visit is highly favored by the older male residents, many of whom did farming with mules in their younger days. A common occurrence during the mule team visit is requests for intergenerational family

photographs with the mules. Families commonly say that the photos will be “for their Christmas cards.”

The mule team visit also affords the veterinary medical students who manage the mules and conduct the visits the unique opportunity to interact with older adults. They often engage with the older adults by telling details about the mules, and replying to questions about the mules posed by the older adults and their family members. Thus, lively conversations occur during the presentation and as people are standing with and petting the mules.

PV is a unique program for a multitude of reasons, primarily because it incorporates visits from a range of animals, not just companion animals that are typically used in AAA. This provides the older adult attendees with novel experiences and stimulates discussions. In addition, educational presentations about the visitor animals are provided for the residents as well as learning opportunities for MU students. These interactive opportunities differ from traditional AAA programs that often offer only friendly visits. Last, as demonstrated in the literature, AAA in a group setting has added social benefits; thus, PV contributes to the ongoing social interaction among TigerPlace residents with facility staff, and with their family members whom they regularly invite to attend the weekly programs.

METHOD

Pilot Study Sample

In 2011, a pilot study of the PV program was conducted with a small convenience sample of residents who self-selected their participation in the program. Our goal was to determine the extent to which older adult attendees bonded with an animal visitor. We also posed research questions addressing the extent to which personal characteristics such as age and previous pet ownership were associated with bonding to a visitor animal.

Measures

Residents ($N = 13$) at TigerPlace who regularly participated in the PV program were asked to complete a brief demographic questionnaire about themselves and also to complete the Center for the Study of Animal Wellness-Pet Bonding Scale (CSAW-PBS) after engaging in a 1-hour visit with a dog. The CSAW-PBS is a 28-item questionnaire designed by Johnson and Meadows (2003) to measure a participant's feelings of attachment, reciprocity, and unconditional acceptance after receiving a visit from a dog in the context of AAA. The statements are scored in a fixed format in which responses can range from 1 “more often false” to 5 “more often true.” Total scores range from 28–140 with higher scores indicating a stronger bond. The scale was

found to have a reliability Cronbach alpha score of 0.892 when used with older adults in a dog walking program (Fulton, 2005). The constructs by which the CSAW-PBS was created have been validated by confirmatory factor analysis with a sample of community-dwelling adults (Bibbo, 2014).

RESULTS

Table 1 illustrates the demographic characteristics of PV participants ($N = 13$). Sixty-nine percent (69%) of the residents were female ($n = 9$), 85% were between the ages of 80–89 ($n = 11$), 62% had owned a pet in the past ($n = 8$), and 85% did not currently own a pet ($n = 11$). Descriptive statistics were used to analyze the results from the CSAW-PBS and address the research questions. Two participants did not complete the CSAW-PBS in its entirety, therefore the sample size of preliminary results was $N = 11$. It was found that older adults who participated in the PV program formed a bond with the visitor animals, $M = 76.7$ [$SD = 26.2$, range = 37–116]. Although it is not possible to expect significant findings from such a small sample, descriptive findings showed that residents of a younger age group (80–89 years, $n = 9$) exhibited a stronger bond with the visitor animals $M = 78.9$ [$SD = 28.9$, range = 37–116], than the older adult age group (90+ years, $n = 2$) who also participated in the program $M = 68.5$ [$SD = 6.4$, range = 64–73]. However, this was not statistically significant based on an independent samples t -test, ($p = .370$). Those who previously owned a pet ($n = 7$) reported stronger bonds with the animal visitor during the PV program $M = 82.9$ [$SD = 28.2$, range = 37–116] than those who had never owned a pet ($n = 4$) $M = 66.0$ [$SD = 21.3$, range = 38–89]. However, this was also not statistically significant based on an independent samples t test ($p = .469$).

TABLE 1 Demographic Characteristics of PV Participants

Variable	$N = 13$
Gender	Male: 4 Female: 9
Age (years)	80–89: 11 90+: 2
Current marital status	Married: 5 Divorced: 1 Widowed: 7
Previously owned a pet	Yes: 8 No: 5
Currently owns a pet	Yes: 2 No: 11
Pet Location	N/A: 11 Tiger Place: 2

DISCUSSION

Findings from this very small pilot study were not statistically significant. While additional study with larger samples is warranted, the mean values of participants' scores on the CSAW-PBS are consistent with finding of other investigations of AAA in nursing homes. These values demonstrated that older adults formed bonds with visitor animals in an AAA program in the form of unconditional acceptance, reciprocity, and attachment to the animal visitors among older adults who attended the program. People in nursing homes have previously been found to benefit from AAA visits (Banks & Banks, 2002, 2005). The size of our AAA groups is consistent with the most effective implementation of AAA reported by Banks and Banks (2005). Anecdotal observations during the PAWSitive Visits AAA program demonstrated that the sessions can facilitate intergenerational interaction as animals are something to talk about in conversations not bound by generation-specific trends in language or topics of popularity. Although participants in our program were cognitively intact, others have reported that such AAA programs may be beneficial for people with various cognitive and mental disabilities (Morrison, 2007).

Implications

We have learned that there are several key factors to consider when developing and conducting an AAA program. Visitor animals selected for AAA programs should undergo veterinary medical screenings and behavior evaluations. In order to prevent the possibility of disease transmission, animals must be current on vaccinations, veterinary health checks, and have been bathed within 24 hours prior to making a visit. These are common policies for animals used in AAA programs to ensure health, safety, and welfare of both the individuals receiving the visits and the animals visiting. Pet Partners is recognized as the gold standard in training and registering animals and their handlers for AAA (Pet Partners, 2012). Animals that have not been well socialized or exposed to different environments are not good candidates for AAA programs, as they may respond to the situation or participants in a negative manner (e.g., shying away or showing stress-induced aggression). Exotic animals, including raptors, may participate as AAA visitors if they possess calm and unreactive behavior characteristics and have been socialized for this activity.

Additional precautions are taken when these animals visit TigerPlace, such as prohibition of photographs or touching animals that are not socialized to accept human touch (e.g., birds of prey). Although it is important that the handler is aware of the animal's behavior and monitors for signs of discomfort or stress during the visit, the PV coordinator also monitors this and is

prepared to stop interactions if either the animals or the older adults exhibit stress behaviors during the interaction. It is essential that animals engaged in AAA are healthy, well-behaved, and calm around people.

Some issues associated with conducting an AAA program include the reliability and accountability of handlers who bring animals. Older adults may not have great tolerance for late arriving animals, program sessions that do not start on time, or handlers who fail to arrive with their animal. Scheduling of AAA visits needs to be systematic, done in advance, and publicized to the potential attendees. TigerPlace, like most facilities, has many regularly programmed activities so we have learned that it is important to schedule AAA visits during times when residents are likely to attend and when other activities do not conflict, thus preventing residents from making difficult choices. This factor has been very important to the success of the PV program. In addition, an informal setting (comfortable chairs arranged in a circle or in casual groupings rather than in lecture or classroom formation) seems to be most beneficial for group based AAA. An informal setting encourages interaction by promoting participants to ask questions, share stories, and bring photos of previously owned pets to share with the group, all while visiting the animal at their leisure. Having comfortable seating, adequate lighting, good acoustics, a congenial coordinator with excellent communication skills, and effective visual teaching aids (e.g., posters with a large dark font and displays about each visitor animal) contribute to the success of such AAA programs.

Support of administration and staff of the facility is also instrumental to the success of an AAA program. Because TigerPlace is a pet facilitating retirement residence, having animals present in the building is one component of the overall ethos (Johnson, Rantz, McKenney, & Cline, 2008). The PAWSitive Visits Program is part of the larger TigerPlace Pet Initiative, operated by ReCHAI, which provides instrumental assistance so that residents and their pets can age in place together (Johnson, 2013a). While we acknowledge that PV occurs in what may be a somewhat uncharacteristic environment of human-animal interaction at TigerPlace, the PV program is scalable for other facilities and could be part of overall recreation therapy programming. As with introduction of any new program, a champion is needed who can elicit the support of facility administration and staff, do the necessary planning, build a roster of handlers and animals, and implement the program systematically. If these steps are taken, there is every reason to believe that the staff and older adults living in other facilities can benefit from an AAA program.

While facilitating older adults' adjustment to transitions (in particular relocation to a retirement residence) is the responsibility of all staff in such settings, AAA provides a major opportunity for nurses and recreation therapists to engage with older adults to enhance adjustment. AAA is an

intervention which has been identified as useful in the context of relocation stress syndrome (Johnson, 2013b). The interactions occurring during AAA provide nurses and recreation therapists with valuable opportunities to assess the residents' adjustment and to assist them with distraction from feelings of anxiety or depression. These interactions can also provide links between nurses, recreation therapists, and residents as they share common experiences with animal visitors and also disclose previous experiences with animals, thereby forming meaningful bonds with residents.

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