

# Practitioner Attitudes and Beliefs Regarding the Role Animals Play in Human Health

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## About This Document

*HABRI Central Briefs are peer-reviewed summaries of particular applications and issues within the field of human-animal interaction. Each Brief presents an overview of the subject matter, assesses the current state of research, then highlights unresolved questions or issues. Key resources are identified for further reading.*

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## Overview

Many studies have evaluated the effectiveness of animals in improving patient outcomes, such as their ability to improve cardiovascular health or alleviate depression symptoms. However, little research has been done to evaluate the beliefs of practitioners about the role that animals can play in human health. Since practitioners are gatekeepers to treatments, understanding their beliefs about animals' utility in human health interventions is fundamental to the mainstream acceptance of animals to achieve specific therapy goals. If practitioners do not believe or understand how animals can improve human health, they are unlikely to prescribe such treatments. Thus it is essential to evaluate and understand the attitudes and beliefs of practitioners regarding the relationship between animals and human health.

Research into practitioner attitudes began in 1979, with an investigation of allergists beliefs regarding pet ownership

among allergic patients. Since that time several other studies on pet-keeping and immunology have been conducted. However, the majority of the research into practitioner attitudes and beliefs on the role animals play in human health has centered on animal assisted interactions (AAI)\*. This brief summarizes the current knowledge on practitioner attitudes and beliefs regarding the role that animals play in human health as well as makes recommendations for future research.

## State of Current Knowledge

### IMMUNOLOGY

Early research into practitioner attitudes towards animals began with investigation into the attitudes of allergists towards pet owners who had allergies. Numerous veterinarians had observed that their patients with allergies were advised by their allergists to remove their

\*We recognize that there is a multitude of terminology that can be used, such as animal assisted activities (AAA), animal assisted interventions (AAI), and animal assisted therapy (AAT), and that different researchers may prefer different terms. However, for ease in summarizing the issue of practitioner beliefs, this brief will use the overall term animal assisted interactions (AAI) to refer to any activity, intervention or therapy where animals are involved.

pets from the home, even if they didn't have clinical signs of an animal allergy. The patients viewed the veterinarian as sympathetic, so often the veterinarian was put in the position of discussing animals and allergies with their patients. Because of this sympathetic view, the pet owner often revealed attitudes and beliefs to their veterinarian that they would not reveal to their allergist, such as the intention to keep their animals in defiance of the allergist's recommendation (Baker, 1979). Because of these experiences, many veterinarians suspected that allergists routinely recommended removal of pets, even when no clinical allergy to the animal existed. In the late 1970s, veterinarian Edward Baker evaluated this belief by surveying 200 allergists throughout the United States, Canada, and Mexico (Baker, 1979). A third of the allergists who responded indicated that they routinely recommended the removal of pets in allergic patients. Furthermore, they indicated that if that recommendation was not followed, they were unwilling to consider hyposensitization treatment even though they reported that it could be effective. This hardline approach was noted despite the fact that only 30% of the allergists who routinely recommended removal of pets believed that the patient would follow their instructions. While analyzing the results, Baker wondered if the allergists' demographic information, such as age and personal pet ownership, something the initial survey did not collect, would influence their professional recommendations. He evaluated this by conducting a follow up survey with 170 allergists (Baker & McCulloch, 1983). The second survey again asked about treatment recommendations, but also collected demographic information, including age and pet ownership. The results once again were that 33% of allergists recommended routine pet removal while only 30% believed that the recommendation would be followed. However, with the additional information collected, Baker found that allergists owned pets at rates consistent with the general population, and that allergists who presently owned pets or had pets as children were less likely to routinely recommend their removal. In a concurrent survey with allergic families, 73% reported that they would refuse to remove their pets, even if their allergist insisted on it, and many reported that they would lie to their allergist about the number and type of pets in the household (Baker & McCulloch, 1983). Subsequent research into pet keeping by allergic patients continued to document this stalemate wherein a majority of patients will not comply with the allergist's recommendations, yet a third of allergists still routinely recommend the removal of animals (Beck & Meyers, 1987; Grammer, Shaughnessy,

Shaughnessy, & Patterson, 1987; Herring, McGeady, Jones, & Mansmann Jr, 1981). The consensus of the researchers who have conducted these studies is that rather than creating an adversarial relationship where the patient has no intention of complying with the physician's orders, and is put in the position of receiving less than optimal care and/or actively lying to their physicians, allergists should appreciate the strength of attachment that people have to their pets, and attempt to find other ways to optimize the care of their patients. Since the early 1990s, there has been much research on the effect of animal exposure on the development of allergies and/or asthma, however, no recent research which focused on the allergist's perceptions could be located for this review. Additionally, while it is an important topic, the role of animal exposure on the development of allergies and/or asthma is outside the scope of this review and will be covered at length in a forthcoming HABRI Central brief.

## **ANIMAL ASSISTED INTERACTIONS**

Most of the research into practitioner attitudes and beliefs has focused on their beliefs about the efficacy and use of AAI. A 2014 survey of family physicians by the HABRI Foundation found that 69% of doctors have worked with animals in a hospital, medical center, or medical practice. Furthermore 97% of doctors surveyed believed that there are health benefits to owning pets, with 75% of them responding that pet ownership had improved a patient's physical health and 87% reporting that pet ownership had improved a patient's mood or outlook. While 75% of doctors report being willing to prescribe a pet to improve overall health, 60% of them had actually recommended that a patient acquire a pet (HABRI Foundation, 2014). These findings show that in a general sense the majority of family physicians have a positive view of the role that animals play in human health. Specific research on practitioner beliefs on the use of animals has been conducted in elderly care, mental health, occupational therapy, social work and treatment centers.

## **ELDERLY CARE**

Although some staff members have expressed concerns about the possibility of zoonotic diseases, allergies, or increased workload, the vast majority of staff working in hospice care and nursing homes support the inclusion of animals as a way to normalize the patients' lives and ameliorate their loneliness (Kirchhoff & Beckstrand, 2000; Kranz & Schaaf, 1989; Phear, 1996). However, many of

the studies on staff perceptions of the use of animals in hospice care or nursing homes have taken place in local facilities with a relatively small staff numbers, and the majority rely on open-ended questions. The only study of elderly care facilities which could be located for this review which used an accepted instrument to measure staff members' attitudes towards pets was Crowley-Robinson and Blackshaw's investigation into nursing home staff and patient attitudes toward their resident therapy dog (Crowley-Robinson & Blackshaw, 1998). Crowley-Robinson and Blackshaw used the Pet Attitude Scale to measure the staff members' general attitudes towards pets. Consistent with the studies of allergists, they found that staff attitudes toward pets in general influenced how they felt about having a resident dog. Despite not using a measurement scale to measure general attitudes towards pets, several other studies also concluded that staff member's acceptance of AAI was largely influenced by their underlying personal opinion of animals (Kranz & Schaaf, 1989; McCulloch, 1985).

## MENTAL HEALTH

Practitioner attitudes towards the use of animals in mental health treatment have changed dramatically since 1961, when Boris Levinson's first paper on the subject, "The Dog as Co-therapist" (Levinson, 1962) was met with a lukewarm reception by most and openly mocked by some (Levinson, 1983). In 1999, a study found that the majority of therapists surveyed believed that AAI can be effective across age groups and in diverse practice settings and that as many as 50% of therapists were using animals in their own practice (Mason & Hagan, 1999). Mental Health Practitioners incorporate a wide variety of animals, including dogs, cats, fish, dolphins, and even farm animals into AAI. Those who employ farm animals as part of their therapy report it as being efficacious (Berget, Ekeberg, & Braastad, 2008). However, the majority of mental health practitioners believe that small animals, such as dogs and cats are more likely to be more effective than farm animals (Berget & Grepperud, 2011). Subsequent studies have found that female practitioners and those with personal therapeutic experience with animals place a higher value on the treatment efficacy of AAI (Bente Berget & Grepperud, 2011). Additionally, the future generations of practitioners appear to be even more accepting of the use of animals in treatment, with 92% of mental health residents reporting that they believe that AAI is beneficial and 87% of them indicating that they plan to prescribe AAI for their

patients. Although an overwhelming majority of residents plan to incorporate AAI into their practices, 20% of them indicated that they were worried that other staff members would not be supportive of its utilization (Eaglin, 2008). In light of these findings, it is possible that one of the barriers to implementation of AAI is the perceived beliefs of others or the culture of the institutions that practitioners work within. Evidence of cultural or regional differences in implementation of AAI were hinted at by Rice et al. (1973) who described geographic clustering of AAI use. As part of a survey of AAI practices, Rice et al. noted that more therapists in the Northeastern parts of the United States were using animals as part of their therapy (Rice, Brown, & Caldwell, 1973). Although this finding is from 1973 and likely out of date, no subsequent published research on the geographical trends in AAI use could be located to either confirm or refute this observation. Despite the fact that this and other findings seem to insinuate that there may be some regional or cultural differences that affect the implementation of AAI, no studies that examined the role that cultural differences may play on health professionals' perceptions of AAI were located by either Eaglin (2008) or for this review. This may be due to the fact that studies of AAI tend to focus on a specific intervention rather than broadly surveying practitioners.

Several studies have found that the majority of therapists utilizing animals in therapy are self-taught on the subject, lacking formal education or training in AAI (Black, Chur-Hansen, & Winefield, 2011; Evans, Gray, Christenhusz, & Perez-y-Perez, 2011). However, the lack of formal training is not due to a lack of interest in training programs. In fact many mental health practitioners report desiring formal training or education in AAI. The discrepancy between practitioners wanting training but not receiving it demonstrates the need for better education and training mechanisms for professionals who wish to engage in AAI (Black et al., 2011).

## OCCUPATIONAL THERAPY

Despite the widespread use of service animals to aid persons with disabilities, few studies have been conducted to examine the attitudes of occupational therapists regarding the use of animals. Velde et al. (2005) examined the published research on the use of animal-assisted therapy in occupational therapy and concluded that "little is known qualitatively about the impact of AAT from the perspective of the therapist or the participant

involved” (Velde, Cipriani, & Fisher, 2005, p. 45). Velde et al. reported on three qualitative studies, two of which were unpublished projects. However, only one of the three really touched on practitioner beliefs regarding the role of animals in occupational therapy treatment. This was an unpublished project by Ferrese et al. which interviewed 6 occupational therapist and 3 therapy assistants (Ferrese, Forster, Kowalski, & Wasilewski, 1998). They found that the therapists and assistants believed that the incorporation of animals into therapy can serve as a motivator both to encourage attendance and to extend the duration of sessions. Therapists using animals as part of their therapy also noted that the participants experienced increase range of motion, better sensory modulation and interpretation, higher pain tolerance, as well as improved alertness and cognition. The occupational therapists involved believed that these additional benefits occurred because animals-assisted therapy uniquely enhances the emotional well-being of patients in tandem with other physical benefits (Ferrese et al., 1998).

## **SOCIAL WORK**

Social workers frequently interact with individuals where animals are a component of the family unit, yet a 2013 study found that as a profession, they are just beginning to accept the animal human relationship as being important to their clients’ well-being (Risley-Curtiss, Rogge, & Kawam, 2013). This finding was the extension of a previous study which had found that one third of social workers include questions about animals in their intake assessments, and approximately 25% reported incorporating animals in their practice (Risley-Curtiss, 2010). These reported numbers of social workers utilizing animals in their practice was lower than other fields, such as mental health treatment, so the follow up study sought to understand the characteristics that might influence social workers to consider animals in their practice. They found that social workers are more likely to incorporate animals into their practice if they know other social workers who do so, work exclusively with the elderly, and/or if they personally have a favorable view of animals (Risley-Curtiss et al., 2013). Additionally, social workers who do utilize animals in their practice report that the use of animals improves client engagement, aids the development of empathy, and can assist in modifying anti-social behavior (Evans et al., 2011). The majority of practitioners incorporating animals into their work have no formal education or training in AAI, yet as with mental health workers, many social workers

report being interested in or trying to access training about AAI (Evans et al., 2011; Risley-Curtiss, 2010).

## **TREATMENT CENTERS**

AAI in treatment centers, such as hospitals or cancer centers, generally takes the form of a visitation program, where an animal accompanied by a handler visits the patients on a regular basis. The number of hospitals incorporating animal visitations into their regimen has increased dramatically in the last decade, yet few studies have explored the staff members’ views of these visitation programs. The studies performed have shown that although some staff members have concerns about dog bites or damage to the facilities, most staff members are generally accepting of AAI, with allied health workers being more accepting than doctors and nurses (Bibbo, 2013; Moody, King, & O’Rourke, 2002). As with other areas of health, such as immunology and elderly care, the staff members’ views on AAI were affected by their previous beliefs about animals (Bibbo, 2013). The evaluation that Moody et al. conducted of a dog visitation program in a pediatric unit is representative of the experiences of other AAI in treatment centers. Prior to an intervention, staff members expressed initial concerns regarding the health of patients or behavior of the animals, however, after implementation of a visitation program, staff member concerns were alleviated while their beliefs that a visitation program would distract patients from their illness and have a relaxing effect were affirmed (Moody et al., 2002). Interestingly, following participation in an animal visitation program, many staff members reported higher levels of job satisfaction and that their work environment had improved (Bibbo, 2013; Moody et al., 2002).

## **EFFECT ON STAFF**

Nursing is a high stress occupation, and administrators are constantly seeking ways to combat shortages while retaining qualified personnel (Rossetti, DeFabiis, & Belpedio, 2008). The inclusion of animals, although originally introduced for the patients, has been shown to have a positive effect on staff members’ stress levels and job satisfaction (Chinner & Dalziel, 1991; Edwards, Beck, & Lim, 2014). While conducting an AAI, Barker et al. (2005) noticed that staff members would voluntarily play with the therapy dogs that came to visit the patients. This observation led them to study the effect that interaction with the therapy dog could have on staff members’ stress

levels. Their results showed that spending as little as 5 minutes with a therapy dog proved to be effective at lowering staff members' cortisol levels (Barker, Knisely, McCain, & Best, 2005). They hypothesized that taking a few minutes with the therapy dog may lower cortisol levels more than quiet time alone; in addition to taking a much needed time-out, practitioners also receive love and attention from the dog (Rossetti et al., 2008). Nurses also report that the presence of the therapy dog enables them to see a side of the patient's personality that they wouldn't otherwise see, and that they are able to "see the whole person and not just see the pathology" (Rossetti et al., 2008, p. 31). This greater connection to the patient results in higher personal satisfaction about the care that they provide. In addition to higher personal satisfaction and better staff morale, nurses in facilities with AAI also have more positive feelings toward the administration. While some nurses view it merely as an added benefit, others report that they would select a job or elect to stay at a job because of the presence of a therapy dog (Rossetti et al., 2008).

## Areas for Future Investigation

The studies on allergists' beliefs and the maintenance of pets in allergic families all took place in the 70s and 80s. Contemporary research should explore whether these attitudes persist or if they have shifted over time.

Many of the studies on practitioner beliefs focus on a particular hospital unit or intervention. This narrow focus results in small sample sizes. Furthermore, many of these were self-selected populations where individuals who already supported the use of animals may have been more likely to volunteer. Additional large scale research, such as surveying all therapists in a region or country is needed in order for findings to be more generalizable.

Studies of animal visitations programs show that staff members' perceptions of a visitation program may be influenced by the personality of the handler. Research is needed on the effect of the handler on staff perceptions.

The majority of the research takes place with dogs, more research is needed on practitioner's perceptions towards the use of other animals, such as farm animals, guinea pigs, birds, and reptiles.

Crowley-Robinson and Blackshaw's study on empathy toward the missing therapy dog was the only article located which referenced using a validated scale to measure existing attitudes toward animals. Future research on practitioner perceptions should incorporate an accepted pet attitude scale in order to correlate any results with practitioners pre-existing attitudes toward animals. If the incorporation of an accepted pet scale is not possible, at the very least, record should be made of whether or not the practitioner is a current or past pet owner.

Research has shown that the use of animals in treatment is highly correlated with the practitioner's personal attitude toward animals. Future studies need to explore how to encourage practitioners who aren't inclined to incorporate animals to be willing to do so.

Most of the research has been done with practitioners who are already employing animals in their treatments. More information about the perceived barriers to AAI might be gleaned by surveying practitioners who are not incorporating animals.

Twenty percent of residents reported being concerned that other staff members would not accept AAI. Future research could explore whether or not the perceived perceptions of peers is a barrier to AAI implementation.

Despite the abundance of articles concerning the cardiovascular health benefits of pet ownership, this review was unable to locate any studies that examined the attitudes and perceptions of cardiologists toward the use of animals to improve cardiovascular outcomes.

## Conclusions

Although the health benefits of animals have been demonstrated across a variety of disciplines, there has been little investigation into the beliefs of practitioners about the role that animals play in health. The research that has been conducted to date has focused on either allergies or animal assisted activities. Additionally, much of the research has been conducted either at a particular treatment center or with those participating in a particular intervention, and as a result has had small sample sizes. Because of this design, the small sample sizes and potential for selection bias has limited the generalizability of the findings. Future research needs to take a broader

approach by investigating practitioner attitudes towards animals and barriers to implementation on a wider scale.

Despite the overwhelming evidence that animals can positively affect health, the incorporation of animals into treatment regimens will not become mainstream unless the practitioners who prescribe those treatments view animals as an effective therapy. Across the disciplines studied to date, practitioner attitudes and beliefs toward animals and health has been shown to be influenced by their own personal attitudes towards animals. Therefore future research focusing on understanding how to educate, inform, and influence practitioner's personal attitudes towards animals is essential in encouraging more practitioners to consider utilizing interaction with animals as a treatment option.

## Key Resources

Baker, E. (1979). A Veterinarian Looks at the Animal Allergy Problem. *Annals of Allergy* 43: 214-6.

*Two hundred allergists were surveyed regarding their beliefs about pet keeping and allergies. One third of allergists routinely recommended the removal of pets, and would not provide hyposensitization treatment if this recommendation wasn't followed, even though they reported that hyposensitization was an effective treatment. Only 30% of allergists believed that patients would generally follow the recommendation to remove pets.*

Baker, E. and M. J. McCulloch (1983). Companion animals and human health: allergy to pets: problems for the allergist and the pet owner. In *New perspectives on our lives with companion animals*. A. H. Katcher and A. M. Beck. Philadelphia, PA, University of Pennsylvania Press: 341-345.

*Baker and McCulloch conducted this follow up survey with 170 allergists and 22 allergic families in order to collect more information on allergists' practices as well the beliefs of allergic patients. One third of allergists uniformly insisted on the removal of pets in cases of allergy and 50% insisted on removal in cases of asthma. Those allergists who recommended removal of pets wouldn't consider hyposensitization as a treatment if the pets were maintained, even though they viewed hyposensitization as being effective. Only 30% of allergists believed that the recommendation to remove a pet would be followed, and 43% recognized that forced removal of pets could worsen the symptoms. Allergists owned pets at rates similar to the general population, and those who presently owned pets or had pets as a child were less likely to routinely recommend the removal of pets. Of the allergic families, 73% reported that they would refuse to remove their pets, even if their allergist insisted on it. Many of them reported that they would lie to allergist about the number and kind of pets in the household.*

Berget, B., & Grepperud, S. (2011). Animal-assisted interventions for psychiatric patients: beliefs in treatment effects among practitioners. *European journal of integrative medicine*, 3(2), e91-e96.

*Opinions of 1110 practitioners on the therapeutic effects of AAI were queried. Usefulness and beliefs in treatment effects varied across disorders and categories of effects, with the highest effects being reported for mental*

*retardation and the least effects being reported for schizophrenia disorders. Those who used animals for therapy in the past and more women than men believed that AAI would have a treatment effect.*

Risley-Curtiss, C., Rogge, M. E., and Kawam, E. (2013). Factors Affecting Social Workers' Inclusion of Animals in Practice. *Social Work* 58(2): 153-161.

*The authors believed that social workers are slowly beginning to embrace the animal human relationship as important for client wellbeing and that practitioners are asking questions about animals during client history, but not necessarily incorporating animals into treatment. As such they wanted to understand factors that would influence whether or not social workers included animals in therapy. One thousand sixty two social workers were surveyed about their beliefs and practices regarding animal assisted therapy. They found that social workers were more likely to employ animals in therapy if they knew other social workers who incorporate animals into their practice, worked exclusively with the elderly, or had their own companion animal.*

## References

- Baker, E. (1979). A veterinarian looks at the animal allergy problem. *Annals of allergy*, 43(4), 214.
- Baker, E., & McCulloch, M. J. (1983). Companion animals and human health: allergy to pets: problems for the allergist and the pet owner. In A. H. Katcher & A. M. Beck (Eds.), *New perspectives on our lives with companion animals* (pp. 341-345). Philadelphia, PA: University of Pennsylvania Press.
- Barker, S. B., Knisely, J. S., McCain, N. L., & Best, A. M. (2005). Measuring stress and immune response in healthcare professionals following interaction with a therapy dog: a pilot study. *Psychological Reports*, 96(3), 713-729.
- Beck, A. M., & Meyers, N. M. (1987). The pet owner experience. *Allergy and Asthma Proceedings*, 8(3), 185-188.
- Berget, B., Ekeberg, Ø., & Braastad, B. (2008). Attitudes to animal-assisted therapy with farm animals among health staff and farmers. *Journal of psychiatric and mental health nursing*, 15(7), 576-581.
- Berget, B., & Grepperud, S. (2011). Animal-assisted interventions for psychiatric patients: beliefs in treatment effects among practitioners. *European journal of integrative medicine*, 3(2), e91-e96.
- Bibbo, J. (2013). Staff Members' Perceptions of an Animal-Assisted Activity. *Oncology nursing forum*, 40(4), E320-E326.
- Black, A. F., Chur-Hansen, A., & Winefield, H. R. (2011). Australian psychologists' knowledge of and attitudes towards animal-assisted therapy. *Clinical Psychologist*, 15(2), 69-77.
- Chinner, T. L., & Dalziel, F. R. (1991). An exploratory study on the viability and efficacy of a pet-facilitated therapy project within a hospice. *Journal of palliative care*, 7, 13-20.
- Crowley-Robinson, P., & Blackshaw, J. K. (1998). Nursing home staffs' empathy for a missing therapy dog, their attitudes to animal-assisted therapy programs and suitable dog breeds. *Anthrozoos: A Multidisciplinary Journal of the Interactions of People & Animals*, 11(2), 101-104.

- Eaglin, V. H. (2008). Attitudes and perceptions of nurses-in-training and psychiatry and pediatric residents towards animal-assisted interventions. *Hawaii medical journal*, 67(2), 45-47.
- Edwards, N. E., Beck, A. M., & Lim, E. (2014). Influence of Aquariums on Resident Behavior and Staff Satisfaction in Dementia Units. *Western journal of nursing research*, 36(10), 1309-1322.
- Evans, N., Gray, C., Christenhusz, J., & Perez-y-Perez, M. (2011). Working with people at risk: An exploration of human services practitioners' use of animal-assisted interventions. *Te Awatea Review*, 26-32.
- Ferrese, L., Forster, B., Kowalski, R., & Wasilewski, L. (1998). Occupational therapists: perspectives on using animal-assisted therapy with an elderly population. Unpublished masters project. College Misericordia. Dallas.
- Grammer, L. C., Shaughnessy, M. A., Shaughnessy, J. J., & Patterson, R. (1987). Practices in cat and dog immunotherapy among allergists. *Allergy and Asthma Proceedings*, 8, 253-258.
- HABRI Foundation. (2014). Pets and health: Family physician survey [press release], from [http://www.habri.org/HABRI\\_Physicians\\_Survey.pdf](http://www.habri.org/HABRI_Physicians_Survey.pdf)
- Herring, S., McGeedy, S., Jones, J., & Mansmann Jr, H. (1981). The maintenance of pets in allergic families. I. A survey of health beliefs. *Annals of Allergy*, 46(1), 24.
- Kirchhoff, K. T., & Beckstrand, R. L. (2000). Critical care nurses' perceptions of obstacles and helpful behaviors in providing end-of-life care to dying patients. *American Journal of Critical Care*, 9(2), 96-105.
- Kranz, J., & Schaaf, S. (1989). Nursing-home staff attitudes toward a pet visitation program. *The Journal of the American Animal Hospital Association*, 25(4), 409-417.
- Levinson, B. M. (1962). The dog as a "co-therapist". *Mental Hygiene*. New York, 46, 59-65.
- Levinson, B. M. (1983). Context for companion animal studies: the future of research into relationships between people and their animal companions. In A. H. Katcher & A. M. Beck (Eds.), *New perspectives on our lives with companion animals* (pp. 536-550). Philadelphia, PA: University of Pennsylvania Press.
- Mason, M. S., & Hagan, C. B. (1999). Pet-assisted psychotherapy. *Psychological Reports*, 84(3c), 1235-1245.
- McCulloch, M. J. (1985). Pets in therapeutic programs for the aged. *Journal of the Delta Society*, 2(1), 34-44.
- Moody, W. J., King, R., & O'Rourke, S. (2002). Attitudes of paediatric medical ward staff to a dog visitation programme. *Journal of Clinical Nursing*, 11(4), 537-544.
- Phear, D. N. (1996). A study of animal companionship in a day hospice. *Palliative medicine*, 10(4), 336-338.
- Rice, S. S., Brown, L. T., & Caldwell, H. S. (1973). Animals and psychotherapy: A survey. *Journal of Community Psychology*, 1(3), 323-326.
- Risley-Curtiss, C. (2010). Social work practitioners and the human-companion animal bond: A national study. *Social Work*, 55(1), 38-46.
- Risley-Curtiss, C., Rogge, M. E., & Kawam, E. (2013). Factors affecting social workers' inclusion of animals in practice. *Social Work*, 58(2), 153-161.
- Rossetti, J., DeFabiis, S., & Belpedio, C. (2008). Behavioral health staff's perceptions of pet-assisted therapy: An exploratory study. *Journal of Psychosocial Nursing and Mental Health Services*, 46(9), 28-33.
- Velde, B. P., Cipriani, J., & Fisher, G. (2005). Resident and therapist views of animal-assisted therapy: Implications for occupational therapy practice. *Australian Occupational Therapy Journal*, 52(1), 43-50.