The Effects of Animal-Assisted Therapy at a Long Term Care Facility

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THE EFFECTS OF ANIMAL-ASSISTED THERAPY AT A LONG TERM CARE FACILITY

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THESIS

Submitted to the Occupational Therapy Program at Grand Valley State University Allendale, Michigan in partial fulfillment of the requirements for the degree of

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THE EFFECTS OF ANIMAL-ASSISTED THERAPY
AT A LONG TERM CARE FACILITY

ABSTRACT

This thesis is a qualitative study on how resident pets impacted the lives of residents in a nursing home. Through the hermeneutic process, ten participants were interviewed to determine their relationships with the animals. Five common themes emerged from this study; (a) the participants enjoyed the companionship of pets, (b) the participants found pleasure in feeding the pets, (c) the participants enjoyed petting the animals, (d) most of the participants were unable to care for the animals, and (e) a resident animal would be an important factor in choosing a new nursing home for these participants. This thesis supports the importance of using meaningful and purposeful activities in therapy as a means to promote function.
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Chapter 1

INTRODUCTION

Throughout life, individuals engage in activities to meet their physical, psychological, and social needs. These needs provide meaning for individuals and improve their quality of life (Trombly, 1995). As a healthcare discipline, occupational therapy uses activity that is meaningful and purposeful for individuals to promote well-being and to improve overall function. This philosophy mirrors the belief that people engage in activities to meet their individual needs.

The use of meaningful activities motivates patients in occupational therapy. When patients are interested in an activity they are more motivated to succeed by working harder to accomplish the task, resulting in a higher retention level after the therapy session has ended. It is most beneficial when a therapist uses activities that are familiar to the patients, giving meaning to their lives (Sietsema, Nelson, Mulder, Mervau-Scheidel, & White, 1993).

According to the American Occupational Therapy Association (1993), the philosophical base of occupational therapy is based upon the premise that occupation and purposeful activity, both physical and mental, provide the primary vehicle for human growth and development. This philosophical base is the foundation from which major occupational therapy theories are formulated.
Occupational therapists believe that a patient's life roles help determine what that patient will find meaningful during therapy. What an individual finds purposeful may be uniquely shaped by age, developmental level, culture, and premorbid roles. Purposeful activity can be described as a skill or action that satisfies personal needs (Trombly, 1995). For example, if a patient enjoys gardening, the occupational therapist could include gardening in therapy to help the patient regain function in needed areas. Using a purposeful activity as an intervention tool maximizes the patient's benefits from therapy.

Interacting with animals is one example of a meaningful activity that can be integrated into therapy. Pet owners demonstrate a close bond with their pets. This bond motivates the owners to take care of their pets each day by feeding and grooming. Research indicates that owning a pet increases socialization, necessitates responsibility for care, and provides companionship (Mallon, 1994).

Animal-assisted therapy can be facilitated in two ways: (a) as part of a therapeutic treatment or (b) with the animal as a resident of a health care facility. Therapeutic treatment with an animal promotes the physical interaction between a client and an animal. Some of the goals of therapeutic treatment are to increase range of motion, strength, and bilateral coordination; to decrease blood pressure and heart rate; to increase self-esteem, attention, and cognition; and to increase socialization (Barba, 1995; Holcomb & Meacham, 1989; Kehoe, 1991; Siegel, 1993). A resident animal lives at a health care facility with clients. The clients and the animal are free to interact when both parties desire. The animal is cared for by staff and clients. A resident pet may provide
benefits to the patients of a facility by providing care to the pet or participating in therapy sessions (Delta Society, 1995).

Patients of a skilled nursing center who interact with a live-in pet may or may not share the same benefits as pet owners (Savishinsky, 1992). Resident animals may also generate negative responses from patients. One study describes patients who have experienced poor relationships with animals expressing negative feelings toward resident animals (Kongable, Buckwalter, & Stolley, 1989).

The literature we researched indicates that animal-assisted therapy has been the primary responsibility of recreational therapy. We believe that occupational therapy can better facilitate the use of animal-assisted therapy by first learning the client’s history, what role pets may have played in the client’s life and whether the interaction with an animal is a meaningful activity to that person.

This study is designed to determine the effects resident pets have on the residents of a local nursing home. Nursing home residents who live with dogs, fish, and birds will take part in this research.

Participants in this study will be selected based on two criteria: (a) participation is on a voluntary basis and (b) participants do not have a diagnosis of dementia or Alzheimer’s disease. Volunteers will participate in a semi-structured interview. Before conducting the study, current literature regarding animal-assisted therapy and resident pets is reviewed and critiqued. This enables us to better determine what, if any, research has been done examining the relationship between animal-assisted therapy and patients’ occupational roles (such as pet-ownership) and to develop a questionnaire.
The interviews will be conducted following the hermeneutic approach. We will consult with a qualitative research expert to group interview responses into themes based on the history and life roles of each participant (Polkinghorne, 1988). After all the interviews are conducted we will collaborate with our research expert to determine common themes between the residents who owned pets and the residents who have never owned pets.

It is our intention to determine the effects resident pets have on the residents of a local nursing home. We are interested in if and how the pets motivate the residents, if the relationship between the residents and the pets is positive or negative, and if a resident animal has improved the residents’ quality of life as perceived by the residents.

**Research Question**

What effects do live-in animals have on the residents of a local nursing home from the residents’ perspective?

**Purpose**

The purpose of this study is to examine the relationship between nursing home residents and the animals they interact with at their health care facility. The results of this study can be used to help occupational therapists determine whether to incorporate pets into therapeutic treatment as a meaningful activity not merely as a diversional activity.
CHAPTER 2

REVIEW OF RELATED LITERATURE

Animal-assisted therapy can be facilitated in two ways: (a) as part of a therapeutic treatment or (b) with the animal as a resident of a health care facility. A therapeutic treatment with an animal is the physical interaction between a client and an animal. This interaction is facilitated by a licensed or registered therapist, who has typically been a recreational therapist. The goals of therapeutic treatment with animals are to increase range of motion, strength, and bilateral coordination; to decrease blood pressure and heart rate; to increase self-esteem, attention, and cognition; and to increase socialization (Barba, 1995; Holcomb & Meachan, 1989; Kehoe, 1991; Kongable et al., 1989; Mallon, 1994; Reichert, 1994; Siegel, 1993).

The second type of animal-assisted therapy is through the use of a resident animal. A resident animal is an animal that lives at a health care facility with the clients. The animal has access to most or all of the facility and is taken care of by the residents and staff. The residents and the animal are free to interact when both parties desire. Interacting with animals may be a purposeful and meaningful activity for clients who have previously owned pets. Purposeful and meaningful activities are activities that meet clients' physical, psychological, or social needs (Trombly, 1995). Occupational therapists believe that a person's life roles help determine what clients find meaningful (Trombly, 1995). Animal-assisted therapy is considered meaningful for clients in many different ways: physically, psychologically, and socially, both interpersonally and
intraperonally. We will review the benefits of pet ownership, human-animal contact, why pets can be an integral part of an elderly person's life, and the physical, psychological, and social effects a pet can have on a person.

**Pets**

Pet owners have a close bond with their pets (Mallon, 1994). Pets provide unconditional acceptance, love, and companionship (Kongable et al., 1989). Unconditional love and acceptance can promote self-esteem (Kongable et al., 1989). The human-animal bond motivates pet owners to take care of their pets each day by feeding and grooming. Research indicates that owning a pet increases socialization, necessitates responsibility for care, and provides companionship (Mallon, 1994).

**Elderly**

Many residents of long-term care facilities regard their former pets as having been members of the family (Savishinsky, 1992). Elderly residents of long-term care may not receive as much human touch and socialization as they normally would at home (Mallon, 1994). As part of the normal aging process, elderly people typically experience a decrease in vision, hearing, muscle mass and bone mass. This often prevents elderly people from being as socially active as they typically have throughout their lifetimes. Therefore, elderly residents are more isolated with decreased socialization as they age.

Engaging in animal-assisted therapy has positive effects for elderly people, including pets fostering sociability, enhancing morale, fulfilling needs to nurture and be nurtured, reducing reliance on psychotropic medications, and providing sensory stimulation (Savishinsky, 1992). The effects derived from resident animals is similar to
those derived from animal-assisted therapy making long-term care facilities similar to the home environment.

The health benefits derived from animal-assisted therapy are especially important for elderly residents. Stroking a pet provides a calming effect for the residents and the companionship a pet provides may ease elderly residents' sense of isolation.

**Physical**

The physical benefits of the interaction with an animal during therapeutic treatment are similar to those of pet ownership. The benefits include improved cardiovascular functioning, self-care performance, and musculoskeletal strength (Kongable et al, 1989). A noticeable decrease in heart rate and blood pressure is also a common benefit of animal-assisted therapy (Katz & Westbrook, 1985; Loughlin & Dowrick, 1993; Polon & Babwin, 1984; Rowan & Beck, 1994; Siegel, 1993; Voelker, 1995; Walsh, Mertin, Verlander & Pollard, 1995).

A recent experiment by Zisselman, Rovner, Shmuely and Ferrie (1996) tests animal-assisted therapy with 57 hospitalized geriatric psychiatric patients. The patients have conditions such as depression, dementia, Parkinson’s disease, and stroke. Intervention for the patients consists of one-hour visits with a dog for five consecutive days. The patients have contact with and feed the dogs. The researchers conclude that there are no major differences in the patients' self-care abilities, disoriented behaviors, depressed or anxious moods, irritable behaviors, and withdrawn behaviors after the visits with the dog. Pre-and post-assessments are conducted with the Multidimensional Observation Scale for Elderly Subjects.
Results show no changes for several reasons: (a) a five-day test period is an insufficient amount of time to produce physical changes in the participants, (b) the measurements show post treatment changes at the termination of the week instead of the termination of the treatment at mid-week, (c) there are no accepted standards of administering animal-assisted therapy to be used as protocol, and (d) the researchers are unaware of the impact of medication on participants’ responses (Zisselman et al., 1996). Thus, this study is limited by procedural flaws.

Caring for and touching are two frequently practiced behaviors in both human-animal and parent-infant relationships (Kongable, et al., 1989; McQuillan, 1985; Reichert, 1994; Siegel, 1993). Physical contact is essential to maintaining a healthy lifestyle. Through physical contact individuals develop an attachment to their pets. The act of physically touching and caring for an animal may elicit a physical response such as reduced blood pressure, heart rate, and stress (Siegel, 1993).

Qualitative findings confirm “the human need for touch and contact comfort is essential” (Mallon, 1994, p. 92). Individuals living in residential care may not receive as much human touch as they normally would at home and animals may provide compensatory contact (Mallon, 1994). In a review of many studies, Casey (1996) finds that individuals who talk to animals and stroke them may exhibit the production of endorphins which help reduce stress. Endorphins are produced by the pituitary gland. They are released into the central and peripheral nervous systems to reduce pain and stress.
Companion animals often have a stress-reducing effect on their human partners (Casey, 1996; Katz & Westbrook, 1985; Rowan & Beck, 1994; Siegel, 1993). A study by Siegel (1993) on pets, stress and health, reports pet owners have significantly lowered stress levels than non-pet owners. Siegel measures this through semi-structured interviews, documenting reduced doctor visits of 938 elderly individuals. The subjects are enrolled through Medicare in a health maintenance organization. An initial interview with the subjects collects demographics, health status, and history of pet ownership. Six more interviews are conducted every two months focusing on the human-animal relationship and the nature of doctor visits, if any. The final results show that pet owners visited the doctor less than non-owners during a one-year period. The strength of this study is the thoroughness demonstrated by seven interviews of each of the subjects. The researchers examine the relationships between the subjects and their pets over a one-year period.

Companion animals provide clients with a focus outside of themselves. The company of a resident animal aids the client in pain management and anxiety reduction (Barba, 1995). Stroking and caring for an animal can trigger the release of endorphins which naturally reduce the intensity of pain and stress. Barba documents the progress of an eight-year old boy as he ceases to request pain medication each time he is visited by the therapy dog. After the dog enters the room he lays down allowing the boy to stroke and talk to him. In this example, the boy is relaxed and playful when the dog is present and physical contact is being made. Although this research is of single case design, it demonstrates the successful use of an animal to decrease pain.
The physical benefits of animal-assisted therapy are well documented. These include improved cardiovascular functioning, self-care performance, musculoskeletal strength, decreased blood pressure and heart rate, and increased range of motion, strength, and bilateral coordination for a variety of populations (Kongable et al, 1989).

**Psychological**

The literature describing animal-assisted therapy indicates both obvious and subtle psychological benefits in cognition, self-esteem, self-acceptance and attention (Kehoe, 1991; Loughlin & Dowrick, 1993; Twiname, 1984). The review of several studies shows animal-assisted therapy as effective in rehabilitation as well as being basic to the caring, communication, and comfort of nursing care (Barba, 1995; Taylor, Maser, Yee & Gonzalez, 1993).

One study shows that animals increase patients’ awareness of their environment which leads to the patients’ increase in orientation of day and time (Taylor et al, 1993). A puppy is used to elicit eye contact and vocalization with elderly residents in a long-term care facility. The guardians of eighteen elderly residents with dementia consent to the residents’ participation. The residents spend time with a puppy and a picture of a puppy in a quiet room on two separate occasions. The researchers record visual contact, vocalizations, and the length of time spent with the puppy and the picture. The results do not show an increase in eye contact or vocalization, however the length of time residents voluntarily spend with the live puppy is significantly higher than the time with the picture. The limitation of this study is that the residents are unable to express any
emotions, thoughts or feelings about their interactions with the puppy because of their diagnoses.

Other studies examine animal-assisted therapy for individuals lacking in self-esteem or displaying strong dependency characteristics (Fick, 1993; Loughlin & Dowrick, 1993). Loughlin and Dowrick survey 80 bird owners with an 49-item questionnaire. The questionnaire consists of questions concerning demographic information and rating statements regarding why people keep birds. Participants are asked to identify which psychological needs are fulfilled by owning a bird. Results indicate that avian companions often fill human needs such as socialization, self-esteem, and cognition. Upon examination, the social needs are met most frequently.

Loughlin and Dowrick (1993) conclude that human-animal interactions provide unconditional understanding and acceptance of humans by animals. This study is limited because through the questionnaire it is determined that most of the respondents owned pets in addition to the birds and the researchers are unable to determine which psychological needs are met strictly by the birds versus the other pets.

In a pilot study, Fick (1993) observes the behaviors of elderly males in a psychiatric hospital during group therapy sessions both with and without a dog present. The subjects are observed and analyzed through videotaping. The subjects are told that the dog is being trained for use in nursing homes and needs exposure to group settings. Fick indicates that verbal interactions between subjects increases significantly with the presence of the dog. The presence of the dog provides a comfortable environment for the
subjects. However, the scope of this study is limited because there are few participants and they are all male.

Pets are non-judgmental (Barba, 1995). Barba (1995, p.200) states, “Therapy animals show unconditional acceptance by their wagging tails and happy faces, regardless of a person’s physical appearance or unusual manner of speech.” In the presence of an animal an individual may experience a close companion without the anxiety and stress of being accepted by that companion (Barba, 1995). Based on her past research Barba states, “Interactions with animals encourage people to express emotions without questions or fear of rejection, give and receive love, laugh and play, recall similar pleasant experiences, and feel worthwhile” (Barba, 1995, p. 200).

The companionship and unconditional love that pets provide add meaning and solace to lonely lives of elderly individuals (Polon & Babwin, 1984; Rowan & Beck, 1994). Rowan and Beck conclude this after interviewing Medicaid patients who are dog owners. Polon and Babwin (1984) also report a case study of an elderly woman’s increase morale and socialization as a direct result of interaction with a therapy dog. This patient reports a positive change in her emotional status after beginning visits with the dog. This study is limited because it is based on only one individual.

Many times talking to an animal is paired with physical contact. Individuals of any age may confide in an animal because the animal is non-judgmental (Casey, 1996; Ceconi & Urdang, 1994). The physical contact with pets provides a variety of sensory stimulation such as petting, stroking, brushing, feeding, playing, and cuddling (McQuillen, 1985). Stroking an animal provides comfort and has a calming effect.
(Kongable, et al., 1989). In turn, this stimulation can elicit physical and psychological effects such as lower blood pressure, reduced stress, and increased self esteem. (Siegel, 1993).

The research regarding the psychological effects of animal-assisted therapy on an individual is vast. It is documented that animal-assisted therapy can have a positive impact on self-esteem, cognition, self-acceptance, attention, and orientation of day and time. These benefits are especially significant for elderly residents of nursing homes who may experience a sense of loneliness or isolation.

Social

Interacting with animals impacts individuals' social skills. Increased attendance and social interaction with the ability to express feelings more easily are the goals of a study of institutionalized patients with psychiatric diagnoses done by Holcomb and Meacham (1989). The goals are accomplished by introducing two dogs, a cat and a rabbit for patients to hold during group activities. Observations of attendance and spontaneous interactions between the patients and animals are made during group activities for a total of 30 groups. The patients report a more positive affect, increased sensory stimulation, a greater sense of normalcy, and feelings of belonging and acceptance. The presence of animals during group activities increased attendance of patients more than any other group activity. In this study animal-assisted therapy provides opportunities for increased social interaction of patients. The results of this study are valuable tools for therapists using animals for increased socialization. The results validate the use of animal-assisted therapy.
Caring for a pet helps individuals develop socially acceptable behaviors. Human-animal interactions increase feelings of pleasure, socialization, and relaxation (Taylor et al., 1993). Pets provide a topic of conversation between people who do not know one another (Casey, 1996). Polon and Babwin (1984) report, “Most people, when talking to pets, use facial expressions and voice tones that resemble those used by lovers or adults when speaking to children” (p. 177).

Haggard (1985) concludes that through the observation of clients in a rehabilitation hospital interacting with three stray kittens, the clients talked with one another significantly more than when the kittens were not present. In this qualitative study patients described as withdrawn, wheel themselves to the patio to find the stray kittens and call them onto their laps. Furthermore, the animals serve as a non-threatening topic of conversation between patients (Haggard, 1985).

Resident animals may also generate negative responses from patients. A study of 12 participants diagnosed with Alzheimer’s disease demonstrates this. All but one of the participants had owned a pet in the past. The participants are initially observed in the absence of the dog to determine baseline social behaviors. Then on six separate occasions the researchers observe positive social behaviors of smiling, laughing, looking and leaning toward the dog, touching the dog, and verbalizing. The researchers also observe negative behaviors of name-calling, shouting, and kicking at the dog. The observations are of both individual and group settings.

Although social behaviors increase when the dog is present, two of the participants express unhappy feelings toward the animal. The negative behavior is
expressed consistently by the same two participants. Through the report of the family members, the researcher attributes the participants' reactions to their prior poor relationships with animals (Kongable, et al., 1989). Although this study validates the use of animals in a therapeutic manner, health care practitioners should be cautious when assessing participants' histories with animals before incorporating animals into an activity.

Animal contact encompasses caring for and talking to an animal as well as physically touching, feeding, playing, and cuddling with the animal. There are many social benefits of human-animal relationships. Rowan and Beck (1994) state, "In sum, there is solid evidence that animal contact has significant health benefits and that it positively influences transient physiological states, morale, and feelings of self worth" (p. 88).

**Occupational Performance**

A relationship with a pet provides purposeful activity or occupation for many people. Siegel (1993) finds that pet owners are significantly more attached to the animals used in an animal-assisted treatment than non-pet owners. However, we find no current literature that delineates the relationship between occupational performance and pet ownership (Siegel, 1993). Most documentation identifies the benefits of animal-assisted therapy. In the literature we find that most animal-assisted therapy has been facilitated by recreational therapists rather than occupational therapists.

Occupational therapists use purposeful and meaningful activities to elicit motor, cognitive, sensory integrative, psychological, and social behaviors. The activities used as
intervention are chosen based on the client's interests and how important the activity is to that client. The interests are obtained by asking the client about this life history and what roles he has enjoyed in the past (Helfrich & Kielhofner, 1994). The activities are then incorporated during therapy sessions to promote function. For instance, a client who enjoys fishing may use this activity to promote upper extremity movement and increase upper extremity range of motion.

Purposeful activities, those based on the client's interests, also promote life satisfaction, competence, and independence (West, 1984). Purposeful activities are based on the client's intrinsic motivation. Trombly (1995) states, "Purposeful and meaningful occupation improves or produces occupational functioning" (p. 960).

Using intrinsic motivation in therapy produces favorable outcomes in physical, cognitive, psychological, and social performance (Nelson et al., 1996; Sietsema et al., 1993; Trombly, 1995). Using a client's intrinsic motivation during therapy addresses the whole person instead of treating the parts. This holistic approach to treatment is founded in occupational science (Clark, Wood, & Larson, 1998). Occupational science is an evolving discipline based on occupational therapy. It is "the study of the human as an occupational being including the need for and capacity to engage in and orchestrate daily occupations in the environment over the life span" (Yerxa et al., 1990 p. 6). Occupational science is described as multi-dimensional and incorporates an individual's roles which evolve over time.

Occupational science should be one of the foundations animal-assisted therapy is based on. Occupational therapists with the knowledgeable of occupational science have
the proper education and experience to use animal-assisted therapy as a form of treatment. Treatment may consist of (a) activities that incorporate animals or (b) relationships that evolve between patients and animals. The results of this study can be used to help occupational therapists determine whether to incorporate pets into therapeutic treatment as a meaningful activity not merely as a diversional activity.

Animal-assisted therapy provides many subtle and obvious benefits for different populations of people. Animal-assisted therapy is effective in a variety of health care settings as well as in the home. The elderly who are susceptible to isolation and depression, are frequently cited in this literature. Understanding the physical, psychological, and social effects of animal-assisted therapy on patients, occupational therapists can promote meaningful activities through animal-assisted therapy.

**Purpose**

The purpose of this study is to examine the relationships between nursing home residents and the animals they interact with at their health care facility.
CHAPTER 3

METHODOLOGY

Study Design

Background

This study was conceived due to the researchers' interest in animals, pets, and the elderly. One of the researchers grew up with several animals. She currently owns several dogs. She was interested in participating in animal-assisted therapy but was unable to due to time constraints. One day, a fellow student did a presentation on animal-assisted therapy. This presenter discussed what animal-assisted therapy is but shared that there was limited research involving animal-assisted therapy and occupational therapy. This presentation sparked further interest in the topic. Thus, we decided to do our master's project on animal-assisted therapy.

The presenter described animal-assisted-therapy as meaningful and having a positive impact on outcomes for patients receiving occupational therapy. Meaningful activities are commonly used in occupational therapy. A meaningful activity is something that is of value and interest to the patient. Occupational therapists often use meaningful activities in therapy to increase motor performance. By doing this, there generally is an increase in functional outcome such as range of motion, strength, bilateral coordination, or endurance for the patient (Trombly, 1995). Also, the patient may
become more motivated to participate in the activity because it is meaningful to them. The patient may then focus more on the activity and less on their disability or illness.

Animal-assisted therapy is the use of animals during therapeutic treatment to improve a patient's performance in a variety of areas. Animal-assisted therapy can be used to improve range of motion, increase motivation, increase socialization, facilitate trust building, and decrease blood pressure and heart rate through the therapeutic use of touch (Barba, 1995; Casey, 1996; Fick, 1993; Holcomb & Meacham, 1989; Kongable, et al., 1989). Animals are typically brought to treatment by the therapists rather than living at the health-care facility full time. In this instance, therapists bring their own pets, or animals may be borrowed from a local animal shelter. However, animals can also be residents of a particular facility.

After narrowing our topic, we conducted an extensive review of the literature on animal-assisted therapy. The literature described how animal-assisted therapy benefits a variety of patients. For example, animal-assisted therapy involving dogs helped emotionally impaired patients become comfortable discussing their feelings and increased their socialization (Holcomb & Meacham, 1989; Taylor, et al., 1993; Haggard, 1985). Animal-assisted therapy which involved the use of fish improved physical mobility and decreased blood pressure in patients with cardiac disease (Kongable et al, 1989). The current research primarily described situations in which the animals were brought to a facility.Absent from the research was the use of resident animals in long-term care facilities. We also found limited research involving animal-assisted therapy in
occupational therapy treatment. Instead, animal-assisted therapy was used in conjunction with recreational therapy.

We then chose an elderly population for our study. Three reasons guided this decision. First, there was limited research involving the elderly and animal-assisted therapy. Second, existing literature indicated that the elderly, who are often isolated and depressed, benefited from pets with increased morale (Polon & Babwin, 1984). Finally, animal-assisted therapy can be incorporated into occupational therapy because it is one use of meaningful activities. We believed the animals would help foster social skills, enhance morale, fulfill needs to nurture and be nurtured, reduce reliance on psychotropic medications, and provide sensory stimulation to the elderly (Savishinsky, 1992).

Then, we searched a metropolitan city in the midwest for facilities which used animal-assisted therapy. We visited four facilities which used animal-assisted therapy. The first facility was a large rehabilitation hospital where animal-assisted therapy was used in their pediatric unit on a monthly basis. The animals were not used more frequently because of sanitation reasons. The second facility was an Alzheimer’s unit attached to a nursing home. This facility did not have a resident animal because the animal had recently died. The third facility was a nursing home for the elderly which used dogs brought in by volunteers. These dogs were used in large group activities for an hour at a time. However, this was not a consistently scheduled activity. The final facility was a long-term care facility which had a resident dog. The dog (golden retriever) had lived at the facility for over four years. The dog was able to access the residents’ rooms, hallways, and activity rooms. The recreation therapist was in charge of overseeing the
care of the dog. The nursing staff was responsible for the dog's daily care. This facility also had resident birds and fish.

Recreation therapists organized the animal-assisted therapy programs at the facilities we visited. Although each of the facilities employed physical, occupational, and speech therapists who used the animals periodically, none of the facilities had formally established animal-assisted therapy programs for the purpose of the patient treatment.

We chose to conduct our study at the long-term care facility with the resident animals because the residents were familiar with the animals and were exposed to the animals for long periods of time in a natural setting. Furthermore, the nursing home staff agreed to allow us to use their facility for our research project. This nursing home had 149 elderly residents.

**Present Study**

The purpose of this study is to identify what effect resident animals have on the residents of a long-term care facility. The results of this study can be used to help occupational therapists determine whether to incorporate pets into therapeutic treatment as a meaningful activity with elderly adults.

This study will utilize a qualitative design. Qualitative research design is commonly used in occupational therapy research to determine and to explain occupation because it allows the researcher to understand a patient's life roles associated with a specific activity (Blanche, 1996; Gage, Cook & Fryday-Field, 1997; Helfrich &
Kielhofner, 1994; Jonsson, Kielhofner & Borell, 1997; Kinghorn & Roberts, 1996; Rudman, Cook & Polatajko, 1997). Through the use of qualitative research design, general themes emerge to explain the qualitative aspects surrounding the research topic. The themes describe the personal attributions the participants place on the research topic and how the research topic has impacted their lives (Creswell, 1994).

Typically, research is either qualitative or quantitative. In quantitative studies, general themes are established and the research is used to validate these pre-existing themes. For example, the participant is provided with a questionnaire and is instructed to indicate the most appropriate answer among the choices provided. The participant is not allowed to provide input as to why they indicated their choice. The participant is only provided with the opportunity to agree or disagree with the proposed research.

In contrast, qualitative studies attempt to identify new themes (McCracken, 1988). The researcher chooses a topic to explore. The researcher then selects an interviewing technique to determine how their participants feel about the topic. The method of interviewing the participants is left to the discretion of the researchers. Typically, the researcher provides the participants with open-ended questions. The participants are encouraged to explain in detail why they responded the way they did. This qualitative approach provides the participants with the opportunity to bring personal experiences into the study and to explain why they feel their experiences are important to them. Through the use of semi-structured interviews, our study will focus on the impact resident animals have on the residents at the long-term nursing facility.
The sample size in quantitative studies is usually large and involves random sampling. Typically, quantitative studies involve more than one hundred participants. Quantitative studies can be generalized to large numbers of people (Creswell, 1994). In contrast, qualitative studies target a specific group of people and involve a small number of participants. Typically, qualitative studies involve less than twenty participants. Hence, qualitative research is not statistically generated.

This current study is appropriate for the qualitative approach because the participants are allowed to share their life history and experiences with pets through the use of in-depth interviews. Our intention is to understand what impact the resident animals have on a select group of nursing home residents and what general themes emerge among the residents regarding animals.

In the present study, ten nursing home residents will be selected and asked by the nursing home staff to participate in this study. Each of the voluntary participants will be individually asked a set of questions about his past experiences with pets as well as the effect the current nursing home resident pets has on him. The experiences will be unique to the ten participants. After each interview, the questions will be revised to reflect the answers provided in the interview. This process will validate the general themes which appear in the study. The results of this study are not intended to be transferred to other residents of the facility or other nursing homes in the world.

This study will be approved by the Human Subjects Research Committee from Grand Valley State University and by the Bob Irwin, CEO from the nursing home.
selected for this research project. The data collection will take place between August 13 and September 2, 1998.

Validity/Trustworthiness

Validity is defined as the ability to produce the desired results (Guba & Lincoln, 1989). In this study, validity is conducted through the hermeneutic process. The hermeneutic approach has been selected to ensure a high degree of validity in this qualitative study. This check-recheck method allows us to determine if our conclusions are accurate (Guba & Lincoln, 1989). This process begins with one set of interview questions. After each interview, the questions are then revised based on the responses given on the previous interview. This interviewing process defines emerging themes and validates the study’s analysis.

There are four components which describe the validity or trustworthiness of this qualitative research project: (a) credibility, (b) transferability, (c) dependability, and (d) conformability (Lincoln & Guba, 1985). The first criterion in this study is credibility. Credibility is the ability to demonstrate that the results of the research are accurately identified and described (Lincoln & Guba, 1985). This study has credibility because it involves two researchers with different viewpoints; two occupational therapy students, one occupational therapist, and one qualitative research expert. Using two researchers and a qualitative research expert to analyze the data eliminates potential personal biases. We will also use member checks in the hermeneutic process. This entails that each participant validate the responses of a previous participant during the first interview as
well as in the re-interview process. Therefore, each resident will be given a revised set of interview questions based on the results of the previous interviews.

The second criterion is transferability. In our study, this is the ability to transfer the results to other health care facilities (Lincoln & Guba, 1985). This study uses ten participants who describe the impact animals have on their lives. Each participant will bring a different experience with animals to the interview. Themes will be extracted from the interview based on their responses. Each participant’s response will be compared to the other participant’s responses to determine common themes. Thus, these themes are specific to these participants. However, the findings of this study can be read by occupational therapists in other long-term facilities so they may gain a better understanding of the possible effects live-in pets may have on the elderly. Occupational therapists can then begin to explore options of using animals in their therapy sessions.

The third criterion is dependability which is often called reliability in quantitative research. This is the ability to duplicate the study for future research (Lincoln & Guba, 1985). Dependability is difficult to achieve in this study. For example, the initial questionnaire may be used in other studies. However, after the first interview, the questionnaire is modified based on evolving themes. This process makes this study unique and is difficult to duplicate. We will document how the themes are defined, providing rationale for this decision making process. Our age, race, and gender may influence the conclusions we draw. It should be noted that both researchers are young, Caucasian women. Also, we are unfamiliar with the residents. They may feel more
comfortable talking to people they know. Thus, we may influence the results of this study, weakening its reliability or improve its bias.

The fourth criterion described by Lincoln & Guba (1985) is conformability. Conformability occurs when the research findings are determined by the subjects rather than by the researchers' bias. The hermeneutic process extracts evolving themes from each interview which are then confirmed by the next participant through specific questions until the conclusion of all interviews. This interview process will be monitored by a qualitative research expert from Grand Valley State University to ensure conformability. There is also one occupational therapy professor from Grand Valley State University who will be assisting in this research. Bias will be controlled by having four viewpoints in this study.

Study Site and Subjects

A long-term care facility with several resident animals will be used in this study. This facility is located in the Midwest. This nursing home has 149 residents and a staff which includes several nurses, nurse aids, one occupational therapist, two physical therapists, two speech therapists, and a recreational therapist. Typical diagnoses for the residents of this facility include stroke and dementia. This study will consist of ten adults (two men and eight women) who are of Caucasian decent. The subjects' ages range from 63 to 92 with the median age of 80.8. This facility is selected for this study because it has one resident dog, birds, and fish. The dog has lived there for four years. The dog is allowed to roam the facility, including the residents' rooms and the activity rooms. The birds have lived there for two years.
Participants in this study will be selected based on two criteria: (a) voluntary participation and (b) no diagnosis of dementia or Alzheimer’s disease. The participants need to be able to verbally provide answers to questions asked of them. The participants need to be able to recall events which happened before they moved to the nursing home and to be familiar with the animals that currently reside in the nursing home. For that reason, ten participants will be recommended and selected by the recreational therapist from this facility (Babbie, 1990). Each participant will sign a consent form before participating in this study.

**Equipment and Instruments/Procedure**

The participants will participate in a qualitative, in-depth, semi-structured interview which will last approximately one hour. The semi-structured interview is chosen as the means of data collection because it provides the residents with the topic and general open-ended questions. At the same time, the semi-structured interview allows the participants to control what information is discussed and to talk about meaningful events in their lives. (Guba & Lincoln, 1989).

The semi-structured interview provides the participant with a list of questions which we wish to answer. The initial set of questions are chosen to elicit experiences the participants have had with animals from their past and with the animals who currently live with them (See Appendix B). We do not have to specifically follow the interview questions. This approach allows the participant the greatest flexibility in discussing the topic while providing the maximum amount of meaningful information to the researcher (McCracken, 1988).
One researcher will conduct each of the interviews and another will transcribe them. This method will ensure that each interview is conducted with consistency. This consistency will increase reliability.

Each interview of the nursing home residents will be audio taped by the interviewer, providing an accurate record of the interview. The audio taping allows the interviewer to focus on what the resident is saying. After the interview, the audio tapes will be transcribed for data analysis. At the conclusion of this study, the audio tapes will be destroyed to protect the identity of the participants. The researchers will keep the interview transcripts.

Data Analysis

Hermeneutic analysis will be used to determine evolving themes in this research study. Through the hermeneutic approach, we categorize the participants' life experiences discussed in the interview into general themes (Polkinghorne, 1988). The basis of this approach is the discovery of themes and patterns in the participant's life experiences through ongoing interviewing. The interview questions will be reworded to reflect evolving themes. The purpose of this approach is to elicit, analyze, and interpret meaningful experiences of the group. However, the data collected is specific to the individual life experiences of the ten nursing home participants.

The hermeneutic process involves interviewing each participant. The first participant will be asked a set of open-ended questions which we perceive as significant to the topic from our past experiences and from our literature review. General themes emerge from the first interview. We will summarize these themes after transcribing the
interview. The evolving themes will then be used to formulate a new set of questions (Guba & Lincoln, 1989).

The second participant will be asked similar questions. In addition to the questions provided, the participant will be asked to comment on an evolving theme by agreeing or disagreeing. After the second interview is completed, the data will be analyzed and modified based on the evolving themes. The transcription of the two interviews will be compared and contrasted. Common themes will be incorporated into new questions for the third interview to determine if the experiences are similar among the residents. This interview process continues until all ten interviews are completed. At this time, we will consult with the qualitative expert and summarize the existing data.

Limitations

There are four major limitations to this study:

1. The research is labor intensive and time consuming due to the nature of the hermeneutic process. All of the interviews consist of open-ended questions in which the responses can become lengthy. Each of the interviews must be conducted and then transcribed.

2. The researchers are immersed in the analysis of the data which can create a bias. The qualitative approach involves an in-depth understanding of the participants’ lived experiences and the subjective interpretation of the data (Lincoln & Guba, 1985). However, without this extensive interview process, the results of this project would not be conclusive to this nursing home. For these reasons, this study uses a interview method which reflects the opinions of the residents interviewed previously.
3. The results of this qualitative study will not be generalizable to the general public. The intention of this study is to determine what impact resident animals have on the residents of a particular nursing home.

4. The hermeneutic process is ambiguous and allows a great deal of latitude in the interpretation process (Heidegger, 1962). The results are not based on statistics, but on personal feelings described by the residents which are interpreted by the researcher.
CHAPTER 4

ANALYSIS OF DATA

Introduction

Ten residents of a nursing home were chosen by their recreational therapist to participate in this study regarding the effects the resident animals had on them. Each resident agreed to be a part of this study. The participants were interviewed by one researcher and the audio-taped interviews were transcribed by the other researcher. The interviews took place at the nursing home in a variety of rooms. Some participants chose to be interviewed in their own room, others in the main activity room, and one chose the main lobby. The interview results were compiled after each interview. Common themes emerged through this analysis. The researchers included these themes in subsequent interviews and the new participants commented on them. The following sections describe the common themes found in our study.

COMMON THEMES

The Companionship of Animals

All ten participants had previously owned pets. Eight participants had owned at least one dog, two had owned cats, one had owned birds, and one participant had lived on a farm with several different animals. All ten participants reported that they liked being around pets and the majority of them liked dogs. Jody stated she did not like dogs but was fond of cats:

A lot of them (other residents) have dogs, cats, and birds and everything else. I never really cared... well we used to have birds too, not that I was especially fond of birds. Dogs, well, nothing, I’m not interested in them really. I would never hurt them or anything. The cats. I’ve always loved cats.
Eight participants spoke fondly of their pets. Many participants talked briefly about their pets, identifying them by name and type of animal. Most of the participants' rooms were decorated with pictures of pets they had owned. Some of the pets had passed away before the participant moved into the nursing home. Other pets were given to family members or friends when the owner moved into this nursing home. These pets were considered part of the participants' family. Many participants reported it was difficult to move to a nursing home without their pet. During one of the interviews, Jody showed the interviewer a picture of her cat. Jody said, "That's my cat...Princess...My daughter's got her now...I hated to get rid of her, I'll tell ya. But, you can't do nothing about it."

**Feeding the Animals**

Jasper was the resident dog who lived at this nursing home for approximately four years. She was a golden retriever and had a mild temperament. According to the recreation therapist, Jasper visited all of the hallways, spending most of her time in two of them. All ten participants stated they saw Jasper on a daily basis. When asked about how often Stella saw Jasper, she responded, "(I see Jasper) usually every day: twice a day or once a day. She's got a lot of places to cover. She goes to the woman across the hall; she knows she's going to get something to eat."

According to the participants, the most popular time to see Jasper was during meal times. Four participants reported they fed Jasper part of their meals and three participants kept dog treats in their room. During feedings, Jasper spent time alone with each resident. All the participants who fed Jasper found this activity fulfilling. For example, Liz said, "When she comes in the dining room, I always give her a little tidbit. I don't know if she has a favorite thing. She's pretty gullible. She takes it all." Marsha also said, "I feed him all the time and they
get after me because they don’t want him to eat. He’s getting too big.” Finally, Stella and Jody shared feelings about their interactions with Jasper, particularly focusing on the activity of giving her food:

(Stella) I give her a treat.. talk to her.. pet her.. tell her she’s a good dog, and thank her for visiting me.. like she really belongs to me. I guess everyone pretty much likes him; even the ones that don’t feed him-they like him. I’d tease her a little bit. I’d get a cracker and put peanut butter on it. She’d come in and if I didn’t have dog biscuits or anything, my daughter would get out the peanut butter and crackers. She’d sit there and watch me spread the peanut butter...When she’d come in, I’d say, “you are not getting anything until I am done eating, you know better than that.” She’d go out and play in the hall and (sit) in the hallway waiting for me and when I was done, she’d come in and we’d eat.

(Jody) I can’t feed him enough to suit him so she can stay as much. She used to be a regular. It was like she could smell it. The minute I’d start eating, there she was. She’d lay there and wait. But, now, she don’t do that no more. But, I don’t have scraps and of course they don’t want you to do that. I don’t try to do that then. So, I think maybe she isn’t quite as satisfied now. I think maybe she goes some place else.

Other participants chose not to feed Jasper. They expressed understanding of possible health problems for Jasper when she ate extra food. Due to weight gain, Jasper could develop hip problems, obesity, heart conditions, or other possible diseases. The residents felt responsible for Jasper’s health and took pride in preventing these problems. Seven participants expressed understanding of not feeding Jasper due to her being overweight. Four participants felt strongly about not feeding Jasper in fear of making her overweight. Celia shared her experiences with Jasper:

Yeah, she always comes by me when I get my tray. I say to him, “It’s all gone. It’s all gone.” Then she gets out of here. She always sits there and looks at me.. She thinks she’s gonna get it as it goes in my mouth. Then I say to her, “No Jasper, you better get out of here. She turns around and gets out of here....She’s getting too big and she might get infections from other’s food (I don’t feed him).
Petting the Animals

Petting Jasper was another popular activity among the participants. Four actively pet her. Five others responded that they liked to reach out and touch Jasper but they did not have the strength to pet or brush Jasper as they did with their former pets. Not all of the participants enjoyed Jasper. One participant reported she never liked dogs, but enjoyed other pets. She reported keeping her distance from Jasper. She never had a problem with Jasper bothering her. She believed Jasper knew who gave the dog attention and who did not.

Caring for the Animals

This nursing home had several fish and birds in addition to Jasper. The bird cages were located at the end of each hallway. A large fish tank and bird cages were also found in the lobby. Several chairs were placed for residents to sit and watch the animals. Many participants reported spending time watching the birds and fish. The birds were described as “beautiful” and “noisy”. One woman wanted to have birds in her room but was physically unable to take care of them.

When asked about taking on more responsibility for the care of the animals, such as grooming the pets, feeding, and cleaning the bird cages, the first two participants were eager to help. One expressed interest in having a horse live in the court yard and taking care of it.

The remaining eight participants stated they did not want any more responsibility caring for the resident pets. Their reasons ranged from not wanting the responsibility on a daily basis, the lack of their mobility and ability to reach all parts of Jasper for grooming, and feeling that it was the nursing home staff’s responsibility to care for the animals. Two participants shared a story about Jasper being sprayed by a skunk and how the nursing staff had to clean Jasper. They
felt this responsibility was too much for them, especially when both occurrences happened at night. They also felt that they physically could not take care of the animals during these “emergencies”.

Six participants wanted this nursing home to obtain other pets. In contrast, two participants felt having more pets at the facility would cause more problems. The recreational therapist reported that prior to this study, the facility unsuccessfully attempted to adopt another dog. The first dog was a puppy who was described as being too “rambunctious” by many participants for this nursing home. The second dog, Oscar, was not fully house trained. The first participant interviewed had become best friends with Oscar. He took him for walks, fed him treats, and played ball with him. In return, Oscar spent much of his day with him and slept in his room at night. This resident had a difficult time adjusting to life without Oscar. He felt this facility should not adopt any more pets. He was afraid to become attached to another pet and then have it removed from the facility. He felt a dog should go through extensive training and testing for compatibility before being adopted.

**Future Living Situations**

The participants were asked the question, “If you had to move to another nursing home, would you check to see if there were any dogs that lived there?” All ten participants responded that they were comfortable at this facility. Six participants shared that having a resident pet would be an important factor in making their decision to move to another facility. The remaining four participants were not concerned whether the facility had pets. They were more concerned about the facility’s quality of resident care.
Conclusion

All ten participants enjoyed having animals around them. Most preferred Jasper over the fish and birds because they were able to physically interact with Jasper. Martha shared a common thought, "Oh, I love them. I think it is a good idea to have grownups with animals around them. That gives them something to concentrate on when people are not here."
CHAPTER 5

DISCUSSION

Our research provides evidence that there are common themes and differences in the behaviors of nursing home residents in relationship to the animals at a long-term health care facility. We have described several common themes and one significant difference.

Common Themes

All of the participants have previously owned pets. Thus, their interview responses were based on experiences as pet owners. We have determined five common themes: (a) the participants enjoy the companionship of pets, (b) the participants find pleasure in feeding the resident animals, (c) the participants find pleasure in petting the animals, (d) the participants are unable to care for the animals, and (e) for these participants a resident animal would be a factor in choosing a subsequent nursing facility. Thus, the participants demonstrate positive emotions in the majority of the common themes.

Companionship of Animals

All of the participants enjoy being around pets, with the majority of them favoring dogs over other animals. The participants who prefer dogs to other pets identify themselves as previous dog-owners. Most of the participants speak fondly of their own pets and have their rooms decorated with pictures of their pets from home. Polon and Babwin (1984) explain the intensity of owner-pet relationships, “Most people, when
talking to pets, use facial expressions and voice tones that resemble those used by lovers or adults when speaking to children” (p. 177). According to Barba (1995), in human-animal relationships, individuals may experience close companionship without the fear of being judged and accepted.

A client who has developed an attachment to a particular pet may be more inclined to participate in therapeutic treatment if the animal is incorporated into that treatment (Helfrich & Kielhofner, 1994). Activities used during occupational therapy treatment are based on a client’s interests. Therefore, if a client has an attachment to a particular pet that animal may be incorporated into occupational therapy treatment to increase the client’s motivation and participation.

**Feeding the Animals**

Many of the participants feed and talk to Jasper, the resident dog. The participants feed Jasper with dog treats they keep in their rooms. All of the participants who feed Jasper find this activity pleasurable. Thus the participants developed relationships with Jasper when feeding him. Some participants report that Jasper favors them over other residents because they give him special treats. This relationship between the residents and the dog provides an impetus for both parties to interact with each other whenever desired. Feeding the animal meets the physical and emotional needs of the residents. Interacting with animals may be a meaningful activity for individuals who have previously owned pets. Meaningful activities are activities that meet clients’ physical, psychological or social needs and are regularly used as a part of occupational therapy treatment (Trombly, 1995).
Petting the Animals

Another common theme among the participants is the pleasure they derive from petting Jasper. Some of the participants actively pet her. Others, who are not able to actively pet the dog due to physical limitations, manage to reach out and touch her as she passes. The benefits of physical contact with a resident animal are similar to those of pet ownership, such as increased cardiovascular functioning, increased self-care performance, increased musculoskeletal strength (Kongable et al, 1989), decreased heart rate, and decreased blood pressure (Loughlin & Dowrick, 1993; Rowan & Beck, 1994), all of which are important benefits for older adults. The use of animals in occupational therapy, through petting and grooming, can help facilitate these benefits in the elderly population.

According to Siegel (1993), individuals who own pets also have significantly lower stress levels than individuals who do not own pets. The elderly population are more susceptible to stress. Elderly residents of a long-term care facility are typically at a higher risk for stress due to their lack of socialization (Mallon, 1994). Using pets to engage elderly residents in occupational therapy treatment can reduce the residents' sense of isolation thus reducing their stress levels.

Caring for the Animals

Despite the pleasure the participants receive from their interactions with Jasper, most of them expressed displeasure when asked about assuming more responsibility for the resident animals. Several participants expressed their desire for the nursing home to
obtain other pets, however, they still stated their physical disabilities would restrict them from participating in the maintenance of the resident animals.

Occupational therapy uses purposeful activities, activities based on a client’s interests, in therapeutic treatment (West, 1984). When a client is unable to demonstrate the desired outcome of the treatment, such as caring for an animal, an occupational therapist adapts the activity to fit the client’s abilities (Trombly, 1995). The adaptation of tasks are accomplished through an activity analysis. Occupational therapists are professionally trained to perform an activity analysis.

Activity analysis is the observation of an activity reducing it to its physical, psychological and social components with different populations and in different environments (Trombly, 1995). A client who is aware of his physical limitations may not be aware of possible adaptations occupational therapists may make to improve his occupational functioning. Therefore, an occupational therapist can adapt the task and the environment to facilitate a client’s desire to care for an animal.

**Future Living Situations**

Finally, when the participants were asked if the resident pets would be a factor in choosing a subsequent nursing facility, the majority stated yes. These participants said they would inquire if the nursing facility had resident animals before making a decision to move.

Literature states that pet owners have a strong bond with their pets. This bond is facilitated by the unconditional love and acceptance the animal provides the owner (Mallon, 1994). This human-animal bond is important in understanding the impact
animals have on their owners and the impact the resident pets have on the residents of nursing facilities.

Seigel (1993) found that participants who were attached to their own pets prior to exposure to animal-assisted therapy pets demonstrated increased interaction with the therapy pets. This is in comparison to participants who either did not have pets or were not attached to their pets at home. Seigel determined the close bond between the residents and the animals increased the residents' desire to participate in physical activities that involved the animals' care. Occupational therapists who incorporate animals in treatment may be providing purposeful and meaningful activities for the clients. Occupational therapists' use of purposeful and meaningful activities fulfill individuals' physical, psychological and social needs (Trombly, 1995).

Differences

There is one significant difference among the participants' responses. One participant stated she has never liked dogs. She keeps her distance from Jasper and believes Jasper knows to stay away from her. Research demonstrates pet owners are significantly more attached to animals used in animal-assisted therapy than non-pet owners (Siegel, 1993). However, this particular participant was a previous pet-owner only to appease her spouse. The participant never liked animals and only tolerated them because it pleased her husband. This underscores the importance of choosing interventions that are based on the client's interest and receptivity. These interests are identified by asking the client about his life history (Helfrich & Kielhofner, 1994). Therefore, a client's interests may be used to derive purposeful and meaningful activities
and guide occupational therapists in the appropriate use or non-use of animals in therapeutic activities.

**Strengths**

There are five strengths of our study: (a) our interview process was interactive, (b) all of the candidates selected participated in the interview process, (c) our questionnaire was open-ended, (d) all of the subjects selected participated in the interview process, (e) the facility we chose for our study was supportive and (f) two researchers analyzed the results. These strengths ensure a high degree of validity and reliability.

We used the hermeneutic process in our study to ensure a high degree of validity. In other words, we achieved validity through the check-recheck method. After each interview, we drew conclusions from the participant’s responses. During the subsequent visit, and before interviewing a second participant, we reviewed our conclusions with the first participant for affirmation of our results. After receiving affirmation, we revised the questions based on our conclusions. We then used our revised questions with the next participant to try to determine emerging common themes.

Each participant we talked with answered all of the questions to the best of his ability and provided the interviewer with findings that support our research. Part of the criteria for our research was the ability of each participant to be cognitively functional and capable of verbal expression to participate in the interview process. Each of the participants met that criteria and voluntarily completed his interview.
Open-ended questions were used in the interview process. This provided the participants with the opportunity to give as much information as they felt appropriate to the topic being discussed. All additional information received facilitated the researchers’ ability to draw more valid conclusions of emerging themes through the method of explaining the participants’ answers.

All of the residents selected participated in the interview process. The researchers did not have to make any adjustments in the interview process due to conflicts of interest between the participants and the researchers which increases the reliability of our study.

The staff, at the health care facility we selected, was supportive of our study. They offered assistance by making willing residents accessible to the project. The health care facility reviewed our project before approving it.

Our study has a high degree of reliability. We maintained consistency throughout the interview process. One researcher conducted all of the interviews and maintained all of the personal contact with the participants. The other researcher transcribed all of the interviews.

Limitations

Limitations of this study should also be noted. There are three limitations of this study: (a) the hermeneutic process is ambiguous and subjectively interpreted, (b) the sample is small and non-random and, (c) the resulting data are qualitative in nature and, therefore, the data cannot be extrapolated to a larger population of individuals.
The researchers interpreted the responses of the participants and drew conclusions based on the responses. Having two researchers involved in the interpretation process instead of one researcher helped maintain consistency. In turn, this increases the validity of the data and reduces the bias in the interpretation process.

The participants were selected by the staff at the nursing facility. Each of the participants was asked a set of questions about his past experiences with pets and his current experiences with the resident animals. Each of the responses provided by the participants were unique. The researchers compared all of the responses to find common themes. Ten participants were used in this study. Ten participants is a small sample which limits the number of responses and the variety of experiences available for interpretation.

The results of this study are not applicable to the general population. Rather, the results indicate the impact resident animals have on the residents of one particular nursing home. More research needs to be conducted to determine the impact resident animals have on different populations and in different environments. With further research, occupational therapists may derive information useful in the analysis and implementation of activities to educate individuals and help them achieve the greatest independence possible.

**Clinical Implications**

Using animal-assisted therapy and resident animals has positive effects for elderly people (Savishinsky, 1992). Some of the effects of animal-assisted therapy are fostering sociability, enhancing morale, fulfilling needs to nurture and be nurtured, reducing
reliance on psychotropic medications and providing sensory stimulation (Savishinsky, 1992). The elderly population, who reside in long-term care facilities, typically have less socialization and nurturing relationships than they did living at home (Mallon, 1994). Incorporating pets into occupational therapy treatment can provide older adults with an increase in nurturing, social interactions and sensory stimulation.

Increased socialization and living in a nurturing environment can make long-term care facilities more similar to the home environment. The benefits of living with resident animals and animal-assisted therapy are similar to those of pet-ownership and the home environment, such as improved self-care (Kongable et al., 1989). Independent self-care is a common goal of occupational therapy treatment. Thus, occupational therapists may use animals in treatment to facilitate increased self-care activities by giving clients something to focus on, nurture and physically care for.

Occupational therapists could assist clients in self-care goals. By engaging the client and animal in grooming activities or by playing catch with a ball the client would increase functional range of motion which would allow him to increase his independence with self-care activities. Grooming activities may also be used as a tool to increase balance and trunk stabilization. The activity may be adapted so the client crosses midline and regains balance with each brush stroke. Increased balance and trunk stabilization also leads to increased independence in self-care.

Human-animal relationships provide individuals with a focus outside of themselves. Caring for an animal can trigger the release of endorphins which reduce the intensity of pain and stress (Barba, 1995). Pet owners also have significantly lowered
stress levels than non-pet owners (Siegel, 1993). Reducing pain and stress during occupational therapy treatment can help elderly individuals achieve their goals of independent self care.

The elderly who are susceptible to isolation and depression can obtain a variety of benefits from animal-assisted therapy: physical, psychological and social. The mere act of petting an animal provides a calming effect for elderly people and may ease their sense of isolation. Animal-assisted therapy can help elderly people in a variety of ways, such as increasing range of motion, strength and bilateral coordination; decreasing blood pressure and heart rate; increasing self-esteem, attention and cognition; and increasing socialization (Barba, 1995; Holcomb & Meacham, 1989; Kehoe, 1991; Kongable et al., 1989; Mallon, 1994; Reichert, 1994; Siegel, 1993). All of these activities help increase functioning and independence of daily activities in the elderly population.

Occupational therapists’ orientation is to increase the individual’s functional independence, coupled with an understanding of his or her impairments. Occupational therapists evaluate an individual’s abilities and use problem-solving strategies to find activities that are intrinsically motivating to help develop adaptive solutions and increased independence. Occupational therapists are in the unique position of coordinating meaningful activities and treatment interventions. Because of this fundamental link between meaningful activities and treatment interventions, the use of animals in therapeutic treatment is within the domain of occupational therapy practice.
Future Research

The multiple benefits derived from animal-assisted therapy and resident animals provide an impetus for future occupational therapy research studies. This research study would be valuable if replicated with different populations. Although the elderly population may benefit from animal-assisted therapy there are many other age groups that derive pleasure from human-animal interactions such as children, adolescents, young adults, and middle-aged adults (Barba, 1995; Kongable et al., 1989; Siegel, 1993).

Additional research would help occupational therapists understand the physical, psychological, and social effects of animal-assisted therapy on patients. To gain this understanding would provide occupational therapists with tools to promote meaningful activities through animal-assisted therapy. Using animals as a tool in treatment would help individuals regain functional independence.

Occupational therapists use purposeful and meaningful activities in therapy treatment to promote function. Purposeful activities also promote life satisfaction, competence, and independence (West, 1984). Occupational therapists may use animal-assisted therapy as a form of meaningful activities. The results of our study and further studies of different populations can help occupational therapists determine whether to incorporate pets into therapeutic treatment as a purposeful activity, not merely as a diversional activity. Further studies may also help educators determine whether animal-assisted therapy should be introduced into occupational therapy curriculum in higher education.
Conclusion

Older adults and animals develop physical, psychological, and social bonds with each other. This has been identified through interviewing ten residents of a local nursing facility. Older adults also derive physical, psychological, and social health benefits from animal-assisted therapy. We have concluded this through our extensive review of the current literature.

Animals and older adults need each other because of the unconditional love and companionship that bonds them together and the health benefits derived from human-animal interactions. Animals do not judge people by their illnesses or disabilities. Older adults with illness or disabilities demonstrate unconditional love to the animal. Animal-assisted therapy uses the human-animal bond to enhance a person's quality of life and to improve occupational performance. This study indicates that occupational therapists can promote meaningful activities through animal-assisted therapy.
References:


APPENDIX A

Consent Forms
REQUEST FOR SUPERVISORY COMMITTEE

This is to be completed by the student and transmitted to the Director of your program.

Student's Supervisory Committee: The Committee, consisting of a Chairman plus two members are to be identified by the student. Committee appointments are not final until approved by the Director of Occupational or Physical Therapy. PAS students need only the signature of their Research Advisor.

Carol Treacy       Sarah Kendziorski
Student(s) Name(s) (print)

Topic area or tentative thesis title: Animal-assisted Therapy

COMMITTEE RECOMMENDATION:

Chairperson/Research Advisor: Denise P. Meier
Program/Department: OT - GVSU
Member: Patti A. Giuffre
Program/Department: Sociology
Member: ____________________
Program/Department: ____________________
Signature: ____________________
Date: 12/17/98

rh#2/request.com
Mr. Bob Irwin  
Brookcrest Christian Nursing Home  
3400 Wilson SW  
Grandville, MI 49418  

Dear Mr. Bob Irwin:

Sarah Kendzierski and Carol Treacy are Grand Valley State University students in the Masters of Occupational Therapy program. The authors' thesis project is on the relationship between home residents who have previously owned pets and their interaction with the resident animals. Your facility was chosen because it has a resident dog, birds, and fish.

This thesis project will consist of a semi-structured interview with approximately twelve residents. This interview will determine the meaningful experiences the residents encounter having a resident pet in their nursing home.

The authors are requesting written permission to use your facility in this thesis project.

Sincerely,

Sarah Kendzierski

Carol Treacy

Bob Irwin, Administrator  
11/3/97  

cc: Dawn DeVries
This research project should be expedited based on the following reasons:

1. This research project involves approximately 20 participants from a local nursing home (Brookcrest Christian Nursing Home) to determine the effects the current resident pets (two dogs, birds, and fish) have on the residents. No new animals will be introduced to the nursing home by the researchers. Brookcrest has approved this study.

2. Research will involve audio-taped, semi-structured interviews with each individual. At the completion of the study the audio tapes will be destroyed.

3. Interviews will last approximately one hour and will be scheduled at the participants' convenience. Interviews will take place at Brookcrest.

4. This research project poses minimal risk to the participant. A potential risk is the participant may become emotionally involved in the interview. This may result in sad feelings and crying. However, the opposite effect may be elicited: happy feelings during reminiscing.

5. The participants are selected based on their cognitive ability to understand and communicate answers to questions asked.

6. Participation is voluntary. The participants may withdraw from the project at any time. Consent forms will be utilized for this study.
GRAND VALLEY STATE UNIVERSITY

Occupational Therapy
Release Form

Two students from Grand Valley State University, Sarah Kendziorski and Carol Treacy, are conducting a study on what the residents at Brookcrest Nursing Home think of their pets (Jasper and Sophie, the dogs; the birds and the fish). This study involves an interview which will last approximately one hour. The interviews will be audio taped then transcribed. At the completion of this study, the tapes will be destroyed. Each participant in the study will remain anonymous.

The participants in this study will be exposed to minimal risk. A potential risk is the feelings brought out during the interview about the current pets and/or about pets owned previous to the participant’s move to Brookcrest.

I, __________________________________________, hereby agree to participate in this study and give permission to the Grand Valley State University, Occupational Therapy program to utilize audio tapes during this interview process.

I understand the tapes will be destroyed upon completion of this study. I will remain anonymous in this study. I understand that I am participating in this study at my own will. If, at any time during this study (before, during, and after the interview process), I choose to withdraw from this research project I will not be asked why.

Signature: ___________________________ Date: _____________________

Name printed: _________________________________________________________________

Brookcrest Christian Nursing Home
3400 Wilson Ave., S.W.
Grandville, MI 49418

Guardian signature, if needed: _________________________ Date: _____________________

Witness:___________________________________ Date: _____________________

For further information/questions, please contact the researchers:
Sarah Kendziorski (616) 538-9280
Carol Treacy (616) 554-0469

For information/questions regarding your legal rights, please contact:
Professor Huizenga
Chair of Human Subjects Review Committee
(616) 895-2472
APPENDIX B

Questionnaire
QUESTIONNAIRE

1. What pets have you previously owned? ______________________________________________

2. How do you feel about the pets at Brookcrest? __________________________________________

3. Which pet do you enjoy the most? ______ Why? __________________________________________ 

4. How do you feel when the pets are around you? ________________________________________

5. How do you feel when the pets are not around you? ____________________________________

6. How often do you interact with the resident pet? ______________________________________

7. Tell me what things you do with the resident pet at Brookcrest. __________________________

8. If you had to move a new facility, would you want that facility to have a resident pet? ________