RIGHTEOUS PUPS
AUSTRALIA

"INTERACT" – RIGHTEOUS PUPS AUSTRALIA'S THERAPY DOG PROGRAM

Mission Statement

Interact, the Righteous Pups Australia Therapy Dog Program, has been created for the expressed purpose of increasing the quality of life for residents at Bethlehem Home for the Aged, Mercy Health and Aged Care facility, Australia.

We Aim to:

- Promote a general feeling of wellbeing.
- Provide unconditional love and acceptance for all residents.
- Improve resident's focus and attention.
- Interact with those who have difficulty communicating.
- Stimulate memory function.
- Encourage and aid speech functions for stroke victims.
- Provide simple physical activities for those who are mobility impaired (patting and brushing animals).
- Provide practice for specific physical therapy functions. E.g. throwing a ball.
- Create a system of feedback that collects and records the positive effects of the relationship between our therapy dogs, the residents and staff.

About Therapy Dogs

Therapy dogs first rose to prominence in Europe; from there they quickly spread throughout the United States, and are currently gathering momentum in Australia.

The first documented use of animal therapy was in 1792 when an asylum incorporated animals as part of the rehabilitation of patients. In 1942 a convalescing solider in New York requested a dog keep him company, subsequently other patients also requested companion dogs. In 1953, psychiatrist Boris Levison began to use his dog, Jingles, in his office during consultations.

Today, therapy dogs can be found working in a variety of residential and care settings: nursing homes, hospitals, hospices, rehabilitation units, mental health facilities, special educational settings, class rooms, senior citizen programs,

domestic abuse shelters, children's residential facilities, prisons, courtrooms, foster care and home health visits.

Therapy dogs are widely used to reduce loneliness, anger, stress and depression of those that interact with this type of initiative[1]. These programs show that regular interaction with a therapy dog has a significant and holistic benefit for its benefactors, especially when the dog becomes an integral part of the human habitat of a facility.

Benefits of Therapy Dogs

As the population of elderly Australian's increase there is growing interest in the promotion of successful and stimulating aging[2]. Over the last three decades, interdisciplinary researchers in veterinary medicine, public health and the behavioural sciences have begun to scientifically investigate and report back on the tangible health benefits of therapy dogs in residential facilities, especially as these benefits relate to the health and functioning of the elderly citizens[3].

The latest scientific data available suggests people can live longer, healthier and more enjoyable lives, while taking fewer medications, when given the prospect of interacting with therapy dogs[4].

Cognitive Benefits for Residents

Since 1996 researchers and advocates in the field of aged care have embarked on defining and working out the practicalities of accomplishing successful aging. The MacArthur Studies[5] into Successful Aging identified three significant components, which impact a person's quality of life as they age:

a) A high level of engagement with life,
b) Low risk of disease and
c) High physical and cognitive functioning levels.

Therapy dog programs elicit engagement and social interaction, which improves physical and cognitive functioning[6]. Dogs bring a sparkle to an otherwise sterile day, they are something pleasurable to observe, interact with, provide opportunities for play and laughter, and they rekindle old memories and provide a lively subject for conversation between residents, staff and visitors.

Dogs in an aged care facility break down barriers and decrease social isolation because they entice people to interact with the environment by transforming it into a more homelike social environment. Research confirms the presence of dogs in aged care facilities is intellectually and socially stimulating for residents and increases their levels of alertness, responsiveness and participation[7].

Dr Rebekah Johnson, Associate director for Research at the Center for Excellence in Aging, at the University of Missouri, conclusively demonstrated dramatic neurochemical changes in elderly residents after a quiet interaction with a dog.

- Phenethylamine (elation) increased
- Dopamine (energized) increased
- Endorphins (runners high, serotonin) increased - which saw a dramatic reduction in the need for prescribed antidepressants.
- Oxytocin (happiness) increased
- Prolactin (nurture) increased
- Cortisol (stress) decreased

Medical evidence tells us that these hormonal changes are undoubtedly linked with a person's overall sense of happiness and well-being and therefore interaction with a dog can become a preventative measure in the aging process and facilitate successful aging. Tests show us that when a human pats a dog, within minutes they get a massive release of beneficial hormones. For many researchers this study indicates that the interaction between human and animal may delay the production of bad body chemicals associated with diseases such as cancer.[8]

Physical Benefits for Residents

In 1991 Elliot and Milne studied the effects of a dog visiting and interacting with residents of a psychiatric institution over the course of a month. These residents predominately suffered from senile dementia or depression. Researchers found a dramatic deduction in residents challenging behaviours as a result of interacting with a dog[9]. In 1985 Haggard conducted a study and found when his subjects were greeted by a dog their blood pressure, heart rate and respirations reduced markedly, while the reverse occurred when they greeted another human[10]. Medical tests reveal a dramatic decrease in heart rate, blood pressure triglyceride and cholesterol levels of people around dogs[11]. One study conducted

showed that just 10 minutes in the company of an animal significantly reduced a person's blood pressure rate[12]. Merely watching dogs play can lower stress and blood pressure[13].

Dr Karen M. Allen is a research scientist in medicine at the State University of New York in Buffalo. Dr Allen et al and The American Heart Association conducted a study in 1999 of a number of stockbrokers who were on medication to control high blood pressure. Researchers gave the medication, Lisinopril, to all subjects, while half of the subjects were also given a pet to take home and care for. The research revealed the stockbrokers with pets experienced half the stress levels and increases in blood pressure, than those without pets and more than half of the stockbrokers with pets were able to go off their medications completely[14].

Further Studies reveal that the presence of, and interaction with, a dog, can create a buffering therapeutic effect against everyday stressors, by decreasing heart rate and blood pressure[15]. A study of 1800 AIDS patients conducted by the University of California, Los Angeles (1999) School of Public Health, found pets provided a level of companionship that reduced the likelihood of patients suffering from depression and increased their perception of being able to cope with the stress of their illness[16]. The study, which stands as one of the largest scientific studies examining the health benefits of pets, also concluded that those who didn't have a pet were twice as likely to report symptoms of depression. A further study conducted by Dr Odendall, a researcher for the Life Sciences Research Institute in Technikon, South Africa, found people who interact with dogs have increased levels of Oxytocin and Phenethylamine, hormones that produce pleasant feelings and a sense of psychological well being[17]. In many ways dogs have proven to act as an anti-depressant[18].

Animals can also help to hasten healing from injury and surgery[19]. Dr Richard Stein of the American Heart Association reported a number of studies that showed pet owners had shorter hospital stays, fewer doctor visits, take less medication for high blood pressure and cholesterol and find it easier to fall asleep at night [20]. Studies suggest animals keep your heart and the rest of you younger and healthier[21]. Friedmann and Thomas[22], and an Australian study conducted by Baker Medical Research Institute, found that pet owners had lower blood pressure, blood cholesterol and plasma triglycerides compared with non-pet owners, overall reducing the risk of heart disease[23]. Lynch, Katcher and Friedman showed that heart attack sufferers who owned pets had a four hundred per cent better chance of surviving the next year [24]. In 1995, Dr Erika

Friedmann, professor at the Department of Health and Nutrition Sciences at Brooklyn College, conducted the same study with a wider test sample and more refined measurement techniques.

The study revealed dog owners were actually eight times more likely to survive the first year after a heart attack[25].

Therapy dogs can also mitigate pain. Dr Jeff Burgess of the University of Washington Pain Center describes chronic pain as structural with bones, muscles, joints and nerves serving as sources for raw pain[26]. As chronic pain begins to build normal activity grinds to a halt and lethargy is closely followed by anxiety and depression. Dr Burgess suggests dogs make people more relaxed, elevate their mood, keep them moving, remove the focus from them and, by touching the dog, patients can block transmission of pain from the periphery to the central nervous system, shutting the pain processing centres down. Virginia Byers-Kraus MD, PhD a rheumatologist and associate professor of medicine at Duke University School of Medicine suggests pets have a powerful anxiolytic affect[27].

Therapy dogs are a positive antidote to inactivity, fatigue and arterial hypertension in elderly residents[28]. They are also good conductors for physical therapy for patients with arthritic fingers, who pet, touch and stroke them[29]. A one year prospective study of 995 non-institutionalized older people living in Canada found a positive association between pet ownership and physical health as assessed by the participant's ability to perform daily activities such as preparing meals, bathing, dressing, walking, and climbing stairs[30].

Studies conducted with Alzheimer's patients in long term care facilities in the United States document the short term effects of the presence of a therapy dog, which included a dramatic increase in socialization (i.e. Frequency of smiles, tactile contact, looks and leans, physical warmth, praise, duration of smiles) and improved physiological indicators (i.e. Heart rate, blood pressure and skin temperature). Lynch, Thomas and Weir (1993) examined marked physiological responses in dementia patients when a companion dog was introduced and patients were allowed to pat it: heart rates of dementia patients decreased 5 beats per minute[31].

Emotional Benefits

In 1974 a revolution began in aged care facilities in New York. It was named the 'The Eden Alternative'. Its conspirators identified loneliness and boredom as the catalysts for psychological suffering among nursing home residents[32]. Most residents struggle with the transition from independent living to residential care, and consequently many experience moderate to severe levels of anxiety and depression[33]. The Eden Alternative sought to make residential care more homelike and positive so it introduced animals and plants into the human habitat of care.

Recreational programs took on a new perspective and residents reacted optimistically. John Morley, Gerontologist, St Louis University Medical Centre, reported, "as soon as the animals arrived residents who normally confined themselves to their rooms started coming out, depressed residents began to smile and social interaction increased and young children started to come to visit their grandparents". Families of the residents were surveyed and 70% believed there was a definite increase of a sense of happiness and fun since animals became an integral part of the facility[34].

Many Australians develop a close and intimate bond with their pets and many residents would have grown up with family pets. Sadly, some residents have to say goodbye to their canine friends in order to enter the residence. Dog therapy programs can rekindle fond memories for residents and increase their sense of self. Residents who have a mental illness or low self-esteem tend to centre their focus on themselves. Animals have the effect of drawing a person's attention away from themselves and into interacting with their surroundings[35]. Many believe this animal-human bond is stimulated by the dog's ability to accept people as they are and therefore provide an open and emotionally safe climate for relating[36].

The elderly and infirmed often find themselves socially isolated and alone [37]. A study reported in the Journal of the American Geriatrics Society (March 1999), maintains pets can become a 'buffer' for the psychological impact of social isolation, especially among people who lack a strong social support system. Many studies support the notion that pet ownership or regular contact with animals will reduce blood pressure, the number of medical consultations, feelings of helplessness, loneliness, depression, and social isolation[38]. According to Banks and Banks, even a weekly visit of a dog can produce as significant reduction in loneliness and social isolation for elderly residents[39]. A prospective study examined the effect of visiting and resident dogs on elderly people in Australian nursing homes, over a 23 month period[40]. They studied the measures

of tension such as depression, anger, vigour, fatigue and confusion. Results indicated that where dogs were integrated into the day-to-day functioning of the facility, there were significant decreases in tension, confusion and fatigue, and increases in vigor.[41]

There have been many studies conducted into the importance of physical touch upon a person's health and wellbeing. Babies deprived of touch often died or had extreme difficulty developing healthy and intimate relationships later on in life. For the elderly, touch is vital but often hard or inappropriate to accept from other human beings. Companion dogs can provide a bridge for touch and there is something irresistible and comforting about the warm, furry coat of a dog[42].

Patting a dog can also endorse physical therapy goals as it encourages the use of hand- eye coordination, movement of hands, arms and actions like reaching and turning[43]. Dogs have a great ability to satisfy a person's need for touch: to be touched with warmth and affection and without judgment or prejudice[44].

Alzheimer's disease is a slow and progressive neurological disorder that leads to cognitive dysfunction, incontinence, vocalizations and behavioural disorders like agitation, aggression and wandering. Pharmacological interventions are able to alleviate some behavioural problems. There are also proven non-pharmacologic interventions like utilizing a companion animal. Studies conducted with Alzheimer patients demonstrate a range of benefits such as increased socialization, improved social behaviours and decreased levels of agitation. One study in particular conducted by McCabe et al (2002) of an Alzheimer's ward over a four week period reported significant decline in a host of problem behaviours, fewer episodes of verbal aggression and mood disorders and lower levels of anxiety, through regular contact with a companion dog[45].

Kongable et al reportedly found the presence of a dog had a positive impact on patient's social behaviours[46] Batson et al concluded that pet therapy was a valid intervention as it meets the psychological needs of patients by providing communication and physical contact[47].

Relational Benefits

Dogs are extremely social creatures who overcome language and interpersonal barriers, to interact without bias or prejudice[48].

Dogs genuinely like people and create an atmosphere of joy and laughter for each interaction. In addition, they also activate ones sense of humour amidst the routine of daily life, which is often uneventful for aged care residents. McCulloch studied psychiatric outpatients and all of his patients reported animals helped them laugh and maintain a sense of humour despite their personal circumstances. Today, laughter is recognised as a powerful medical intervention as animals often 'tickle the funny bone'. A 1981 Melbourne study by the Australian Joint Advisory Committee on Pets in Society, evaluated the influence of pets on morale and happiness on frail elderly residents at Caulfield hospital[49]. Six months after the arrival of a golden retriever, the sixty residents were rated as happier, more alert, and responsive; they smiled more, laughed more and displayed more optimism about life. The psychosocial benefits of therapy dogs in institutional settings are generally associated with increase in social and verbal interactions: residents tend to smile more, talk more, reach out towards people and objects, exhibit more alertness, attention and experience more symptoms of well-being and less depression[50].

Therapy dogs have a proven history of being a 'social lubricant' for breaking the ice and facilitating residents relating to other residents and staff. They give them something shared to think and talk about. They provide a source for touch, affiliation and companionship. They stimulate residents to engage in, and interact with, something beyond themselves and the daily routine of a residential care facility. They change the fabric of a care facility and boost overall morale. For some residents it can heighten self-confidence, esteem and even sense of purpose in life. Therapy dogs also lower stress levels and help residents to cope with illness, loss and depression. Furthermore, they rekindle resident's memories of their own pets and invariably elicit a friendly response[51].
The majority of pet owners talk with their pets and even confide in their pets, and elderly people with home assistance reportedly confided in pets more than other human beings[52]. As expressed earlier, people commonly experience a decrease in blood pressure and stress when relating to dogs, with the reverse often the situation when relating to people, thus indicating that people are more relaxed conversing with animals, even unfamiliar animals, than with people. Levison (1962) suggests dogs make excellent confidants as they are sympathetic; they appear to listen and cannot tell[53]. For people between 65-78 years a major source of conversation occurs with companion animals. A cross-sectional study of 128 elderly dog owners found that 75% of men and 67% of women felt that their dogs were their only friend and they owned dogs for companionship, emotional bond, usefulness and loyalty[54].

Companion dogs are intuitive and compassionate and can detect illness and sadness. These dogs have a genuine desire to provide companionship and comfort to those who need it. One of the most pressing issues for elderly residents is not disease, but depression. Loneliness creates stress and can become traumatic. Dr Lynch says real loneliness, "begins with an inability to communicate"[55]. Companion dogs are a powerful antidote for loneliness and depression - and an easy pill to take[56]. Life in a care facility can become lonely and tedious but a canine visitor can break routine and stimulate the mind in remarkable ways, increase morale and optimism[57]. Banks & Banks conducted a study of three groups; the first group interacted with a therapy dog for 30 minutes each week, the second group interacted with a therapy dog, three times a week for 30 minutes each time and the third group didn't have a dog at all. The groups that had interaction with the companion dog showed a decrease in loneliness and an increase in optimism[58].

Staff Benefits

Working in a residential care facility can be stressful and emotionally draining. It takes special people, with a spirit of compassion, to lay down their lives for the needs and care of others. As a by-product of many of the studies recorded, the benefits elicited by companion dogs also extended to the staff. In addition to providing staff with a much welcomed stress release, the beneficial impact of the dogs on resident's further aids the staff in providing the care required by residents.

A longitudinal study was conducted in an Australian retirement village in Australia on the perceptions and social interactions between staff and residents. Winkler et al[59] conducted behavioural observations and interviewed staff and residents. Participants indicated social interaction increased within 6 weeks of placing the dog in the facility, but returned to a similar baseline for residents after a 22-week period. However, staff interaction levels remained high.

In conclusion, within time the dogs had become part of the furniture for the residents while, at the same time, continuing to produce the cognitive, physical, emotional and relational abovementioned benefits, but they provided an ongoing positive impact on inter-staff relating[60].

Spiritual Benefits

Animals have an innate ability to capture our attention and captivate us with their presence and behaviour. In the process it helps us to be able to have physical contact with another living being of creation. These days, there are so many legal ramifications related to human to human contact that often an elderly resident may miss out on that physical connection. An avid researcher and psychiatrist Dr Michael McCulloch states, "Touch is one of our primary needs when we're born and one of our last needs to go." In long-term facilities, residents are often sorely lacking the feeling that they are needed. Pets allow them, even if for a short time, to be nurturers once again.

Also, in a very real physical sense, residents can stroke their warm, furry visitors, facilitating social behaviour and encouraging physical movement[61], and helping to meet their innate need for touch.

Economic Benefits

Many studies conducted nationally and internationally confirm the financial benefit of pet companionship.

Studies conducted by the Cambridge University in England and the University of California in Los Angles both found pet ownership translated to improved overall health and fewer medical visits[62].

The Journal of the Royal Society of Medicine reported a study conducted in the United Kingdom that found after only one month post acquiring a dog or cat, seniors had 50% fewer minor medical problems like painful joints, hay fever, insomnia, constipation, anxiety, indigestion, colds and flu, general tiredness, palpitations or breathlessness, back pain and headaches[63]. The study also revealed pet owners visited their general medical practitioners 21% less than non-pet owners[64].

An Australian study of 6000 households found dog and cat owners required less medication for blood pressure, cholesterol, sleeping difficulties and heart conditions. A study conducted across New York, Missouri and Texas found medication expenses dropped in nursing homes that allowed pets. These medication expenses dropped from an average of $3.80 per patient, per day to $1.18 per patient, per day where animals and plants become an integral part of the environment[65].

The Australia People and Pets survey (1994) confirmed pet ownership equated to a $988 million yearly saving on the health care system[66].

Research conducted by Morgan Research in Australia, estimated health savings for pet owners at $790 million on health expenditure, a further saving of $44.754 million for internal medical visits and pharmaceuticals savings were estimated at $31.430 million and hospitalisation $186.3 million, altogether pet owners as compared with non pet owners saved $262.484 million of our national health budget[67].

Research findings released at the 8th International Conference on Human-Animal Interactions, in Prague, conclusively demonstrated that interaction with animals had tangible impact on health benefits for elderly persons and can assist to lower medical and pharmaceutical costs, shorten recovery times and promote a holistic sense of well-being.

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