CHAPTER 4

THE CURRENT STATUS OF ANIMAL-FACILITATED PSYCHOTHERAPY

4.1 Introduction

Although animals are currently used to assist people in various ways, this chapter will accentuate the role of animals in psychotherapy as applied in psychiatry. Other disciplines using animals for psychological support are:

- Paramedical disciplines: Physiotherapy\(^{94}\) and occupational therapy.\(^{99}\)

- Social work: Animals are used as social support in old age homes, hospices and prisons; as guide dogs for the blind, signal dogs for the deaf, service dogs for severely physical handicapped persons who have to move around in wheelchairs; and social dogs for mentally retarded children to provide positive stimulation from the environment.\(^{100,101}\)

- Education: Animals are used in formal education as well as in schools for special education\(^{102,103}\) to enhance learning. Animals are used as models to explain certain concepts such as responsibility to others and the cycle of life.

As often occurs in academic developments, various terms have been suggested to describe the same phenomenon. In the case of the use of animals in therapy, apart from animal-facilitated psychotherapy, "pet therapy" (PT), "pet psychotherapy" (PPT), and "pet-facilitated psychotherapy" (PFP) are used. Jules Cass defined "pet-facilitated therapy" (PFT) as:

"the introduction of a pet animal into the immediate surroundings of an individual or a group as a medium for interaction and rela-"
tionships, with the therapeutic purpose of eliciting physical, psychosocial and emotional interaction and responses that are remedial". 104

Alternative terms used for "facilitation" were "pet-mediated therapy" (PMT) and "pet-orientated psychotherapy" (POP). Burch, Bustad, Duncan, Fredrickson and Tebay105 added two more terms: "animal-assisted activities" (AAA), which:

"provide opportunities for motivational, educational, recreational, and/or therapeutic benefits to enhance quality of life and are delivered in a variety of therapeutic environments by a specially trained professional or volunteer, in association with animals". 105

and "animal-assisted therapy" (AAT), which is

"a goal-directed intervention in which an animal is used as an integral part of the treatment process". 106

In the latter case the therapy is applied by a health service professional with specialised expertise, such as a psychiatrist. For the purpose of this study in psychiatry, it was decided to use the term animal-facilitated psychotherapy (AFP), because animal is a more inclusive term than pet and their role in psychotherapy is to facilitate maintenance or improvement of mental health.

4.2 Animals in therapy before 1960

Despite the fact that Levinson has been recognised as a pioneer in the field of animal-facilitated psychotherapy since the 1960’s human-animal interaction studies were established, animals were used to this avail long before the new field of human-animal interaction studies was established. Animals were systematically
used to benefit people in Gheel, Belgium as early as the middle ages. In the ninth century, a programme was founded where citizens provided family care to handicapped people. An integral part of this programme was to use animals as a "therapie naturelle". In the 1790s a social therapy institution was founded in York Retreat, England by the Society of Friends. A Quaker, William Tuke, started this retreat because he was unhappy with the way patients were treated in psychiatric hospitals and asylums. He appointed a physician who was opposed to restraint methods and potent drugs. Instead, the patients received love, kindness, understanding and a manifestation of trust. A part of this approach included contact with animals such as rabbits and poultry. One of the aims was to provide patients with an opportunity to learn self-control by caring for the animals.

In 1867, Bethel was founded in Germany, where animals were kept to benefit handicapped people. It began as a home for epileptics, but is now an extensive centre for the care of disabled people with more than 5 000 patients and more than 5 000 personnel. Animals used are birds, cats, dogs, horses, farm animals and wild game in a park.

There may have been an unknown number of institutions and therapeutic programmes in which animals were used to facilitate therapy for people with psychiatric conditions, but they were not publicly recorded. The rest of the history of animal-facilitated psychotherapy will be discussed from the contributions of Levinson onwards.

**Animal-facilitated psychotherapy: 1960-1979**

Boris Levinson published his first work in this field in 1962. The title was "The dog as co-therapist". This was followed in 1964 and 1965 with titles such as "A special technique in child psychotherapy" and "Pet psychotherapy: Use of household pets in the treatment of behavior disorders in children". These pioneering works culminated in two books in 1972, "Pet-oriens-
tated Child Psychotherapy" and "Pets and Human Development". Levinson noticed that his own pet could play a role in facilitating communication between a withdrawn child and himself as therapist, because he could reach out to the child via the dog. His psychiatric practice was at his home in New York, where he began using the term "pet therapy". Levinson was convinced that pets could play a psychotherapeutic role both in institutions, and in ordinary people’s homes. The main aims of his approach were to:

- establish non-threatening contact between child and pet before therapy could begin;
- allow the animals to act as bridging objects (third party) between disturbed communication and normal communication; and
- use the animals to break down certain psychological barriers.

In the 1970s the husband and wife team, Professor Samuel and Doctor Elizabeth Corson, used animals at the psychiatric hospital at the Ohio University, where both occupied positions. Because they had only used animals as part of the therapy, they preferred the term "pet-facilitated psychotherapy". The rationale for using pets was to provide positive non-verbal communication based on the abilities of pets to offer love and tactile reassurance. The aims of their therapy were to:

- improve non-verbal communication of and between patients;
- stimulate self-confidence; and
- use animals for reality orientation.

In one study, 50 psychiatric patients were introduced to pet-facilitated psychotherapy mainly because other therapeutic
methods had failed. All the patients showed some to marked improvement, except for three who did not accept their pets.109

Some standard books also started to appear, contributing to the broader field of human-animal interaction, but also including references to animal-facilitated psychotherapy as such.

The title of the first book was "Pet Animals and Society" with R S Anderson111 as editor. The contents reflected contributions from probably the first official international meeting on human-animal interaction on 30 and 31 January 1974, in London. Apart from the Corson’s110 chapter on "Pet-facilitated psychotherapy", which was a summary of their earlier work, Levinson, predicted in his "Forecast for the year 2000":

"Suffering from even greater feelings of alienation than those which are already attacking our emotional health, future man will be compelled to turn to nature and the animal-world to recapture some sense of unity with a world that otherwise will seem chaotic and meaningless".111


According to Katcher,70 a psychiatrist from Pennsylvania University, pets could have the following psychological advantages:

- to relieve loneliness;

- to fulfil a nurturing need; and

- to occupy people in such a way that they remain active and thus to combat idleness.

These three functions can help to relieve psychological depression and social isolation. Furthermore, other advantages are:
- to use animals as attachment figures which can be touched and pampered;

- to enjoy the aesthetic value of pets; and

- to experience a feeling of safety and security.

These functions can help to relieve anxiety and to enhance psychological stimulation.

Another advantage is to achieve relaxation through the use of animals for physical exercise.

Katcher also found that:

"A therapist is perceived as more trustworth.y and less threatening because of the animal’s presence, and the animal provides a safe and stimulating topic for discussion. Once contact and trust are established, therapy can move forward".\textsuperscript{112}

McCulloch\textsuperscript{94} did a study on psychologically depressed outpatients who owned pets. He reported that the patients continuously referred to the support their animals provided. Some of the advantages mentioned were:

- companionship;

- drawing attention away from matters that bothered them;

- a feeling that the animals needed them;

- love;

- relief of a feeling of desolation; and

- providing play and humour.
McCulloch felt that animals could be prescribed by psychiatrists for chronically ill patients or disabled persons, for people feeling isolated and lonely, people who have no hope for the future and those who have a feeling of hopelessness and low self-esteem, and people who lack a sense of humour. However, he warned that the following aspects should be taken into consideration:

- previous experiences with pets are a recommendation;
- monitor the situation if a pet should die;
- match patient and pet;
- coordinate a prescribed pet with other therapeutic approaches;
- choose the right time to introduce a pet as therapy;
- evaluate the total situation to ensure that the environment is suitable to keep animals; and
- if animal therapy has no beneficial effect, make sure that the situation does not deteriorate before other support is given.

Beck, Seraydarian and Hunter\textsuperscript{113} studied the effect of the presence of animals in a therapy environment during the rehabilitation of psychiatric inpatients. The aims of the study were to evaluate

- the impact of animals on therapy; and
- the activity of groups exposed to animals.

Two matched groups of psychiatric inpatients in their twenties were used, one group of eight and another of nine. Daily sessions of the group were held for 11 weeks in identical rooms,
except for the presence of caged finches in one of the rooms. All patients were evaluated before and after the sessions, using standard psychiatric rating scales. The group that met in the room that contained animals showed significantly better attendance and participation during therapy sessions. They also improved significantly in areas that were assessed by the Brief Psychiatric Ratio Scale’s subscale.

In 1981, two books were published. The one, "Interactions between people and pets" by Bruce Fogle\textsuperscript{114} was a compilation of contributions to another symposium held in London during 1980. Two chapters, "Pet-facilitated Therapy in Human Health Care" by Cass\textsuperscript{104} and "A Child Psychiatrist’s Perspective on Children and their Companion Animals"\textsuperscript{115} dealt with animal-facilitated psychotherapy. The first of these chapters referred to many practical and general aspects of animal-facilitated psychotherapy and the second explained the positive and negative interaction between children and pets. Family drawings and case reports were added to establish the role of companion animals in the development of children.

The second book, "Between Pets and People - the importance of animal companionship", was written by Alan Beck and Aaron Katcher.\textsuperscript{82} In a chapter, "Pets as therapists", they discussed the variety of circumstances in which pets can play a therapeutic role, i.e. from home to institution environments. They also discussed the then current research in this field. The authors warned against "bandwagon" contributions and said that pet therapy had become the "darling of the mass media":

"A major research area that remains to be addressed is simply to identify just what pet therapy is ... We need to balance enthusiasm about the value of pet-facilitated therapy with guidelines for its judicial use and continued research to ‘fine tune’ its application and develop its potential diagnostic
value. Most of all, we must conduct proper studies to validate its effectiveness so as to justify its implementation along with other forms of appropriate therapy". Bruce Fogle’s second book on human-animal interaction was published under the title "Pets and their People". He also added a chapter, "Pets in therapy", in which case reports and studies were discussed. He emphasised the proper defining and planning of programmes, before they are implemented.

Katcher and Beck also published their second book, "New perspectives on our lives with companion animals".

The next year indicated that some "knowledge explosion" in the field of human-animal interaction had taken place after the cautious beginning of the sixties and seventies. Three notable books appeared in 1984. The first by Phil Arkow, "Dynamic Relationship in Practice: Animals in Helping Professions", covered a wide range of topics, but did not deal with psychiatry as such. However, two useful contributions which could be of importance in animal-facilitated psychotherapy were made in this book, viz The American Veterinary Medical Association’s Guidelines for Veterinarians in Animal-facilitated Therapy Programs and information on pet policy in nursing homes, animal visitation regulations and pet programme guidelines.

The second book, "The Pet Connection - its influence on our health and quality of life" by Anderson, Hart and Hart, was again a compilation of presentations at conferences on human-animal interaction in Minnesota and California-Irwin in 1983. Although quite a few studies referred to the use of pets for emotionally disturbed and handicapped children, autistic children, the aged, prisoners, people with depression in nursing homes and the chronically ill, no specific reference was made to the use of animals in psychiatric therapy.
The third book, "Pets and the Elderly - the therapeutic bond", by Cusack and Smith focused on animals for the elderly, and provided useful practical information on how to implement a successful animal-facilitated therapy programme. They referred to a number of programmes that worked well in the USA and supported the idea that pets could also be prescribed as therapy. The following two programmes involved psychiatric patients.

A study conducted under the supervision of Gloria Francis, Professor of Psychiatric Mental Health Nursing at the Virginia Commonwealth University, investigated the value of companion animal visitation to semi-institutionalised elderly people living in group homes. Two homes in which the residents were chronically mentally ill persons, who had been discharged from psychiatric facilities, were used for the study. Animals with four handlers visited the one group once a week for three hours during an eight-week evaluation period. The control group received human visitors. Each group was pre- and post-tested for eight variables, viz health self-concept, life satisfaction, psychological well-being, social competence and interest, personal neatness, psychosocial and mental function and depression. The residents who interacted with the animals improved in six out of the eight areas mentioned. No differences were found for personal neatness and health self-concept. No improvement was found among the control group in any of the areas. The conclusion was that it was a simple and inexpensive but successful therapeutic approach.

Mary Thompson and colleagues conducted a study at the Coatesville Veterans Administration Medical Center to examine the parameters of behaviour change that may occur in psychiatric patients exposed to animal contact, and to establish guidelines for implementation and operation of pet-facilitated psychotherapy in institutions. The study was conducted among an experimental and control group of 10 patients each and the ages ranged between 40 to 60 years. While the control group was not exposed to animal interaction over a six-week period, the experimental group interacted with animals during 18 sessions
over the same period. Sessions lasted 45 minutes and included instructions on animal care and handling, petting and playing with the pets, as well as a group discussion involving animals. Dogs, cats, parakeets and guinea pigs were used. Overall results indicated that patients with moderate functional impairment improved significantly over both the control group and those with low and high impairment in the experimental group. The conclusion was that patient selection for pet therapy is important.\textsuperscript{89}

A problem that arose from these publications which appeared in close succession in the early eighties, was that many cross-references were given for the same therapy programmes and that the contributions were not always representative of new progress.

In 1987 a book, "The Four-Footed Therapist - how your pet can help solve your problems", was published by a psychotherapist, Janet Ruckert.\textsuperscript{119} She used her dog during therapy sessions and offered simple exercises one can do at home with a pet to help face and solve problems such as loneliness, anxiety, passivity, lack of self-confidence, job stress, divorce, conflict in relationships, child-rearing and ageing. She also provided guidelines to families who wanted to adopt a pet and hints on how to introduce pets to infants and to teach children responsibility.

In 1988 "Pets and Mental Health" by Cusack\textsuperscript{120} appeared. One chapter was devoted to "Psychiatric Patients" and many previous studies were repeated once again, but there were also updated studies and new case reports. She quoted a report by the Director and a Professor in Psychiatry on patients in a psychiatric halfway house as follows:

"Pet dogs in a psychiatric residential setting provide a wide spectrum of helpful benefits to patients - uncritical affection, comfort, tactile resonance, the joys of energy release, the opportunity for responsibility, the bridge
to relationships with fellow residents as well as outside neighbors. The dogs exert a stabilizing influence upon the residents' lives. The capacity to give and accept love helps the psychiatric patient feel equal with his pet at a deep emotional level. Since egalitarian socialisation is an integral element in the development and formation of friendships, the relationship with a pet is a rich opportunity to bring new capabilities and a feeling of increased confidence in human relationships".  

The key concept in this quotation is egalitarian socialisation fulfilling deep emotional needs.

4.5 Animal-facilitated psychotherapy: 1990-1999

Draper et al\textsuperscript{122} were still unconvinced by the scientific research of the previous three decades and they also found the terminology confusing. They said that, despite claims of effectiveness in treating mental and emotional illness, almost no cases were described in psychiatric literature.

To improve research on the subject, they proposed rating scales to generate numerical values for statistical analysis from videotaped observations. For this purpose they exposed 10 referred cases which had diagnoses such as dementia, post-traumatic brain syndrome and mental retardation to interaction with a dog. All patients scored various degrees of positive responses. Blind ratings indicated high intrarater correlations.

Nielsen and Delude\textsuperscript{123} introduced a tank of guppies and a cage of guinea pigs into an interim residence for former psychiatric inpatients. The residents showed great concern for the animals and quickly developed social relationships with them. All residents talked to the guinea pigs and most petted them. They
also commiserated with the surviving guppy after the death of its companion. Responses on a questionnaire indicated that the residents found the presence of the animals beneficial and strongly approved of their continued presence. After the termination of the study period, additional fish were acquired by the residents and proposals were made to upgrade the guinea pig holding area.

However, the residents were unable to maintain this level of concern without the researcher’s involvement. The animals later had to be removed from the home. The researchers concluded:

"This ultimate outcome raises the issue of long-term efficacy of the use of animals as therapeutic adjuncts among psychiatric and other populations - an issue on which adequate research is lacking".123

Walsh, Mertin, Verlander and Pollard124 did a study on the effects of the presence of a dog among patients with dementia in a psychiatric ward. Two matching groups with regard to age, gender and diagnosis were used, one being a control group. Assessment included general daily functioning, physiological measures, namely blood pressure and heart rate, as well as a measure of general ward noise levels. Results indicated significant differences in the experimental group with relation to decreased heart rate, but not blood pressure. The latter was probably due to the various medications the patients had received. Ward noise levels were also substantially lower in the experimental ward when the dog was present.

Banman125 used animals for adolescents in a psychiatric facility. The research finding suggested pets may have various therapeutic functions when working with young persons in a psychiatric environment.
Voelker\textsuperscript{126} reported on the status of animal-facilitated therapy in an article in the Journal of the American Medical Association, under the title "Puppy love can be therapeutic, too". It is estimated that there are about 2,000 animal-assisted programmes in the USA. The most common of these programmes are in psychotherapy and physical rehabilitation, and the dog is the animal most often used in these therapies. At the Rehabilitation Institute in Chicago, dogs are evaluated by a group called Chenny Troupe, prior to entering a therapy programme. Only about 3% of dogs tested are found suitable. This group provided dogs for about 6,000 patients. Despite the extensive use of animals in therapy, there is still a need among doctors for proof of the positive effects by scientific methods:

"Some researchers have recognized that traditional study designs won’t adequately capture outcomes from animal-assisted therapy".\textsuperscript{126}

Voelker\textsuperscript{126} reported on Katcher’s research, on which he had spent a few years measuring the effects of animal-assisted therapy on children with attention-deficit disorders and conduct disorders. A standard clinical group was used with a control group. The clinical group spent up to four hours of their school week in a special programme where they had to care for animals such as gerbils, hamsters, chinchillas, a pot-bellied pig and a dwarf goat. They also learned how to handle and present their animals at hospitals and nursing homes. Within three months of animal interaction the children had a decrease in symptomatology. The percentage of decline was equivalent to one standard deviation. During the same period, the control group experienced about 35 episodes of very aggressive behaviour, compared to none in the clinical group. This programme had already continued for more than four years.
Zisselman, Rovner, Shmuely and Ferrie assessed the efficacy of using animals' companionship programmes for hospitalised elderly persons, by evaluating the effect of pet therapy on 58 geriatric psychiatric patients. Disorders of the patients included depression, dementia, Parkinson’s disease, stroke and accompanying medical disorders. Patients were randomly assigned to the project, which included visits with dogs, brief talks about dogs or an exercise intervention for one hour per day for five days. Assessment was done using the Multidimensional Observation Scale for Elderly Subjects before and after the intervention week. The results showed no significant treatment differences between the two groups. However, irritable behaviour scores improved in women with dementia.

One of the latest books in this field is "The Waltham Book of Human-Animal Interaction: benefits and responsibilities of pet ownership" edited by Robinson. In the chapter, "Pets in Therapeutic Programmes", it is mentioned that animal-facilitated psychotherapy continues to develop and that the applications are expanding. Burch reported on a study where animal-facilitated psychotherapy was used effectively with children who had prenatal exposure to drugs, as a result of their mothers using substances such as crack, cocaine or heroin during pregnancy:

"These children often have health, neurological and behavioural problems, attention deficits and language or other developmental delays. Often socially withdrawn and resistive to touch, many of these children will respond to an animal."  

Another book, published in the same year, "Animal-assisted Therapy - a guide for health care professionals and volunteers" by Bernard, does not deal with therapy as such, but describes a step-by-step approach on how to initiate and manage animal therapy programmes.
The latest book in this field is Wilson and Turner's131 "Companion animals in Human Health". The contents was based on selected papers presented at the 7th International Conference on Human-Animal Interaction in 1998. Although health aspects are dealt with, there is no specific chapter on PFP.

4.6 A review of literature on animal-facilitated psychotherapy

Literature since the nineties on the use of animals in psychiatric context is scanty. One of the reasons could be the lack of a proper theoretical rationale for therapy. Other negative remarks have been that the effectiveness of one programme did not last very long and that patients in the other programme showed very little improvement. In the first instance, it is clear that stimulation to focus attention away from the self will not carry on automatically. It would be the same as to report that patients took their medicine the first month while the nurse supervised, but lost interest in medication when the nurse did not control it any more. Concern about this point can be solved very easily (as other long term programmes indicated) by keeping the involvement going with the continuous support of professionals. Two aspects are also important in the second negative report. Five days are far too short to evaluate an animal programme and secondly, one should know exactly what should be assessed. The aims were too general, the conditions too varied and the assessment did not focus on particular parameters. Despite these less positive results, most studies were properly structured, statistically analysed and scientifically reported.

Reports on animal-facilitated psychotherapy since the sixties can be divided into three phases. The first two decades brought awareness of the possible advantages animals may have for psychiatric patients. During the eighties (especially the first half thereof) awareness developed into the "bandwagon syndrome". In a short time many reports and books appeared on animals as adjuncts in therapy. This was followed by criticism from scientists in the field, that claims cannot be made if studies do
not meet the criteria for scientific methods. During the third phase in the nineties, results were less ecstatic, more balanced, more tentative and scientifically researched and reported.

Despite the hype in the early eighties, the field of animals in therapy failed to attract funding for elaborate research in this field. Possible sponsors were encouraged as follows:

"... much more attention has been given to the scholarly investigation of human-animal interaction but significant support still eludes the field ... A few large grants would, however, change the negative or neutral attitudes of many academics since there is nothing quite like the lure of significant research funding to concentrate the mind and convert even the most cynical of sceptics".

One reason for a lack of financial support could be that the use of animals in therapeutic situations is underreported.

Levinson found in a survey among 435 psychotherapists that 39% of them used animals in therapeutic procedures. This could be an indication that, although not many publications appear on the subject, animals are used to play a subtle but positive role in improving troubled people’s existence. Furthermore, that this beneficial effect is understood and used by a significant number of psychotherapists.

Rice, Brown and Caldwell found that, out of 190 members of the American Psychological Association in the USA, 21% reported some use of animal content in their psychotherapy programmes.

In an overview by Phil Arkow, he reported in 1977 in the USA that 15 humane societies were involved in animal therapy programmes and eight universities had research projects inves-
tigating such programmes. In 1984 he reported that 75 humane society programmes and 44 academic projects were being conducted. 89

In a survey among psychotherapists by Wolff 134 in the USA, it was found that 48% of those institutions who participated in the survey used animals as facilitators in psychotherapy.

Blackshaw and Crowley 135 conducted a telephone survey among nursing homes, retirement villages, institutions for the elderly and handicapped in hospitals in Brisbane, Australia. Of the 103 that replied, 68.6% had resident pets and 11.8% said that they had conducted pet therapy programmes before.

Hughes 136 did a survey among 250 occupational therapists and found that of the 70% who returned the questionnaire, 11% used animals as part of their therapy.

Hume 137 reported that animal-facilitated therapy can now also be traced on the Internet World Wide Web as follows:

URL: http://www.rehabet.com/aft/index.html

Under the title "What is Animal-Facilitated Therapy?" she reported:

"Animals have been used in institutional settings for years to comfort lonely and depressed patients, alleviate boredom, and help make facilities more ‘homelike’. The use of animals, especially dogs, by hospitals in actual treatment sessions to assist neurologically disabled patients work toward achievement of goals related to speech, movement and socialization, is a more recent development." 137
4.7 Animal-facilitated psychotherapy in South Africa

The same criticism of too few medical reports on animal-facilitated psychotherapy is true for South Africa. In the tenth anniversary issue of The Human-Animal Contact Study Group’s journal, "Companion", three articles referred to animals in psychiatric/psychological context.

The first examined the role of pets in post-traumatic stress. It has been determined what profile of patient would benefit from animals and what their preferences of animal species are. Earlier experience with animals was stated as an important factor and the animals chosen in order of popularity were dogs, horses, cats, birds. Five patients were exposed to animals in a therapeutic programme and studied in-depth and on a long-term basis. Although animals were not the only positive factor in the persons’ lives, they certainly helped to get them back into the community as balanced people.\(^{138}\)

The second article was published by students of the Department of Occupational Therapy, University of Pretoria. A survey was done on the effect of companion animals on 13 psychiatric patients from the Eersterust suburban area. The project lasted five weeks and check lists were used to monitor emotions, interpersonal behaviour and awareness towards the animals. Again animals were not the only therapy applied during the project and it is difficult to assess their exact contribution. However, indications were found that animals have a positive effect on emotions and interpersonal behaviour.\(^{139}\)

Thirdly, a clinical psychologist used his dog as a co-therapist in his consulting room and he published a few case reports on the advantages of having a dog in therapeutic situations. The presence of the dog made the patients relax and enhanced communication.\(^{140}\)
In a later issue of "Companion", Van Heerden\textsuperscript{141} discussed the implementation of a companion animal visiting programme at the Weskoppies psychiatric institution in Pretoria. She said such a programme should pass through a preparation, planning, implementation and evaluation phase. Results are not yet available.

Cage birds were used as part of a research project for a masters degree, in an institution for mentally retarded persons at Witrand, Potchefstroom. Patients were randomly selected from a specific category and divided into an experimental and a control group (n = 40). A pre-post-method of evaluation was used. Four standard scales were applied as measuring instruments and the results were analysed statistically. In comparison with the control group, the experimental group showed distinct improvement in social adaptability, which was evident in the more constructive use of language, more self-reliance and responsibility, better social interaction and a significant reduction in aggression, rebelliousness and withdrawal behaviour.\textsuperscript{142}

4.8 Discussion

Apart from the scientific literature, the general perception that animals are good for human health may also justify a serious re-evaluation of animals in therapy. A recent article, "Health enhancement and companion animal ownership"\textsuperscript{143}, in the Annual Review of Public Health\textsuperscript{143} is one such example. In a popular medical booklet by Dr Tom Trauer,\textsuperscript{144} titled "A family guide to healthy living - coping with stress", he gave the following advice with regard to pet therapy:

"Pets can play a very useful part in the campaign against stress. For people living on their own, who might otherwise feel lonely, aimless and isolated, they provide much-needed company, a sense of responsibility and a certain amount of exercise. Indeed, research has shown that lonely heart
attack victims with pets tend to live longer than those who do not have pets".\textsuperscript{144}

To add to this, in a cover story, "The Evolution of Despair", the idea was popularised that modern man was not genetically prepared for his current environment. The main emphasis lies on the social level, where animals can play a role:

"The problem is that too little of our 'social' contact is social in the natural, intimate sense of the word".\textsuperscript{145}

The role of companion animals in human society is quite mundane and ordinary. However, this very familiar phenomenon in many people's homes could serve as a strong indicator of the psychological role pets can play in modern society. It signifies a need for attention other than, or additional to human or electronic contact. The question arises, despite all obstacles and odds against the use of animals in health environments, whether this natural option is not more commonly in use than the situation today's scientific methods allow practitioners to investigate and report on suggests? The positivistic approach that only things that can be measured convince, or even worse exist, may be the wrong one in this field. The alternative is that researchers should know exactly what they want to measure and that such measurements should be based on acceptable theoretical research.

Apart from the studies mentioned in this chapter and the commonsense indicators that animals can enhance human health, academia also responded to the challenge of understanding human-animal interaction. This subject is currently studied and taught at many universities and other learning institutions throughout the world. The field is duly organised via the International Association of Human-Animal Organizations (IAHAIO). Only one representative society per country is allowed to join the Association and at the moment 37 countries are members. The IAHAIO organises international conferences on human-animal
interaction, including sections on animals in therapy, every third year. In 1998 the eighth conference of this kind was held in Prague, Czech Republic. At the previous conference in Geneva, the Association obtained the support of the World Health Organisation and two resolutions which were adopted at that conference are of particular importance to this study:

- To ensure regulated companion animal access into hospitals, retirement and nursing homes and other centres for the care of people of all ages who are in need of such contact.

- To officially recognise as valid therapeutic interventions those animals that are specifically trained to help people overcome the limitations of disabilities; to foster the development of programmes to produce such animals; and to ensure that education about the range of capabilities of these animals is included in the basic training of the health and social service professions.

The next chapter will discuss the physiology of positive interaction.