Utilization of Animals as Therapeutic Adjuncts with Children and Youth: A Review of the Literature

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ABSTRACT: In recent years, there has been an increasing use of pets and farm animals in therapy for the emotionally ill, the mentally retarded, children, and others who suffer from isolation and loneliness. We see love, affection, touch, and nurturance of animals as a positive step in socializing troubled young people to nurturing roles in society. Assisting young people in developing positive relationships with animals and their environment can be a novel and useful approach to addressing the needs of youngsters in child and youth care. This review of the literature sets the context for examining this approach, which has particular relevance for work in residential settings.

Approximately 61% of the households (52.5 million) in the United States have animals, and more than half of these have more than one animal (Beck, 1990). The psychological, social, and physical benefits of animal companionship have been reported for various populations. There are numerous reports in the media, the popular literature, and the professional literature about the therapeutic role of animals in children's lives. Documentation indicates that companion animals can improve the physical and emotional health of people, as well as provide companionship, reduce isolation, and possibly contribute to the development of responsible independent behavior (McCulloch, 1984; Mallon, 1991). This literature review will set the context for a discussion of the utilization of animals as therapeutic adjuncts in working with children and adolescents.

Professionals in the child and youth care field are experiencing the value of using animals as therapeutic aids in treating simple problems like loneliness or more complex disorders such as severe autism. In what was initially known as pet-facilitated therapy but what has

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recently been re-defined as animal-facilitated therapy, animals have found a place in various therapeutic situations.

Utilizing animals as therapeutic adjuncts is not a substitute for human relationships, but a complement to them (Katcher & Beck, 1987). One of the pet's primary functions in therapy has been to serve as the bridge to decrease the initial shock incidental to encountering a therapist or beginning a new group therapeutic experience. Petting an animal during a session distracts the child's attention. By permitting itself to be petted, the companion animal gives the child a feeling of being accepted, as if he or she were with a friend. Since it is usually the worker's or agency's animal that is making the child feel accepted, the child experiences the therapist as accepting him or her, too. What is most important when companion animals are utilized as adjuncts is the establishment of a relationship between the child and the worker, not the specific approach used by the latter. Once the therapist has, with the aid of the companion animal, secured the confidence of the child , he or she may begin to utilize whatever techniques are most comfortable and appropriate (Levinson, 1984).

Several authors have noted that, in some ways, animal-assisted therapy is similar to other forms of intervention (Fraser, 1991; Mallon, 1991; Daniels, Burke & Burke, 1985; Katcher & Beck, 1983; Levinson, 1962). In animal-assisted therapy, the therapeutic process occurs within the context of the child's interaction with the animal and the therapist. The singular difference that distinguishes it from music, art, dance, or poetry therapies is that, in the case of the former, there is a living, responsive "co-therapist." Levinson (1962) also points out that techniques that are successful with adults often do not work for children; thus, utilizing animals as adjuncts to therapy can offer a viable and novel intervention alternative in working with children.

A review of the literature available on the subject today produces many titles. There are extensive bibliographies provided by the published proceedings of the London, Philadelphia, and Toronto Human-Animal Bond Conferences. The Latham Foundation of Alameda, California, and the Delta Society of Renton, Washington, have also developed numerous resources and information on the topic. Literature on the subject is not limited to any magazine, newspaper, or professional journal, nor to any one professional group; it is truly interdisciplinary in nature.

Even with this extensive review, there were relatively few substantive, quantitative studies. While there is strong sentiment and much information that suggests the benefits of animal-assisted therapy, the actual data are sparse (McCulloch, 1984). In examining the topic with regard to animals as therapeutic adjuncts with children, the author has chosen not to include documentation on therapeutic horse-back riding and prosthetic uses of animals such as guide dogs for the blind or deaf.

There are two types of studies that appear in the literature: (1) descriptive or hypothesis-generating studies, and (2) studies designed to test a hypothesis. There is an abundance of the former, usually case studies, documenting the results of a program or intervention with no formal research design and no controls. These studies are helpful in identifying clinical phenomena and can assist in the basis for development of hypotheses that later may be tested by more controlled studies. As Beck and Katcher (1984) point out in their review, "They rarely demonstrate the value of a treatment or the existence of a causal relationship" (p. 414). There are, however, relatively few hypothesis-testing studies, and those are largely studies of the health effects of animals rather than tests of the therapeutic efficacy of the formal animal-facilitated therapy programs.

A Brief History

The history of the utilization of animals as adjuncts to therapy dates back to prehistoric times. Animals in mythology, the red and black paintings of leaping bison and galloping horses done by Paleolithic humans in the caves of Altamira, provide evidence that the human-animal bond is not a new discovery (Levinson, 1969). The first recorded setting in which animals were utilized in a long-term therapeutic setting was the York Retreat in England. Founded in 1792 by the Quakers, this was one of the first places where the mentally ill were treated humanely rather than cruelly. The feeling that the mentally ill "might learn self control by having dependent upon them creatures weaker than themselves" was the guiding principle of this early experiment in animal-facilitated therapy. The courtyards at York housed small animals, such as rabbits and poultry, for which the patients cared (Bustad, 1979, p. 117).

In 1867, animals were included in the treatment of epileptics at Bethel, in Germany. Originally established for epileptics, Bethel is now a large center for healing people with various disabilities. At present, the center has over 5,000 patients and continues to utilize animals as one of its primary methods of treatment. In this country, the experience of introducing animals as therapeutic agents was reported in the 1940s at the Pawling Air Force Convalescent Hospital. As veterans convalesced, they were encouraged to work with animals at the center's farm and in the nearby forest (Netting, Wilson, & New, 1987). Current interest in the value of the human/companion animal bond was generated in large part by the work of the late child psychologist, Boris Levinson (1962, 1964, 1965, 1968, 1969, 1970, 1972, 1978, 1984) and the early work of Corson and Corson (1978, 1979). Their courage in utilizing animals as therapeutic aides—before "there was a bandwagon"—provided enough evidence of the benefits to justify serious scientific research (Beck & Katcher, 1984). While there has been an increasing awareness of the field, it is clear that research activities on the human/companion animal bond and animal-facilitated therapy are in their infancy. It is clear, however, that more research is needed to better understand the implications of the bond and the nature of animal-facilitated therapy (Beck & Katcher, 1983, 1984; McCullogh, 1984; Behling, 1989).

The significant and novel contributions made by Levinson and the Corsons were well documented, but they were relatively simple observations and case studies rather than definitive experiments. Over the years, these original studies have been indiscriminately cited as "evidence demonstrating the efficacy of pet-facilitated therapy, an interpretation never intended by the authors" (Beck & Katcher, 1984, p. 415). While their pioneering work contains much evidence to justify serious scientific exploration of the ability of animals to facilitate more conventional forms of therapy, it was not their intent that it be used as conclusive evidence demonstrating the therapeutic effect of animals.

Benefits of Animals as Adjuncts to Therapy

There are many reports in the literature of the value and benefits of contact with companion animals (e.g., Brickel, 1980; Corson & Corson, 1980; Fox, 1981; Katcher & Friedman, 1980; Levinson, 1969, 1972; Mugford, 1980; Ross, 1983, 1989). The most often cited benefit of animal ownership is that of companionship. Many researchers suggest that animals fulfill needs for affiliation and affection (Katcher & Friedman, 1980; Levinson, 1978; Mugford, 1980). Companion animals cheer people up, help them communicate, and are a source of nonjudgemental affection (Beck & Katcher, 1987). Brickel (1982) reports that companion animals relieve anxiety and can provide emotional support. The presence of a companion animal can also inspire humor and improve morale in depressed children (McCulloch, 1981).

Mallon (1991), in his report on the utilization of dogs in the dorms of a residential treatment center for children, discovered that the children utilize the dog as their confidant. Since animals cannot speak, interactions between the dog and the child are truly confidential. In a residential treatment center, where children quickly learn that almost everything is shared with the interdisciplinary treatment team, having a confidant is a valuable asset. The dog mascot in such a setting fulfills this role for many children.

Levinson (1970), states that, "caring for a pet provides an opportunity for the child to toughen his ego . . . acceptance for responsibility for the care of a pet will eventually lead to an acceptance of responsibility for establishing meaningful, satisfying human relationships" (Levinson, 1970, p. 1763). Use of animals in a therapeutic setting with children can also "provide a dress rehearsal for children and help them prepare for later life experiences that relate to sexual behavior, giving and receiving love, parenting, birth, and death" (Cain, 1983, pp. 5-6).

Bowlby (1982) has clearly documented the importance of attachment in the lives of human beings. Companion animals have been demonstrated to be important attachment figures for human beings and appear to satisfy this basic human need (Rynearson, 1978; Levinson, 1978; Mugford, 1980; Behling, 1989). Clearly animals serve as a very positive and fulfilling aspect in the lives of all people, but when the person happens to be a child, contact with an animal is almost universally beneficial (Beck & Katcher, 1983).

Levinson (1978) makes a number of points about the benefits of the therapeutic role of animals that are most comprehensive and bear repeating:

- The importance of the animal to humans is psychological, not "practical."
- A relationship between a human and an animals can often be more salutary than one between two humans.
- An animal can satisfy a human's need for loyalty, trust, and respect.
- A relationship with an animal can be less threatening than a relationship with a human.
- Animals are alive and, therefore, provide greater therapeutic opportunities than play therapy.
- The arena in which one would work with a child and an animal is much broader than the therapist's office. Levinson later referred to this as "a social lubricant."
- Animals can speed up the therapeutic process.
- Animals can be around 24 hours a day if they are needed.

Levinson (1964) concluded that using animals in therapy with children was useful in two ways: first, as catalytic agents helpful in speeding up therapy in a clinician's office; and second, by being placed in homes of an emotionally disturbed child where they might tend to restore a healthy communication between members of the family.

Children and Animals

A number of researchers have studied the impact of companion animals on the lives of children (e.g., Beck & Katcher, 1983, 1984, 1987; Cain, 1983; Condoret, 1983; Fraser, 1991; Levinson, 1962, 1964, 1965, 1968, 1969, 1970, 1972, 1978, 1984; Mallon, 1991; Melson, 1990; Ross, 1981, 1983, 1989; Smith, 1983). Many of these studies indicate that animals have played an important socializing and humanizing role in the lives of children.

The best known and earliest case studies in animal-facilitated therapy with children were reported by Boris Levinson, the first clinician to build the utilization of companion animals into a "self-conscious diagnostic and therapeutic technique" (Beck & Katcher, 1983, p. 93). Levinson found that animal-facilitated therapy worked best with children who were non-verbal, inhibited, autistic, schizophrenic, withdrawn, obsessive-compulsive, or culturally disadvantaged. Autistic children were especially helped, because the animal strengthened their contact with reality (Levinson, 1964).

Initial reports by Levinson, documenting the experience of using his dog as a co-therapist, were met with ridicule and resistance from his colleagues, but a subsequent study that he conducted found that 33% of the practitioners surveyed had also utilized animals at some point in their practice (Beck & Katcher, 1984).

Levinson's published work consists of a series of articles in psychological journals, beginning in 1962, and two books. In these works he describes his experiences with his co-therapist, Jingles, and documents accounts of therapeutically significant interactions. He did not apply rigid experimental protocols but experimented with the utilization of the animal within the flow of therapy with children. Levinson's work reports the existence of clinical phenomena; it does not try to define them. There is not tabulation of overall results. While other therapists had reported utilization of animals, no other therapist felt that they had found any phenomena striking enough to merit reporting in a professional journal. Levinson's work is therefore the first such documentation of this novel adjunct to therapy with children.

Since Levinson and Jingles made animal-facilitated therapy with children acceptable, many other accounts have surfaced illustrating the values of animals for disturbed or displaced children in various child and youth care situations: schools, hospitals, residential treatment centers, day care centers, and community/recreation centers (Cusack, 1988).

Condoret (1983) reported the utilization of animals in the treatment of an autistic child whose first spontaneous interaction with a living being occurred when she observed the flight of a dove that was brought into a classroom. After that one instance, she paid attention to the dove's successive flights, the class dog, other children, and her teachers. The change in the child's demeanor when she encountered the dove's flight is documented on videotape. No effort was made to repeat the experience with any consistent protocol. It is simply stated as an isolated, documented instance in a classroom in which animals and children were brought together.

In a highly novel and expensive study in Florida, Smith (1983) brought together eight autistic children and three trained bottlenosed dolphins for six sessions of water play. Beck and Katcher (1984) note its expense, stating that, "in addition to the children and their parents, there were three primary investigators, a parent coordinator, a camera crew, dolphin trainers, and students" (Beck & Katcher, 1984, p. 415). Despite the inordinate costs involved, persistent change was reported for only one child. Beck and Katcher, in their critical review of this study, state, "Other than a reported, but ungualified, increase in attention span, there were no persistent changes. Thus, the treatment made no fundamental change in the major symptom of the disability . . . to justify so cumbersome a procedure as the use of dolphins." (Beck & Katcher, 1984, p. 415). The critique suggests that social learning in children diagnosed as autistic is a commonplace event at any good treatment center; while the study gets credit for its uniqueness, it garners low scores in the area of effectiveness.

Gonski (1985) uses case examples to illustrate and document her work with adolescent males in a residential setting. The author found that utilizing her dogs as therapeutic adjuncts facilitated her development of relationships with her clients. She concluded that well trained and carefully selected canines could be utilized for psychotherapeutic work with children and supports Levinson's finding that they can also speed up the therapeutic process. No efforts to repeat the experience were documented, and there was no consistent protocol.

Quantitative Studies

Kellert and Westervelt (1983), in one of the few instances of quantitative research into the relationship between children and animals, studied the attitudes of 250 children, at several grade levels, towards animals. They found major differences among age, sex, ethnic, and urban/rural groups. In particular, they established three major, agerelated developmental stages in the way children relate to animals: (1) 6-9 years—major increase in affective relationship to animals; (2) 10-13 years—major expansion in cognitive understanding and knowledge of animals; (3) 13-16 years—dramatic increase in ethical concern and ecological appreciation of animals (Soares, 1985).

Robin, ten Bensel, Quigley, and Anderson (1983) conducted a study of 269 disturbed children institutionalized for delinquency problems and concluded that 47% of those surveyed reported that pets were important for children growing up because they provided someone for them to love. For a control group of students in a regular public school, a pet was important to them because it taught responsibility. For many abused and disturbed children, "a pet becomes their sole love object and a substitute for family love" (Robin & ten Bensel, 1985, p. 69). Case histories recounted children's attitudes towards their pets and indicated that pets served as a sole source of solace, at times of stress, loneliness, and boredom.

Considering interaction with animals as a kind of "dress rehearsal" for life, the issue of bereavement from pet loss as experienced by children has been widely studied (Neiburg, 1982; Neiburg & Fischer, 1982; Robin, ten Bensel, Quigley, & Anderson, 1983; Steward, 1983). An extensive study of 507 adolescents in Minnesota reports that over half had lost their "special pet" and only two young people reported feeling indifferent to the loss (Robin, ten Bensel, Quigley, & Anderson, 1983). Steward (1983) conducted a similar study of 135 school children in Scotland and found that 44% had pets that had died and two-thirds of these children expressed "profound grief at their loss" (Robin & ten Bensel, 1985, p. 70).

Animal Abuse

Felthous and Kellert (1987), Mallon (1990), and Ross (1990) all introduce the issue of monitoring children who have histories of animal abuse. Children with unharnessed anger, aggression with poor impulse control, or a documented prior history of cruelty to animals are usually not appropriate candidates for animal-assisted therapy. In such situations, an animal should not be utilized as a therapeutic adjunct or, at the very least, the interaction should be closely monitored. The professional who chooses to utilize an animal in a treatment situation has an obligation not only to serve the child in treatment, but also to protect the animal from harm (Mallon, 1991).

Tapia (1971) presents an analysis of 18 cases in which childhood cruelty to animals was the chief complaint or one of the complaints. This study revealed that, "they were all boys, usually young and of normal intelligence, and that they showed many other aggressive symptoms, such as destructiveness, bullying, fighting, stealing, and fire setting" (p. 76). A chaotic home with aggressive parental models who administered harsh corporal punishment was also noted as the most common factor. Many of the children placed in residential treatment programs fit these descriptions, and professionals need to screen and monitor such children closely when utilizing this adjunct therapy.

In a follow-up study conducted six years later with 13 of the original 18 cases, eight of the 13 children were still cruel to animals. Time alone did not seem to improve the condition. The most effective form of therapy seemed to be significant change in or removal from the chaotic home situation (Rigdon & Tapia, 1977).

Felthous and Kellert (1987) believe that childhood cruelty to animals poses an even more serious consideration in that there is a correlation between excessive cruelty to animals in childhood and later incidence of violence towards others as an adult. The authors make three points: first, that repeated acts of serious cruelty to socially valued animals, such as dogs, are more apt to be associated with violence towards people than are isolated acts of cruelty, minor abuses, and victimization of a less socially valuable species, such as a rat; second, if animal cruelty is associated with aggression against people, it is most likely associated with serious, recurrent personal violence, such as physical abuse directed towards the child by the parental figure; and third, subjects must be interviewed directly because prior animal cruelty behavior may not have been documented (p. 714). Children who have been victims of abuse themselves can, in turn, be abusive towards animals. The presence of this condition alone should not preclude the possibility that such a child could benefit from this intervention, but it does require that professional staff provide close supervision and possibly provide for opportunities for reconciliation between a child and an animal.

The Use of Animals in Group Care and Treatment

Ross (1981, 1983, 1989) has written extensively about the therapeutic effects of integrating animals and children in a residential treatment center. Ross et al. (1984) conducted a study at Green Chimneys, a 150-acre farm and residential treatment center for children, to determine the impact of farm involvement on emotionally disturbed, learning disabled youngsters. Researchers randomly selected 22 subjects from a group of 88 latency-aged urban youths, most with no prior farm experience, and explored how they became involved with the animals and people and how their levels of involvement were related to age, sex, diagnosis, and other critical variables. This hypothesis-generated study found that "animals employed in therapeutic and educational intervention have a strong involving influence and can be the agent for the development of rapport and therapeutic change" (Ross et al., 1984, p. 129).

Mallon (1990) and Ross (1989) document the need for rules and regulations in animal-facilitated therapy programs. Both authors outline the significant benefits of human-animal bonding as well as the inherent risks in conducting such programs. They also discuss issues such as developing guidelines for infection control protocols, dealing with animal abuse, and the importance of administrative and board support for such an intervention. They affirm, as Levinson (1972) had before them, that although pets are not a panacea for the world's ills, various applications of animal-facilitated therapy are worth noting and may provide a partial solution to the problem of alleviating stress and feelings of deprivation in children and others.

Conclusions and Directions for Future Work

As suggested by Beck and Katcher (1984), investigators studying the impact of animal-facilitated therapy programs for children have a tendency to suspend critical judgement of research findings to favor a belief that animals have therapeutic potential. If one is to learn more about the value of using animals as therapeutic adjuncts to treatment, animal-facilitated therapy programs must consider the following issues, as suggested by Beck and Katcher (1984), in their research designs and evaluation procedures:

1. The Need to Account for Expectancy and Novelty

Judgements about programs should not be made during the period of time when the animal is a highly novel intrusion. Investigators need to test for changes in response to the animals over a period of time (Beck & Katcher, 1984).

2. The Need for More Than Just Smiling Faces

The smiling child with a fluffy kitten has unfortunately become the cliché for the animal-facilitated therapy movement. The beneficial effects of pets is a social stereotype, as a look at advertising will support (Melson, 1990). There is little doubt that a fluffy kitten can make a child smile, but using such photos to generate belief in the therapeutic potential of animal programs, when in reality they generate only a transient emotional response, is irresponsible.

Without elaborate research designs, the organization using animals can record some very simple data. This information could significantly improve overall knowledge in the field. Recording whether or not the immediate emotional impact of an animal translates into lasting therapeutic change would be valuable information. A simple checklist, encouraging staff to record impressions, would serve this purpose.

3. The Need for Use of More Sophisticated Research Methods

Greater methodological rigor is needed particularly to document what is deeply believed and what many believe "works" (Melson, 1990). The use of appropriate controls to produce clear, consistent evidence would be heuristically and ethically justified (Beck & Katcher, 1984; Ross, 1989; Melson, 1989); there is, as noted in this review, a serious deficit in the lack of adequately controlled studies. There is also a lack of prospective, longitudinal studies and experimental studies to address issues of *effect*, not just correlation or association (Melson, 1990). Those designing and implementing animal-facilitated therapy should "think the unthinkable and consider the possibility that pets may have little or no effect... into a therapeutic environment" (Beck & Katcher, 1984, p. 419). Considering this possibility suggests that appropriate methods are a valuable part of any study.

4. The Need for Evenhanded Evaluation of Research Data

There is a tendency to interpret data defensively and to disregard that which is considered negative or nonsupportive of the value of animal-facilitated therapy. There is a need to ask: "Do pets have a therapeutic effect?" rather than "How can I demonstrate the therapeutic effect of pets?" (Beck & Katcher, 1984, p. 419). In support of this idea, Melson (1990) states, "There is a need for more sensitive, nonreactive measures of research on children and pets" (p. 13).

5. The Need to Examine and Justify Costs and Risks

The enthusiasm about animal-facilitated therapy programs has all but obscured serious discussion of this area. Financial accountability and risk control issues need to be more carefully examined, and risk management and fiscal responsibility of programs need to be carefully monitored (Ross, 1989; Mallon, 1990). Those engaged in animalassisted therapy need to be realistic, acknowledging potential problems as well as potential benefits that accompany such a program (Netting, Wilson, & New, 1987).

6. The Need to Develop Criteria for What Constitutes a Therapeutic Gain

The difference between recreational use of animals with children and what is to be considered a lasting therapeutic gain as a result of such intervention needs to be examined and documented (Beck & Katcher, 1984).

Gender Factors in Research on Animal-Facilitated Therapy

One area that could provide for future directions in the utilization of animal-facilitated therapy programs for children is that of examining the role of animals in facilitating nurturing behavior in male children. Beck and Katcher (1987) cite this need stating, "There is a critical need for continued and augmented exploration of the emotional and health value of nurturing living things" (p. 181). Beck (1990), reaffirms this need stating, "Boys, in particular, may be introduced to the importance of nurturance with the aid of their pet" (Beck, 1990, p. 3).

Katcher and colleagues (1983) began to explore this area in a health-related study of the roles of men, women, and dogs, in which they determined that, "there were no significant differences in the ways or amounts of time that men and women touched their pets" (Katcher, Friedman, Goodman, & Goodman, 1983, p. 14). Subsequent studies (Beck & Katcher, 1987, and Melson, 1989) yielded similar results.

In a study she conducted on the role of pets in the development of nuturant behavior, Melson (1989) concluded that gender had little influence on whether children became attached to pets. Melson points out that, while children are traditionally thought of as recipients of nurturant behavior, Melson (1989) concluded that gender had little themselves, this is an area worthy of further exploration and study. Interacting with and caring for animals are sources of learning about and practicing nurturance that are equally accessible, in terms of gender role expectations, to boys and girls (Melson, 1990).

In a paper presented at Green Chimneys' People, Pets, and Plants Conference, Melson (1990) stated, "We have evidence that nurturing animals may be particularly beneficial to boys. This is because caring for babies and young children becomes associated in children's minds with 'women's work,' or 'what mommies do,' as early as three years of age; by age four or five, we find boys becoming less interested in infants and their care and more avoidant of experiences around baby care" (p. 6). Melson concludes that there was no such association in the minds of children with regards to caring for animals. Because such care is gender-neutral, it might prove to be a particularly useful training ground for the development of nurturance in boys.

The influence of gender and further investigation into children's pet-related nurturing calls for further study. Its results could prove fruitful to facilitating nurturing experiences in young boys, thus promoting a more nurturing society, in addition to providing for new methods and applications of animal-facilitated therapy with children.

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