

Human-Animal Bonds I: The Relational Significance of Companion Animals

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The importance of human-animal bonds has been documented throughout history, across cultures, and in recent research. However, attachments with companion animals have been undervalued and even pathologized in the field of mental health. This article briefly surveys the evolution of human-animal bonds, reviews research on their health and mental health benefits, and examines their profound relational significance across the life course. Finally, the emerging field of animal-assisted interventions is described, noting applications in hospital and eldercare settings, and in innovative school, prison, farm, and community programs. The aim of this overview paper is to stimulate more attention to these vital bonds in systems-oriented theory, practice, and research. A companion paper in this issue focuses on the role of pets and relational dynamics in family systems and family therapy (Walsh, 2009a).

Keywords: Human-Animal Bonds; Health and Mental Health Benefits; Bonds with Companion Animals/Pets; Animal-Assisted Interventions; Therapeutic Program Applications

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Native peoples say that a long time ago on the earth a chasm opened up separating animals and humans. As the chasm got wider and wider, the dogs jumped across to be with the humans. Today, when you hear wolves howling in the night, they're crying out for the chasm to close — (Kling, 2006)

Ancient peoples valued the profound connections between humans and animals. In recent years, increasing research evidence confirms the physiological, psychological, and social benefits of interactions with animals and the therapeutic potential of animal-assisted programs in a wide range of settings. Yet the field of mental health has been slow to recognize the importance of these bonds in clinical theory, research,

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and practice. This overview paper brings needed attention to the relational significance of companion animals for our well-being, connectedness, and resilience.

HUMAN-ANIMAL BONDS IN HISTORICAL AND CROSS-CULTURAL CONTEXT

In ancient times and in cultures worldwide, animals have been respected as essential partners in human survival, health, and healing. Many spiritual traditions have honored the relationships of people to animal forms of life, as part of the interconnectedness of the natural world and a link to the spirit world (Serpell, 2006). Animal companions and guides have assumed powerful roles in animist beliefs and shamanic practices (Campbell, 1984). Asian cultures, Amerindians, and other indigenous peoples continue to draw symbolic meaning and important teachings from animals.

In Chinese legend, 2,500 years ago the Buddha summoned twelve creatures under the Bodhi tree, taught them about their strengths and weaknesses, and then sent them out into the world to guide people in their personal and relational growth. The Chinese believe that each of us is born with essential characteristics and creative forces of the animal associated with the month and year of our birth. Since ancient times, animals have also been important throughout folklore and mythology. The “Fu Dog,” a mystical part-lion, part-canine creature, is still prominent in stories, sculpture, and imagery, as a protector of the home and small children.

The domestication and socialization of animals was an interactive process of mutual cooperation and coevolution based on a shared need for shelter, food, and protection. Archeological evidence reveals that over 14,000 years ago, domestic wolves, ancestors of the dog, lived in settlements with humans (Serpell, 2008). Valued for their intelligence, keen senses, and loyalty, early dogs were respected as guardians, guides, and equal partners in hunting and fishing. By 9,000 years ago, both dogs and cats assumed crucial roles in developing agricultural communities. Dogs assisted in herding and farming, while cats eliminated rodents that brought disease and threatened grain harvests. Although treated as subservient to their human masters, both became increasingly valued as companions.

Both dogs and cats were treated with great respect in ancient Egypt. Cats were honored and even worshipped in association with the goddess Bastet, who represented the protective powers of the sun. Dogs were considered such loyal companions during life that they were revered as guides in the afterlife. When a pet dog died, the owners shaved off their eyebrows, smeared mud in their hair, and mourned aloud for days. Even commoners scraped together enough money to embalm and mummify their dogs and buried them in one of Egypt’s many animal necropolises (Ikram, 2005).

During the early Greek and Roman empires, dogs were commonly kept as hunters, herders, and guardians, but were also treated as loyal, beloved pets (Coren, 2002). In early Greek literature, Homer wrote about the dog’s fidelity in *The Odyssey*. When Odysseus arrived home after an absence of many years, disguised as a beggar, the only one to recognize him was his aged dog, Argus, who wagged his tail at his master and then died. Animal burials in ancient Greece and Rome revealed their significance to human companions. The intentional wording of epithets described the merits of the animal and their owner’s sorrow at their death. In the ruins of Pompeii, stretched out beside the remains of a child were the bones of a dog named Delta—identified by his engraved silver collar.

Ancient burial sites in many parts of the world reveal close animal-human bonds over the millennia. In Peru, where dogs are still valued as shepherds with prized llamas, archeologists have discovered cemeteries where the early Chiribaya people buried their dogs with blankets and food alongside their human companions (Lange, 2007).

Both Judaism and Islam placed importance on the proper treatment of animals. The Talmud recommends that dogs be respected because they refrained from barking during the night the Israelites escaped from bondage in Egypt. With Christianity came an annual ritual of “Blessing of the Animals” on church steps (Dresser, 2000). In Catholic parishes, this occurred on the Feast Day of St. Francis of Assisi, the patron saint of animals. However, in the Middle Ages, the Christian churches persecuted pagan believers as witches and heretics and identified animist spirits in animal form with the devil (Serpell, 2006). Cats, associated with witchcraft, did regain some status for their role in destroying rats that carried the Black Plague.

Since the Middle Ages, purebred cats and dogs increasingly became the prized possession of rulers and aristocracy. In Asia, some breeds were so valued that they had their own servants. Lap dogs became popular as “comforters.” In the royal court of China, Pekinese dogs were bred very small to fit into an empress’s sleeve, to be carried around the palace. In Japan, the royal family kept dogs in their private quarters to warn them of intruders and to warm them in bed in winter.

Throughout Europe, breeding and owning lap dogs, cats, and other pets became a widespread trend among the royalty. In the 19th century, Queen Victoria, who was especially fond of dogs, had nearly 90 different pets during her life. With the rise of the middle-class, aspirations of affluence led to wide demand for “aristocratic” animals to compensate for a human lack of “proper breeding.” The competitions for “best of breed” enabled commoners to emulate the rich. Owners imbued their pets with human-like qualities, often adorning them with elaborate clothing. They provided amusement, relieving pressures of everyday life. Family pets became central to family life. As in earlier times, their care and nurture brought companionship and pleasure, as well as compensation for loss with frequent early parental and child mortality.

Sadly, domesticated animals have often been badly abused by humans. Their cruel treatment and exploitation in overwork and gaming sparked the advocacy of animal protection organizations and laws in England in the late 19th century. In the United States, the American Society for the Prevention of Cruelty to Animals (ASPCA), founded in 1866, led to the first laws to protect animals. Of note, they were also used to prosecute cases of child abuse before child protection laws were written! (New York Society for Prevention of Cruelty to Children, 2009). In our times, animal rights movements have been at the forefront in addressing concerns about maltreatment and killing of animals (Ascione & Shapiro, 2009). Organizations such as Progressive Animal Welfare Society (PAWS, <http://www.paws.org>) advocate for animals through education, legislation, adoption programs, and direct care (See American Humane Association, <http://www.americanhumane.org>).

IMPORTANCE OF COMPANION ANIMALS IN CONTEMPORARY LIFE

Over recent decades, companion animals have become increasingly important in the lives of Americans (Grier, 2006). More than 63% of U.S. households, and over 75% with children, currently have at least one pet (APPMA National Pet Owners Survey,

2007–2008). The vast majority of pet owners regard their pets as their friends (95%) and/or family members (87%). Dogs are the most common pets, followed by cats, horses, and birds. Both children and adults enjoy a wide range of pets, including fish, gerbils, ferrets, turtles, rabbits, and farm animals. America's cats and dogs are a pampered lot: all survey respondents reported that they give their pets a holiday present; 87% include their pets in holiday celebrations; 65% sing or dance for a pet; 52% percent prepare special meals for their pets; 53% take time off from work to care for a sick pet; and 44% percent take their pets to work, boosting morale and productivity (Wells & Perrine, 2001). On the internet, weblogs, and social networking sites (e.g., Petster.com, mycatspace.com, and Dogbook on Facebook) connect pet enthusiasts and provide useful information, such as healthcare resources and community events.

The amount of money spent on pets has doubled over the past decade, exceeding the gross national product of many developing nations. Pet lovers increasingly go to great lengths for veterinary care, including costly, extensive medical treatments for serious illnesses. The devotion to pets is evident in an astonishing range of consumer products and services, from special meals and toys to ergonomic feeding tables, day spas, and acupuncture. The desire to travel with pets has led many airlines, hotels, and resorts to welcome them with special services and programs. The desire for particular breeds has led to the availability of DNA testing kits and the purchase of “designer dogs” in hopes of combining the desired traits of different pure breeds. Countering that trend is the growing interest in adopting shelter animals that need homes.

Pets have also been valued companions to our nation's leaders and first families in the White House (Grier, 2006). Harry Truman famously said, “If you want a friend in Washington, get a dog!” “Bo” Obama is the most recent resident pet, following the Bush family cat, India, and two Scotties, Barney and Miss Beasley, who had their own webpage. The Kennedy family kept rabbits, hamsters, a canary, and a horse named Macaroni. Perhaps the strongest bond was between President Franklin D. Roosevelt and his Scottish terrier, Fala. As Roosevelt faced daunting national challenges through the Great Depression and WW II and his own personal challenges of disability, Fala accompanied him everywhere: to social events, meetings, and even peace negotiations. Fala attended Roosevelt's funeral, was buried near him, and is depicted at his side in the FDR Memorial sculpture on the capitol mall.

The term *pet* (from the root of the French word “petit”) has long been the affectionate term for animals kept for pleasure and companionship (Grier, 2006). Professionals and scholars in veterinary medicine, animal welfare, and human-animal interaction prefer the term *companion animal*, to connote a psychological bond and a mutual relationship (see <http://www.deltasociety.org>). Likewise, they view owners, long regarded as masters over their animals, as human companions and animal guardians or custodians, with concern and obligation to provide for their proper treatment and well-being. Similarly, they recommend a shift away from dominance-based coercive training approaches (considered misapplications from captive wolf packs and military training) to positive reinforcement, rewards-based training (Geller, 2007; Grandin & Johnson, 2009).

It should be noted that *service animals* are not legally considered pets. They undergo extensive training to live and work in partnership with an individual with particular disabilities and life challenges. Their essential role for optimal functioning

and wellbeing over many years makes their bond especially vital (Sachs-Ericsson, Hansen, & Fitzgerald, 2002).

HEALTH AND MENTAL HEALTH BENEFITS OF COMPANION ANIMALS

Over the past 30 years, an abundance of studies in a wide range of journals and disciplines offer mounting evidence that interactions with companion animals contribute to good health, psychosocial well-being, and recovery from serious conditions. Although early studies were small, samples and methods have varied, and the data are not conclusive, more recent systematic research largely confirms these benefits (Barker et al., 2003; Friedmann & Tsai, 2006; Wells, 2009).

One of the strongest areas of research evidence correlates pet ownership with positive physiological measures, such as lower blood pressure, serum triglycerides, and cholesterol levels. In fact, the presence of a pet was found to be more effective than that of a spouse or friend in ameliorating the cardiovascular effects of stress (Allen, Blascovich, & Mendes, 2002). In landmark findings, following a heart attack, patients with pets had a significantly higher 1-year survival than those without pets; those with dogs were 8.6 times more likely to still be alive (Friedmann, Katcher, Lynch, & Thomas, 1980; Friedmann & Thomas, 1995). Many effects are mutually beneficial (Wells, 2009). Simply stroking a dog significantly reduces blood pressure in both the person and the animal! Interactions with companion animals increase neurochemicals associated with relaxation and bonding and they improve human immune system functioning (Charnetsky, Riggers, & Brennan, 2004).

A number of studies demonstrate the positive impact of pets on coping with chronic conditions and on the course and treatment of illness such as heart disease, dementia, and cancer (Friedmann & Tsai, 2006; Johnson, Meadows, Haubner, & Sevedge, 2005). Companion animals have been found to facilitate the recovery of hospitalized children (Kaminsky, Pellino, & Wish, 2002) and ameliorate depression in AIDS patients (Siegel, Angulo, Detels, Wesch, & Mullen, 1999). Avian companionship was found to alleviate depression, loneliness, and low morale of older adults in skilled rehabilitation units (Jessen, Cardiello, & Baun, 1996). Companion animals ease suffering and anxiety at the end of life for those in palliative and hospice care (Geisler, 2004).

Several studies suggest that animals with heightened sensory perception may be able to detect early signs of cancer and critical medical situations, such as hypoglycemia and seizures (Wells, 2009). In one nursing home, the resident cat, Oscar, sensed the impending death of residents, going to their rooms and curling up on the bed with them. Staff then would call family members, who were grateful to be able to anticipate the death of a loved one (Dosa, 2007).

Pets also have been found to influence the course and optimal functioning with pervasive developmental disabilities (Martin & Farnum, 2002) and mental health disorders including schizophrenia, depression, anxiety, and ADHD (Barker & Dawson, 1998; Beck, 2005). For instance, those with schizophrenia had less apathy, a better quality of life, and increased motivation. In part, interactions with pets alter the tendency of those with mental problems to focus negatively on themselves. They become more involved in their environment in nonthreatening ways with a companionate animal.

Not all study findings are consistent. One epidemiological survey found that Australian seniors owning pets had higher rates of depression than nonpet owners

(Parslow et al., 2005). However, in a cross-sectional design, no causal assumptions of influence can be made; it may be that seniors with more life challenges and depression turn to pets for comfort. Overcoming methodological limitations of small and cross-sectional studies, longitudinal research over two decades in Germany ($N = 9723$) and Australia ($N = 1246$) found that people who have continuously owned a pet were the healthiest group and those who no longer had a pet or never had one were least healthy (Headley & Grabka, 2007). In these nationally representative surveys, the relationship remained significant after controlling for gender, age, marital status, income, and other variables associated with health.

Spanish investigators (Virues-Ortega & Buéla-Casals, 2006) reviewed the findings in cross-sectional and longitudinal studies to better understand the psycho-physiological effects and positive adaptation with long-term human-animal interaction. They found good evidence that these ongoing relationships moderate physiological processes through relaxation and soothing contact in stroking and holding pets. Pets also provide stress-buffering effects in pleasurable interactions and noncritical social support. Additionally, they provide indirect benefits, for instance, in strengthening health by maintaining exercise. Walking a dog or having casual conversation about pets also catalyzes social interactions, reducing isolation and loneliness.

Overall, a broad range of investigations have found that animal-human interactions reduce anxiety, depression, and loneliness as they enhance social support and general well-being (Friedmann & Tsai, 2006). Further research is needed to better understand the meaning and significance of bonds with companion animals and the interactions of key variables. Studies simply comparing pet owners with nonpet owners do not reveal the dynamic interplay of influences. Studies differ in focus, samples, and methods and often include a range of pets, life stages of persons, and length of relationship. Some studies examine the impact of visiting or residential animals, rather than particular animal-human bonds. Large surveys need to include qualitative measures of the subjective meaning of bonds with different types of animals. Personal preferences (e.g., cats or dogs) and living situations, (e.g., residential restrictions) need to be taken into account. Few studies examine ethnic, racial, and social class differences. For instance, in low-income minority communities where police dogs are used to intimidate and apprehend suspects, residents—especially children—might more likely develop fear of dogs or see them as providing aggressive home protection rather than companionship.

To understand the contributions of companion animals to our physical, mental, and relational well-being, a broad systemic perspective is required, considering animal characteristics in interaction with personal needs and preferences, relational dynamics, life situation, and sociocultural context. To fully appreciate the strength of close, long-term bonds with pets, we need to explore more deeply their meaning and significance for their human companions.

MEANING AND SIGNIFICANCE OF BONDS WITH COMPANION ANIMALS

The field of mental health has undervalued the unique and deep bonds individuals have with their pets (Kruger & Serpell, 2006). Those whose closest relationships are with animals have often been viewed as strange or deficient, their affections pathologically misplaced. Strong attachments have been assumed to be symptomatic of an inability to forge healthy connections with humans or to handle separation and loss.

As researchers have seriously examined human-animal bonds in their own right (Hines, 2003) their findings suggest that feeling even closer to a pet than to others is not uncommon, and the vast majority of pet lovers are not socially inept or trying to replace their human companions. Most people who connect strongly with animals also have a large capacity for love, empathy, and compassion. For instance, Kurdek (2008) found that college students with a high level of attachment to their dogs were also highly attached to their mothers, siblings, and best friends (although less so to their fathers), and did not show high levels of anxiety or avoidance. Such studies suggest that most people do not turn to pets as substitutes for failed interactions with humans. That said, many who experience social stigma or outright rejection, such as gay and lesbian persons, value all the more the nonjudgmental acceptance of animal companions (Plakcy & Sakson, 2006).

How is it that the mental health field has been so slow to recognize the significance of human-animal bonds? Following the philosophical views of Descartes, who denigrated animals, early 20th century behavioral psychologists Watson and Skinner contended that animals are inferior to humans, lower creatures incapable of complex thinking or feeling. Such views (which contributed to inhumane laboratory treatment of animals) were highly influential in widespread assumptions in psychological theory that owners merely misattribute “human” feelings to animals, with anthropomorphic projections. However, people’s consistent descriptions of their pets’ behavior suggest that they do, indeed, express complex emotions. For instance, 81% report that their dog acts “jealous,” for example when they pay attention to another person or dog (Morris, Coe, & Godsell, 2007). In my own clinical experience such accounts are common. One client reported that his Siamese cat, accustomed to his full attention, “sulked” in the corner as he labored many months over his doctoral dissertation and, when it was completed, “she jumped up on the desk and peed all over the final document.”

A both/and interactional view is required to appreciate the complexity of human-animal bonds. First, as it is well established in the mental health literature that individuals commonly project their own expectations, feelings, and needs onto other humans, particularly their partners and children, it would be natural for this same process to occur to some extent with companion animals. And yet, pets are not simply objects of anthropomorphic projections. Supporting Charles Darwin’s (1998) observations on the evolutionary continuity of species, a large body of research now confirms that a wide range of species are intelligent and sentient creatures with remarkable cognitive, emotional, and social intelligence, albeit with considerable differences in the degree of abilities (Bekoff, 2007). Domesticated animals and many species in the wild, such as elephants, display clear indications of emotional attachment to and mourning for a mate, a parent, or an offspring (Masson, 1995). Leading primatologists have found striking parallels between human behavior and that of chimpanzees and bonobos (who share with us over 98% of genetic makeup), particularly in their social relationships, from power struggles to empathy (DeWaal, 2005). Whales, dolphins, and wolves have sophisticated social and communication patterns that we are only beginning to decode. Chimpanzees and birds have been taught to communicate with humans and to understand and use symbols to express feelings and concepts (Pepperberg, 2008). Both dogs and cats have a rich and varied emotional life (e.g., Masson, 2002).

Findings are clear that dogs have complex thinking and feelings and have acute sensory perception. Biological anthropologists have found that dogs demonstrate an

uncanny ability—far better than our closer primate relatives—to read human cues and behavior, accurately interpreting even subtle hand gestures and glances (Katz, 2003). Studies have demonstrated the similarities of dogs and humans in brain structure and the workings of nerve cells. The neurons have similar chemical composition and the patterns of electrical activity are identical. Recent genetic studies find over 75% overlap between the genetic code of humans and canines (Kirkness, Bafna, & Halpern et al., 2003). As social interactions are especially important to dogs, it is not surprising that they both elicit and respond to the feelings, intentions, and behavior of their closest human companions. Although companion animals do not speak our language, they clearly understand and communicate with us in a myriad of ways.

Clinical Perspectives

Research on the mental health impact of companion animals is augmented by clinical observations. Searles (1960) noted the importance of pets in many families of individuals with schizophrenia, who found it easier to establish and maintain a relationship with a pet. The loss of the pet often precipitated an episode of severe symptoms of the disorder. Child psychologist Boris Levinson (1970), who pioneered the use of pets in therapy, observed that a pet bond could be a lifeline for those who were especially vulnerable. He contended that the acquisition of a pet was one of the ways in which human sanity is preserved.

Relational and systemic perspectives have particular relevance for companion animal bonds. For instance, Melson (2003) sees the value in extending attachment theory to better understand relationships with pets. Beck and Madresh (2008) applied attachment theory in a web-based survey of pet owners and found pets to be a consistent source of attachment security. Of note, compared with their relationships with romantic partners, their attachments with pets were more secure on every measure. A study applying a self-psychology perspective (Brown, 2007) found that companion animals (including horses, dogs, cats, and rabbits) rivaled and even surpassed humans in their ability to provide important self-object needs, such as self-cohesion, self-esteem, calmness, soothing, and acceptance. A symbolic interactionist perspective (Saunders, 2003) has also been applied to the intersubjective connections between pet lovers and their companion animals, attending to ongoing interaction processes such as play, mutual gaze, and “speaking for” animals.

Family systems theory provides a valuable framework for understanding the many varied roles pets play in couple and family functioning (see Walsh, 2009a). Studies suggest they can increase positive interactions and resilience; they can also react to family tensions and become embroiled in relational conflicts. Melson and Fine (2006) stress that a systemic perspective is essential to fully understand the significance of bonds with companion animals, considering them in relation to dynamic processes within family systems and embedded in complex social systems.

A DEEPER UNDERSTANDING OF COMPANIONATE BONDS

To better understand research findings on the benefits of having companion animals, a closer look at the meaning and significance of these bonds is essential. Over the life course, these attachments meet many varied needs for human well-being (Melson, 1998).

Our Changing Social World

Contemporary societal changes may account, in part, for the growing importance of pets. As lives have become more stressful and frenetic, pets offer relaxation and replenishment. With playful interactions, they bring their human companions into the carefree joy of the moment. Dogs and cats in particular give an abundance of pleasure; they generate whimsical humor, curiosity, enthusiasm, and a sense of possibility. In uncertain times of global threats and financial insecurities, pets offer a comforting respite from life's storms.

As patterns of individual and family life have been undergoing transformation, adults and children increasingly move in and out of varied households and relationships over a lengthening life course (Walsh, 2003). Companion animals meet relational needs for consistent, reliable bonds and facilitate transitions through disruptive life changes. As one woman remarked, "My cat Max has been with me through two marriages, divorce, and widowhood as the one relationship I can always count on." These attachments are especially strong for growing numbers of adults who are remaining single or are living on their own for extended periods of time (Zasloff & Kidd, 1994). Some view their pet as their "significant other" and even their "soul mate." Young people who aren't ready to raise children, or those who forego childrearing, often choose to raise a puppy instead.

As family and interpersonal connections have fragmented, companion animals facilitate social contacts and new friendships. On walks with pets, or buying pet food, strangers are more inclined to stop and talk. Children and adults spontaneously greet animals, ask to pet them, and talk to them. Dog parks and dog beaches function much like play groups for toddlers and their parents. They provide a pet-centered social network for "parents," who take delight in watching animal interactions and antics, and share their pet experiences and tips on handling particular challenges. Interestingly, owners come to recognize the dogs and know their names and traits, even when they don't know each other's names. Studies find that pets increase neighborhood interactions and a sense of community (Wood, Giles-Corti, Bulsara, & Bosch, 2007). For many in urban settings, the desire for animal companionship also fills a yearning for closer connection with nature and other living beings.

Role in Child Development

Pets foster positive psychosocial development of children (Melson, 2003), who show enhanced empathy, self-esteem, cognitive development, and greater participation in social and athletic activities. Children's early interest in animals is shaped by their families and social environments. Children live in a world filled with animals—real, symbolic, and fantasy (Melson, 2001). Stuffed animals, popular gifts to infants and small children, bring squeals of delight. They are cuddled, clutched, and dragged around, providing security as children expand their boundaries and comfort in times of sadness, anxiety, or suffering (Triebenbacher, 1998). Animal stories such as *Curious George* and *Where the Wild Things Are* engage children's imaginations as they help them to process their eager explorations and fears of the world around them. In *The Wizard of Oz*, Dorothy's dog Toto provides comfort and security on her journey in a strange land. Stories such as *Bambi* and *The Lion King* teach children about painful parental separation and loss, and the challenges and resilience of the young as they set out on their own. Stories like *Black Beauty* and *Lassie* portray the strong bonds that

children can have with animals. Children relate naturally to animal characters in cartoons, stories, films, and video, and interact with them eagerly at theme parks, in computer games, and on the internet with virtual pets, called Webkins. Zoo and farm visits acquaint urban children with a wide variety of live animals and offer opportunities to observe animal interactions, such as the parental care of their young.

Animals in real life and as fictional characters capture children's imaginations and teach enduring lessons about life, love, and loss. When my daughter, at age 5, experienced her first loss in the death of a classmate, we watched together the video of the magnificent E. B. White story, *Charlotte's Web*. It sparked wonderful conversations about the special relationship between Wilbur, the pig, and his friend Charlotte, the spider; and about his sadness when she died, the normality of death of all living beings, and the importance of grief, carrying on memories, and forging new attachments.

Melson (2003) notes that studies of child development largely have been limited to children's relationships with other humans. She argues for a biocentric approach to developmental theory and research, including attention to interactions with animals, plants, and natural ecologies. Most children see companion animals as peers and they can even learn to read an animal's body language. In fact, it is easier to teach children to be empathic with an animal than with a human, because an animal is straightforward in expressing feelings and behavior. This bond contributes to higher confidence, improvements in mood, and greater empathy with humans (Melson, 2003; Serpell, 2008). Thus, in so many ways, interactions with animals serve as building blocks in development of the self and social relations.

The Heart of the Matter

At the heart of the relationship with pets is a unique affectionate bond. Quite simply, people love their pets (Archer, 1997). Pets greet their human companions enthusiastically on the worst days; they do not notice bad hair; they forgive mistakes; and they do not need to talk things through. As Quindlen (2007) notes, her dogs provide the only uncomplicated relationship in her life. With animals, she observes, what you see is what you get.

Pets that are well-treated offer, in return, love, loyalty, and devotion that is unconditional, consistent, and nonjudgmental. In a study of companion animal bonds of women of color (Risley-Curtiss et al., 2006), this reciprocity was valued most in their relationships. Many individuals experience a profound intimacy in this bond, enhanced through touch, nonverbal communication, and sensory attunement of feeling states. Some say their goal in life is to love and be loved by a human as much as they love—and are loved by—their pet. Pets often live their full lives with their human companions, and profound bereavement at the loss of a cherished pet is normal and commonly as strong as for a significant human companion (see Walsh, 2009a).

Some people prefer the company of pets to people. Children and adults with neurological conditions such as autism are often highly attuned to animals. One remarkable person, Temple Grandin, channeled her hyperfocus and sensory differences into an extraordinary ability to relate to animals, take in the world as they do, and recognize their cognitive and emotional abilities (Grandin & Johnson, 2005). Her sensitivity to animal suffering and well-being led her to design more humane treatment of livestock and to a career advocating for animal welfare.

In studies of women under stress, Allen (1995) noted that five recently widowed women all told similar stories about the beneficial role of pets. Each said that while she appreciated the consolation efforts of family and friends, she really wanted to be alone with her dog, especially immediately following her husband's death. This was, in part, because the dog had been shared with the husband, but more importantly, because she felt that with her dog, no social pretenses were necessary and there were no judgments or expectations for her to "bear up."

A number of web-based organizations are dedicated to the special bond between individuals and their pets for comfort and healing. "Critters for the Cure" (<http://www.crittersforthecure.com>) focuses on their vital role for women with breast cancer and raises money for homeless animals and for breast cancer research and treatment. In "Critters Speak," women document the vital importance of this bond in their journey with cancer. Many recount that, in the middle of the night or when tears would flow, it was their "critters" who gave comfort. One woman says of her cats, "It didn't matter whether I was bald, or exhausted, or felt like a toxic waste dump, they were there to curl up next to me to nap or purr or entertain." Another woman says she learned to laugh her way through her illness, painting her dog's nails orange for Halloween. Another writes about how her two dogs, her "angels," have kept her going through many years of battling recurrent cancer. "Their warm heartbeat lying next to me was incredibly healing."

Clearly, pets provide nurturance and support through difficult times. Bookstore shelves are filled with personal stories of loyalty, responsiveness, and courage in remarkable rescues of their human companions. Many also describe a sense of psychological as well as physical security with companion animals. Those who have had pets readily seek connection with other animals to cope with stressful situations, as did my client Jody.

Jody, a graduate student, was doing humanitarian assistance work in a conflict zone in Africa. Without family or friends nearby for support, she formed an attachment with the goat in the yard of the compound where she lived and worked. Showered with hugs and treats, the goat, which she named "Dani," greeted her with baahs and playful head-butts. Dani began sleeping outside her door, bolstering her sense of security, and followed her everywhere, much like Mary's little lamb. The local staff, initially bemused, became quite fond of her pet goat.

Children who have suffered neglect, untrustworthiness, or abuse in human relationships sometimes become abusive themselves, particularly where there has been domestic violence (see Walsh, 2009a). More often, they develop a closer connection with animals than with the humans in their lives. Pets can satisfy needs for physical, emotional, and social contact without the fear of unwanted or threatening involvement with other human beings (Becker, 2002). As one woman said, her dogs taught her it was safe to love without holding back. Geller (2007) described the impact of her troubled family upbringing of emotional abuse, never feeling loved or that she belonged. That experience gave her a special affinity for animals and an understanding of what it means for a pet to be treated badly as a scapegoat in family dynamics. It led her to become a trainer and "life coach" for dogs and their owners/guardians.

Hafen, Rush, Reisbig, McDaniel, and White (2007) found in their clinical practice that pets may provide a protective effect for alienated or despondent individuals who

find meaning in their lives through their bonds with pets. Although some clients expressed suicidal ideation, they were adamant that they would not act on it because they would not abandon their pets and felt a responsibility to provide care for them. In my own clinical practice, clients have experienced many of the benefits found in research. I hold fond memories of one young man I worked with many years ago:

Sam, age 23, lived alone, had few friends, and had retreated into a virtual nightlife on his computer. He lost his job, became increasingly depressed, and slept all day. He was fearful of close relationships and avoided contact with his parents, having felt suffocated by his mother's babying and wary of his father's harsh criticism. In therapy, he made gains in restructuring his life and getting a new job. Yet he was lonely and anxious about pursuing an intimate relationship.

As our therapy progressed, Sam decided to get a puppy, naming her Goldie, and became very attached to her. Goldie also prodded him to get out of bed every morning and kept him responsible to take good care of her. This essential role function also helped him structure his time, stay on track with his job, and get out of his apartment to the park where other "dog people" gathered. Taking Goldie to family dinners made contact with his parents less stressful. At our last session, Sam brought Goldie for me to meet her—even the receptionist grinned at the resemblance of the golden retriever to his longhaired therapist.

Clearly, this bond also served to ease the ending of our therapeutic relationship and helped Sam to sustain the gains he had made. In a holiday card a year later, he told me that he had met someone special at the dog park. The following year I received their wedding announcement with a photo of the happy couple and their dogs.

Later Life Well-Being

For elderly people, companion animals enhance the quality of life, bringing value, meaning, and worth (Baun, Johnson, & McCabe, 2006). Seniors with pets have fewer minor health problems, fewer doctor visits, and lower health care costs (Friedmann & Tsai, 2006). Pets promote relaxation, help seniors adhere to a daily schedule, and enhance their mobility and well-being. They provide companionship, comfort, and security. Their vital role for persons experiencing the devastating effects of dementia is well documented (Baun & McCabe, 2003; Filan & Llewellyn-Jones, 2006). They decrease agitation, and increase socialization. In nursing homes and dementia units, pets improve residents' mood, decrease depressive symptoms, and improve their social interaction and quality of life (Colombo, Buono, Smania, Raviola, & De Leo, 2006). Residents become more engaged in their environment when animals are living with them. Even the installation of a large fish tank in the dining room of dementia units increased calm, socializing, and healthier eating. Moreover, gazing at fish swimming in a tank was significantly more effective than standard meditative techniques (Filan & Llewellyn-Jones, 2006).

Kindred Spirits

From young children to the elderly, many experience a deep affinity with companion animals that expands the spiritual dimension of human experience (Walsh, 2009b). These soulful interactions can restore a sense of calm, balance, and harmony.

They can stir within us something quite profound and shared with other living beings. Many report that they yield a deep sense of connectedness and unity with all life and nature. As ancient and indigenous peoples have known, animals can teach us valuable lessons about life (Grandin & Johnson, 2009; Masson, 2005), from the natural rhythms over the life cycle to the joy in living and loving fully in the present.

ANIMAL-ASSISTED INTERVENTIONS

The therapeutic use of animals for human health and mental health benefits is a rapidly growing field (Fine, 2006). Animal-assisted activities (AAA) and animal-assisted therapy (AAT) are the preferred terms for these interventions (see Delta Society <http://www.deltasociety.org>). *Animal-assisted therapy* involves the carefully planned and monitored use of the therapist's companion animal in sessions to build rapport, enhance the therapeutic process, and facilitate positive change (see Walsh, 2009a). Here a brief description is offered of AAA in institutional and group settings, with several program illustrations.

AAA provide opportunities for motivational, educational, recreational, and/or therapeutic benefits for optimal recovery and functioning, positive development, and enhanced quality of life. A growing number of animal-assistance programs in Asia, Australia, Europe, and North America are developing in a variety of settings from hospitals and nursing homes to programs based in schools, residential treatment centers, and even prisons. For instance, school-based and library programs, such as "Sit Stay Read!" in Chicago, help children overcome shyness, anxiety, learning difficulties, and classroom embarrassment by having them read aloud to a visiting pet, who is attentive and nonjudgmental. Programs are delivered by trained professionals and volunteers with companion animals that are certified to meet specific criteria (Delta Society; Therapy Dogs International; see websites).

Many community-based programs offer casual "meet and greet" activities and spontaneous interactions involving visits by pets. Typically, volunteers, led by a facilitator, take their companion animals to hospitals, nursing homes, assisted living residences, and long-term care facilities for regularly scheduled visits. Their benefits in these settings are particularly well documented (e.g., Crowley-Robinson, Fenwick, & Blackshaw, 1996; Lutwack-Bloom, Wijewickrama, & Smith, 2005). In some programs, volunteers bring their dog or cat to an adult or children's long-term care facility to interact with individual residents or in large-group activities. When animals visit, residents are more alert, responsive, and are happier. There is more laughter and social interaction, particularly long conversations, than during any other "therapy" or entertainment time (Bernstein, Friedman, & Malaspina, 2000). Families often chose to come at this time, finding conversation easier and visits most pleasant.

Animals are incorporated into a variety of programs as a significant part of treatment and recovery for people with physical, cognitive, emotional, or social challenges, such as wounded military veterans and children with autism (Granger & Kogan, 2006). Physical therapists use interactions with dogs to increase motivation, balance, and walking in those recovering from strokes. Animals are also trained to signal the need for assistance to those with diabetes and epilepsy. The benefits of therapeutic horseback riding have been found with persons with psychiatric disabilities (Bizub, Joy, & Davidson, 2003). A randomized, controlled trial demonstrated the value of interactions with dolphins in the treatment of depression (Antonioni &

Riveley, 2005). Another randomized, controlled trial with persons with schizophrenia and other serious psychiatric disorders found that only those who worked with farm animals for 12 weeks, in addition to receiving standard psychiatric care, gained significant improvement in coping, confidence, and quality of life (Berget, Ekeberg, & Braastad, 2008).

Many programs developed for adolescents and young adults in residential treatment provide opportunities to form a bond with an animal, take responsibility for its care, and experience empathy and nonthreatening affection (e.g., Harbolt & Ward, 2001). A well-replicated, intensive animal care intervention program has had remarkable success with children and adolescents with severe conduct disorder in residential treatment (Katcher & Wilkins, 2000). The program elicited a range of prosocial behaviors—nurturing, affection, play, lower aggression, peer cooperation, responsibility, teaching others, and responding to adult authority—and also produced greater calming and focused attention than comparison programs, such as Outward Bound. More recently, the program has been effective with attention-deficit disorder and other learning disabilities in public school special education programs (Katcher & Teumer, 2006). In grooming and training animals, such as horses and dogs, youths gain abilities that enhance their self-esteem, confidence, and ability to relate interpersonally. One counselor remarked on how amazing it is to see tough kids rolling around playfully with dogs, laughing and hugging them, or nuzzling horses as they groom them. Those who have experienced abuse or neglect in their human relationships connect empathically with rescued animals, their suffering, their good heart, and their potential.

“Puppies Behind Bars” (<http://www.puppiesbehindbars.com>) is one of many programs in prisons and correctional facilities to incorporate animals into rehabilitation efforts. Animals selected from rescue shelters receive supervised training from inmates to become service animals for people with disabilities, including combat veterans with P.T.S.D. and traumatic brain injuries. The responsibility for grooming and training a dog not only provides important and meaningful experiences for inmates, but also decreases prison violence and contributes to better morale within the prison system (Turner, 2007). Other programs, in which inmates care for rescued horses, have been found to improve psychological functioning and reduce rates of prison recidivism (Strimple, 2003). One former drug addict said that caring for a dog and preparing it to help someone in need brought her joy and made her a better person, able to see the good in others and more confident that she can rebuild her own life.

The number of programs and settings that are successfully connecting humans and animals to address a broad range of problems suggests that these interactions provide something both basic and profound. More than simply recreation or stress reduction, animal-assisted programs demonstrate clear therapeutic and rehabilitation benefits.

CONCLUSION

Human-animal bonds merit greater attention in mental health research, theory, and practice, particularly in family systems and relational approaches. As research has developed from small, descriptive reports to more systematic study, there is steadily increasing evidence that companion animals provide many important physiological, psychological, and relational benefits. Their contribution to well-being, healing, and positive growth in a variety of animal-assistance programs holds strong

potential for valuable clinical and community intervention and prevention initiatives. Further research, with both qualitative and quantitative methods and assessment tools (Anderson, 2007; Wilson & Barker, 2003), will further inform such programs.

Yet, there is a curious disconnect in the mental health field: animal-human bonds are unmentioned in most clinical training and research curricula despite the abundant evidence of their importance over the millennia, their centrality in contemporary lives, their therapeutic value in health and mental health research, and their deep meaning for human companions over the life course. The potential therapeutic value of animal companionship receives scant attention in mainstream mental health literature and the subject is rarely found on course syllabi or in textbook reference lists. As a topic of research, it is marginalized and grossly underfunded. Serpell (2006), a leading authority on human-animal bonds, views the neglect of this topic as a legacy of the anthropocentrism that has dominated Western thinking and mental health paradigms. The dismissive assumption, "It's only an animal," has blinded many to the significance of these bonds. I concur with Serpell's outlook that, by expanding our vision beyond this prejudiced mindset, hopefully, we can enrich clinical practice through a more holistic and open-minded view of the potential contribution of animal bonds to human healing and well-being.

Fundamentally, humans are relational beings. Companion animals, although not for everyone, can meet many core psychosocial needs and enrich our lives. They provide pleasure and relaxation; deep affection and steadfast loyalty; and security and constancy in our changing lives. These attachments bring joy and comfort to children and adults and contribute to healthier, happier, and even longer lives. Bonds with companion animals may not be our whole lives, but they can make our lives whole.

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