## BOOK REVIEW

## Attachment to Pets: An Integrative View of Human-Animal Relationships With Implications for Therapeutic Practice

by Henri Julius, Andrea Beetz, Kurt Kotrschal, Dennis Turner, and Kerstin Uvnäs-Moberg. Hogrefe Publishing, Cambridge, MA, 2013, 192 pages, \$49.00 (softcover).

This book explores the nature of the human-animal relationship within a phylogenetic and ethologic framework, reviewing the history and nature of the attraction/bond, delineating its socio-psycho-biological correlates, and describing the breadth and mechanism of its therapeutic usefulness. Human-animal connections have been lauded in one form or another since the beginning of time. One has only to observe ancient cave drawings of dogs, which date back 32,000 years or so. However, not until recent decades has the psychotherapeutic value of the humananimal relationship become so clearly defined, formalized, scientized, researched, and supported by collegial and supervisory groups such as the International Association of Human-Animal Interaction Organizations.

In this ambitious work, the authors seek to review the research regarding and delineate the many benefits of human-animal interaction, such as improved health status, stimulation of social interaction, improvement of empathic skills, reduction of fear and anxiety, increased trust and calmness, improved mood, reduction of depression and aggression, improved pain management and stress management (including lower blood pressure and heart rate), lower cortisol levels, increased oxytocin levels, and facilitated learning. Most notable is their assertion that animal-assisted therapy can facilitate the remediation of disordered attachment. Anatomic, physiologic, and biochemical specifics are offered in support of this claim.

The book is arranged into 9 chapters. Chapter 1 provides case histories of relationships between humans and animals that have had life-changing, even curative, effects for the humans involved. Animals also benefit from these relationships. The authors grapple with the question of whether humans and animals can form "true" relationships in the biopsychological sense of the word. Chapter 2 reveals that humans and animals share brain and physiologic structures and mechanisms that underlie social behavior, thus providing the base and prerequisite for humans and their companion animals to be able to establish true relationships. Chapter 3 provides a review of the research, delimiting the beneficial effects of humananimal relationships described above.

Chapter 4 defines the role of oxytocin, produced in the hypothalamus and acting as both a hormone and a neurotransmitter, in mediating these beneficial effects. Oxytocin release is triggered by certain kinds of social interactions and touch. Social interactions that incorporate the concepts of attachment and caregiving trigger the release of oxytocin. These concepts are introduced in chapter 5, in which a helpful review of attachment styles is provided. We recall from our study of child development that there are securely and insecurely attached children—and adults. Insecurely attached children may manifest avoidant, ambivalent, or disorganized patterns of attachment. The caregiving correlates of these attachment styles are identified as well. Flexible caregiving in caregivers is usually associated with secure attachment in children. These patterns, established in infancy, often carry on throughout our lives and are generalized to most other significant relationships. Chapter 6 provides a comprehensive review of the research, which clearly supports a connection between the oxytocin system and attachment and caregiving. Securely attached children develop highly functioning oxytocin systems stemming from attachment to their caregivers. Their caregivers, also, have well-toned oxytocin systems. Conversely, maladaptive caregiving is likely to be associated with an imbalance in the oxytocin system. In insecurely attached children, the attachment figures do not trigger an adequate oxytocin release and thus fail to alleviate stress in and calm the child. The primary caretakers of children with disorganized attachment, children who have been abused or neglected, not only fail to calm but may actually activate the child's fight-or-flight system, a neurobiological system activated by stress and associated hormones, predominantly cortisol. The further social development of such children is seriously jeopardized.

Chapter 7 reviews empirical evidence indicating that humans establish attachment as well as caregiving relationships with animals. Interestingly, pathologic attachment and caregiving patterns rooted in human-human relationships do not transfer to pets in most instances. For children with insecure attachment patterns, secure attachment to pets is 4 times higher than it is to humans. The same ratio applies to caregivers: they are 4 times more likely to give flexible caregiving to animals than to humans. These are very hopeful findings, made even more hopeful by the finding that secure attachment to pets does transfer to the human-human relationship.

Chapter 8 reiterates the beneficial effects of human-animal relationships described above and reviews the research supporting these assertions. The authors attribute these beneficial effects to regulation of the oxytocin system that occurs over the course of forming a healing relationship with an animal. Chapter 9 provides further elaboration of the therapeutic benefit of the human-animal relationship and conjectures why animals are valuable therapy assistants.

The psychological and underlying neuroendocrinologic changes associated with friendly animal contact seem to promote approach behavior and trust in others and minimize aloofness. Under these conditions, the attachment system of the person with insecure or disorganized attachment will open up to integrate new and positive experiences in human-human relationships (p 148).

We all know that animals can help people heal from trauma dating back as far as infancy, but these authors analyze the components of the healing process, elucidating them in biochemical, physiologic, and psychological terms. They provide a broad overview of the research that defines the value of therapy animals, as well as a robust bibliography for extended exploration. The book could be quite helpful to those therapists who are considering integrating therapy animals into their practice. Additionally, it has usefulness to us as practitioners working in a climate where evidence-based practice has become the norm. This book is worth the read.

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