

## Horses helping children grow

Louise B. Graham  
Bridgewater State University

Allison Lindsey  
Bridgewater State University

### ABSTRACT

A review of Animal-Assisted Therapy and related terms such as *Animal-Assisted Activities* is presented as an introduction to the exploration of additional equine applications with children. Animal-Assisted Therapy has been studied, but Animal-Assisted Activities with children facing normal developmental struggles has not received much attention. Definitions and research for various animal activities and therapies are reviewed. Subsequent focus will be on equines helping children via Animal-Assisted Activities to meet normal developmental challenges. Creating parallels using a horse is an avenue to working with children, aiding them in the process of introspection, self-monitoring, self-efficacy, self-esteem, metacognitions, and overcoming angst associated with normal development hurdles. Horses can give accurate and unbiased feedback via their reactions to a child's behavior, thus increasing self-awareness of the impact of behavior on others. There are many different modalities utilizing equines, all of which have positive impacts on the individual. (143)

Keywords: Equines, Children, Animal-Assisted Activities

Copyright statement: Authors retain the copyright to the manuscripts published in AABRI journals. Please see the AABRI Copyright Policy at <http://www.aabri.com/copyright.html>

## INTRODUCTION

Animal therapy and activities take many forms, and are often discussed in relationship to children or individuals with physical and/or mental-health disabilities. This paper will review the various equine therapies, and will additionally address the value of equine-structured activities for improving the lives of children facing normal developmental hurdles. Definitions and descriptions of the different types of, and names for, the equine therapies and activities will lay the groundwork for the expanded use of horses with children.

### History of using animals in therapy

There are a plethora of names used to describe interactions between humans and animals in therapy (Lentini & Knox, 2009). Animal-Assisted Activities (AAA) are activities that involve animals spending time and visiting with people (Delta Society, 1996). The Delta Society (1996) states that with AAA, the same activity can be executed with a variety of people, unlike an Animal-Assisted Therapy program, which is tailored to a specific individual or a medical condition. Animal-Assisted Therapy (AAT) is more focused. The Delta Society describes AAT as a “goal-directed intervention in which an animal that meets specific criteria is an integral part of the treatment process” (Fine, 2006, p. 264). In AAT, the therapist should have a well thought-out plan for how working with the animal will make a difference in the life of the client when compared to a more conventional form of therapy. Equine Facilitated Psychotherapy (EFP) is a type of AAT: “Specifically, EFP is a planned treatment using the horse as an integral part of the psychotherapy process” (Lentini & Knox, 2009, p. 51). “In addition to the name Equine Facilitated Psychotherapy, also encountered in the literature were the titles Equine-assisted psychotherapy (EAP), equine assisted experiential therapy (EAET), Equine-facilitated therapy (EFT), Equine-assisted learning (EAL), Equine facilitated learning (EFL), therapeutic riding, psychotherapeutic riding, and hippotherapy” (Lentini & Knox, 2009, p. 51). In EFP, therapists with different styles work with horses and use various theoretical orientations as part of their therapy. Esbjörn (2006) reviewed the research and found that there was much variation in the ways in which therapists intellectualized EFP. There are many different ways in which EFP can be used, and many of the principles, theories, and even the methods of administering therapy can also vary. Some therapists practice therapy by providing riding instruction, while some focus on what it takes to care for, herd, or lead the animal (Lentini & Knox, 2009). Some practitioners of EFP work in group settings, while others focus on one individual in their approach to therapy. Most therapists use different blends of techniques that they feel work for them and their clients.

Animal-Assisted Therapy “was designed to promote improvement in human physical, social, emotional, and/or cognitive function; including thinking and intellectual skills” (Rothe, Vega, Torres, Soler, & Pazos, 2005, p. 374). Throughout history, many types of trained animals have played major roles in therapy. “Horses were used in the 1700s to assist in the therapy of a variety of diseases” (Beck & Katcher, 1996, p. 132). The first “documented case of Animal-Assisted therapy (AAT) appears in 1792 at the York Retreat in England” (Pichot & Coulter, 2007, p. 9). During this time, it was noted that animals would “enhance the humanity of the emotionally ill” (Beck & Katcher, 1996, p. 132). “Florence Nightingale is credited as the first clinician to study animals in health care” (Pichot & Coulter, 2007, p. 4). She saw that small animals had favorable results for her habitually ill patients (Nightingale, 1860). “Throughout history animals have been observed to improve motivation, self-control, and responsibility, as

well as numerous other mental and physical benefits” (Pichot & Coulter, 2007, pp. 9–10). One of the first studies found that people who owned pets lived longer than those who didn’t own pets (Friedmann, Katcher, Lynch, & Thomas, 1980).

“Today domestic animals are routinely used in a variety of settings including schools, hospitals, nursing homes, mental health units, physician offices, prisons, and businesses” (Pichot & Coulter, 2007, p. 10). Further research suggests that animals also have the ability to reduce stress in children and adults (McNicholas & Collis, 1995; Serpell, 1996). Programs that use equine therapy are becoming much more common as we learn about additional benefits to individuals.

### **Equine-facilitated psychotherapy**

Equine-facilitated psychotherapy (EFP) is a form of Animal-Assisted Therapy that allows horses to be an integral part of the treatment of children, adults, and families that struggle with mental-health issues. This unique therapy provides opportunities to enhance self-awareness, develop feelings of self-love, and allow people to grow, progress, and heal (Nilson, 2004).

This type of treatment is beneficial when trying to resolve unfinished business. Corey (1991) defines unfinished business as unexpressed feelings that are linked to memories carried into present life in ways that interfere with one’s ability to function effectively (Klontz B., Bivens, Leinart & Klontz T., 2007). He suggests that the issue will stay present until an individual deals with the pent-up feelings (Corey, 1991). Experiential techniques help clients resolve unfinished business through re-experiencing significant life events and relationships, allowing them to work through unresolved conflicts and emotions to live more fully in the present (Klontz, et al., 2007).

Licensed therapists who are also certified equine specialists facilitate equine therapy programs. Equine Assisted Growth and Learning Association (EAGALA) is the most well-known organization to certify therapists. EAGALA (2015) composed the standards of excellence in equine-assisted psychotherapy, and is dedicated to improving the mental health of individuals, families, and groups around the world. In conducting equine therapy, the therapist may focus on experiential activities, not actual horseback riding, with a child client. The child may, for example, persuade the horse to engage in particular behaviors via activities that the activity leader designs for the pair. The child may pick up a horse’s hoof to clean it, or cajole a horse to follow him or her in the pasture. As a child must convince a large animal to acquiesce to his or her desires, this may bring about a sense of mastery and increases self-confidence and self-esteem while promoting a feeling of being loved.

### **Animal-Assisted activities: A good fit for children**

Animal-Assisted Activities fit into a child’s natural world. Pichot and Coulter (2007) suggest that at an early age, children are taught to love animals and associate them with positive and playful experiences. Animal characters are present in children’s lives; they are on babies’ toys, clothes, furniture, sheets, and many other objects. Adults animate and anthropomorphize stuffed animals during interactions with babies and young children (Pichot & Coulter, 2007). Children soon learn to associate animals with comfort, play, and home (Sussman, 1985). Animal characters in books teach children about toilet training, obeying mom and dad, looking both ways before crossing the street, and other necessities of life (Pichot & Coulter, 2007). Adults can

teach life's lessons through parallels from animals' lives, and children readily understand and apply the embedded lessons. A therapy animal is an established and highly effective method to help children learn (Pichot & Coulter, 2007). As Berg and Steiner (2003) repeatedly stress, the key to working with children is to really hear them and to use mediums that are consistent with who the child is and how they best communicate. According to Berg and Steiner (2003), the underlying principle is to listen carefully to a child to learn as much as possible about the individual and how each one makes sense of the world in a unique way. According to Pichot and Coulter (2007), children who are more action oriented frequently benefit from working with therapy animals. Animal-Assisted Activities can be a helpful approach to working with children and their challenges in everyday life.

### **EAA and diabetes**

According to the national diabetes organization (2014), diabetes is a crisis in the United States of America. From 1990 to 2009, the rates per 100 of diagnosed diabetes in the United States population increased by 217% (from 0.6 to 1.9) for those aged 0–44 years and by 150% (from 5.0 to 12.5) for those aged 45–64. The prevalence of diabetes in 2012 identified 29.1 million Americans, or 9.3% of the population, had diabetes (diabetes.org, 2014). Eighty-six million people have prediabetes, and 9 out of 10 of those people are unaware of their condition. About 208,000 Americans under age 20 are estimated to have diagnosed diabetes. Each year 18,436 people under the age of twenty are diagnosed with diabetes. Children today are less physically fit and active than in earlier years, and their hearts and lungs are not as healthy as those of a middle-aged jogger (Papalia & Wendkos Olds, 1994). Sedentary and overweight children and adolescents would benefit from the exercise of walking a horse in their management of diabetes. Losing weight, eating healthy, and being active can cut the risk of developing diabetes in half for people who are prediabetic. Exercise helps with the control and management of diabetes by improving blood sugar control, boosting overall fitness, and reducing the risk of heart disease and stroke (Mayo Clinic, 2017).

For children with type-2 diabetes, working with horses provides numerous opportunities for physical activity. A horse must be retrieved from the pasture, walked to cool if sweaty, and returned to the pasture after the activity. Children brush the horses, shovel out the stalls, and push wheelbarrows full of manure out to the manure pile, all the while exercising, but without it being identified as such.

### **EAA and social support**

Social support is a generic term covering a variety of positive acts, interpersonal transactions, and social provisions that arise from social relationships and that are widely accepted to enhance human health and well-being (McNicholas & Collis, 2001). Samter (1994) distinguishes between social loneliness and emotional loneliness, the prior being an impoverished or absent social network whereas the latter is the absence of a particular type of close relationship. Shyness, low self-esteem, a lack of self-confidence, or deficits in communication skills may result in emotional loneliness. Animals are indirect providers of social support; The presence of a pet increases the number of positive social interactions between the handler and other people (McNicholas & Collis, 2001).

Sports have been shown to improve cognitive and social development (Berk, 1991). Hart, Ladd, and Burleson (1990) indicate that there are two sources of self-esteem: how competent children think they are in various aspects of life, and how much social support they receive from other people. Learning equine skills can foster a self-image of competency. Noncompetitive peer group activities offer opportunities for enhancing relationships. Having children work together to clean a stall, brush a horse or retrieve horses from the paddock has the potential to act as a stimulus for children to learn to work together, create a division of labor, problem solve, and receive positive feedback from their peers.

Humans have a desire to be needed and have some form of reciprocity in our relationships. Domesticated animals require our care for their survival. Horses are pack animals, and view their caregivers as part of their herd or pack when they live bereft of an equine group. Children who become a caregiver for a horse or have the opportunity to be involved in an equine-assisted activity experience being needed and loved, which may contribute to raising self-esteem, self-efficacy, initiative, and communication skills. The child–horse bond can develop the following qualities: mutual trust, respect, affection, empathy, unconditional acceptance, confidence, personal success, responsibility, assertiveness, communication skills, and self-control (Rothe, et al., 2005). Some horses are loving, loyal animals, and give unconditional love to the caregiver. With such a horse, a child experiences unconditional acceptance and attention, thus potentially increasing self-worth and self-esteem. The horse can impart a sense of calm, security and reassurance of love and acceptance. The child must problem-solve and execute task completion while caring for and interacting with a horse. When a child observes the teacher, camp leader, or adult being kind, caring, and loving to an animal, and the animal responds with attention, this interaction implies that this person can be trusted. If the horse trusts X, then he or she must be trustworthy.

### **EAA physical and cognition development**

Rao and Seaton (2009) believe that team sports have become too competitive and often result in harsh criticism, which is damaging to young people's self-esteem. The reality of youth team sports is that only a few participants excel. Rao and Seaton (2009) recommend alternatives to team sports, advocating that children participate in noncompetitive movement activities that are more primitive than team sports, such as gross motor movement, or any movement that is not dangerous. Among adolescent boys, competence at sports is strongly related to peer admiration and is more important in their development of self-esteem than at earlier ages (Berk, 1991 p. 530). A child who is not particularly adept at physical activity may shy away from any physical activity in the traditional sense, but may be more at ease performing equine-care activities. The dynamic movement of a horse may increase balance, posture, flexibility, and gross motor control (Copeland, as cited in Granger & Kogan, 2006). A child who is "clumsy" or has poor coordination may increase these skills by riding. Of course, a child's preconceived cognitions regarding horses will set the stage for the equine and child interaction, and equines may not be a good fit for all children.

Piaget's Intellectual stage of Operational thinking is closely linked to experience (1952). Children's thinking is tied to the here and now, and conservation can be learned by measuring food for the horses, feeding, and watering them. Children can be given different shaped containers to measure out the same amount of liquids to learn conservation. Rao and Seaton (2009) believe that schools are better suited to girls' natural being than boys', because teachers



expect children to sit still and pay attention for long periods of time. Boys are more likely to have difficulty with focusing, and sitting still due to their higher energy levels and stylistic differences (Rao & Seaton, 2009). Boys may have a preference for hands-on activities, tactile learning, and physical movement (Rao & Seaton, 2009).

Children who use mnemonics may see an increase in memory capacity. The use of mnemonics aids learning the body parts of a horse and makes memory practice fun. The mentor can introduce metaphors by commenting on the behaviors and actions of the horse. Most children in the Operational thinking stage do not appreciate metaphors and similes until they reach adolescence, when thinking becomes symbolic and they begin to think about thinking (Elkind, 1981). The child can be asked what he or she thinks the horse is feeling or thinking when the animal displays a particular behavior. Elkind states that adolescents can conceptualize and attribute motives to their parents and others (1981). They might be asked to surmise what they think might have prompted a particular response to their own behavior from the horse. They can be asked to write a story from the horse's point of view, with the horse telling the story. This in turn can serve as feedback for the child regarding the impact of their behavior on others. The activity leader can transition into formal operational thought by asking children to think of general principles for interacting with horses.

A child may be asked to devise a plan to care for a horse over the course of the day, thus promoting the frontal lobe skills of planning and organizing. Many times the activities have to be changed from the original plan, and this can promote resiliency in children. For instance, a horse might run through an open gate and need to be caught, or might roll in the mud just after being groomed. The reality of being able to adhere to schedules will be challenged, and a child can gain an understanding of what he or she can accomplish, as well as a realization of the need for flexibility (Rothe, et al., 2005, p. 379).

Children may be reticent to read aloud if they have difficulty reading or pronouncing words, or are shy. A reading enrichment program, "Barks and Books" inspires tentative readers and improve their reading and communication skills by reading aloud to animals. The Reading Education Assistance Dogs (R.E.A.D.) program employs volunteer, registered therapy animals and their owners who visit schools, libraries, and many other settings as reading companions for children. Miniature horses are often used in this capacity in place of dogs. Mathematics skills can be practiced by asking children to calculate how long it would take to ride to a particular place if it is  $x$  miles away and the horse walks at a particular rate. Children can be asked to place poles on the ground that the horses will step over; they must measure the horse's stride and then calculate the distance apart to correctly place the poles. Writing skills can be practiced if children are asked to write about their favorite horse.

### **Skill acquisition**

A person must acquire new abilities in order to properly care for a horse. A child may experience bonding via the process of acquiring these new abilities and skills. The child is put at ease by being told that acquiring new skills will take time. It is also important that the child understands that it is all right if they don't get everything correct the first time by providing a safe environment in which they can make mistakes. The adult can validate feelings of panic, defeat, or apprehension while simultaneously working on coping techniques. A child's confidence often increases as he or she improves and gets better at caring for the horse. A child may pick a task with which they have less experience in order to challenge him- or herself. For

example, walking a horse on a halter requires coordination, planning, and effective communication with the animal. Often children and even adults fear that the horse will step on their feet as they walk with the horse. The professional can offer assistance as needed to the child, and may speak with the child about thoughts or feelings that arise during the activity. Children may become independent in their own hair washing after learning to wash a horse's mane. Feeding horses can become a matter of understanding weights and measurements, fractions, and quantities.

### **EAA and self esteem**

Equine activities may increase self-esteem by allowing one to understand how to impact another being in a positive way. A child identifying with a powerful, 1100-pound horse may develop an increased sense of self. When the horse reacts to a child's guidance, the horse gives over some power to that child. In this situation, the adult can have an outside perspective and can watch, remark, and educate the child in both verbal and nonverbal communication skills. An adult providing feedback about mastery-oriented attributions regarding ability increases self-esteem (Berk, 1991). There are many instances when nonverbal communication learned by working with a horse can be translated to human relationships and elicit a transformation in the child. "Empathy is developed through a special communication of cooperation and care, and a sense of identification develops between horses and people" (Rothe, et al., 2005, p. 381). Some children may have developmental issues because of a lack in a parent's ability to successfully exhibit love and affection. Children need to give and receive love without restriction in order to grow and develop their own identities. The company of a horse can provide a child with unconditional love. When children work with horses, they also learn about body placement in relation to others, and may become more aware of dangerous situations and what to do in order to improve their circumstances (Dyer, 2000).

### **EAA and anxiety**

Working effectively with a horse involves patience, forgiveness, reliability, understanding, and care. A child can see a clear picture of equine response to anxiety through observation of herd behavior (Beck & Katcher, 1996). When horses sense danger, they initially respond with heightened alertness, then abandon activities in order to check the environment, and will then flee if the situation seems too dangerous (Rothe, et al., 2005, p. 379). These situations result in a specific behavior followed by either fleeing or returning to the original activity. Horses are animals of prey and startle and frighten easily. Children may identify with the emotions the horse displays, and this can serve as an avenue for discussion of emotions and responses to emotions. Children can problem-solve means of calming the horse that can be directly translated to themselves. This experience "allows the projection of a child's wants, needs and behaviors through the horses" (Rothe, et al., 2005, p. 375).

Children can be given challenge activities to guide the horse to overcome an anxiety provoking situation. For example, a horse might shy at a shiny object on the ground. The adult would ask the child what he or she might do to help the horse overcome that fear. The resulting learning experience could be quite enlightening for the child in regard to their own fears and apprehensions.

Shy children experience heightened levels of anxiety in social and novel situations. Friedmann, Locker, & Lockwood (1990) write that stress-moderating benefits from the presence of a friendly animal can be derived without pet ownership. Animal introduction increases parasympathetic nervous system arousal, and reduces blood pressure, heart rate, and cortisol levels (Barnes, et al., 2007). Barker, Knisely, McCain, and Best (2005) measured serum cortisol, epinephrine, norepinephrine, salivary cortisol, salivary IgA and lymphocyte counts before and after interacting with a therapy dog, and they found that a reduction can occur in as few as five minutes. A major developmental task for children 6–9 years of age is managing fear. As they become more aware of other people and of themselves and have a strong desire to be accepted by peers, they can become fearful of making mistakes, looking foolish, or being embarrassed. These fears may inhibit them from trying new things (Schaefer & DiGeronimo, 2000). Horses will not criticize, laugh at, or make fun of the child. Children can experience a positive growth experience overcoming fears and meeting the new challenge of working with the equine.

Horses form strong bonds with their caregivers, and will often greet an individual with a welcoming neigh. Working with a sensitive horse can provide an opportunity for an adult to instill new skills in a child (Bates, 2002; Roberts, Bradberry, & Williams, 2004). Children who typically struggle with physical and emotional intimacy are often able to accept such intimacy from a horse, and because of that experience, are able to transfer newly acquired skills to their daily lives.

Equine activities address a variety of mental-health and human-development needs, including behavioral issues, attention deficit disorder, substance abuse, eating disorders, abuse, trauma, depression, anxiety, relationship problems, and communication challenges (EAGALA, 2015). The literature contains a plethora of articles on horses helping with mental health and physical disabilities. The value of equines with children grappling with normal developmental challenges is scarce. Just as we know that sports and youth organizations, such as scouting programs, can aid children in their development, the use of equines to assist with these developmental tasks has been underrepresented. The basis of these activities is that because horses behave similarly to human beings in their social and responsive behavior, it is easy for children to establish a connection with them. While there are many different modalities involving equines, all have been found to have positive impacts on humans.

### **EAA and Suggestions for further study**

Ethology is defined as the observational, often comparative study of animal and/or human behavior (Turner, 2006, p. 487). Turner (2006) believes that most studies are concerned with the biological basis of behavior but that the human–animal bond is an important area for study. Turner (2006) also notes that while there have been many studies investigating the differences in the human–animal interaction with humans of varying ages and genders, nearly all of the studies have been with dogs and cats. More research on human–equine interaction should be explored. Breed and gender differences in equines should be explored for potential relational differences with children; gelded equines have been employed, but mares are not spayed as are canines and felines. The age of a horse should be investigated as a variable, as should whether the equine is the sole horse in the barn, or part of a stable. Socialization in animals is a significant factor in connection with their often unique ability to interact with humans.



## REFERENCES

- American Diabetes Association (2016). Statistics about diabetes. Retrieved from <http://www.diabetes.org/diabetes-basics/statistics>
- Barker, S. B., Knisely, J. S., McCain, N. L., & Best, A. (2005). Measuring stress and immune response in healthcare professionals following interactions with a therapy dog: A pilot study. *Psychological Reports, 96*(3), 713–729. doi:10.2466/pr0.96.3.713-729
- Barnes, V. A., Davis, H., & Treiber, F. A. (2007). Perceived stress, heart rate, and blood pressure among adolescents with family members deployed in Operation Iraqi Freedom. *Military Medicine, 172*(1), 40–43.
- Bates, A. (2002). Of patients & horses: Equine-facilitated psychotherapy. *Journal of Psychosocial Nursing and Mental Health Services, 40*(5), 16–19. doi:10.3928/0279-3695-20020501-14
- Beck, A. M., & Katcher, A. H. (1996). *Between pets and people: The importance of animal companionship*. West Lafayette, IN: Purdue University.
- Berg, I. K., & Steiner, T. (2003). *Children's solution work*. New York: Norton.
- Berk, L. E. (1991). *Infants, children, and adolescents*. Allyn and Bacon: Boston.
- Corey, G. (1991). *Theory and practice of counseling and psychotherapy* (4th ed.). Pacific Grove, CA: Brooks/Cole.
- Delta Society (1996). *Standards of practice for animal-assisted activities and animal-assisted therapy*. Renton, WA: Delta Society.
- Dyer, D. A. (2000). *Every child's dream: Horses helping kids grow up, a parent's guide*. Blacksburg, VA: Advantage ReSource.
- EAGALA (2015). Equine Assisted Growth and Learning Association. Retrieved from <http://www.eagala.org>
- Elkind, D. (1981). *The hurried child: Growing up too fast too soon*. Reading, MA: Addison-Wesley.
- Esbjörn, R. J. (2006). When horses heal: A qualitative inquiry into equine facilitated psychotherapy (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3213087)
- Fine, A. H. (Ed.). (2006). *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice*. San Diego, CA: Academic Press.
- Friedmann, E., Katcher, A. H., Lynch, J. J., & Thomas, S. A. (1980). Animal companions and one-year survival of patients after discharge from a coronary care unit. *Public Health Reports, 95*(4), 307–312.
- Friedmann, E., Locker, B. Z., & Lockwood, R. (1993). Perceptions of animals and cardiovascular responses during verbalization with an animal present. *Anthrozoös, 6*(2), 115–134.
- Granger, B. P., & Kogan, L. R. (2006). Characteristics of animal-assisted therapy/activity in specialized settings. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (2nd ed., pp. 263–285). San Diego: Academic Press.
- Hart, C. H., Ladd, G. W., & Burleson, B. R. (1990). Children's expectations of the outcome of social strategies: Relations with sociometric status and maternal disciplinary styles. *Child Development, 61*(1), 127–137.

- Hines, L., & Fredrickson, M. (1998). Perspectives on animal-assisted activities and therapy. In C. C. Wilson & D. C. Turner (Eds.), *Companion animals in human health* (pp. 23–39). Thousand Oaks, CA: Sage.
- Klontz, B. T., Bivens, A., Leinart, D. & Klontz, T. (2007). The effectiveness of equine-assisted experiential therapy: Results of an open clinical trial. *Society and Animals*, 15(3), 257–267. doi:10.1163/156853007X217195
- Lawrence, E. A. (1984). Human relationships with horses. In R. K. Anderson, B. L. Hart, & L. A. Hart (Eds.), *The pet connection: Its influence on our health and quality of life* (pp. 38–43). Minneapolis: University of Minnesota.
- Lentini, J. A., & Knox M. (2009). A qualitative and quantitative review of equine facilitated psychotherapy (EFP) with children and adolescents. *The Open Complementary Medicine Journal*, 1, 51–57. doi:10.2174/1876391X00901010051
- Mayo Clinic Staff (2015). Diabetes and exercise: When to monitor your blood sugar. <http://www.mayoclinic.org/diseases-conditions/diabetes/in-depth/diabetes-and-exercise/art-20045697>
- McNicholas, J., & Collis, G. M. (1995). The end of a relationship: Coping with pet loss. In I. Robinson (Ed.), *The Waltham book of human–animal interaction: Benefits and responsibilities of pet ownership* (pp. 127–143). Oxford, UK: Pergamon.
- McNicholas, J., & Collis, G. M. (2001). Children’s representation of pets in their social networks. *Child: Care, Health and Development*, 27(3), 279–294. doi:10.1046/j.1365-2214.2001.00202.x
- Nightingale, F. (1860). *Notes on nursing: What it is, and what it is not*. New York: Appleton.
- Nilson, R. (2004). Equine-facilitated psychotherapy. *Perspectives in Psychiatric Care*, 40(2), 42.
- Papalia, D. E., & Wendkos Olds, S. (1994). *Human Development* (6th ed.). New York: McGraw-Hill.
- Piaget, J. (1952). *The origins of intelligence in children*. New York: International University.
- Pichot, T., & Coulter, M. (2007). *Animal-assisted brief therapy: A solution-focused approach*. Binghamton, NY: Haworth.
- R.E.A.D. Intermountain Therapy Animals. Retrieved from [http://www.therapyanimals.org/Read\\_Team\\_Steps.html](http://www.therapyanimals.org/Read_Team_Steps.html)
- Rao, A., & Seaton, M. (2009). *The way of boys: Promoting the social and emotional development of young boys*. New York: Harper-Collins.
- Roberts, F., Bradberry, J., & Williams, C. (2004). Equine-facilitated psychotherapy benefits students and children. *Holistic Nursing Practice*, 18(1), 32–35.
- Rothe, E. Q., Vega, B. J., Torres, R. M., Soler, S. M. C., & Pazos, R. M. M. (2005). From kids and horses: Equine facilitated psychotherapy for children. *International Journal of Clinical and Health Psychology*, 5(2), 373–383.
- Samter, W. (1994). Unsupportive relationships: Deficiencies in the support-giving skills of the lonely person’s friends. In B. R. Burlinson, T. L. Albrecht, & I. G. Sarason (Eds.), *The communication of social support: Messages, interactions, relationships, and community*, pp. 195–214. Thousand Oaks, CA: Sage.
- Schaefer, C. E., & DiGeronimo, T. F. (2000). *Ages & stages: A parent’s guide to normal childhood development*. New York: Wiley.
- Schultz, P. N., Remick-Barlow, G. A., & Robbins, L. (2007). Equine-assisted psychotherapy: A mental health promotion/intervention modality for children who have experienced intra-

- family violence. *Health and Social Care in the Community*, 15(3), 265–271.  
doi:10.1111/j.1365-2524.2006.00684.x
- Serpell, J. A. (1996). *In the company of animals: A study of human–animal relationships* (2nd ed.). Cambridge: Cambridge University.
- Turner, D. C. (2006). The future of research, education, and clinical practice in the animal–human bond and animal-assisted therapy. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (pp. 487–498). San Diego, CA: Academic Press.
- Sussman, M. B. (Ed.). (1985). *Pets and the family*. Binghamton, NY: Haworth.

