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Pepperdine University
Graduate School of Education and Psychology

BEST PRACTICES FOR NON-PROFIT ORGANIZATIONS USING HUMAN-ANIMAL
INTERACTIONS AS AN INTERVENTION WITH AT-RISK YOUTH

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Education in Educational Leadership, Administration & Policy

by

Jai Oni Sly

July, 2021

Farzin Madjidi, Ed.D. – Dissertation Chairperson

This dissertation, written by

Jai Oni Sly

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

Doctoral Committee:

Farzin Madjidi, Ed.D., Chairperson

Gabriella Miramontes, Ed.D.

Maria Brahme, Ed.D.

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VITA

EDUCATION

- 2018-2021** **Pepperdine University, Graduate School of Education, Malibu, CA**
Doctorate of Education in Educational Leadership, Administration, & Policy
- 2016** **Pepperdine University, Graduate School of Education, Malibu, CA**
Masters of Arts, Teaching with Multiple Subject Credential
- 2015** **UCLA Extension, Los Angeles, CA**
Paralegal Certificate, ABA Approved
- 2015** **California Polytechnic University, Pomona; Pomona, CA**
Bachelors of Science, Anthropology;
Bachelors of Arts, Gender, Ethnic Multicultural Studies

PROFESSIONAL EXPERIENCE

2019-Present **Ingenium Charter School, Canoga Park, CA**

- Teacher- 1st grade
- Social Media Guru
- Curriculum & Instruction Committee
- Extended Learning Program Task Force
- Operations Task Force

2018-2019 **310 Tutors, Santa Monica, CA**

- Coordinating Liaison

2017-2018 **LAUSD, Los Angeles, CA**

- Teacher at Budlong Elementary School

2016 **John Muir Elementary School, Santa Monica, CA**

- Student Teacher

2015-2016 **McKinley Elementary School, Santa Monica, CA**

- Para-Educator
- Student Teacher

PROFESSIONAL/COMMITTEE EXPERIENCE

2021	Kappa Delta Pi-Lamda Mu Chapter
2018- Present	K9 Youth Alliance- Board Member, Secretary, DEI Committee Chair
2018-Present	Human Rights Action Center- Board Member

ABSTRACT

Non-profit organizations and community programs work with at-risk youth to teach social-emotional skills like empathy, self-confidence, and self-efficacy. This research aimed to examine best practices for community programs that use human-animal interaction as an intervention for at-risk youth. Specifically, the phenomenological study aimed to review the successful strategies that community programs when working with the at-risk youth population. The challenges faced and how these type of community programs measure their success were also important purposes of these research. Participants shared successful strategies, how success is measured as well as challenges and recommendations for other community programs that work with the at-risk youth population.

As a result, PESA (Planning, Education, Safety, and Assessment) Model was created to help individuals focus on the essentials when starting a program. Organizers should focus on planning and identify goals, followed by communicating and getting buy-in from all partners. Non-profits should provide and engage in training, mentorship and research. Furthermore, safety for all participants is paramount when conducting the program. Lastly, assessment via feedback and research based measurements are crucial to the betterment of these types of interventions.

Keywords: at-risk youth, dog training, human-animal intervention, community programs, non-profit organizations

Chapter 1: Introduction

Background/Historical Context

The relationship between animals and humans has been documented for over 10,000 years (Grandgeorge & Hausberger, 2011; Margolies, 1999; Morrison, 2007). Before the domestication of dogs, wolves lived with humans (Smith, 2019). Domestication for dogs was around 14,000 BC and cats around 6000 BC (Clutton-Brock, 1995; Davis, 2007; Grandgeorge & Hausberger, 2011). Dogs are used for various reasons like hunting, herding, guardians, and guides (Clutton-Brock, 1995; Mullen, 2013; Walsh, 2009). The social relationship between humans and dogs has become more evident through the practice of dog burials and examination of the domestication of dogs (Morey, 2006).

Humans have developed relationships with dogs and other animals for various reasons, more commonly in the United States, as pets or companions. The idea of using animals as companions and household pets has proven to play a significant role in children's lives as they grow older. Researchers conducted a study that asked the youth to identify the most critical relationship in their lives; nearly half stated a pet they owned (Kosonen, 1996; Mueller, 2014). While dogs and other animals are seen as family members for many modern-day families, there are significant benefits to working with animals (Fine, 2015; Triebenbacher, 1998). Pets have made a positive impact on families. Fine and Beck (2010) suggest that pets fill a void in their owners' lives as people can return home to a pet instead of an empty house.

Animal interaction and animal-assisted therapy have been documented for decades. The use of animals for therapeutic purposes began in the 11th century. It expanded in the 18th and 19th centuries, focusing on various healthcare institutions throughout Europe (Grandgeorge & Hausberger, 2011).

One well-documented account of animal-assisted therapy happened in 1792 at the York Center in Britain (Harkrader et al., 2004; Netting et al., 1987; Ormerod, 2008; Weaver, 2015). In the 1940s, the military used horses and farm animals to aid with therapeutic activities. Researchers suggested that animal interaction promotes positive effects on human health, social environment, and well-being (Grandgeorge & Hausberger, 2011; Hines, 2003).

In the late 1800s, Henry Bergh, Etta Wheeler, and Elbridge Gerry collaborated on identifying the vulnerabilities of children and animals, which led to the creation of protection laws (Mullen, 2013; Myers, 2007; Walsh, 2009). There are limitations as the field of research is lacks understanding of the development process when community programs pair HAI and youth. Research around HAI concerns various disciplines such as veterinary medicine, medicine, psychology, ethology, sociology, and anthropology (Grandgeorge & Hausberger, 2011; Michalon et al., 2008). HAI is used in various settings, in everyday homes, nursing homes, prisons, and mental institutions.

Ernest (2014) stated, “Sigmund Freud, best known as ‘the father of psychoanalysis,’ became a proponent of AAT when he began using his favorite dog, Jo-fi, during his psychotherapy sessions” (p. 28). It was suggested that Jo-fi help Freud identify the level of anxiety a patient had. Serpell (2010) stated that:

According to Freud, infants and young children are essentially similar to animals, insofar as they as they are ruled by instinctive cravings or impulses organized around basic biological functions such as eating, excreting, sexualizing, and self-preservation. Freud referred to the basic, animal aspect of human nature as the “Id.” (p. 26)

Furthermore, Freud (1959) stated that when animals are integrated into dreams it was a means of disguising themselves. It was suggested that children, when experiencing external pressure or

mental illness, have no healthy or creative outlet (Serpell, 2010; Shafton, 1995). Serpell (2010) stated,

Freud's concept of the "Id" as a sort of basic, animal "essence" in human nature bears more than a superficial resemblance to animist and shamanistic ideas concerning animal souls and guardian spirits, and the "inner" or spiritual origins of ill-health (p. 26).

Related to this idea, Boris Levinson (1972), considered the founder of "pet-facilitated therapy", wrote in his book that:

One of the chief reasons for man's present difficulties is his inability to come to terms with his inner self and to harmonize his culture with his membership in the world of nature. Rational man has become alienated from himself by refusing to face his irrational self, his own past as personified by animals (p. 6).

Both Freud and Levinson suggested the "animals were essentially a symbolic disguise for things we are afraid to confront in the flesh to arguing that relations with animals played such a prominent role in human evolution that they have now become to our psychological well-being" (Serpell, 2010, p. 27).

In the late 20th century, child psychologist Levinson (1962) suggested that animals' integration in everyday life was necessary. Levinson published articles throughout the 1960s about animal-assisted therapy and is often cited (Adams, 2010; Fine, 2006; Weaver, 2015). Levinson (1962, 1965) often discussed the idea of dogs being a co-therapist and using a pet for psychotherapy in order to treat behavior disorders. Through Levinson's psychiatry practice and personal animal, he observed a positive relationship between a child's social interaction when his dog was around (Grandgeorge & Hausberger, 2011). Levinson (1975) stated that as animals become a part of a human's life, the animal becomes a friend and can affect a person's attitude. Research shows that an animal as a pet or companion has immediate and long-term health benefits (Halm, 2008).

In the 1980s, bringing pets to nursing homes on a became widespread. This type of activity is referred to as animal-assisted activities (AAA; Hart, 2010). When integrating the animals into the individual's overall treatment plan at the nursing home, that is referred to as animal-assisted therapy (AAT). Interestingly, volunteers were more likely to volunteer their time if animals were involved at the nursing home than not (Hart, 2010).

Some domesticated animals are social species (Grandgeorge & Hausberger, 2011). Grandgeorge and Hausberger (2011) suggest that if animals are domesticated, they have social competencies and needs to establish human-animal bonds. Furthermore, humans use pets as a social substitute in such aspects, and they can help children develop their social skills. Social substitute means that humans use the animals to connect with other beings and often communicate with, verbally and non-verbally through gestures and body language. Animals and human beings, a social species, help facilitate human-animal interaction leading to human-animal bonds.

While animals have unique social relationships with humans, physical, emotional, and mental well-being plays an essential role in relationships between animals and humans (IAHAIO, 2019). Beyond companionship, animals offer many health benefits. Beck (2002) suggested the animals decrease levels of loneliness and helps stimulate conversations. Humans also engage in physical interactions that encourage love and care for animals (Beck, 2002; Fine & Beck, 2010). Creagon (2002) stated that animals help anchor the connection between the body and the mind. Furthermore, pet companions provide connections to the world, viewed as a pleasure source (Fine, 2006; Fine & Beck, 2010; Fine & Eisen, 2008). In some cases, animals can give humans a purpose, hope and possibly provide a reason to live.

Media Coverage Impact

In the 1970s and 1980s, the popularity of using human-animal bonds (HAB) and human-animal interaction (HAI) received worldwide attention. Media covered organizations that were using animals for interventions and service dog training (Hines, 2003). In the early 1980s, a veterinarian, Dr. Bustad, coined the term HAB (Bustad, 1996; Weaver, 2015). Much of the scholarly writing was published in veterinary journals until the early 2000s, when HAB and HAI became wide-spread practices for other fields (Bustad, 1996; Ormerod, 2008; Weaver, 2015). Although HAB and HAI were practiced and written about for veterinary journals, media coverage helped expansion of the field.

Hines (2003) suggested that the media have an interest in human-animal interactions. The media then shared the findings through popular magazines and newspapers (Grandgeorge & Hausberger, 2011). The media campaigns showcased the positive benefits of HAI. Beck and Katcher (2003) and Grandgeorge and Hauserberger (2011) stated that the media campaigns showcased animals as a miracle cure. Many professionals were interested and curious about the advantages of using animals during interventions (Fine & Beck, 2010).

However, the media did have a negative effect on scientific research. Fine and Beck (2010) and Fine and Eisen (2008) suggested that the media coverage romanticized the relationships between people and animals. Some struggled to maintain objectivity because the media displayed an emotional show (Grandgeorge & Hauserberger, 2011). Although the media did have a negative effect on scientific research, overall, the promotion of the positive effects led to a significant increase in involvement from animal networks such as animal welfare groups, veterinary organizations, and animal food companies.

Beck and Katcher (2003) suggested that published research about HAI could be impacted by bias. It was suggested that the research could be directed and impacted based on financial backing (Beck & Katcher, 2003; Grandgeorge & Hauserberger, 2011). However, Beck and Katcher (2003) suggested that community programs have more scientific and objective HAI research. Although the suggestion was made, many clinical papers were published by financial backers involved in the organization of the community programs (Grandgeorge & Hauserberger, 2011). The researcher might be biased toward convincing these programs that HAI has many positive outcomes and not explaining adverse outcomes.

The early stages of research on HAI and HAB focused primarily on communities where children and adults suffered from some illness, had a disability, or were hospitalized (Friedmann & Tsai, 2006; Halm, 2008; Walsh, 2009; Wells, 2004). The American Veterinary Medical Association (2011) describes HAB as a mutually beneficial relationship that can be influenced by behaviors essential to humans and animals' well-being and health. The research on HAB and HAI eventually expanded past the veterinary and academic research communities in the 80s. However, HAB has not been universally accepted for its definition. Bayne (2002) also suggested there is no agreement on the definition. However, Fine & Beck (2010) note that several researchers have concluded that there are commonalities.

Pet Therapy

Animal-assisted therapy was initially called *pet therapy*. Pet therapy eventually is interchangeably used to include animal-assisted therapy (AAT) and animal-assisted activities (AAA; Hines, 2003). AAT and AAA are now considered animal-assisted interventions (AAI), where organizations promote animal activities and therapy. AAT is used to help

- hospitalized patients,

- veterans who have post-traumatic stress disorder,
- people who have experienced abusive situations, reduce the level of anxiety for individuals, and
- increase one's interest in activities and hobbies (Salvatore, 2016).

The Delta Society (1996) established the evaluation of animals suitable for therapy and community programs. AAT enlisted many different kinds of animals used for various activities. While dogs are the most popular, animals include cats, parrots, dolphins, donkeys, and horses (Salvatore, 2016). Each animal type can help with various problems for youth; horses and dogs help with self-esteem and emotion-regulation (Salvatore, 2016).

HAI has physiological, psychological, and social effects and suggests beneficial effects on humans' physical and mental health (Chur-Hansen et al., 2014; Halm, 2008). Through AAI, HAI and HAB have beneficial aspects to the emotional, physical, and psychological aspects of humans, animals, and the environment (Pet Partners, 2019). Physiologically, patients who participate in AAA and HAI have been shown to lower their blood pressure and body temperatures. There was also increase in physical activity, specifically walking up to 500% more (Halm, 2008). Cole and Gawlinski (2000) stated that human brains were stimulated and that physiologically people were more relaxed.

When looking at psychological effects, with HAI and AAA, there is a positive effect. Participants exhibited a higher perceived level of happiness, excitement, relief, and distractions from their situation (Halm, 2008). HAI plays a significant role when looking at human development. When looking at HABs, the researchers have to develop limited and express attachment and build empathy and promote one's health under certain circumstances (Kogan, 2020). Kogan (2020) states that HAI addresses violence prevention as it relates to the juvenile

community. When looking at the attachment behavior, some ideas of trust, attention, security, and love can develop between the person and animal (Risley-Curtiss, 2006; Terpin, 2004).

Animals play a significant role in how people relate to their environment (Woodard & Bauer, 2007). Halm (2008) found that children discussed the idea of unconditional love and motivation more frequently when HAI was used.

Benefits of Pet Therapy

Researchers have suggested that animal-assisted therapy has specific goals. Hamama et al. (2011) and Thompson (2013) suggest that the goals include improve communication and socialization. Communication, both verbal and non-verbal, is used during interactions. Furthermore, both parties engaged in socialization, as they are in groups. Another goal suggested is to help loneliness, isolation, and boredom while addressing loss or grief (Hamama et al., 2011; Thompson, 2013).

Thompson (2011) and Hamama et al. (2011) suggested goals were to

- improve self-esteeming and self-worth;
- lift moods and affect while lessening depression;
- improve problem-solving skills;
- improve feeling expression; and
- improve engagement and ability to trust.

Theoretical Foundations for Pet Therapy

There is not one complete theory that explains why and how animals have therapeutic effects on individuals. For this dissertation and in chapter two, attachment theory and relational developmental systems theory are examined. However, some theoretical foundations can be examined. Kruger and Serpell (2010) provide a comprehensive review of the theoretical

foundations for AAT. One foundation examined is the biophilia hypothesis. E. O. Wilson (1984) states the biophilia hypothesis as the innate human tendency to focus on life and lifelike processes. Wilson's theory claims that the human draw towards animals is evolutionarily driven. He also asserts that humans have increased their chances of survival by focusing on animals as they provide cues for safety and danger in the environment. Using the biophilia hypothesis, individuals begin to recognize that interactions with animals are instinctive and natural. In light of this theory, AAT may achieve its therapeutic effects by exploiting the human genetic predisposition to focus on and attend to animals.

Animals provide social support to individuals and facilitate social interactions with other humans (Kruger & Serpell, 2010; O'Haire, 2013). Humans find that the nonjudgment and unconditional love animals give are positive social supports (Friedman et al., 1980). Anderson and Olson (2006) describe the "unconditional social support" that therapy animals provide to students with emotional needs in the special education setting. Kruger and Serpell (2010) suggest how animals act as mediators during social interaction. This type of mediation can be seen and described by Levinson's work suggesting that animals can contribute to building rapport between therapist and patient (Levinson, 1969).

The literature on AAT overflows with attachment theory discussions (Jalongo, 2015; Melson, 2001). Bowlby's (1969) theory of attachment emphasizes that individuals are naturally driven to form and maintain attachments with others, leading to attachment behaviors such as seeking proximity and resisting separation. Typical attachment is described between young children and their mothers. Some researchers have suggested that animals, mainly pets, can replace attachment figures for children (Melson, 2001). While most of the research literature focuses on human subjects, positive human-animal interactions appear to provide clear benefits

to the animals as well. For this dissertation and in chapter two, attachment theory and relational developmental systems theory are examined.

Community Programs

Community programs use HAI in a variety of communities. Recently, several community programs work with correctional facilities. When animals are used in various settings, it can aid children with behavioral and emotional problems (Esposito et al., 2011). These correctional facilities use these programs where inmates can work with animals, where they serve as caretakers and trainers for human services or in preparations for adoption (Fournier et al., 2007). In 1981, the Washington State Corrections Center for Women began their first dog-training program (Cooke & Farrington, 2016). Currently, there are over 300 programs that implement dog training programs in correctional facilities. The programs in these facilities suggest, with some anecdotal reports, that there are rehabilitative benefits for those inmates (Beard, 1984; Fournier et al., 2007; Haight, 1986).

The use and documentation of community programs are relatively new; many studies conclude these programs' effects on inmates (Cooke & Farrington, 2016). Some researchers have concluded positive psychological and social behavior outcomes (Fournier et al., 2007; Garrity et al., 1987; Hecht et al., 2001). Furthermore, HAI has been proven to show positive psychosocial effects for people who are in psychiatric hospitals and nursing homes (Fournier et al., 2007; Johnson et al., 2002). Like other HAI, dog therapy programs for inmates benefited from increased self-esteem and self-efficacy (Cooke & Farrington, 2016; Gilger, 2007; Strimple, 2003).

Types of Community Programs

There are two types of commonly used community programs. The most common are dogs and horses. When using dogs, the common name is canine-assisted therapy. When working with therapy dogs, there is a focus on therapeutic activities that focus on enhancing a person's social-emotional, physical, behavioral, and cognitive skills. The use of dogs therapy is used especially for people who have been diagnosed with post-traumatic stress disorder (PTSD), attention deficit hyperactivity disorder (ADHD), autism spectrum disorder, and dementia. Dog therapy programs have also been integrated into the classroom. Programs are used to promote of reading skills, creative writing, and promotional group activities. Students find these programs meaningful and enjoyable as dogs are non-judgmental, so the affective filter is down.

When using horses and other equines, the type of therapy is called equine-assisted activities and therapy (EAAT). Equine-assisted therapy consists of psychotherapy, hippotherapy, and horseback riding. Hippotherapy is physical, occupational, and speech-language therapy using the equine movement to improve functional outcomes for individuals with psychological, cognitive, social, physical, or behavioral problems (American Hippotherapy Association, n.d). Therapeutic horseback riding is a recreational therapy used by individuals with disabilities. This type of therapy has a physical benefit as it improves motor skills and sensory skills. Equine-assisted psychotherapy refers to the use of equines when treating individuals who have psychological problems.

At-Risk Youth

At-risk youth experience caregiver maltreatment, which affects the child's emotional regulation and development, resulting in problems the child experiences, both academically and behaviorally (Schatz et al., 2008; Thomas, 2013). At-risk youth experience many stressors,

including living in high crime neighborhoods, lack of access or resources, limited to healthcare, and lack of educational opportunities (Thomas, 2013). These youth are at risk of becoming juvenile offenders. In 2006, the number of juvenile offenders in correctional facilities was over 36,000, ranging from 12 to 21 years old (Snyder & Sickmund, 2006). It is suggested that the at-risk youth population can lower juvenile offenders' chances by receiving interventions. Through intervention, HAI, in this case, youth are about to understand and address behaviors while improving their academics, emotional regulation, and psychosocial skills (Schatz et al., 2008; Thomas, 2013). When looking at the at-risk communities, various programs have been created to teach empathy and gentleness while addressing conflict management and interpersonal issues (Zasloff et al., 2003).

Youth who are considered at-risk who experience traumatic and emotional distress that goes unchecked often experience severe challenges during adulthood. Ewing et al. (2007) state that these students should experience positive and effective interventions during the developmental stage(s) to improve their psychosocial outcomes for the future. Youth are at-risk of entering the juvenile justice system at a higher rate if they experience early childhood or adolescence trauma (Baer & Maschi, 2003; Dixon et al., 2005; Leve & Chamberlain, 2004; Martin et al., 2008; Mullen, 2013).

Statement of the Problem

The use of HAI can affect child and adolescent development when used as an intervention (Hurley, 2014). Some community programs and non-profit organizations use HAI to promote social and emotional growth while being used as an intervention. Community programs have been using HAI as a form of intervention with youth from at-risk communities. There is no standard practice when looking at community programs that use animal interventions with at-risk

populations. HAI has also been used as a violence prevention tool for the at-risk youth community. The non-profit K9 Youth Alliance, located in Los Angeles, uses HAI as an intervention. They pair youth with shelter dogs to promote self-esteem, self-determination, and empathy (K9 Youth Alliance, 2020). While several organizations use HAI programs with different populations, studies on the at-risk youth population are limited.

Organizations that use HAI as an intervention in jail facilities and for individuals with disabilities are the communities that are commonly researched. However, there is little to no research available on organizations that work with the at-risk youth population. The majority of research is focused on youth currently incarcerated or at juvenile detention centers. These programs and research are essential and are parallel to the at-risk youth community. However, research on best practices for organizations that partner with communities serving at-risk youth should be available. By understanding the best practices, organizations' success can be shared and replicated.

When using the HAI as an intervention for at-risk youth, non-profit organizations use various practices to address the at-risk youth's social-emotional needs. Non-profit organizations seem to determine their practices when partnering with the at-risk youth community. The purpose of HAI, as an intervention, is to target student emotional development and promote social and emotional growth. K9 Youth Alliance conducts surveys before and after completing a 3-week program. For other community programs, that length varies (Fournier et al., 2007; Mueller, 2014). Community programs use surveys before and after the program (Fournier et al., 2007; Mullen, 2013; Riggio, 1986; Turner, 2007; Walsh & Mertin, 1994). Students are asked questions related to the students' social-emotional state and a written statement regarding their program experience. Results concluded that most participants experience positive outcomes and

develop emotional intelligence and coping skills (Britton & Button, 2007; Davis, 2007; Harkrader et al., 2004; K9 Youth Alliance, 2020).

Fine (2015) suggests literature available about community programs and their outcomes is not enough. Many researchers suggest there is little written literature available for practitioners to conduct HAI and much less for community programs (Chandler, 2017; Fine, 2006, 2010, 2015; Fine & Eisen, 2008; Jalongo, 2018; Parish-Plass, 2008; Pichot & Coulter, 2007; Trotter, 2012; VanFleet, 2008). Most research has been conducted with populations focused on incarcerated individuals and people with disabilities; however, available research is limited. Furthermore, there is a lack of research that focuses exclusively on the at-risk youth population. While there is anecdotal evidence of success and numerous community programs, there is a need to understand best practices. By understanding best practices, community programs will have guidelines to use in order to have successful programs with the at-risk youth population.

Purpose Statement

Non-profit organizations and community programs work with at-risk youth to teach social-emotional skills like empathy, self-confidence, and self-efficacy. This research aimed to look at best practices for community programs that use human-animal interaction as an intervention for at-risk youth. Specifically, the phenomenological study aimed to review the successful strategies that community programs when working with the at-risk youth population. The challenges faced and how these types of community programs measure their success are also important purposes of the research to review. Participants shared successful strategies, how success is measured as well as challenges and recommendations for other community programs that work with the at-risk youth population.

Research Questions

The study addressed the following research questions (RQ).

- RQ1: What success strategies and practices do community programs employ when implementing Human-Animal Interaction as an intervention with at-risk youth?
- RQ2: What challenges are faced by community programs when implementing Human-Animal Interaction as an intervention with at-risk youth?
- RQ3: How do community programs measure the success of their practices?
- RQ4: What recommendations do community programs have when implementing Human-Animal Interaction as an intervention with at-risk youth?

Significance of the Study

The study's significance was that the findings would provide community programs information that operates using HAI as an intervention for at-risk youth. Organizations that use HAI as an intervention, regardless of the animal, have become increasingly popular in recent decades. The findings would benefit staff and administrators who work with the at-risk youth community, researchers, clinicians who use HAI, and other professionals. Much of the literature available is sporadic and ambiguous as it pertains to specific goals and practices (Fine, 2015). HAI use has grown in popularity in since the 1970s and 1980s due to media coverage. However, many researchers suggest that there is little written literature available for practitioners to conduct HAI and much less for community programs (Chandler, 2017; Fine, 2006, 2010, 2015; Fine & Eisen, 2008; Jalongo, 2018; Parish-Plass, 2008; Pichot & Coulter, 2007; Trotter, 2012; VanFleet, 2008). Most research has been conducted with populations focused on incarcerated individuals and people with disabilities; however, available research is limited. Furthermore, there is a lack of research that focuses exclusively on the at-risk youth population. Organizations

will understand the success strategies organizations used when using HAI with the at-risk youth population. Community programs that work with other populations, like the juvenile correctional facility and individuals with disabilities and illness, can also observe successful strategies for the at-risk youth populations and replicate the intervention program.

This study focused on organizations working with youth who experience various stressful situations and environments, like low socioeconomic status, minority communities, and experiences a lack of social support. Also, the study focused on programs that serve students from diverse backgrounds. When looking at these organizations' best practices and strategies, this study identified standard practices for non-profit organizations when using HAI as an intervention. The aim was to gather the information that would allow other organizations who would like to conduct community programs that involve HAI to identify the best practices used when working with the at-risk youth population.

Assumptions of the Study

This study assumed all individuals interviewed are board members, executive directors, program directors, or the community programs' founders. Another assumption is respondents understood what a community program was and the instructions given before the interview. There was an assumption that results would not represent all community programs that use HAI as an intervention. This study assumed that all participants who were interviewed would answer the questions honestly. Another assumption was that participation was not mandatory, and answering all questions was not required. Another assumption in the study was that there are no language barriers. The researcher took precautions, as noted in Chapter 3, to address any personal biases.

Limitations of the Study

This study had several of limitations. One limitation was the research was specific to organizations engaged in dog assisted activities. Other limitations of this study were the organizations that specifically work with at-risk youth populations. By narrowing the serviced population, organizations' selection was limited. They might not represent community programs that work with various populations. Due to COVID-19, many programs that work the at-risk youth population are on hold. This is due to students not in physical schools or after-school programs like the YMCA or Boys & Girls Club. Further research will need to be conducted to explore organizations outside of the United States.

Definition of Terms

Animal-assisted activities. Animal-assisted activities (AAA) are social visits where animals provide individuals social and emotional support (Adams, 2010; Delta Society, 1995; Chandler, 2017; Hines, 2003; Weaver, 2015).

Animal-assisted interventions. Animal-assisted interventions (AAI) describe the use of various animal species in a diverse way that is beneficial to humans. The use of animal-assisted therapy, human education, and activities are considered animal-assisted interventions (American Veterinary Medical Association, 2020).

Animal-assisted therapy. Animal-assisted therapy (AAT) is an interaction that provides individuals therapeutic benefits, physically or mentally (Adams, 2010; Delta Society, 1995; Fine, 2006; Furst, 2006). Animal-assisted therapy is a form of animal-assisted activity, sometimes used interchangeably. For this dissertation, animal-assisted therapy programs will be referred to as community programs. Originally, Levinson (1962) called the approach pet therapy.

At-risk youth. At-risk youth as a group of youth exposed to threats within their environment suffer from adverse psychosocial stressors and lack social support from others (Gebo & Sullivan, 2014; Rosenfeld et al., 1998; Thomas, 2013; Thompkins & Schwartz, 2009; Wallace et al., 2017).

Attachment. Attachment is a bond that provides security, emotional well-being, and stability (Bowlby, 1969; Sable, 2008; van der Horst et al., 2008; Weaver, 2015).

Best practices. According to the Merriam-Webster Dictionary (n.d.), best practices are a procedure that has been exhibited through research and experience. A best practice produces optimal results and it is established or proposed as a standard suitable for widespread adoption. For this study, best practice is defined as the technique or method that community programs use when using HAI as in interventions with at-risk youth.

Community programs. AAA, formally termed pet therapy, described activities between humans and animals for therapeutic purposes. For this study, the researcher utilized the term community programs to describe animal-assisted therapy and activity, as different programs used the terminology interchangeably. Community programs refer to animal programs or non-profit organizations that facilitate HAI between dogs and humans.

Human-animal bond. While AAI is a broad term, Human-Animal Bond (HAB) establishes a dynamic relationship that is mutually beneficial amid humans and animals, which can be influenced by behavior (American Veterinary Medical Association, 2020). HAB is an attachment relationship with an animal that is mutual and serves to improve the quality of life for humans (Weaver, 2015). HAB can serve as a substitute for human to human bond (Adams, 2010; Fine, 2006; Levinson, 1969; Risley-Curtiss, 2010; Sable, 1995).

Human-animal interactions (HAI). Research states that AAI is a broad term which includes the AAT, AAA, and DAT (American Veterinary Medical Association, 2020). While there are a variety of terms to use, for this research, HAI will be used for consistency throughout the remainder of the paper.

Prison animal program (PAP). The programs used in prisons and correctional facilities are called prison animal programs (PAP; Britton & Button, 2005; Deaton, 2005; Fournier et al., 2007; Furst, 2006, 2007; Weaver, 2015).

Prosocial behavior. Prosocial behaviors is learned behavior based on attachment and social skills, which increases one's ability to abide society rules and laws (Bartol & Bartol, 2011; Meloy, 2003; U.S. Department of Health and Human Services, 2001; Weaver, 2015).

Psychosocial outcomes. Psychosocial outcomes refer to feelings, behavior, self-esteem, social interactions, relationships, and social cognition (Tsimicalis et al., 2005; Vahedi, 2010)

Social skills. Social skills are an individual's ability to use verbal and non-verbal communication (Riggio, 1986; Weaver, 2015).

Social skills inventory. An assessment tool used to measure multiple dimensions of social functioning (Riggio, 1986; Weaver, 2015).

Summary

Chapter 1 examines the historical relationship between animals and humans as it dates back to 12,000 years. The bonds formed between humans and animals have proven to show positive benefits for both humans and animals. In Chapter 1, the problem and purpose are identified. The field of HAI has significantly grown over the last 50 years, examining HAI as it pertains to various groups like individuals with disabilities, incarcerated individuals, and at-risk youth populations. Chapter 1 identified how HAI and community programs could positively

affect juveniles and improve youth psychosocial outcomes related to social-emotional development.

In Chapter 2, literature about the history on community programs and their purpose is discusses. Chapter 2 includes a discussion of theoretical frameworks within existing literature that focus on developmental theories. Also, Chapter 2 identifies community programs that use HAI. The literature reviewed examines organizations that use HAI as an intervention with various groups, like incarcerated juveniles and youth with disabilities. Chapter 3 explains the methodology utilized for this study. Chapter 3 also focuses on the sample size, population, participant selection, inclusion and exclusion criteria, human subject protections, reliability, and validity of the study and interview techniques used. In Chapter 4, an analysis of the data collected is given. Chapter 5 concludes this study with results and provides future recommended research.

Chapter 2: Literature Review

Community programs' expectations are to lead to positive outcomes for at-risk youth. To reach those intended positive outcomes, facilitators must understand the relationships between humans and animals when conducting HAI. The general effects of using HAI consist of improvement in social interactions, psychological aspects and motivation (Fine, 2015; Kaufmann et al., 2015). Fine (2015) suggested that there is no one complete framework to "explain and integrate all mechanisms and effects of HAI, and due to the complexity of such a variable interspecies social exchange as HAI, it will be difficult to create" (p. 212). The relationships between humans and animals and how animals can affect humans can be explained through multiple frameworks (Fine, 2015; Julius et al., 2013).

The purpose of Chapter 2 is to highlight the theoretical frameworks upon which the research is based. This chapter focuses on the history of human-animal interactions (HAI), background of community programs, best practices and positive outcomes. The best practices within those communities and therapeutic benefits are explored.

History of Community Programs

Community programs were originally called pet therapy programs. Pet therapy programs were conducted where AAA took place (Hines, 2003). Levinson introduced these programs were introduced in 1962. Pet therapy was used to develop rapport between patients and therapist and increase the patients' motivation during their sessions (Fine, 2010; Mallon, 1994, Mallon et al., 2006). Pet therapy programs continued growing in popularity through the 70s and 80s. As changes occurred, organizations need to meet different populations' needs (Mallon et al., 2006). Organizations began working with youth from urban environments.

The American Veterinary Medical Association (AVMA) determined in 1982 that the HAB was a crucial part of individuals and community health (Animal & Society Institute, 2011). As a result, AVMA found that the bond served a significant purpose to medicine. Veterinarians and other professionals believed that pet therapy was a needed community service that provided health benefits to humans and animals (Animal & Society Institute, 2011; Fine, 2010; Mallon et al., 2006). Soon began interdisciplinary cooperation where many fields, including physicians, health care professionals, activity directors, government organizations, therapists, volunteers, and veterinarians collaborated to work toward a common goal (Animal & Society Institute, 2011).

Purpose of Community Programs

Community programs in various states have created programs that work with multiple communities. Programs focus on pairing animals and humans to develop bonds and, in turn, have positive social and development benefits that help an individual navigate challenging environments. When animals are used in various setting, it can aid with behavioral and emotional problems (Esposito et al., 2011). Literature suggests that community programs aid in providing social support, which leads to better psychosocial outcomes (Allen, 1991; Esposito et al., 2011; Garrity & Stallones, 1998). As a result, community programs have been used with various populations, like youth, individuals in correctional facilities and health care facilities.

The use of community programs in medical settings for health benefit has provided the largest body of research available regarding HAI benefits. During the 1790s, a mental institution, the York Retreat began treating psychiatric patients allowing them to walk around the grounds and engage with small animals (Hooker et al., 2002; Serpell, 2010; Thomas, 2013). Patients reflected on their interactions as well as increasingly sought to communicate with the animals. This behavior and integration of animals into the institution helped improve patient social skills

and behaviors (Serpell, 2010; Thomas, 2013). The York Retreat use of small animals like birds and rabbits increased their health outcomes for their beneficial social and emotional results (Hooker et al., 2002). In the mid-19th century, medically ill patients used companion pets to help relieve the emotional isolation they experienced (Hooker et al., 2002; Serpell, 2010). Second World War veterans at Air Force Convalescent Hospital in New York institutions incorporated dogs, horses, and livestock in their treatment (Hooker et al., 2002; Schafer, 2002). The use of animals for individuals who were housed in mental health facilities or had post-traumatic stress disorder following the war improved their emotional state when working with animals.

The creation of community programs that specifically work with the at-risk youth population is relatively new. By examining literature with similar outcomes but different populations, results would be parallel to those working with the at-risk youth population. The outcomes of these community programs include psychiatric symptomatology, psychological states, and social behaviors. Hart (2006a) suggests that people who engage with animals during these programs have a significant life change and promote psychosocial benefits and motivation to perform a task.

Documentation shows that humans and animals have had a longstanding relationship that extends beyond pets. Animals interact for working purposes like disabled human assistance, hunting, search and rescue, or a food source in some cultures (Beck, 2002; Charleson, 2010; Herzog, 2010; Morey, 2006; Mueller, 2014). HAI's goal is to improve human health, welfare, and quality of life (IAHAIO, 2013).

Pet therapy is considered an aspect of animal-assisted therapy (AAT). Fine (2010) stated that pet therapy is a catch-all term for any physically, psychologically, or developmentally therapeutic activities in nature. However, there are some distinctions between AAT and AAA.

According to Pet Partners (2012), AAA has:

- no specific goals for treatments
- universal activity for all participants
- activities involve volunteers and animals visiting individuals in a casual setting
- individual needs and visits length of time varies.

In comparison, Pet Partners (2012) state AAT has:

- set goals for sessions/treatment
- individual treatment plans
- therapeutic intervention plan for social, emotional, physical, and cognitive challenges for individuals
- patients' needs are pre-determined and visit schedule during set times

Based on the comparison, the community programs would follow AAA.

Examples of Community Programs

One example of a well-documented community program is Green Chimney Children's Services. Mallon et al. (2006) described Green Chimney as a temporary home for youth in a rural environment. Green Chimney was an independent school for youth children and allowed youth to participate in dairy farming. Initially, the school believed the animals provided the youth companionship, education, and some socialization. However, the interactions between the youth and animals increased the youth's social-emotional skills (Mallon et al., 2006; Thomas, 2013). Green Chimneys Children's Services has been noted as one of the most extended community programs working with at-risk youth.

HAI is used as a therapeutic service to individuals while in correctional facilities. In the late 80s, researchers studied the impact that pet ownership had on inmate behavior and

physiology (Fournier et al., 2007; Katcher et al., 1989). Understanding the mental history of the individuals who are incarcerated is critical. There is a higher number of individuals who experience mental illness and trauma, including parental neglect. The trauma experienced during early childhood or adolescence plays a role in the deficiencies in one's social cognitive functioning (Baer & Maschi, 2003; Dixon et al., 2005; Leve & Chamberlain, 2004; Martin et al., 2008; Mullen, 2013).

Community programs like Project Pooch and Project Second Change, which work with rescue shelter dogs and juveniles, design their program to teach respect, empathy, and compassion (Mullen, 2013). From those two programs, positive outcomes like higher self-esteem, patience, and social skills were reported from inmates and staff (Turner, 2007). While those researchers determined, there was no significant difference when looking at their blood pressure. Research continued, which found a reduced recidivism rate if the inmate participated in the community program (Fournier et al., 2007).

There is limited published research focusing on community programs with juvenile offenders. One juvenile correctional facility hosted a program called Project Second Chance (Harbolt & Ward, 2001). The youth participants were paired with a shelter dog for three weeks. During the program, the participants were challenged to care for and socialize the challenging dogs. The chances of program dogs being adopted increased as well (Thomas, 2013). The program concluded with the participants writing a letter about their program dog to potential adopters. Researchers used the letter as a way to measure program success. Although the researchers did not use a formal measurement to data, the written letters described some emotional growth. This program demonstrated that at-risk youth who participate in similar programs could increase their social-emotional skills and interpersonal growth.

Like the at-risk youth population, juvenile inmates have shared experiences in which they feel stressed and lack support in their environment. When they participate in the dog therapy programs, the relationship the individual develops with the dogs helps inmates understand their situation. Understanding their situation helps improve their behavior and motivation (Cooke & Farrington, 2016).

Davis (2007) researched a similar program in Oregon called Project POOCH. Similar to Project Second Chance, Project POOCH pairs youth offenders with shelter dogs for training. Through self-reporting, Davis found youth increased their skills in empathy, anger management, self-discipline, and interpersonal relationships. As a result of the program, there was an increase in social interaction and relatedness. The staff found a decrease in anti-social attitudes and recidivism rates for those who participated in the program (Cooke & Farrington, 2016; Merriam, 2001). In Rhode Island, Cournoyer and Uttley (2007) conducted a similar study. Participants experienced significant behavioral difficulties in school settings. Overall, the researchers identified a decrease in behavioral issues for participants who completed the program, demonstrating an improvement from pre- to post-group measurement. The staff confirmed the findings as they noted improvements in behavior and attitude in the participants. However, like other programs, the lack of measurable and quantitative data making the findings anecdotal. Although there is limited research on similar programs like the aforementioned ones, these program suggestions align with the anecdotal evidence that community programs have positive outcomes.

A girl boarding school, Copper Canyon Academy, provided a structured therapeutic environment (Aspen Education, 2013). Both canine-assisted and equine-assisted therapy programs were offered to the youth. Ages ranged from 13-17, and those participating in the

programs were suggested to have had a healing experience (Aspen Education, 2013; Thompson, 2013). Equine-assisted activities and therapies (EAAT) are interventions that focus on building relationships, physical activity, increase communication and personal skills (Axen, 2015; Casey, 2011). Casey (2011) also states the EAAT promotes positive self-efficacy and self-esteem. One EAAT program study found that participants improved their muscle symmetry for youth with cerebral palsy (Benda et al., 2003).

EAAT programs focus on different aspects and various outcomes. Some EAAT programs are school-based programs that are individually focused intervention primarily targeting behavior (Wilson et al., 2001). Other programs focus on behavioral and social-emotional growth to prevent disorders (O'Connell et al., 2009). Pendry et al. (2014) suggested that successful EAAT programs were programs that targeted the at-risk population. Outcomes focused on social and emotional skill-building, the collaboration between peers, and self-direction (Pendry et al., 2014). With EAAT and dog therapy programs with juvenile inmates and at-risk youth communities, HAI research must continue for the at-risk youth population.

There are other forms of community programs that are less popular. Other types of community programs with other animals include dolphin-assisted therapy (Thompson, 2013). There are programs that use animals that are wild and other small domesticated animals (Melson, 2001; Pira et al., 2010). However, many programs using those animals present ethical dilemmas (Melson, 2001). Thompson (2013) suggests that while individual animals can be unsafe, the guidelines for use and implementation are debatable.

HAI With At-Risk Youth

Community programs are using the interaction with animals as interventions to provide treatment and increase social outcomes. Syzmanski et al. (2018) suggested that when using

animals, the intervention is more attractive to youth. Furthermore, the youth experience more enjoyable, and the programs have more straightforward implementation (Payne et al., 2015; Syzmanski et al., 2018). Researchers and therapists have reported that animal incorporations have benefits (Reichert, 1998; Rothe et al., 2005; Thompson, 2013; VanFleet, 2008). Anderson and Olsen (2006) found that having a dog in a classroom, where children have severe emotional disorders, can contribute to an increase in the students' emotional stability. Furthermore, it was suggested that dogs can lead to a de-escalation during an emotional crisis. Thus, youth experience positive interactions when animals are incorporated.

There are significant benefits for both social and emotional development when using HAI with at-risk youth. Thompson and Gullone (2003) stated that the use of HAI to develop empathy and prosocial behavior in youth. Burger et al. (2009), Turner et al. (2009), and Stetina et al. (2011) published articles describing the positive changes for the at-risk youth population. Each program focused on the behaviors and perceived feelings of the dog. Participants learn about self-reflection & emotional learning (Thomas, 2013). Youth that works with an animal may increase their empathy and social skills. Youth also can experience and develop a sense of security, companionship, and enjoyment while cooperating and engaging in positive interpersonal relationships.

Researchers looked at the effect HAI programs has on self-esteem and depression among women in a minimum-security prison. The data showed a significant increase in the inmate's self-esteem and significant decrease for depression (Fournier et al., 2007; Walsh & Mertin, 1995). While there were significant changes to the inmates' self-esteem and depression level, researchers suggested one reason for changes might be that participants were soon to be released from prison which could have skewed the data. The HAI in correctional facilities was used as an

introduction of rehabilitative interventions, providing inmates with education and training in psychosocial skills (Fournier et al., 2007; Pearson et al., 2002). Another program showed that the inmates increased self-esteem, developed marketable skills while earning college credit (Mullen, 2013; Strimple, 2003).

These programs help build and maintain social skills. Community programs also provide job and life skills. Some inmates could secure jobs throughout the organizations' community program they participated in or as animal assistance (Strimple, 2003). Overall the community programs in correctional facilities provide an essential service to individuals. Through these programs, inmates can learn transferable skills like effective communication, conflict resolution, and emotion regulation. Participants are also learning compassion and cognitive empathy skills while invoking self-control.

Youth that participates in HAI during their incarceration experience growth in social-cognition, attachment, and positive attitudes (Syzmanski et al., 2018). A study was conducted where 138 adolescents participated in learning about humane education; some individuals participated in training shelter dogs. Others just walked dogs. All participants showed an increase in internalizing behavior problems and empathy. Furthermore, the individuals who trained the shelter dogs experienced nearly double cognitive and emotional growth. This particular study does not use a forum assessment. The participants use a journal writing system, which was analyzed and coded.

Youth are provided the opportunity to role-play. In some instances, at-risk youth, who have experienced trauma can block out experiences (Oaklander, 2006; Thompson, 2013). Youth who participated in programs learn how to interact. Pet Partners (2013) suggest that working with an animal can help a child relearn to play and positively interact with others. Furthermore,

in many studies, therapists encourage role-playing (Levinson, 1962, 1969; O'Callaghan, 2008; Thompson, 2013).

Best Practices

When looking at best practices for HAI, human well-being and animal well-being must be considered (IAHAIO, 2013; Fine, 2015). There are multiple layers when using animals in interventions that require professionals to have the training, ethical codes, and competency (Fine, 2015; VanFleet, 2008). There are also concerns and considerations when talking about humane education and practices (Fine, 2015; VanFleet, 2006, 2014; VanFleet & Faa-Thompson, 2010, 2015; Winkle, 2013). Some basic principles for incorporating HAI include that the dogs have excellent temperament (Fine, 2015). Practitioners should also think about the liability, training component, safety and well-being of participants and the animals (Fine, 2015; Hines & Fredrickson, 1998).

One emphasis for community programs is the welfare of all the parties involved. There many possible risks need to be identified. Facilitators of the community programs need to be well-informed and trained to ensure that they provide the best and most effective supports and activities (Lefebvre et al., 2008). Lange et al. (2006) suggest that facilitators stay informed and learn more about AAT. Research can be done by reading books and journals and attending seminars, workshops and conferences, as well as working with other similar programs. The intent is to learn about topics to increase the benefits and decrease the potential risks of AAA.

Fine (2010) and Thompson (2013) suggest asking the following questions serve to ensure quality practice:

- What benefits can the intervention provide for this participant?
- What benefits will animals provide in the clinical intervention?

- Will the animal's involvement act as a social lubricant to promote a safer environment, or be more intensely integrated into the clinical efforts?
- How can the AAA approach be incorporated within the planned intervention?
- How will the facilitator adapt his or her approach in order to incorporate AAA?

It is integral that the therapist ensures that the interaction between client and animal remains therapeutic, focusing on achieving therapeutic goals and that AAT is integrated into the client's treatment plan (Mallon et al., 2010).

Fine (2010) and Thompson (2013) suggest specifically for youth there are two therapeutic goals. There is the need to develop trust and feel loved while at the same time developing a feeling of competence. Parish-Plass (2008) states youth develop and take responsibility when working with animals. O'Callaghan (2008) concluded from his research that 29% of facilitators that utilize AAT/AAA had intentions of focusing on self-confidence and 39% focusing on trust. The therapist usually presents opportunities for children to develop competence through structured activities with the animal such as training, games and storytelling (VanFleet, 2008).

Parshall (2003) suggests that ethical and legal considerations be taken into account when planning the treatment in order to ensure best practice for AAA when working with at-risk youth. Thompson (2013) suggest considerations several when planning a program. First, ensure that the animal will assist in realizing the program goals. Second, investigate the participant's attitude towards animals. Lastly, ensure that interaction with the animal is beneficial for both the participant and the animal. Taking those three ideals could result in best practice.

Best practice for community programs using HAI as an intervention includes the animal's appropriate behavior in therapy. Lefebvre et al. (2008) state all animals need to be assessed for

suitability. Some problem behaviors would not be appropriate for programs. Problem behaviors include, especially involving youth include, jumping up, nipping, biting or mouthing, inappropriate urinating, excessive vocalizing and inappropriate eating need to be addressed (Urichuk & Anderson, 2003). These behaviors could cause unnecessary risk or harm to both the participants and animals.

Fine (2010) suggests that the following practical guidelines serve to ensure therapy of high standard:

- The animals need to be calm, gentle and enjoy being around people.
- The animals must have an excellent temperament.
- The animals should be prepared and unfazed by unusual sights, sounds, and smells.
- The animals must be obedient and follow instructions.
- The animals must be able to practice and regain self-control once play or excitement has ended.
- The animals must be able to sit quietly for extended periods.
- The animals must be able to navigate through crowded environments.
- The animal must be comfortable with strangers.
- The animals, specifically dogs, must walk comfortably in a heel position and must follow the commands of “sit”, “down”, “come” and “stay.”

Key Components

The American Veterinary Medical Association (2011) states there are several key components to consider when conducting a program. There should be consideration of (a) interdisciplinary cooperation; (b) planning; (c) supervision; (d) animal selection, animal health, human health and environmental concerns; and (e) human animal interactions and welfare.

Interdisciplinary Cooperation. Interdisciplinary cooperation is where the programs work with a variety of stakeholders like physicians, nurses, therapist, veterinarians, volunteers and activity directions in order to work toward the common goal of the program (Arkow, 1998; AVMA, 2011). Getting buy-in and having all stakeholders on board is essential to having a successful program. By communicating and cooperating, many perspectives are considered and there is an increased amount of buy-in of the programs mission and vision.

Planning. The American Veterinary Medical Association (2011) states that in order to have a successful program they should “establish realistic goals and expectations. Anticipation of possible problems and development of solutions prior to their occurrence can avoid conflicts that cause program failure” (p. 2). Arkow (1998) discussed that by planning ahead organizers can logically think through predictable problems so that conflict can be avoided. During planning, the mission, target population and desired outcomes should be common sense and realistic. If these goals are not managed and realistic, negative outcomes such as early personnel burnout and program abandonment can occur (Arkow, 1998).

For health care professional who run pet therapy program, Arkow (1998) suggests conducting a needs assessment. Is there a need for this program or does one already exist? Who are the partners or agencies, and is there a need on an individualized basis? Arkow suggests looking at what type of programs are already available? Are there any community resources available and how do you access them? In the community resources, identify population and create a survey. Collect the available census data. Lastly, Arkow suggests to network. Use your social support to network and find mentors or knowledge individuals. Next, Arkow suggests that a cost-benefit analysis be conducted. Look at how much the program is going to cost and what the benefits would be of that program. Then a comparison of alternative therapies and activities

be analyzed by their cost and benefits. The final step is to get input. Get feedback from the staff and administration. The organizers should also get feedback from the participants as well.

Supervision. Supervision is required at all times. The safety of both youth and dogs is a primary concern. The American Veterinary Medical Association (2011) discussed that staff and administrative supervision of these programs are required to protect the welfare of human and animal participants. Furthermore, it is suggested that all personnel be made aware that the program is in place and that it is considered to play an integral role in communication and buy-in to the program.

Animal Health, Human Health, and Environmental Concerns. The American Veterinary Medical Association states that

A wellness program should be instituted for animals participating in AAA, AAT, and RA programs to prevent or minimize human exposure to common zoonotic diseases such as rabies, psittacosis, salmonellosis, toxoplasmosis, campylobacteriosis, and giardiasis. Need for specific screening tests should be cooperatively determined by the program's attending veterinarian(s) and physician(s). Animals should also be appropriately immunized and licensed. With respect to immunization for rabies, the current Compendium of Animal Rabies Prevention and Control (prepared by the National Association of State Public Health Veterinarians and published annually in the Journal of the American Veterinary Medical Association) and/or state guidelines should be followed. If the animal is to reside at a facility, provisions must be made for its feeding, watering, housing, grooming, and exercise. Associated noise and waste disposal problems must also be solved. (p. 2)

Human Animal Interactions and Welfare. The welfare of all participants must be considered to have a successful program. The American Veterinary Medical Association states that

Introductions of animals and human participants must be arranged and supervised, because some individuals may not enjoy interacting with animals or may have physical or emotional problems that contraindicate such interactions. Animals should be an integral part of a treatment program and not a reward for appropriate behavior on the part of the human participant. Animals should be monitored closely for clinical signs of stress and should have ample opportunity and space for solitude. Any problems or incidents that occur must be reported to appropriate supervisory staff. (p. 3)

Furthermore, Arkow (1998) stated that there might be individuals that do not like pets so the animals, volunteers, staff, and administration must be taken into consideration.

Animal Selection

Selecting an animal for a community program can be challenging. Hart (2000b) states the circumstances and the context of the interactions are essential. It is also essential to understand the needs and characteristics of the animal being used. When considering dogs for interventions, understanding the animal's well-being is essential (Grandgeorge & Hausberger, 2011). The well-being of animals must be considered as the animals used in HAI typically become pets or service animals. The well-being of the animals should be considered as pet form relationships. The animals develop secure bonds with their humans.

Community programs in the 1970s encouraged working with shelter animals. However, in the 1990s, humane associations and veterinary organizations suggested ending the practice of using shelter animals (Fredrickson & Howie, 2000). Issues with consistency and questions about the animals' history and behavior were potential risks. However, New (1995) suggested that working with shelter animals, particularly dogs would enhance interactions and relationships over time. Consequently, one of the goals of community programs is to affect treatment and build relationships which can be done through programs. Programs provide the animals and participants an opportunity to socialize and build those skills.

Organizers of community programs must check their personal preferences. Zasloff (1996) stated that some volunteers and professionals make animal select based on personal preference. One issue is that animals can be chosen because of the individuals love for the breed. However, that is not what is in the best interest of the animals or the participants. While having knowledge

about the specific animal and having general recommendations are helpful, bias towards a particular animal should be avoided.

Community programs have used various animals. Dogs, cats, horses, birds, small mammals, fish and livestock are the typical animals used for community programs. Smaller animals are more acceptable for institutions and with the elderly population. Katcher et al. (1984) described how fish in an aquarium in a medical office can help reduce the level of anxiety. Hart (2000b) states that birds provided entertainment yet were noisy and messy while guinea pigs were quiet, calm, and required little effort. Livestock and horses are popular animals for rural areas.

Endenburg and van Lith (2011) suggest little research has been done on the welfare of the animals involved in HAI. Furthermore, suggest there is no assessment of the potential threats to the welfare of the animals. Thompson (2013) states that animal welfare problems could range from various forms of neglect, abuse and aggression. Often times stress signals go unnoticed, and animals running away and hiding from clients during sessions. Pira et al. (2010) conducted a study on animal-assisted interventions in Belgium and found that some respondents reported occasional negative effects on the animals involved. Pira et al. (2010) noted in a similar study conducted in prisons, found that six of the facilities reported occasional negative effects in an anecdotal way. Negative effects included management problems, negligence with feeding procedures, animal biting, the animals exhibiting stress, and animals hiding and/or running away from prisoners. Although, these studies suggest some negative effects on animals, there amount of research and findings is anecdotal. It's suggested that more research be conducted focusing on the welfare of animals.

Wolff and Frishman (2005) state that all animal participants should be carefully screened. Things to consider when focusing on animal's needs such as food, fresh water and safety. Urichuk and Anderson (2003) stated there are 22 stress signals in dogs. Facilitators should be able to recognize the signals in order to take the necessary action and prevent injury (Thompson, 2013). This is extremely important as the programs are working with at-risk youth.

Dogs. Dogs have been one of the higher percentages of animals used for community programs (Fine, 2010; Hart, 2000b). Dogs are widely used as service animals and improve people's quality of life, who are in need (Fine & Beck, 2010). According to some researchers, dogs have the ability to understand human behaviors (Fine & Beck, 2010; Hare et al., 2002). Delta Society (1996) created a manual that described the guidelines for use of dogs during a program. Dogs have been considered a full-time companion that provides a high-level companionship. However, dogs require constant interaction and stimulation as they need food and exercise. Furthermore, dogs are commonly used for family animals, especially families with children.

Similarly to the Delta Society developing guidelines for community programs, other organizations have developed guidelines for dog appropriateness and selection. Pfau (1990), Fine (2010), and Hart (2000b) discuss how programs like Pet Assisted Therapy in Pasadena, CA and Pets Helping Us Recover in Davis, CA set the standards for dog selection for program. The Source of Unconditional Love (SOUL) program in Sacramento, CA used their guidelines and adapted them to work for home visits. As a result, guidelines have been set for initial dog screening for temperament, a maintenance test, as well as a grooming requirement.

While there are some guidelines and community programs that set some examples, there is not standard for dog selection, other than temperament testing. Furthermore, it is interesting

that most volunteers do not possess the knowledge to properly screen animals for temperament (Fredrickson & Howie, 2000). Holmes (1988) suggested that when guidelines were recommended that practitioners looked the dog's personality, bonding to humans and the relationship between dog and previous owner. Furthermore, temperament determines whether an animal would be suitable as a pet. However, the standard for aptitude needs to be determined as well. Aptitude would evaluate the human/animal team as well as determine whether the animals would be successful in the program environment.

Dogs are able to complete various tasks and used in a variety of environments. Clutton-Brock (1995) discussed the domestication of dogs and how they can fulfill the jobs of herding and hunting, while being man's best friend. VanFleet (2008) suggested that dogs are chosen because of their willingness to engage in various activities. Furthermore, he suggested that dogs are common due to the trainability for various tasks and different environments.

Fine (2010) continues to say that dogs are able to support quality of life. Dogs are a versatile animal that can support human quality of life in a variety of ways. Hart et al. (1987) state that dogs are companions and are eager to interact. Furthermore, dogs can be trained to work on specific rehabilitative task. The extent of which dogs can be trained task is extensive.

Dogs have an effect of people's ability to socialize. Hart (2000a) suggest that dogs are social magnets. Social magnets meaning, dogs can help aid in starting a conversation or purely giving a group comfortability. This can be true for some people who have a physical or communication difficulty (Eddy et al., 1988; Hart, 2000a; Hart et al., 1987; Mader et al., 1989). Furthermore, dogs tend to pay attention to their human companions. When working with a dog, social greetings are expressed and constant communication, verbal and non-verbal, which can lead to promotions in social skills.

Participant Protection

Participants must be protected when employing HAI as an intervention. One Health One Welfare framework should be utilized when structuring programs and re-evaluated throughout the program to ensure protections for participants. When considering the well-being of humans, the organization should be aware of risk and have exclusion criteria depending on the risk.

VanFleet and Faa-Thompson (2015) suggest that the quality of the HAI program are complex. Researchers must have an understanding of selecting, socializing, and training animals as well as finding an animal expert to help them (Benal, 2011; Donaldson, 2005; Fine, 2015; McConnell, 2002, 2005; Trotter, 2012; VanFleet, 2014). Body language of the animal must be understood (Fine, 2015; Rugaas, 2006). Professionals and handlers that work with animals have training and knowledge about the animal's well-being needs which help them detect signs of stress and discomfort (IAHAIO, 2019). While it is necessary for the handlers to have training, there is no mention of the handlers or professionals having training or knowledge about human well-being needs, which help detect signs of stress or discomfort.

Ethics

It is a best practice that the community programs which are working in partnership with other groups and entities, all professionals, and administrators must be aware of the local laws and policies as well as advocate for new or changes to policies and procedures (IAHAIO, 2013). IAHAIO (2019) suggests that an individual who is knowledgeable in animal welfare, for example, a veterinarian, to work with the organizations and an ethics committee. Fine (2015) and VanFleet (2007) suggest that some facilitates do not have professional training or expertise in helping animals or humans. In the literature there is no mention of a psychologist or medical

doctor knowledgeable about human welfare, to consult or work with the programs or on an ethics committee (Fine, 2015; IAHAIO, 2013; VanFleet, 2007).

Risk

There are certain risks that are associated with programs working with animals. Fine (2010) suggests that in some cases program providers may not be adequately trained. Due to inadequate training, the programs can result in poor or negative results. Furthermore, Thompson (2013) states that inadequate training can lead to poor results as well as cause harm. Due to the harm that can be cause, a number of risks must be assessed.

Health risk must be considered when during programs. Hooker et al. (2002) stated that there are increased risks of zoonotic diseases. Fine (2010) suggested that zoonotic diseases can be transmitted from the animal to humans. This is especially the case for individuals and animals when working in health care facilities (Fine, 2010; Thompson, 2013). As a result, Fine (2010) suggest that guidelines and protocol when working with animals.

Another risk that must be considered is physical safety. The American Veterinary Medical Association (2011) started that all interactions between humans and animals should be under supervision. This would be particularly important for programs that work with youth. Furthermore, it is important that animal be prepared for the sessions or activity. Fredrickson-MacNamara and Butler (2010) stated that handles should assess the animals prior to activities and seek care in animals are not prepared. This would be crucial to environment as both the animals and the participants can cause physical harm.

The last risk that should be considered is emotional safety. The American Veterinary Medical Association (2011) stated that in some cases participants may experience or feel rejection from their animals. In some cases, the feeling of rejection is due to unrealistic

expectations set by the participants (Thompson, 2013). As a result, facilitators must identify participants with low self-esteem and should take steps to address those circumstances, should they arise when conducting a program.

Health, physical safety and emotional safety are risk that should be considered and minimized when conducting programs with animals, especially with youth. Should these risks not be assessed and managed, they can cause harm to both animal and human participants and furthermore, can lead to poor results. However, researchers tend to agree that the programs benefit greatly outweigh the risks (Braun et al., 2009; Hooker et al., 2002; Thompson, 2013).

Trained Professionals

When considering the safety and risk associated with these types of program, various types of professionals can help contribute to a successful program. Individuals like psychologist, dog trainers, dog behaviorist, non-profit managers, volunteers, counselors, school administrators, veterinarians, and other professionals participate and contribute in order to have a successful program. Each professional should first be a licenses and credentialed specialist in their professional fields (Morrison, 2007). Furthermore, program organizers should provide training or make classes available to become certified. Morrison (2007) noted that there are national certifying organizations provide limited amounts of training in AAI. Such organizations include the Delta Society, Therapy Dogs International, Therapy Dogs Inc., and the American Kennel Club Good Citizen Test. Furthermore, Delta Society offers training to health care professionals and health care agencies that engage in HAI. Courses are also available to help health care providers learn to screen animals for use in AAT or AAA and provide instructions to persons who will be working with the animals, including staff and volunteers (Delta Society, 2009; Morrison, 2007).

Humane Education

Herman Daggett (1792) defined humane education as a way to correct antisocial behavior. Humane education was also to show compassion and tenderness toward animals (Fine, 2010; Simpson & Weiner, 1989). Arkow (2010), Ascione (2005) and Fine (2010) suggest that in the United States, humane education is an intervention that is purposeful and leads to improved human behavior as well as animal welfare. Fine (2010) suggested that the founder of Massachusetts SPCA, George Angell, believed that “humane education’s utility for ensuring public order, suppressing anarchy and radicalism, smoothing relations between the classes, and reducing crime: it would be a valuable means for socializing the youth especially for the lower socioeconomic classes” (p. 461).

Arkow (1990) stated that for more than a century that there was a need to teach youth to respect animals. Fine (2010) and Arkow (2010) stated that humane education, particularly for boys was a means to insulate them against tyrannical tendencies that could lead to violence if left unchecked. Furthermore, promoting humane education is said to help solve societal problems and can lead to global peace (Arkow, 2010; Fine, 2010). Forman (2007) suggested the by showing kindness to animals will lead to kindness to others, which expands to other people countries and throughout the world.

It was suggested that by teaching youth to respect animals they would develop compassion, empathy (Arkow, 1990; Fine, 2010). Furthermore, children will grow up to be kinder to both animals and humans (Arkow, 1990; Fine, 2010). Humane education programs seek to, “increase children’s ability and willingness to understand another’s perspective, share another’s feelings and help others” (Faver, 2010, p. 365). Programs teach animal related lessons while working on fostering empathy and emotional growth. Humane education programs are

programs which seek to teach compassion and promote social responsibility to children in their relationships with both animals and humans (Faver, 2010; Thomas, 2013). By teaching humane education, students learn and internalize lessons about respect, responsibility, open-mindedness, and kindness.

Fine (2010, 2006), DeGrave (1999), Rathmann (1999), and Ross (1999) suggested that the programs and use of AAI with at-risk youth and special needs youth continues to grow. Arkow (2010) suggested that programs are providing new ways to integrate humane educations. Traditionally, humane education focused on presentations to a class or school audience with the purpose of building community (Arkow, 2010; Fine, 2010). While humane education is a great idea, it has not caught on like other animal related topics (Alberta, 2004; Fine, 2010). The effort to continue implement this type of education for youth. Fine (2010) and Arkow (2010) suggest to continue teaching responsible pet care, animal related careers, dog safety, overall animal behavior and overpopulation. Furthermore, discuss curriculum that focus on benefits of human animal bond to the well being of huans as well as the links between interpersonal violence and animal abuse.

Zasloff et al. (2003) evaluated a curriculum based humane education program, called Teaching Love and Compassion (TLC). The researchers quantitatively found that the participants in the dog group both demonstrated an increase in the understanding of pet care and the needs of the dogs as well as endorsed violence and dog directed fear significantly less often than the control group. Data showed that participants increased the level of care and concern for the dogs. Participants had an understanding of dog behavior due to the relationship built and communication skills develop, both verbal and non-verbal. Data also suggested that there was an increase in confidence, self-esteem, communication skills including conflict resolution and

attitudes toward school and adults. This type of humane education taught during the program provides both the educational background and lived experience.

Surveys

Fine and Mio (2010) and Fine (2008) suggest that one of the challenges to further HAI is documenting the differences HAI makes and the specific protocols that are used. Arkow (1998) states the most challenging thing about programs is documenting the effectiveness.

Documentation is primarily anecdotal. There are instances where organizations make the effort to measure the improvements for physical, social and psychological functions and development (Arkow, 1998). Arkow (1998) notes that organizations implementing programs should “attempt to measure their successes and failures by designing and implementing appropriate indicators, such as resident charting, case studies, questionnaires, videotapes, incident rates or formal research” (p. 29).

There were pretest or posttest designs used for various programs. Demographic questionnaire, the Human Animal Interaction Scale, the Social Skills Inventory, a basic social and emotional communication skills measurement was given to participants in the Pen Pals program (Mullen, 2013; Riggio, 1986) These two questionnaires were given pre-program. For another program, the Coopersmith Self-Esteem Inventory and the Institute for Personality and Ability Test Depression Scale was given pre and post program (Mullen, 2013; Walsh & Mertin, 1994) Another program, the Indiana Canine Assistant and Adolescents Network facilitated a program with juveniles and used an unstructured interview with questions not for a measurement tool (Turner, 2007).

Fournier et al. (2007) stated the although the conduct pretest and posttest the data is limited as it is not a true representation. Due to the lack of availability in survey questions and

the variety of measurement tools used prior to the program, it is difficult to assess whether there is a consistent survey questions. It is also difficult to determine the validity and reliability of questions asked. Numerous correctional institutions with HAI program reported that inmates experiencing more patients and responsibility, unconditional love from animals and feeling calmer in certain situations (Mullen, 2013). Interestingly, the programs mentioned did not use quantitative measurements, only through a qualitative approach. The data received should be viewed with limitations as the method of gathering the data through interviewing was self-reported (Mullen, 2013).

Some researchers suggest there is an inexpensive method of assessing community programs. Syzmanski et al. (2018) suggested that expressive writing could be used to assess and show outcomes of HAI for at-risk youth. Expressive writing is journaling which is done regularly to record thoughts, experiences, and feelings. This method is a form of self-reflection which can aid in self-awareness, insights on behaviors and emotions can help restructure ones' thoughts on specific experiences.

Cost

Community programs are cost effective. Veterinarians and human healthcare professionals stated the programs were cost effective interventions for various facilities and populations (Animal & Society Institute, 2011). However, organizations must understand the associated cost. When developing a community program, non-profit organizations should consider the initial start-up cost and expenses (Mallon et al., 2006). Fundraising efforts are continuous and obtaining grants are necessary. The cost varies from program to program; however, there are standard costs that should be included. Community programs budget for food,

animal upkeep and maintenance, and staff salary (Mallon et al., 2006). Most community programs are funded by grants and fundraising donations.

Arkow (1998) stated the most programs require minimal funding. Furthermore programs must be cost effective. Arkow (1998) suggest running a cost-benefit ratio. Morrison (2007) stated that:

When implementing AAIs, the cost of the care of the animals needs to be considered. This includes food and shelter for the animals, hygienic items, toys, and veterinary costs for health maintenance and incidental events. At this time, there is no reimbursement code for AAIs; however, much of the cost can be decreased through donations and volunteers. (p. 59)

However, one costly thing is the insurance. The “legal liability for resident or staff injury or accident is a concern” (Arkow, 1998). Therefore, having adequate insurance coverage is necessary. Insurance should cover the organization, personnel, motor vehicles, facility and there should be supplemental insurance for volunteers of the program (Arkow, 1998).

Positive Outcomes

According to Beetz et al. (2012), Fine (2015), and Julius (2013) the effects of HAI on humans varies and have been credibly researched and documented. HAI can support cognitive and social emotional learning (Fine, 2015). Researchers suggest that animals enhance human health, socially, physically, and psychosocially (Laskowski et al., 2019; Mullen, 2013; Sakai, 2012; Serpell, 2010; Tsai et al., 2010). The American Veterinary Medical Association (2011) stated that the relationship between animals and people are dynamic and mutually beneficial. Based on those relationships and behaviors health and well-being are influenced (Mullen, 2013). Research suggests enjoyment and engagement during activities and influences youth motivation to participate (Laskowski et al., 2019). HAI has positive impacts on individuals, whether the environment is therapeutic or non-therapeutic (Sakai, 2012). The Delta Society (1995) started

formally documenting the use of animals in therapeutic ways; analysis of these programs showed there were positive health benefits for individuals.

The benefits of HAI when engaging youth and individuals who have been diagnosed with an illness have shown physical and psychological effects. Children and youth experience disruptions to all aspects of life including social, familiar and schooling, while facing painful experiences coincided with diagnosis and treatment (Vallet et al., 2015). By engaging the youth in programs that incorporate HAI, youth have a chance to improve their self-esteem and physical fitness. Through evaluations before and after the program, the psychological health of the youth, specifically self-esteem and self-perception, and a physical fitness test showed improvement for individuals who participated in the program (Vallet et al., 2015).

Psychosocial Outcomes

When working with animals, there is a positive development of feelings, behavior, self-esteem, social interactions, relationships, and social cognition (Bryant, 1990; Fine, 2015; Paul & Serpell, 1992; Poretsky, 1996; Tsimicalis et al., 2005; Vahedi, 2010). Psychosocial outcomes/effects are common in nursing homes and psychiatric hospitals (Fournier et al., 2007; Johnson et al., 2002). Research has found that symptoms of mental illness like depression and anxiety can be eased while strengthening the immune system (Barker & Dawson, 1998; Charnetski et al., 2004; Geisler, 2004; Mullen, 2011).

Use of animals also has a calming aspect. For example, fish have been proposed to have a calming effect. In a dentist office, patients who look at fish in an aquarium helps relax and relieves anxiety (Hart, 2010; Kutcher et al., 1994). One study suggested that for individuals who have Alzheimer's disease are calmer with companion animals (Fritz et al., 1995). Dogs specifically have been helpful during group therapy for individuals who are dissociative (Arnold,

1995). During certain instances therapy dogs can help reduce the anxiety levels of patients in psychiatric hospitals (Barker & Dawson, 1998). It has been well-documented that Individuals who have seizures frequently are calmer with having dog assistance.

Levels of oxytocin have also been studied. Oxytocin is known for the calming effects (Hart, 2010). One study found that there was an increase in oxytocin levels after a dog gazed at their persons eyes (Nagasawa et al., 2008). Another study found that in comparison women had increased levels of oxytocin while being with a dog than reading a book, in which their levels decreased (Miller et al., 2009). However, there was no increase for men during the study. It is suggested that men levels of oxytocin's are not easily boosted. Although there was not an increase, it is important to note there was no decrease when interacting with the dogs and proved there was a decrease when reading.

Social Skills Benefits

When looking at the social skills, research suggests that there is improved social skills and behaviors, especially in correctional facilities, as an outcome of HAI (Corson et al., 1975; Fournir et al., 2007; Salmon et al., 1982; Schuck et al., 2013). Te-Riele (2006) stated that at-risk youth lack in social skills to interact with their peers and family, which can lead to dropping out of school or ending up in correctional facilities. However, when youth engage with animals the participants can begin to understand personal needs and feelings as well as develop empathy (Grandgeorge & Hausberger, 2011). Children also develop a sense of responsibility (Fine, 2015). Animals can be used as social support for children as the animal is not judgmental and the child does not feel threatened (Bryant, 1990; Grandgeorge & Hausberger, 2011). Levinson (1978) suggested that HAI can help with language production. During programs, participants are able communicated with the peers and community program facilitators. During discussions,

participants are given language to discuss the relevant topics and can express their thoughts on the day's training.

Individuals use animals for experiential and interactive tools that help change the individuals thought process and actions (Kruger & Serpell, 2010; Sakai, 2005). Animals provide humans to navigate and understand feelings and vice versa. Animals and humans are about to learn appropriate behaviors through observation, association and direct instruction (Kruger & Serpell, 2010; Sakai, 2005). When animals are used in a therapeutic way, there are enhancements to self-efficacy, agency, and performance accomplishments (Bandura, 1989; Bandura, 1991; Bandura, 2001; Kruger & Serpell, 2010; Sakai, 2005). AAT helps reinforce the idea that individuals can be successful and ultimately change one's perception of self in a positive way.

Empathy

Empathy is one's ability to identify another's mental state, which has cognitive and emotional components (Batanova & Loukas, 20011; Covert et al., 1985; Fine, 2015; Huetter et al., 2016; Lahav et al., 2019; Paul & Serpell, 1992; Poretsky, 1990; Rieffe & Camodeca, 2016; Shamay-Tsoory, 2011). Studies identified two systems of empathy, affective and cognitive; affective empathy is emotions felt for another, while cognitive empathy is understanding another's feelings (Lahav et al., 2019; Thompson & Gullone, 2003). Researchers have found that when juvenile have low levels for both systems of empathy, higher levels of violence and aggression are more likely to present (Euler et al., 2017; Huetter et al., 2016; Lahav et al., 2019). With high levels of empathy, individuals can care, show compassion for other, have prosocial skills as well as show sensitivity to others who are distress and lower levels of aggression and violence (Batanova & Loukas, 20011; Huetter et al., 2016; Lahav et al., 2019; Rieffe & Camodeca, 2016).

Cognitive empathy is the ability to understand another's emotion. In the case of using HAI, a human has or develops the ability to understand the animals' emotions. By developing this type of empathy also for youth to increase their positive behaviors and decrease aggression (Bush et al., 2000) Individuals who are lack empathy or have a low level of empathy are more likely to be offenders (Bush et al., 2000; Jolliffe & Farrington, 2004; Mullen, 2013). Youth must continue to develop empathy as it develops good decision making. Having cognitive empathy is a vital component of rehabilitation (Mullen, 2013). Rehabilitation requires that individuals are able to deal with life problems in a constructive manner. One must be able to have a positive psychological impact and in other do respond in a positive and constructive manner, the person needs to be able to solve problems with assertiveness, control, and must have empathy for others while providing assistance if necessary (Johnson, 2008; Mullen, 2013).

Affective empathy is the ability to feel emotions for another. When working with dogs, youth have the opportunity to engage and understand the animal's emotions. Dogs are also able to pick up on the handler's emotions. During this process, the individual working with the dog might share an emotional experience. However, Pecukonis (1990) suggests that both affective empathy and cognitive empathy work together systematically to produce emotional understanding. As a result, working with animals can help in the development both affective and cognitive empathy.

Health & Physical Fitness

When using HAI, researchers and organizations have suggested that there are some benefits to health and physical fitness. Research suggests that when individuals looks at pictures or interactions with animals there is a correlation to stress relief (Baun et al. 1991; Esposito et al.,

2011). Researchers looked at the cardiovascular effects of humans when individuals used animals for therapy or pets.

Animals have played an effect on physical health. In adults, the level of cortisol and epinephrine can increase and heart rate variability (Allen et al., 2001; Anderson et al., 1992; Esposito et al., 2011; Netting et al., 1987). Studies showed that when there are animals present individuals had lower blood pressure (Allen et al., 2001, 2002; Anderson et al., 1992; Beck & Katcher, 1984; Esposito et al., 2011; Netting et al., 1987). Odendaal (2002) also suggests that people experience decreased blood pressure and cortisol with an increase in dopamine and oxytocin.

Hardiman (2010) and Shallcross (2011) suggest that oxytocin increase explains why there are positive results from community programs. Shallcross (2011) further explains that oxytocin is a significant social hormone and if increased has a positive effect on the participants. However, there is a lack of physical health studies for children, related to stress, who are overweight and obesity (Esposito et al., 2011). Yet, it is interesting to note that being in the presence of an animal can be beneficial to the physiology (Kaminski et al., 2002).

Dogs motivate people to take walks. Serpell (1991) stated that people who adopted a dog increased their daily walking significantly. Siegel (1990) found that there was a one and a quarter hour increase of time spend outside for elderly people who lived in Southern California. Although there are some studies that show people who own dogs do not gain health benefits of exercise (Hart, 2010). Many studies show an increase in time spent walking or spent outside than people who do not own dogs or engage with dogs.

Positive Outcomes for Different Populations

When using HAI as in intervention, some positive outcomes are more prevalent than in others. For this study, looking at different populations and their outcomes provides a broader understanding of positive outcomes as the community programs in this study work with at-risk youth, which can include youth who are incarcerated or have mental or physical disabilities.

Special Education

For the special education setting the outcomes have been well-documented (Fine, 2015). Fine (2010) suggests that there are,

A wide range of institutional settings for children with special needs-children's advocacy centers, juvenile and adolescent mental health and correctional institutions, children's hospitals, child protection agencies, schools for emotionally disturbed youth, private consulting rooms and many others-incorporate AAIs. Schools where humane education is offered may be added to this institutional list. (p. 463)

Researchers suggest that there are improvements as there is a reduction in depressive moods while promotion of positive affects (Banks & Banks, 2005; Fine, 2015; Kaminski et al., 2002; Nathans-Barel et al., 2005; Prothmann et al., 2006; Souter & Miller, 2007). Researchers suggested that there were an increase in positive social interactions (Fine, 2015; Gueguen & Cicotti, 2008; Hart et al., 1987; Hergovich et al., 2002; Kotschal & Ortbauer, 2003; Martin & Farnum, 2002; Prothmann et al., 2009; Schneider & Harley, 2006; Wells, 2004). Social interactions consist of increase communication and establishing relationship which is important for youth when developing their cognitive and social emotional skills. Furthermore, there was a reduction in anxiety and stress levels (Allen et al., 1991, 2001; Barker et al., 2003; Beetz et al., 2012; Beetz et al., 2011; Fine, 2015; Schneider & Harley, 2006; Shiloh et al., 2003). Lastly, there was an increase in concentration and motivation (Fine, 2015; Gee et al., 2007; Hediger & Turner,

2014; Wohlfarth et al., 2013). For youth in special education, the aforementioned positive outcomes overall lead to positive social-emotional skills and cognition.

Individuals in Correctional Facilities

Rehabilitation. HAI as an intervention is used for rehabilitative purposes. Through participation with the community programs, individuals are experiencing positive outcomes like less infractions, rule violations, failed drug screening (Dietz et al., 2003; Prendergast et al., 2001). Through community programs inmates who participated showed a lower recidivism rate and were less like to conduct in criminal ways (Dietz et al. 2003; Fournier et al., 2007; Lipton et al., 2002). Inmates who participated in the People Animals Love (PAL) program showed that 97% of inmates who participated did not return to prison (MoneyMaker & Strimple, 1991; Mullen, 2013; Strimple, 2003). Although these programs cannot change certain circumstances, individuals who participate in these community programs are more likely to address social issues and develop skills that can help them cope once released (Martin et al., 2008).

Community programs provide inmates with rehabilitative benefits (Fournier et al., 2007) Training programs allow offenders to work with shelter dogs and through completion of the program; the teens learn empathy, community responsibility, kindness, and healthy social interactions (Fine, 2015; Harbolt & Ward, 2001). When working with the juvenile facilities, the primary focus is on humane education and basic obedience. The court system and various correctional facilities have partnered with community programs that allow juveniles to complete dog training programs. The primarily focus is to get the participants to identify their emotions. Through these programs, the youth receive training, peer support, counseling, and train dogs which become either house trained, certified therapy dogs, or police dogs (Juvenile Justice Information Exchange, 2019). Community programs are seen as a solution to companion-

animal overpopulations, as these inmates are keeping these animals as pets as well as training them for adoption or human services like guide dogs (Fournier et al., 2007; Fournier & Geller, 2004).

All community programs studied used pre-test and post-test designs to gather their data on their participants (Fournier et al., 2007; Katcher et al. 1989; Walsh & Mertin, 1995). While the length of the programs varied, pre-test data was conducted prior to the program and post-test data were completed within two weeks of the end of the program. Research suggests that community programs in correctional facilities have essential implications on rehabilitation; however, more research is needed (Fournier et al., 2007). Little research is available on the long-term effects of community programs. The analysis of the pretest and posttest surveys conducted lacked questions focused on inmate experience and not the actual HAI experience and effect (Fournier et al., 2007).

Interpersonal Skills & Cognitive Empathy

Individuals in correctional facilities are more likely to exhibit antisocial behavior or lack social competence. Considering the environment in correctional facilities, youth may not bond with the authorities, but animal interaction allows for bonds and creates an environment that is less guarded (Fick, 1993; Kruger & Serpell, 2006; McNicholas & Collis, 2000; Mullen, 2013; Wells, 2004, Wood et al., 2005). Perkins-Dock (2001) suggests that in order to teach interpersonal skills effectively, social skills training and anger management are needed. Through a HAI program, individuals are able to replace feelings of aggressions and learn behavioral, emotional and moral reasoning skills (Glick & Goldstein, 1994; Mullen, 2013; Perkins-Dock, 2001).

Because community programs are done in a group setting, juveniles without animals can be more reluctant to speak up but HAI allows participants to learn and practice cognitive empathy skills with animals. By practicing these skills with animals, participants are able to observe behaviors and identify with their animal. By participating in these programs, individuals are able to have meaningful discussions, develop compassion and potentially identify with other humans (Ascione, 1992, 1997; Mullen, 2013).

Theoretical Frameworks

One of the theoretical frameworks is attachment theory. Attachment theory can clarify how relationships are formed and communication. The human-animal bond and foundations of the connections between humans and animals, particularly dogs, are analyzed through an attachment theory lens. Relational development system theory (RDST), focusing on positive youth development (PYD), is an essential framework for understanding how HAI can be used as an intervention. With these frameworks in mind, community programs have used HAI with various populations (Fine, 2015).

Attachment Theory

Attachment theory, developed by John Bowlby and Mary Ainsworth, is explained as the emotional bond that a parent and child have for the child to develop socially and emotionally (Ainsworth, 1973; Bowlby, 1969). Attachment theory helps researchers understand human relationships from a theoretical and therapeutic perspective (Bretherton, 1992; Sakai, 2012). Bowlby (1988) stated that children are programmed to seek an attachment from their mother. Through the relationships and attachments formed, predictive behaviors were established which could be examined in various life forms. The type of attachments made between the adult and child demonstrates a long-lasting connectedness in which security and safety are established.

While attachment theory looks at the relationship and emotions between humans, an attachment can be examined through the relationships between humans and animals or HAB. Ainsworth (1973) discussed that the characteristics of human attachments are proximity maintenance, separation distress, a secure base, and a safe-haven. Proximity maintenance describes as the child has a desire to need the attachment figure. A secure base is the attachment figure that serves as a secure base so that the child can explore. Separation distress is described as the individual has feelings of anxiousness or anxiety when separated from a parent figure. A safe haven describes when the child needs comfort and safety during stressful situations. It is essential to understand how attachment affects the human-animal bond. By understanding these levels of attachment, facilitators of community programs could help the participants form healthy bonds.

Attachment Theory and Human-Animal Bond. Attachment theory describes interpersonal relationships between people and can help explain the relationship between humans and nonhumans. Humans have an attachment to animals, which is related to a positive emotional state. Like having a secure or strong attachment, individuals who work with animals or own pets experience positive impacts related to anxiety and fewer health problems (Grandgeorge & Hausberger, 2011; Melson & Peet, 1988). Animals rely on humans for basic needs like food, shelter, and affection, which is similar to the relationships that a child seeks from their caregiver (Fine & Beck, 2010; Laskowski et al., 2019; Sable, 2013; Sakai, 2012). Thomas (2013) suggests that animals can be used as a figure for attachment in which that person can build a strong relationship with a secure bond with an animal. Domestic dogs are capable of forming strong bonds with humans (Udell & Brubaker, 2016). Animals can be seen as a family member (Levinson & Mallon, 1996; Triebenbacher, 1998). Individuals can often rely on their animals,

especially when they experience emotional distress, as attachment offers security while enhancing well-being (Laskowski et al., 2019).

Like humans, animals show signs of attachment (Grandgeorge & Hausberger, 2011; Prato et al., 2003; Topal et al., 1998). Like humans, dogs can exhibit secure attachments or experience separation distress (Grandgeorge & Hausberger, 2011; Sherman & Mills, 2008). Challenges can arise when ensuring optimal conditions/environments for animals' well-being while bonding development occurs (Fine, 2015). Challenges like understanding goodness of fit would need to be considered (Fine, 2015; VanFleet, 2006, 2014). VanFleet (2006, 2014) suggests that fit can be determined by demands, temperament, and personality. It is also suggested that if community programs use the goodness of fit model that the organizations needs to identify in their assessments how they evaluate fit (Clothier, 2007; Fine, 2015; Serpell, 2014; VanFleet & Faa-Thompson, 2014).

Developing attachment to animals, specifically to dogs, has been researched in depth. Attachment and human-animal bonds are linked to numerous outcomes like generativity, mental health, empathy, and prosocial orientation (Budge et al., 1998; Marks et al., 1994; Mueller, 2014; Vidovic et al., 1999). Mueller (2014) suggest that youth are deeply attached and committed to their dogs; however, little research is available about the attachment and commitment level of youth who participate in community programs.

Human-animal bonds can be a predictor of future outcomes. The bond could benefit humans in emotional and physical ways (Friedman, 1995). Those future outcomes include the quality of future relationships, the risk of depression, aggression, risk-taking, problem-solving, social competence, and motivation (Lynne et al. 1998; Ruiter et al., 1993; Udell & Brubaker, 2016). Much of the youth who participate in the programs have experienced trauma and have

developed either an ambivalent/anxious attachment or avoidant attachment. Haynes (1991), Friedmann et al. (1983), and Levitt (1988) state that human-animal bonds can help decrease depression and lower blood pressure, which is discussed in the following sections of Chapter 2. Community programs seek to work with youth who have these types of attachments to educate animals, enhance their social skills, and promote beneficial outcomes discussed later in this chapter.

Fine & Melson (2010) suggested that the bonds between animals and children have provided some calm, security and reassurance. It is also suggested that during stressful times, the bond serve as coping mechanisms. Through the lens of attachment theory, Bonas et al., (2000) and Geist (2011) suggest that companionship with a dog fulfills the human need to maintain proximity and can serve as a secure base. Horn et al., (2013) and Jalongo (2015) further conduct review of the research on the attachment behaviors of canines, including one study that explores how dogs attach to humans for a secure base similar to how children attach to their parents. As a result, secure attachment and bonds can happen between animals and youth.

According to Arkow (2010):

When attachments between children and animals are nurtured, many positive benefits ensue. However, when the bond between children and animals is broken by real or threatened violence or neglect in the family, children pay a high price, often with short- and long-term consequences. These children are at higher risk of developing behavioral problems, failing academically, and engaging in delinquent and criminal behavior, and are more vulnerable to physical and psychological problems. (p. 463)

Researchers suggest to that intervention at the earliest opportunity which paying attention to the animals and children's situation can help lead to a positive outcome (Arkow, 2003; Arkow, 2010; Ascione & Arkow, 1999; Fine, 2010; Randour & Davidson, 2008). When a child has a bond or attachment to an animal it can encourage positive development (Fine, 2010; Poresky, 1990).

Relational Developmental Systems Theory

To understand how HAI affects positive developmental outcomes, the relational developmental systems theory (RDST) framework can be used. RDST approach is a proposal to ground HAI research in a developmental system model from which to develop theory and research (Hurley, 2014). RDST focuses on mutually beneficial relationships between individuals. Furthermore, RDST are the conceptions of the context of the relationship and are embedded in a relational meta-model that can be used to integrate the multiple levels of human development (Lerner, 2006; Muller, 2014; Overton, 2010, 2011; Overton & Muller, 2012).

By using RDST as a framework, one can understand the role that HAI has in human development (Mueller, 2014). Mueller focuses on positive youth development (PYD), and through the RDST lens, the focus shifts from a model where HAI is used to address linear associations between humans and animals with a particular human outcome being focused on (Hurley, 2014). As mentioned before, there is a lack of available research, so more studies must be conducted to understand and promote the positive development of youth. Researchers developed studies looking at the influences that HAI has on both people and animals in the relationship. It was significant as relationships were reciprocal in that one must consider the development of both animals and children in the relationship.

A developmental approach is necessary when trying to understand the human-animal relationship, which would help explain how the HAI experience is positive (Mueller, 2014). Research suggests that one must consider the length of time and intensity of the relationship between humans and animals as it plays a role of development for both humans and animals. It is also essential to consider that the relationships are bidirectional. From an RDST perspective, development is multidirectional and integrated into the relationship. When considered how these

relationships are bidirectional, the animal's development is considered the animal experience. The youth who participate have an opportunity to foster developmental regulation that can be adaptive (Mueller, 2014). RDSTs considers human well-being and considers animal well-being as it is essential to take into account how interacting with the animal affects humans and how the relationships impact the animals.

Positive Youth Development and Purpose. By understanding the relationship from this perspective, a great understanding of the developmental process is gained. In order to have a meaningful experience, a relationship and a sense of purpose are cultivated. Researchers are also about to identify how PYD is affected by the use of animals as well as determine factors like self-regulation, social skills, moral reasoning skills, and physical health (Hurley, 2014; Mueller, 2014). There is a purpose for pairing animals and humans for a program. A purpose is defined as a generalized and stable intentional to accomplish something meaningful (Damon, 2008; Mueller, 2014). When an individual has a purpose, there is an overall goal in life. That goal helps organize decisions and actions which can manifest through behavior. Some of the youth do not have an overall goal and have the proposed goals focused on things like athletics, religious services, or political activities (King et al., 2011; Mueller, 2014; Zaff et al., 2010; Zarrett et al., 2007). Community programs have defined purpose, which can be understood in their mission and vision statements. A community program's purpose can also be determined by their actions taken during programs. There is a deeper meaning that extends beyond personal interest and these community programs are contributing to their participants' lives, both human and animal.

Positive Youth Development and Self-Regulation. There is a strong focus on setting and developing intentional self-regulation skills. Researchers suggest the intentional self-regulation skills are focused on the individual's ability to self-select a goal and utilize the

available resources to achieve such a goal. The individual should be able to recognize that although a goal is set, sometimes they are not able to reach a set goal. When working with animals the participant needs to develop a relationship with their animal so both can work together to achieve goal-related skills (Freund & Baltes, 2002; Gestsdóttir & Lerner, 2007, 2008; Lerner et al., 2001; Mueller, 2014; Zimmerman et al., 2007). Mueller et al. (2013) conducted a study on 10th grade students who engaged in HAI programs and found that the most successful relationships with animals were with students who have varying levels of self-regulation skills. However, further studies are necessary to validate the outcomes as this was a single study. Self-regulation skills are an important ability to have when navigating society, so by engaging in HAI, youth have the opportunity to develop and master these skills.

Positive Youth Development and Social Skills. Social skills are another important factor when developing regulations and working with humans and animal relationships. Verbal communication and non-verbal communication like eye contact, facial expressions, and body language is crucial when engaging in social interaction for human-human relationships (Arglye, 2009). Similar to human-human relationships, animals, particularly, dogs are sensitive to facial features and eye contact. Dogs rely on communication signals like pointing and gesturing. In community programs, the participants use communication signals to communicate with the dogs. The participants learn how to train the dogs and use verbal and nonverbal communication to direct and communicate with the dogs. Animals have developed abilities to understand human signals. Actions taken by animals or humans, whether positive or negative, can have a long-term impact (Grandgeorge & Hausberger, 2011; Waiblinger et al., 2006).

Some studies suggest the animals can help facilitate social interactions and conversations (Mueller, 2014; Serpell, 2000). The mere presence of an animal changes an environment. One

study found that individuals who worked with pets or became pet owners beneficial effects gained social skills (Allen et al., 2001; Hunt & Chizkov, 2014). Youth feel safe and express more emotion when working with animals because animals are not judgmental (Mallon, 1994). While it is interesting to see anecdotal reports that human behavior changes when dogs are present, Mueller (2014) suggests future research consider the comparisons between human-human relationships and human-animal relationships.

Positive Youth Development and Moral Development. Animals play an important function and purpose in human lives. The function animals play can create a moral challenge especially when considering the responsibility humans have when treating animals with respect and an animals' overall purpose in human life (Fine, 2015; Mueller, 2014). There are many complicated moral issues related to animals. For example, one moral consideration is the relationship between people being fond of animals or animal activists but still eat animals as a source of food (Herzog & Golden, 2009; Mueller, 2014).

Animals can provide context for the youth when developing moral cognitions (Kahn et al., 2008; Mueller, 2014) When working with youth, theorists suggest that you engage and respond to youth in a two-step fashion, first in an emotional and intuitive way followed by using logic to justify your emotionally based decisions (Haidt, 2001, 2008; Galvin & Herzog, 1992; Herzog, 2010). Youth can then integrate their experiences with animals (Mueller, 2014).

Reciprocity. HAI can serve as a pathway for developing caring behaviors and reciprocity, both important when developing morals. RDSTs highlight reciprocity as a key component in moral development (Mueller, 2014; Turiel, 1998). While peer interaction for youth is great for developing reciprocity, engaging in social activities with animals can help develop moral reciprocity skills (Mueller, 2014). Similar to attachment theory, PYD happens when

nurturing behavior takes place. Beck and Katcher (1984) suggest that communication during HAI has nurturing characteristics. Furthermore, they note that moral reciprocity and caring for others is a fundamental aspect which needs to continue to be developed. Melson and Fogel (1989) similarly states that children developing knowledge about nurturing behaviors when they care for animals. Some research suggests that community programs where youth participate in HAI as an intervention develop a sense of responsibility and develop morals around caring and empathy (Chardonens, 2009; Fine, 2015).

Positive Youth Development, Health and Physical Fitness. Some literature suggests that there is an association between having a pet or working with animals, lowered stress levels, and reduction of obesity (Barker & Dawson, 1998; Bauman et al., 2001; Melson et al., 1997). Mueller (2014) notes that there is not existing literature about animal-related activities as it relates to health outcomes. Similarly, Mueller also notes the lack of documentation of the athletic activities and positive body images as it relates to animal engagement experiences. Mueller suggests the while there are links between HAI and PYD, future research is necessary in order to understand health outcomes for youth.

Conclusion

Human-animal bonds have been a phenomenon documented since the beginning of domestication of animals (Fine & Beck, 2010; Turner, 2007). The relationship and connections have been documented in various forms of literature (Chandler, 2001; Fine & Beck, 2010; Flom, 2005; Serpell, 1991). Fine (2015) suggests that the field of HAI has been filled with anecdotal comments on positive outcomes but lacks the understanding how HAI applies to various populations. Examples of the positive outcomes come from correctional facilities and health care facilities, as well as programs that use equine as their main animals.

Fine (2010) suggests that best practices have not been clearly identified and explained. While there are suggestions for practices in certain fields when working with animals, it is noted that research is primarily focused on that in health care facilities. When looking at best practices in similar fields, discussions about animal selection and participant protections must be had. Ethics and risk of the programs must be considered and evaluated. Another best practice is to include discussions about human education. To understand the outcomes surveys must be conducted and the cost of the programs must be considered.

Focusing on positive outcomes, those are suggested to help enhance human health, physically, socially and psychosocially. Fine (2015) and Mueller (2014) suggests that there is little research available on the effects of attachment of the program animals paired with at-risk youth. Understanding these essential characteristics of attachment can help community programs guide their practices so that their participants are provided an education and positive program experience. Furthermore, research suggests there is positive youth development which leads to youth developing a purpose, self-regulation, social skills, moral development and health benefits. As a result, best practices for community programs that work specifically with at-risk youth should be identified.

Chapter 3: Research Design and Methodology

Introduction

Community programs are using HAI as interventions with the at-risk youth community. Chapter 3 presents how the research is designed in order to further understand best practices for community programs that use HAI with the at-risk community. The research methodology used for this study is analyzed. The chapter portrays the nature of the study and reviews the research questions. A phenomenological approach was used in the study and selective sampling.

In the chapter, the process for selecting participants, the analysis unit and population are described. Explained are the criteria used for inclusion and exclusion from the study. This chapter describes the human subject protections, data collection procedures and the process used to solidify the study's participant list. The chapter discusses the Internal Review Board (IRB) process, interview techniques, and the researcher's personal bias statement, bracketing and epoche. In the chapter, the coding process, validity and reliability are discussed.

Re-Statement of Research Questions

This chapter conveys the research methods that were employed to achieve the aims of this study, which is to answer these four research questions primarily:

- RQ1: What success strategies and practices do community programs employ when implementing HAI as an intervention with at-risk youth?
- RQ2: What challenges are faced by community programs when implementing HAI as an intervention with at-risk youth?
- RQ3: How do community programs measure the success of their practices?
- RQ4: What recommendations do community programs have when implementing HAI as an intervention with at-risk youth?

Nature of Study

A qualitative study was used as the research design in order to describe best practices community programs use HAI interventions. Creswell and Creswell (2018) state that qualitative research is conducted in order to understand the meaning people have for certain experiences. Through a qualitative approach, researchers can achieve a better understanding of personal experience with the following approaches: narrative, ethnography, grounded theory, case study, and phenomenology. With each approach, the researcher collects data to examine the lived experiences of the participants. Qualitative research integrates the use of observation, documentation, analysis, interpretation and meaning of a particular phenomenon (Gillis & Jackson, 2002; Leininger, 1985; MacDonald, 2012). The goal is to understand the participants' viewpoint.

Creswell and Poth (2018) suggest there are commonalities between the five qualitative approaches. One commonality is the data collection is the instrument the researcher(s) uses. The data are collected in the participant's natural setting and all the data can be gathered via interviews, documents and videos. Another commonality is patterns and themes are reviewed and identified from the data through analysis.

Methodology

The researcher used a phenomenological approach for this study. Creswell and Creswell (2018) stated a phenomenological study is where the researcher identifies the core of human experiences about a particular phenomenon. Phenomenological studies focus on individuals who experience a particular phenomenon. To understand the phenomenon, interviews are conducted. Through interviews, the researcher provides the participants an opportunity to share his/her experiences (Privitera, 2017). These interview questions are asked in an open-ended format,

which is common for phenomenological research. The researcher used collected data to distinguish common themes from the responses (Creswell & Poth, 2018; Locke et al., 2004). Understanding the participants' experiences allows the researchers to understand best practices for community programs who use HAI as an intervention for at-risk youth. A narrative was constructed by the researcher to summarize the themes (Creswell & Poth, 2018; Privitera, 2017).

Structured Process of Phenomenology

There is an assumption that studies using a phenomenological approach focus on the lived experience (Creswell & Poth, 2018; Giorgi, 1997). Other assumptions include that there is an acknowledgement of the role the individual has and that experiences described do not contain analysis or explanations (Creswell & Poth, 2018; Husserl, as cited in Giorgi, 1997; Moustakas, 1994; van Manen, 2014). Phenomenological studies provide a way of studying a particular phenomenon of the human experience (Giorgi, 1997).

Moustakas (1994) described the methodical steps to conducting a phenomenological study. First step, determining if the research problem is appropriate for a phenomenological approach. Qualitative research has numerous research methods, so the researcher must determine if that method is best for the study. Step two is identifying the phenomenon and describing it. The third step is to distinguish and specify the philosophical assumptions reviewed later in the epoche and bracketing section. The researchers then collected data from an interview asking open-ended questions. Once data are collected, the researcher identifies themes. The coded data are discussed in Chapter 4. Once themes were identified, the researcher develops structural and textural descriptions for those themes. The themes are used to identify patterns of a particular phenomenon.

Appropriateness of Phenomenology Methodology. The qualitative approaches are ethnography, narrative, grounded theory, case study, and phenomenology. When exploring the phenomenon of community programs that HAI as an intervention with the at-risk youth population, it would be advantageous to hear from the program and executive directors who experience this phenomenon. The phenomenological approach is appropriate for this study as the research design and protocols ensure participants share their experiences. From the data shared by the participants, best practices can be learned and shared with other community programs.

Weaknesses of the Phenomenology Methodology. There are some weaknesses when using a phenomenological approach. One weakness is that some researchers might find the process of structured analysis to be too rigid (Creswell & Poth, 2018). Van Manen (2014) suggests that the researcher needs to identify assumptions, which need to be put aside during the research progress. Using the phenomenology approach, the researcher might have trouble identifying a sample of participants that have experience the particular phenomenon (Creswell & Poth, 2018). Although it is seen appropriate to gather individual experiences and personal knowledge of a particular phenomenon, it can be difficult to make interpretations, in which the researcher should be cautious of inserting personal feelings and/or bias in the data (Gray, 2013).

Research Design

The research design process explained the selection criteria that determine relevant data from participants. The selection criteria include the (a) population, (b) analysis unit, (c) sample size, and (d) sampling technique.

Population

The population groups included program directors, executive directors, educational directors, or board members of community programs that work with dogs and at-risk youth during a humane education or dog training program.

Analysis Unit

The research study intended to identify best practices when community programs use HAI as an intervention with at-risk youth. This study's ideal participant was one of the following individuals: program director, educational director, board member, or executive director for a community program or non-profit organization.

Sample Size

For a phenomenological study, researchers suggest various numbers of participants. According to Creswell and Poth (2018), in a phenomenological study, five to 25 subjects are needed to participate in a study. Morse (1994) considered no less than six participants, and Bertaux (1981) states 15 participants minimum. Among researchers there seems to be a lower number of participants for the sample size, in comparison to the sample sizes for a quantitative study (Gubrium et al., 2012). For this study, 15 participants were sought to be interviewed for the sample size. This number was chosen to represent the median number suggested by researchers for a phenomenological approach. As it relates to community programs that use HAI as an intervention, this area of study is relatively new, so the number of community programs that focus specifically on the at-risk youth population and work with dogs may be limited.

Purposive Sampling

Knowing the information about the sample population, the researcher needs to purposefully select participants who will provide the best information about their experience; this

is called purposive sampling (Patten & Newhart, 2017). A purposive sample will be up to 25 participants, with the goal of interviewing 15 individuals. Horsburgh (2003) suggests that purposive sampling originated to create a sample that will provide the necessary information to understand the study's phenomenon. In order to achieve the study's objective, purposive sampling should be used so that participants can provide the best information. By starting with a pool of 25 individuals and interviewing 15 individuals, this would meet the requirements that are suggested by researchers for a phenomenological study.

Participation Selection

A three-step process was used in order to create a master list. Step One, the researchers carefully identified the unit of analysis, community program executive directors, program directors, or educational directions of community programs that use HAI as an intervention with at-risk youth. Step Two was creating a sampling frame. Starting with GuideStar, a website used as a database for over 2.5 million non-profit organizations. The researcher searched for human-animal programs; over 1,100 results appeared on the first search. The researcher also conducted a Google search using the same search phrase, human-animal program. The researcher then applied the sampling frame. The sampling frame is described as the elements of a study population. Step Three involved application of inclusion and exclusion criteria for maximum variation.

Sampling Frame

As previously stated, the participant selection process required creating a master list. Step One was searching GuideStar for human-animal programs. The human-animals programs showcased over 1,100 organizations. The researcher then applied the inclusion criteria, followed by the exclusion criteria, to narrow down the list. Due to the limited amount of community

programs using HAI that work with the at-risk youth population, a purposive sample maximum variation was applied.

Criteria for Inclusion

The researcher used the following criteria for inclusion:

- Must be an executive director, program director, or educational director for the community program.
- The program must be searchable on GuideStar.
- The program must use dogs as the primary animal.
- The program works with the at-risk youth population.
- Organizations must have a minimum of 2 years of operation.

Criteria for Exclusion

The researcher used the following criteria for exclusion:

- Unavailable to meet for an interview.
- Unwilling to have the interview audio-recorded.

Criteria for Maximum Variation

Once the inclusion and exclusion criteria were applied, a purposeful sampling approach for maximum variation was applied to narrow the list of participants. Creswell and Poth (2018) stated that researchers develop various criteria to enable participants to be selected to result in a broad representation of the criteria. Participants were chosen to provide in-depth reflections about their experiences operating community programs that use HAI as an intervention with at-risk youth. The participants were selected based on years of experience, working in various states and with diverse youth.

Protection of Human Subjects

Creswell and Poth (2018) state that there are three ethical issues associated with the guiding principles of ethical qualitative research:

- respect for persons (i.e., privacy and consent)
- concern for welfare (i.e., minimize harm and augment reciprocity)
- justice (i.e., equitable treatment and enhance inclusivity)

To ensure the study was ethical and the participants' rights, welfare, and safety were protected, the following steps were taken.

As part of the IRB application, the researcher fulfilled the Collaborative Institutional Training Initiative (CITI) Human Subjects Training Course requirement (see Appendix A). Prior to the participants being contacted for interviews and data collection, authorization was received from the Pepperdine IRB (see Appendix B). The IRB application included a copy of the Informed Consent Participation in Research Studies (see Appendix C), the Recruitment Script (see Appendix D), and the Interview Protocol (see Appendix E). Following the IRB's approval, the researcher contacted the participants via e-mail and/or telephone using the Recruitment Script (see Appendix D). The participants were informed of the study purpose, potential risk, potential benefits, and their rights regarding participation and confidentiality. Participants were also notified that the researcher would audio record the interview. The participants were informed that involvement was voluntary and at any time they had the right to withdraw consent at any part of the interview at no consequence. Participants were also informed that they had the option to refuse to answer any question. Each participant signed an Informed Consent document. The researcher used pseudonyms for organization and numbers to label the participants. Using

numbers and pseudonyms were to ensure confidentiality. All data collected was protected in a locked cabinet at the researcher's office.

Data Collection

The researcher used the IRB-approved recruitment script (see Appendix D) to invite all participants to participate and made appointments via e-mail or phone. An introduction of the research, the purpose of the study, and the potential participant's participating interest was provided in the script. When the participants agreed, an interview date and time was selected. Confirmation of the preferred interview date and time was confirmed via e-mail and the Consent for Participation was sent. Following the receipt of the signed Consent for Participation to the researcher via e-mail or mail, the interview was conducted via a video conferencing platform (i.e. Zoom or Google Meet). The audio was recorded via the platforms' record function and via a high-quality handheld audio recorder. Each approximately 60 minutes of interviews was transcribed by a professional transcription service with experience transcribing interviews for research purposes. Pseudonyms and numbers replaced organization names and participant's names. Data collected and audio recordings were kept on the researchers' local drive in locked cabinet in the researcher's office to ensure confidentiality. All recording data will be destroyed following transcription.

Interview Techniques

Participants interviewed were directors of community programs that use HAI as an intervention for at-risk youth. Creswell and Poth (2018) suggest that the interviews be a conversation to understand the experience from the participant's point of view. This researcher used a semi-structured interview style with open-ended questions. Using the semi-structured

interview with open-ended questions allows for participants to describe information, beliefs and opinions (Kumar, 2014).

The researcher used an established interview protocol to elicit responses related to the research questions. The researchers confirmed that the participants read and understood the informed consent, participation is voluntary and that the interview was being recorded. In order to establish rapport, the interviews began with an icebreaker. Following the icebreaker, 10 questions that corresponded to the research questions were asked. The researcher used notetaking sparing given the use of the audio recorder, so active listening could take place. Short comments were used to provide affirmation and encouragement for continued responses. Follow-up questions were also asked to clarify information when necessary. the researcher did not guide the participants answers and noted any observable behaviors or hesitations. Following the interview, the researcher thanked the participant for their participation.

Interview Protocol

Interview protocols are insightful guides that help researchers gather qualitative data (Creswell & Creswell, 2018). All of the interview questions support the overarching research question. This study consists of four research questions. The following interview questions were used in the interviews.

- Icebreaker: What is your role and how did you get involved in the community program?
- IQ 1: What is the purpose of the community program and how does the purpose manifest itself within the program?
- IQ 2: What elements should be in place for a successful program?
- IQ 3: What are some common practices for selecting youth participants?
- IQ 4: What are some common practices for selecting dog participants?

- IQ 5: What is the single biggest challenge you face in implementing HAI?
- IQ 6: Based on your experience does the length of the program influence outcomes?
- IQ 7: What obstacles have you faced when implementing a program?
- IQ 8: How do you handle attachment during a program?
- IQ 9: How do you handle lack of engagement?
- IQ 10: How do you define an successful program?
- IQ 11: In what ways do you know that participants are benefiting from the program?
- IQ 12: What measures & procedures do you use when conducting pre-surveys and post-surveys?
- IQ 13: What suggestions do you have for others interested in starting a community program for at-risk youth?
- IQ 14 Is there anything else you'd like to add?

Relationship Between Research and Interview Questions

With the research questions in mind along with the literature review, the interview questions were developed. The icebreaker was incorporated to develop an understanding of the participants' perspective and establish rapport. In order to show the relationship between the interview questions to the research questions, prima-facie and content validity was applied.

Validity of the Study

Creswell and Creswell (2018) stated that “validity is one of the strengths of qualitative research and is based on determining whether the findings are accurate from the standpoint of the researcher, the participants, or the readers” (p. 199). To ensure validity, the researchers delved into (a) prima-facie and content validity, (b) peer-review validity, (c) expert validity, and (d) interrater reliability.

Prima-Facie and Content Validity

For the initial set of questions, eleven interview questions were developed by the researcher for the interview. Those questions were developed in relation to the literature review and the four overarching questions. The main goal of the prima-facie and the content validity is to establish a link between the research questions and the interview questions. Their relationships between questions were constructed in a table (see Table 1).

Table 1

Research and Interview Questions: First Draft

Research Questions	Corresponding Interview Questions
RQ1: What success strategies and practices do community programs employ when implementing HAI as an intervention with at-risk youth?	Icebreaker: What is your role and how did you get involved in the community program? IQ 1: What is your community programs' purpose and how does that manifest in your programs? IQ 2: What elements need to be in place for a successful community program? IQ 3: What are some practices used when selecting youth participants and dogs for programs?
RQ 2: What challenges are faced by community programs when implementing HAI as an intervention with at-risk youth at-risk youth?	IQ 4: Does the length of the programs play a factor in the outcomes? IQ 5: What obstacles have you faced when trying to implement a program with the at-risk youth population? IQ 6: How do you handle issues of attachment or lack of engagement during a program?
RQ3: How do community programs measure the success of their practices?	IQ 7: How do you define a successful community program? IQ 8: In what ways do you know that the youth are benefiting from HAI? IQ 9: What measures do you use when conducting pretest/ posttest with youth

Research Questions	Corresponding Interview Questions
	participants? (continued)
RQ4: What recommendations would community programs have when implementing HAI as an intervention with at-risk youth?	IQ 10: What suggestions do you have for others trying to start a community program that works with at-risk youth? IQ 11: Is there anything else you would like to add?

Peer-Review Validity

The second step focused on the researcher receiving feedback from two peers. These peers were Pepperdine University doctoral students who were also in the dissertation phase. These peers understand the differences between qualitative and quantitative research. Each peer reviewer received a Peer Review Form (see Appendix F). The form stated that the reviewer determined if each interview question should be kept, revised, deleted. After the forms were received, changes were made, and peer-review validity was established. The interview questions were revised. No questions were deleted and two questions were added to the list.

Table 2 identifies four research questions and the corresponding interview questions with revisions based on feedback from peer-reviewers. Subsequent changes were made to the order and phrasing of the questions within the interview protocol.

Expert Review Validity

The third step required the researchers to have an expert panel review the research questions and the interview questions. The panel included Dr. Maria Brahme, Dr. Gabriella Miramontes, and Dr. Farzin Madjidi. Once edits were received necessary changes were made so

that expert validity was established (see Table 3). No questions were deleted, one question was added making the total of interview questions 14. A question was added to research question 2 regarding challenges when implementing HAI.

Table 2

Research and Corresponding Interview Questions (Revised)

Research Questions	Corresponding Interview Questions
RQ1: What success strategies and practices do community programs employ when implementing HAI as an intervention with at-risk youth?	<p>IQ 1: What is the purpose of the community program and how does the purpose manifest itself within the program?</p> <p>IQ 2: What elements should be in place for a successful program?</p> <p>IQ 3: What are some common practices for selecting youth participants?</p> <p>IQ 4: What are some common practices for selecting dog participants?</p>
RQ 2: What challenges are faced by community programs when implementing HAI as an intervention with at-risk youth at-risk youth?	<p>IQ 5: Based on your experience does the length of the program influence outcomes?</p> <p>IQ 6: What obstacles have you faced when implementing a program?</p> <p>IQ 7: How do you handle attachment during a program?</p> <p>IQ 8: How do you handle lack of engagement?</p>

Research Questions	Corresponding Interview Questions
RQ3: How do community programs measure the success of their practices?	<p>IQ 9: How do you define a successful program?</p> <p>IQ 10: In what ways do you know that participants are benefiting from the program?</p> <p>IQ 11: What measures & procedures do you use when conducting pre-surveys and post-surveys?</p>
RQ4: What recommendations would community programs have to when implementing HAI as an intervention with at-risk youth?	<p>IQ 12: What suggestions do you have for others interested in starting a community program for at-risk youth?</p> <p>IQ 13: Is there anything else you'd like to add?</p>

Table 3

Review of Research and Interview Questions by Expert Panel

Research Questions	Corresponding Interview Questions
RQ1: What success strategies and practices do community programs employ when implementing HAI as an intervention with at-risk youth?	<p>IQ 1: What is the purpose of the community program and how does the purpose manifest itself within the program?</p> <p>IQ 2: What elements should be in place for a successful program?</p> <p>IQ 3: What are some common practices for selecting youth participants?</p> <p>IQ 4: What are some common practices for selecting dog participants?</p>

Research Questions	Corresponding Interview Questions
RQ 2: What challenges are faced by community programs when implementing HAI as an intervention with at-risk youth at-risk youth?	<p>IQ 5: IQ 5: What is the single biggest challenge you face in implementing HAI?</p> <p>IQ 6: Based on your experience does the length of the program influence outcomes?</p> <p>IQ 7: What obstacles have you faced when implementing a program?</p> <p>IQ 8: How do you handle attachment during a program?</p> <p>IQ 9: How do you handle lack of engagement?</p>
RQ3: How do community programs measure the success of their practices?	<p>IQ 10: How do you define a successful program?</p> <p>IQ 11: In what ways do you know that participants are benefiting from the program?</p> <p>IQ 12: What measures & procedures do you use when conducting pre-surveys and post-surveys?</p>
RQ4: What recommendations would community programs have to when implementing HAI as an intervention with at-risk youth?	<p>IQ 13: What suggestions do you have for others interested in starting a community program for at-risk youth?</p> <p>IQ 14: Is there anything else you'd like to add?</p>

Reliability of the Study

Creswell and Creswell (2018) stated that reliability is the “consistency and repeatability of an instrument” (p.154). To determine reliability, the researcher must code the data during the pilot stage. The instrument is validated and reliable following the test results of the pilot study.

Pilot Study

Prior to the study beginning, the researcher interviewed three individuals that meet the inclusion criteria. Interviewees were asked if the questions that were straightforward and concise. In order to check reliability, the researcher needed to determine that all questions were consistent. Interview transcripts were partially coded, indicating major themes and categories. The following steps of the pilot study are discussed in the below in Interrater reliability and validity.

Statement of Personal Bias

Creswell and Poth (2018) state that the researcher's biases should be clearly stated when conducting a research study. In this case, the researcher acknowledges personal biases. The researcher has participated in working with a community program with uses HAI as an intervention with the at-risk youth population. The researcher is a board member of a community program that uses HAI as an intervention with the at-risk youth population. The researcher does have some ideas and perceptions about the phenomenon being studied. However, the researchers avoided speaking about personal experiences during interviews, in order for the participants to speak freely about their experiences.

Bracketing and Epoche

Epoche means to refrain or abstain from judgment (Moerer-Urdahl & Creswell, 2004; Moustakas, 1994). Bracketing, in a phenomenological study, the researcher is required to identify personal biases and set them aside (Petty et al., 2012). Throughout the study, the researcher review biases and assumptions about community programs. In a journal, the research noted any prejudices or judgments about best practices for community programs. The journal was reviewed and the process of bracketing took place prior to each interview.

Data Analysis

Creswell and Poth (2018) suggest the data analysis process consists of three steps:

- preparing and organizing the data for analysis
- reducing data into themes by coding
- using figures, tables or discussion to represent the data.

The data were collected through a series of interviews and transcribed via a professional transcription service. The transcriptions were read and themes were identified by the researchers. Creswell and Creswell (2018) describe reading and identifying themes as the coding process, where ideas are categorized and chunked together. The themes are reviewed and the interrater reliability and validity process began. Similar to Creswell and Poth, Giorgi (1997) suggest that data be collected verbally, followed by reading and breaking the data into parts. Then the data should be organized and expressed from the disciplinary perspective. Lastly, the data should be synthesized; this is discussed in Chapter 4.

The researcher conducted the interviewed and transcribed them verbatim. The interviewer's confidentiality was kept by labeling the recording them Participant 1, 2, 3, et cetera. Once the interviews were transcribed, they were annotated for best practices relevant to the research questions. Keywords were then identified and organized into categories. Once categories were created, the researchers created, a table was formatted and color coded. For this study, no codes were predetermined. The table includes themes, and column headings. Each column contains important phrases or key words related to the themes. The themes were then supported through interrater reliability. In Chapter 4, the findings, major themes, and quotes from participants are discussed.

Inter-Rater Reliability and Validity

Following the researchers' actions aforementioned in the Pilot Study section, two peer reviews also assisted in the interrater reliability and validity test. Both peer reviewers independently reviewed the transcripts collected in the study along with the themes identified. Each peer reviewer, then conferred whether they agreed with the how responses were coded. If a consensus is not reached, the researcher sought guidance from their dissertation committee.

Five Step Process

1. Baseline Themes - Three interviews were reviewed and coded by the researcher.
2. Inter-rater Review - For consensus, the researcher shared coded data with two peers.
Each peer reviewed interviews and established themes from the researcher. The peer-reviewers and researcher came to a consensus.
3. Baseline Themes - Remaining 12 Interviews were then reviewed and coded by the researcher.
4. Inter-rater Review - The peer-reviewers received the remaining interviews and themes from the researcher. The researcher and peer-reviewers came to a consensus.
5. No Consensus- If no consensus was reached, the dissertation committee was used as the expert reviewers.

Summary

Chapter 3 provided a comprehensive and extensive examination of the research design, methodology, and techniques for conducting valid and reliable qualitative research. The research questions and the type of qualitative studies available were discussed. There was a discussion of why phenomenological approach was used. The chapter included the unit of analysis, sample size, and population. Defined in Chapter 3 were the criteria of inclusion and exclusion as well as

the sample selection. The researcher discussed the IRB process and its importance. This chapter discussed how interview questions were determined and their relationship to the overarching research questions. Lastly, Chapter 3 discussed the process for data collection and how reliability and validity were established. Based on the data collection process described in Chapter 3, the researcher presents the findings in Chapter 4.

Chapter 4: Findings

Non-profit organizations employ community programs that utilize human-animal interaction as an intervention with at-risk youth for numerous reasons. Community programs teach social-emotional skills, as well as enhance human health socially, psychosocially, and physically (Tsai et al., 2010; Laskowski et al., 2019; Mullen, 2013; Sakai, 2012; Serpell, 2010). This study sought to explore the best practices that non-profit organizations that use human-animal interaction as an intervention for at-risk youth. To reach this task, the researchers proposed the following four research questions:

- RQ1: What success strategies and practices do community programs employ when implementing HAI as an intervention with at-risk youth?
- RQ2: What challenges are faced by community programs when implementing HAI as an intervention with at-risk youth?
- RQ3: How do community programs measure the success of their practices?
- RQ4: What recommendations do community programs have when implementing HAI as an intervention with at-risk youth?

The researcher gathered answers to the research questions by comprising 14 interview questions that are depicted below. Inter-rater validity was agreed upon by two peer-reviewers and expert panel for the following 14 questions:

- IQ 1: What is the purpose of the community program and how does the purpose manifest itself within the program?
- IQ 2: What elements should be in place for a successful program?
- IQ 3: What are some common practices for selecting youth participants?
- IQ 4: What are some common practices for selecting dog participants?
- IQ 5: What is the single biggest challenge you face in implementing HAI?

- IQ6: Based on your experience does the length of the program influence outcomes?
- IQ 7: What obstacles have you faced when implementing a program?
- IQ 8: How do you handle attachment during a program?
- IQ 9: How do you handle lack of engagement?
- IQ 10: How do you define a successful program?
- IQ 11: In what ways do you know that participants are benefiting from the program?
- IQ 12: What measures & procedures do you use when conducting pre-surveys and post-surveys?
- IQ 13: What suggestions do you have for others interested in starting a community program for at-risk youth?
- IQ 14: Is there anything else you'd like to add?

During a 1-hour interview, participants responded to these questions sharing their experiences of best practices for community programs. The interviews were conversational, and each interview was recorded to ensure data analysis accuracy. Common themes were established by analyzing and coding the responses.

Chapter 4 provides details about the study participants, data collection, and the analysis process. Data collected from each interview question is discussed in narrative and graphic form.

Participants

Participants were chosen using a purposeful sampling approach. A purposeful sampling approach is consistent with qualitative research. A purposeful sample of 25 participants was chosen from population of program directors, executive directors, educational directors, or board members of community programs that work with dogs and at-risk youth during a humane education or dog training program. The targeted goal of 15 subjects was interviewed.

The 15 participants represented non-profit organizations that work with youth and dogs throughout the United States. There were 13 female participants and two male participants. Participants ranged in experience from two years to 35 years in working with animals and youth.

Data Collection

The researcher obtained IRB approval on February 10, 2021. Following approval interview requests were sent out and data collection began on February 16, 2021. A sample of 25 non-profits was identified on the Guidestar database using the criteria of inclusion. Prospective participant contact information was obtained via the Guidestar website or the individual non-profit website. As the process extended, it was essential to increase the sample to a total of 43 participants identified in order to reach the goal of interviewing 15 subjects. Overall, three participants agreed to interview but did not respond to the request to schedule or responded after 15 interviews were completed. Three indicated that they did not have time or could not answer the questions. An additional 22 individuals did not respond to the interview request at all. Getting a response and scheduling a time proved to be more of a challenge than initially planned when scheduling the interviews.

Participants were contacted via e-mail, website contact form, or LinkedIn message if an e-mail was not available. Participants were sent the interview protocol and IRB approved Recruitment Script. Once a participant confirmed via e-mail, follow up e-mails ensued to schedule an interview date and time along with the IRB approved consent form. Each participant consented to participate in the interview. During the interview, the participant was given information about the purpose of the study, advised and confirmed consent of the interview being audio-recorded and that his/her identity would remain confidential. Participants were given the opportunity to ask any questions related to the study. The allotted scheduled interview time

was approximately 60 minutes per interview, however, interviews ranged from 22 minutes to 79 minutes. All interview questions were semi-structured. The interviewer responses were limited to clarifications of information or affirmations of the information provided by the interviewee. The participant interview dates are summarized in Table 4.

Table 4

Dates of the Participant Interviews

Participant	Interview Date
P1	2/16/21
P2	2/18/21
P3	2/19/21
P4	2/19/21
P5	2/24/21
P6	3/1/21
P7	3/1/21
P8	3/1/21
P9	3/3/21
P10	3/4/21
P11	3/5/21
P12	3/5/21
P13	3/5/21
P14	3/5/21
P15	3/5/21

Data Analysis

Using coding techniques in line with qualitative research procedures, the data were analyzed. Before and during each interview, the researchers jotted down any biases and preconceived thoughts about best practices when using human-animal interaction as an intervention for at-risk youth. This was done in order to suspend any bias and assumptions during the data collection process.

All interviews were audio recorded. Handwritten notes were taken during each interview. The audio-recordings were later transcribed. Each transcript was reviewed and key words,

phrases, viewpoints were coded to identify commonalities in the responses. These codes were organized on Google Doc with tables. Tables were color coded according to common themes.

Inter-Rater Review Process

An inter-rater review was conducted by a peer review panel consisting on two doctoral candidates in the Doctor of Educational Leadership, Administration, and Policy (ELAP) program to ensure coding validity. Both doctoral students have prior experience with qualitative research methods and data analysis.

Following the coded data from three interviews by the researcher, the interview questions, interview transcripts and the working Google doc with the coded data was shared with the peer-review panel. The panel independently reviewed the information and provided comments. Subsequent conversations were had between the researcher and panel following comment review and modifications to the codes were made. The researcher then analyzed and coded the remaining 12 interview transcripts. The interview information was again provided to the panel and reviewed until consensus was reached. The panel's recommendations included: reducing the number of themes per question by combining similar codes and modifying the language and descriptors to answer the questions what and how.

Table 5*Inter-Rater Coding Table Edit Recommendations*

Interview Question	Items	Inter-rater Recommendations	Modification Applied
1	Use of the term dog adoptability	Recommended the use of “adoption” as the animals considered for study are dogs	Changed the term to adoption
4	Use of the term temperament test	Recommended the use of assessment, given the codes identified more than one type of test than temperament test	Changed the term to assessment
9	Accommodations	Recommended to combine two other themes, break and choice, as those are accommodations made	Combined the themes into accommodations
10	Feedback	Recommended to combine themes of feedback, anecdotal notes and communication into one feedback theme.	Combined the themes into Feedback

Data Display

According to the research questions and corresponding interview questions, data were organized. Each participant was referred to as Participant 1 (P1), Participant 2 (P2) and so on, up to and including Participant 15 (P15). Following the identification of common themes from the codes, the data were summarized in frequency bar charts to provide a visual of the results. Each chart was organized by the frequency of response in descending order. The comments and key phrases made by participants were identified as commonalities that resulted in the themes

displayed in the charts. Each interview questions resulted in multiple themes. Descriptions of the theme and a quote from one or more participant were accompanied with each chart. This was done to provide a greater level of context to the codes as well as provide meaningful insights from the participants.

Research Question 1

Research Question 1 (RQ1) asked: What success strategies and practices do community programs employ when implementing HAI as an intervention with at-risk youth? To answer this inquiry question, participants were asked four interview questions. The four interview questions related to RQ 1 were:

- 1: What is the purpose of the community program and how does the purpose manifest itself within the program?
- 2: What elements should be in place for a successful program?
- 3: What are some common practices for selecting youth participants?
- 4: What are some common practices for selecting dog participants?

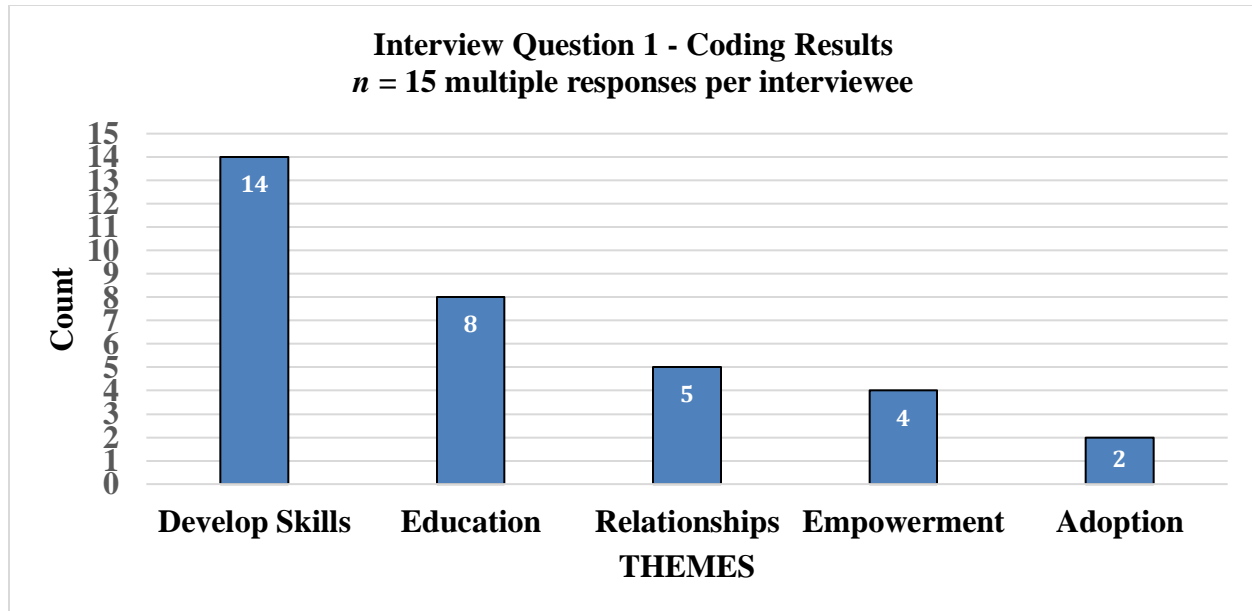
Each participant's responses were collected and examined for commonalities, which were grouped and reported as themes to respond to RQ1.

Interview Question 1

Interview Question 1 asked: What is the purpose of the community program and how does the purpose manifest itself within the program? This question focused on the organizations rational for implementing the programs. The five key themes that were inferred from the interview responses were: (a) develop skills, (b) relationships, (c) education, (d) empowerment, and (e) adoption (see Figure 1).

Figure 1

Interview Question 1 – Coding Results



Develop Skills. It is important for youth and dogs who participate in programs to develop skills. Developing skills is defined as learning communication skills, empathy, trust, leadership, stress management 14 of the 15 participants said that developing skills was a purpose of the program. As an example, Participant 1 stated that youth “develop leadership skills, they develop clear communication skills, empathy.” Participant 12 focused on youth who were on a path that would lead to being incarcerated and stated that youth who participant in the program develop “compassion and empathy.....the goal was to help them succeed in life.” Participant 13 talked about neuro diversion youth who have “amazing strength and skills and...want to help them develop those strengths and skills kind of beyond the traditional academics.”

Education. Education is important, particularly humane education. Education is defined as educating the participates on humane topics. Humane topics are animal welfare, behavior, communication, safe animal handling, etc. 8 of the 15 participants identified that education was

part of the purpose of the program. Participant 6 spoke about the importance of working with people in the community and how there is a “big gap in exposure and good information about animals, animal handling, animal care, and animal nutrition.” Participant 4 echoed that during class time they covered “different topics and animal welfare.” On the animal side, the dogs learn basic training. The idea of learning a trade for a future job was discussed. Participant 12 talked about how the programs “provide them with the ability to learn a trade, dog training.”

Relationships. Relationship development was important. Relationships are defined as establishing a bond or rapport or healthy attachments. 5 of the 15 participants stated that developing relationships was the purpose of the program. Many of the youth have trust issues, experienced abuse and trauma or have developed unhealthy attachments. Participant 15 stated that the program’s mission was to “break the cycle of abuse” as “an alternative form of healing trauma.” Participant 15 continued to explain that,

Kids will let their guards down with animals, where they have a tendency to be very guarded particularly kids who lived through trauma. There's a strong likelihood that a healthy attachment can form, between the animals and the children, particularly during bonding activities like walking, brushing, feeding and caretaking for the animal, and having a having a new in in helping secure attachment is really important when you're recovering from trauma, because most of the kids that we're working with have had attachment severely disrupted.

Participant 9 discussed how the purpose was for youth and community members, including police officers to “gain rapport.”

Empowerment. Empowerment of the youth was a key theme. Empowerment is defined as communicating and encouraging the participants. The theme empowerment was identified by 4 of the 15 participants. Participant 10 stated that “the purpose is for humans to grow and transform” and see the program as an “empowerment program.” Participant 1 and Participant 5 stated that the mission was enrich the lives and empower youth.

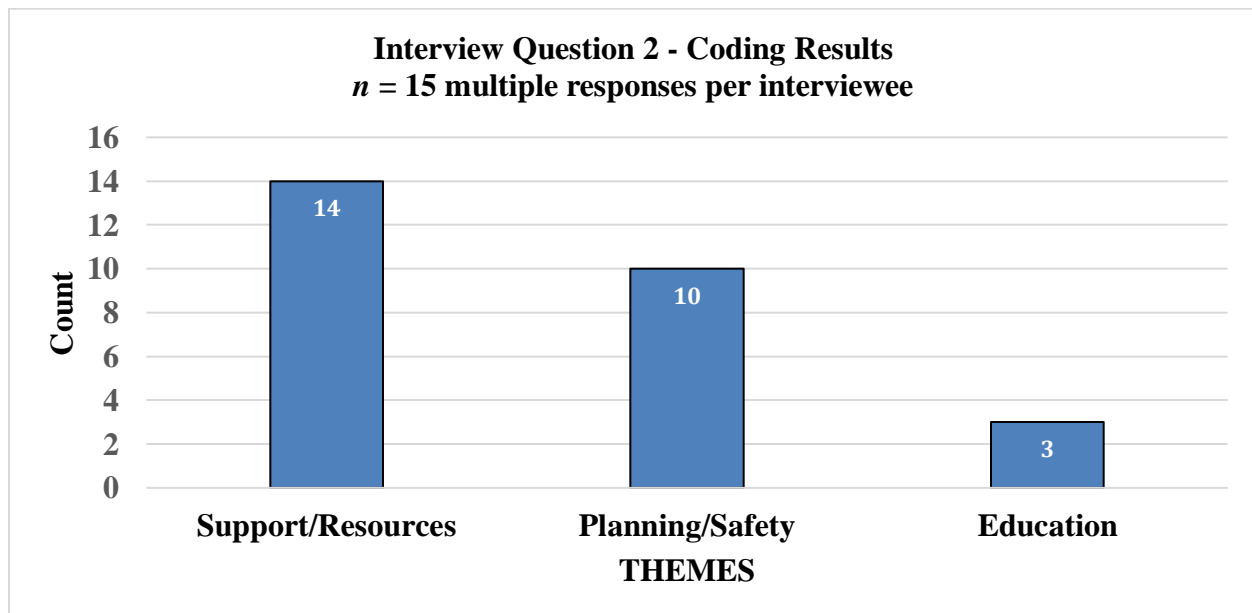
Adoption. Part of the purpose of a program is for the dogs to get adopted. Adoption was mentioned by 2 of the 15 participants as part of the purpose. Participant 5 stated that part of the purpose was “preparing the dog for adoption” and “giving that dog a second chance at a better life.” Participant 11 echoed that statement by stating that a goal was to “reduce things like conflict and aggression within the shelter” which would lead to “the dogs can have a greater chance of getting adopted and also staying in their homes.”

Interview Question 2

Interview Question 2 asked: What elements should be in place for a successful program? This question focused specific elements that need are needed for a program to be successful. The three key themes that emerged are: a) support/resources, b) planning/safety, and c) education (see Figure 2).

Figure 2

Interview Question 2 – Coding Results



Support/Resources. Support and resources were the most important element for a successful program. 14 of the 15 participants said that support and resources were elements

necessary. Support and resources is defined as buy-in, funding, facilities, and transportation. Participant 1 and Participant 4 stated that partnering with an organization that works with youth was necessary. P1, P6, P7, P11, P14, and P15 all stated that volunteers are also vital to running a successful program. Resources included having a facility or space. Participant 7 stated that having “space to conduct a program” was necessary. Participant 9 stated that for their programs they “identified needed a neutral space or at least a safe space” to conduct programs. Other resources included funding and buy-in.

Planning/Safety. For a successful program, planning and safety components need to be considered prior to implementation. Planning and safety consist of thinking ahead and anticipating what things need to be in place for a program. The theme of planning and safety was identified 18 (27%) of 65 key words, phrases and viewpoints. Participant 15 made the point that in order for these programs to work, volunteers and staff should take “kind of a Hippocratic oath, to do no harm.” Participant 15 further elaborated to the goal for program is to “do it safely and do it property”. For safety, one key aspect was having insurance. Participant 11 stated it was important,

To make sure that there's safety across the board. We also maintain liability insurance, we have a general liability insurance, I have a professional licensure liability insurance, I have a workman's comp insurance I have Dog Training insurance, and I have just a general umbrella policy to cover what may be missed in those other policies and thankfully knock on wood we've not had to experience that yet. As of now, but, safety is our general our number one priority.

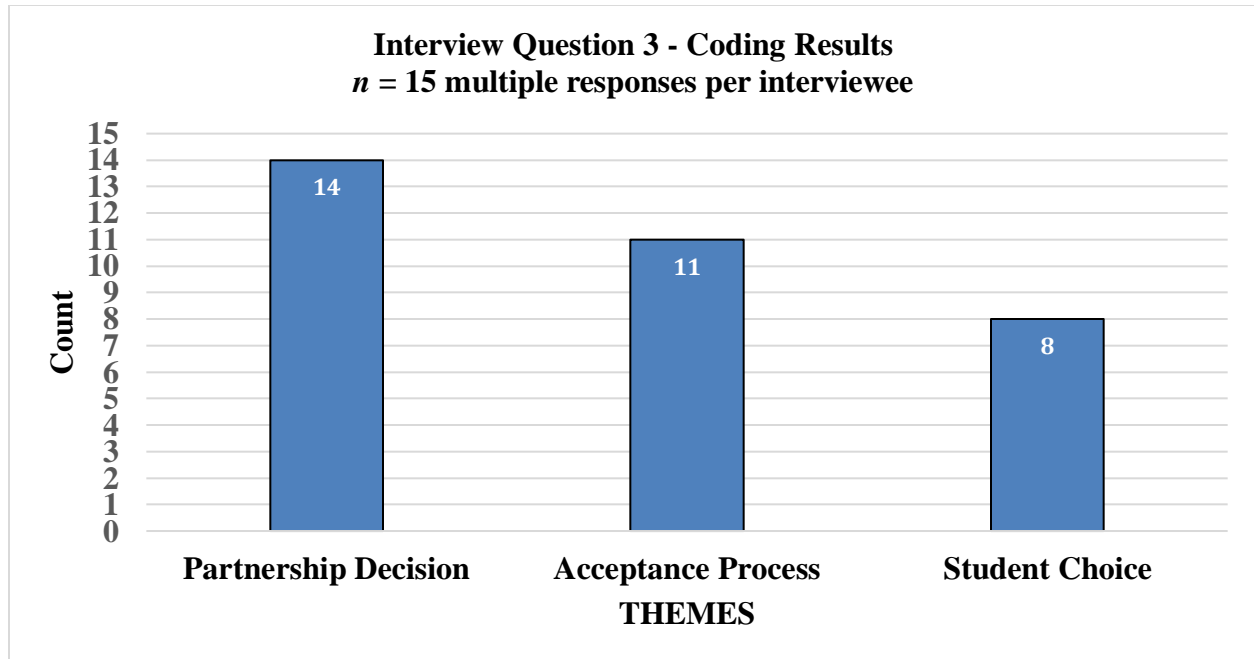
Education. Providing educational discussions was a necessary element for a program. Educational topics included topics of humane education, animal welfare, communication, and body language. The theme for providing education as an element for a successful program was mentioned by 3 of the 15 participants.. Participant 6 and Participant 7 stated that the staff and volunteers also needed to have knowledge and training prior to the program.

Interview Question 3

Interview Question 3 asked: What are some common practices for selecting youth participants? This questions focuses on program practices for select the youth participants. There were three key themes emerged which were: (a) partnership decision, (b) acceptance process, and (c) student choice (see Figure 3).

Figure 3

Interview Question 3 – Coding Results



Partnership Decision. For selecting youth participants, the decision was often a partnership decision. Partnership decision is defined as the youth partner aiding in or selecting specific students for the program. Partners make selections based on their knowledge of the youth participant or give insight into the youth’s personality or commitment level. 14 of the 15 participants discussed how the organization or youth service provider were involved or completely controlled the decisions for youth selection. All participants except for Participant 11

stated that the partnering organization has some influence on the youth decision. Participant 1 and Participant 15 mentioned that the provider of students typically determine the group of students. Participant 6 stated that “directors of the school...make that selection....they knew the kids better than us.” Similarly, Participant 7 stated that it was “partner to determine who’s going to be a good fit, who would benefit.”

Acceptance Process. There is a criterion for the acceptance process. Part of the criterion for the acceptance process is that there be a presentation, parent or guardian consent to their children’s participant, have transportation and that the student have no history of animal abuse or violence. 11 of the 15 participants mentioned their process for acceptance to participate in the program. Participant 9 stated that needed “a more formalized way of picking participants” because the process currently is “people reach out to us, people will send us text messages or e-mails” and everyone is accepted. Interesting, Participant 9 did mention that they depended on the certain partnerships, some students who had a violent offense could not participate and they “didn’t like the limitations of that.” On the other end, Participant 12 and Participant 14 stated that youth who have “a previous history of any type of animal abuse” or “harming animals” were not appropriate for the programs so that was taken into consideration.

Student Choice. Some programs require that the student make the choice to be a participant in the program. Student choice is defined as a student opting into the program, instead of an adult selecting them with no say. Student choice for participating in the program was discussed by 8 of the 15 participants. It was stressed by Participant 10 that “the participants need to be invested in the process.” Similarly, Participant 11 stated that “youth who want to participate say...anytime you’re forcing us to do anything, like you’re going to have to do this, there is resistance.” Participant 6 shared, we have to have this as a smaller group of kids who

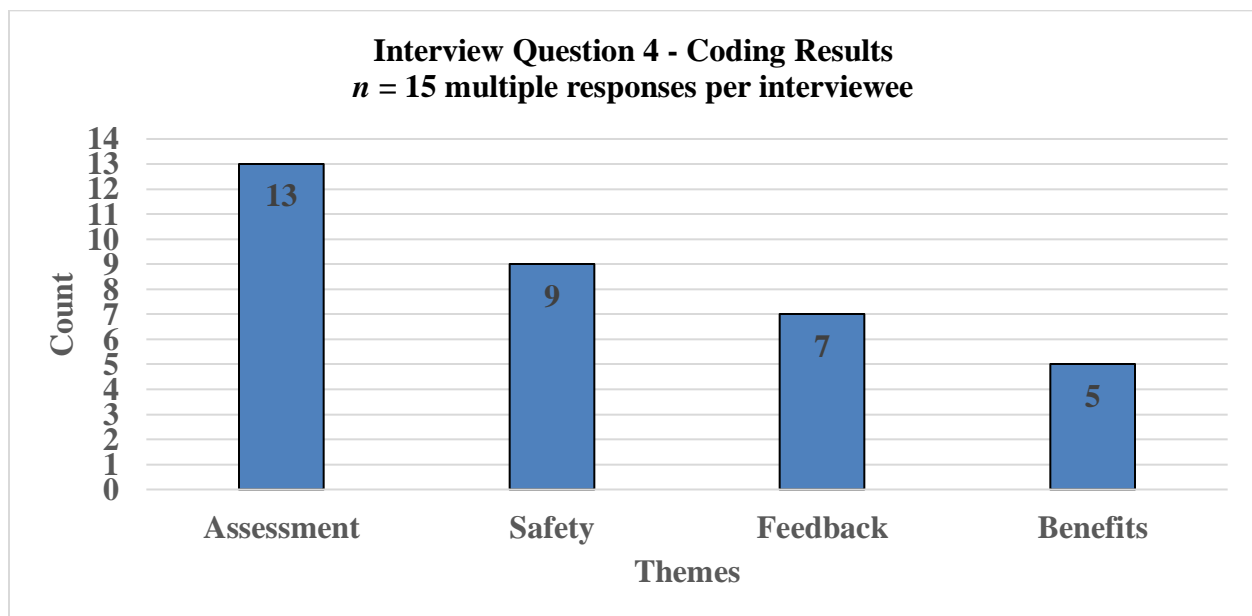
really want to be here.” This was reiterated by Participant 6 again stating, “We really wanted kids that were enthusiastic and wanted to be there.”

Interview Question 4

Interview Question 4 asked: What are some common practices for selecting dog participants? Similar to Question 3, this question focused on the dog selection process, which resulted in four key themes: (a) assessment, (b) safety, (c) feedback, and (d) benefits (see Figure 4).

Figure 4

Interview Question 4 – Coding Results



Assessment. Assessments of the dogs are essential when selecting a dog for participation in the programs. Assessments of the dogs included temperament testing, health test, appropriate dog breed type for activities. Various types of assessments were discussed by 13 of the 15 participants. Among the themes, assessments emerged 30 (45%) of the 66 key words, phrases and viewpoints. All dogs must go through an evaluation but the type of assessment differed

between organizations. P1, P3, P4, P7, P9, P12, P13, P14, and P15 stated they conduct a temperament test to make sure the dogs are stable and temperamentally sound to work with people and youth. Participant 5 mentioned the evaluation used is “called Donna Do Right evaluation.” Interestingly, only Participant 3 stated that the dogs needed to pass a “therapy dog test.”

Safety. Practicing safety is a common practice when choosing dog participants. The theme of following safe practices when selecting dogs. Safety refers to using safe practices and having safety protocols for the dogs and participants. Safety was discussed by 9 of the 15 participants. Participant 1 stated that “safe handling and safe practices” are followed at all times. When selecting dogs, Participant 4 mentioned that they are “looking for safety first.” In the case for Participant 10, who works with wolf dogs, they “put most of the onerous emphasis on our trained humans as handlers to keep the situation safe [while] animals willing to connect with humans and humans are willing, in terms of safety.”

Feedback. As part of the dog selection process, it was common practice to get feedback from shelter staff, foster dog parents, dog trainers and behaviorist. Feedback is defined as receiving verbal or written feedback from the various adults who are a part of the program process. Receiving feedback from various stakeholders was mentioned by seven of the 15 participants. Participant 4 suggested that working a “professional dog trainer and has a lot of experience with dog behavior” is important. Participant 2 also mentioned that utilize “a behavior team, a handful of people that specialize in behavior, training and enrichment.” Some of the feedback also comes from behavioral notes from the shelters. Participant 7 stated that they “look at their behavior notes coming in.”

Benefits. Some dog participants are selected because they would benefit from the training. Benefits include socialization, stress management skills, learning basic commands and receiving more exposure while in the shelters. Of the 15 participants, 5 discussed how the dogs would benefit from the program. Participant 2 stated that it was important to “choose those that will also benefit from the program.” Participant 1 talked about how sometime dogs are chosen because the “need a little extra help managing stress.” Only Participant 4 talked about how the dogs who are selected get “additional social media kind of exposure for adoption” which was a key theme for the purpose of the program discussed in IQ 1.

Summary of RQ1

The purpose of RQ1 was to identify successful practices and strategies that are used when implementing a HAI intervention program with at-risk youth. Fifteen themes were identified by analyzing key words, phrases and viewpoints from the participant responses to the four interview questions. The purpose of these programs are to (a) develop skills, (b) relationships, (c) education, (d) empowerment, and (e) adoption. Important elements that need to be in place for a successful program are (a) support/resources, (b) planning/safety, and (c) education. When selecting youth participants common practices are (a) allowing for partnerships to make the decisions, (b) having criteria for an acceptance process, and (c) allowing student choice. Dog participant selection involves (a) having assessments, (b) receiving feedback, (c) safety measures for all involved, and (d) having benefits for the dogs.

Research Question 2

Research Question 2 (RQ2) asked: What challenges are faced by community programs when implementing HAI as an intervention with at-risk youth? To answer this inquiry question,

participants were asked five interview questions. The five interview questions related to RQ 2 were:

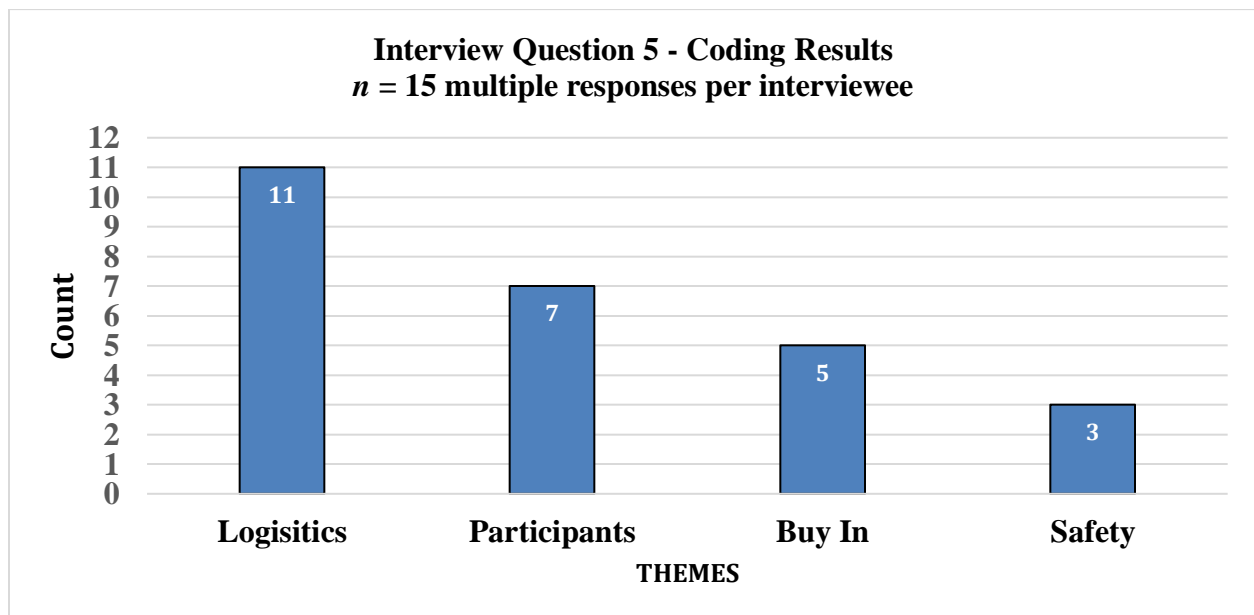
- 5: What is the single biggest challenge you face in implementing HAI?
- 6: Based on your experience does the length of the program influence outcomes?
- 7: What obstacles have you faced when implementing a program?
- 8: How do you handle attachment during a program?
- 9: How do you handle lack of engagement?

Interview Question 5

Interview Question 5 asked: What is the single biggest challenge you face in implementing HAI? This question yielded 53 responses which were grouped into four themes. The themes that emerged were: (a) logistics, (b) participants, (c) safety, and (d) buy in (see Figure 5).

Figure 5

Interview Question 5 – Coding Results



Logistics. Logistics among participants was the single biggest challenge. Logistics included starting a program, transportation, access to facilities, and communication. Among the participants 11 of them discussed how logistics was their single biggest challenge. Participant 4 talked about how it was always a challenge in “figuring out how to get them all transported at the right time.” Participant 5 stated,

It's what we call inside. We call it making the sausage. It's all of the behind the scenes work that is very labor intensive. Simple things like transportation of dogs to juvenile hall. One would not think that would be a big problem or a challenge but it is.”

Participant 6 and Participant 12 both mentioned that one of their main challenges was finding a facility to hold their program. Participant 14 stated that when it comes communication “having good communication between the facility staff and our people” while having “communication open and clear” is extremely crucial to having a program.

Participants. Participants are defined as youth participants, dog participants, and volunteers. Seven of the participants stated that having the right participants for the program was a challenge. Participants include the youth, the selection of dogs, and trained volunteers. Working with shelters dogs can be challenging. To illustrate, Participant 2 stated that they always question “are we going to have the right animals to work the program, and you know a shelter it's so unpredictable and it's changing every single day.”

Buy In. Getting buy in from other proved to be a challenge for a number of the participants. Buy-in refers to having support from stakeholders. Of the 15 participants, five discussed buy-in. Participant 3 discussed the differences between people thinking the programs are good ideas versus actual support. Interesting, Participant 3 said many thought it's “a great idea... [but] don't have any money for that.” Furthermore, Participant 3 discussed that organizations and governments “are spending tons of money and other types of interventions and

punishments and things that this would negate the need for those if you would do them. So it's getting that actual by in your work versus it just being a good idea.” Another challenge mentioned regarding buy in is push back when getting started. Participant 11 and Participant 12 talked about the push back and resistance received and how important is it received buy in from the leadership.

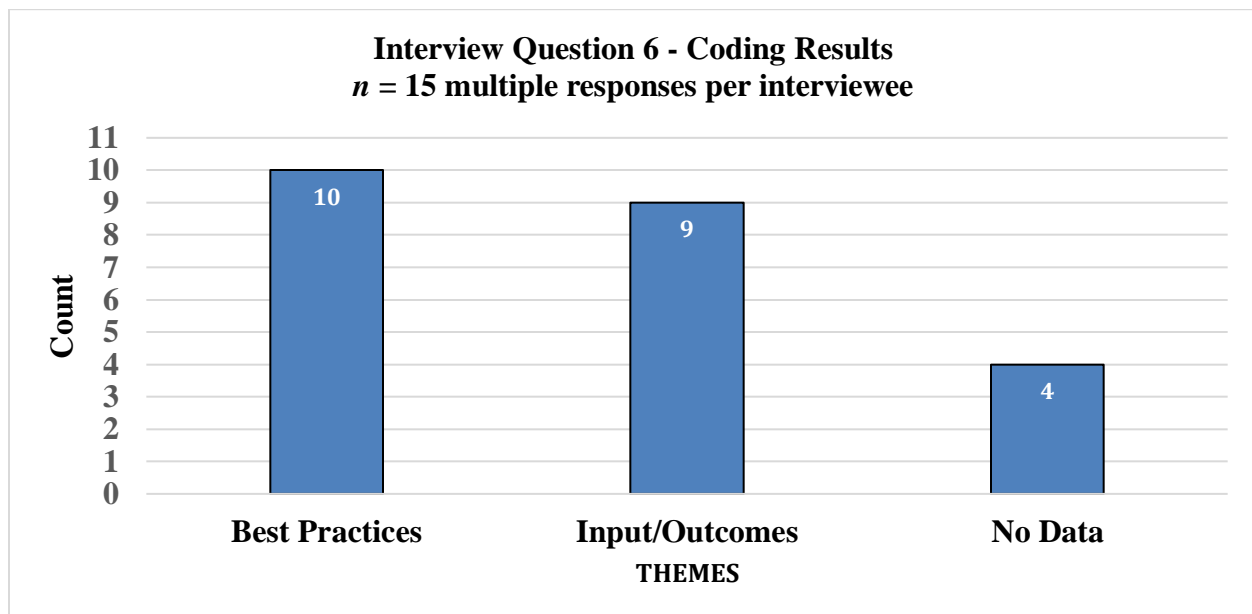
Safety. One challenge that was common was safety. Safety refers to using safe practices and having safety protocols for the dogs and participants. Among all the participants, 3 discussed how safety was a huge challenge. Participant 11 stated the “safety aspect is always like number one.” Furthermore, Participant 11 said that it was always a top priority to “make sure everyone is safe in that setting.” Participant 8 talked about how working with youth can be prove to be a challenge when doing research because “everything requires IRB approval.” Youth, specifically at-risk youth are a vulnerable population and their safety was always considered and received “additional scrutiny.”

Interview Question 6

Interview Question 6 asked: Based on your experience does the length of the program influence outcomes? For this interview question 107 key words, phrases and viewpoints were identified and separated into three key themes. The themes that emerged were: (a) best practice, (b) input and outcomes, and (c) no data available (see Figure 6).

Figure 6

Interview Question 6 – Coding Results



Best Practices. When selecting the length of time for a program, organizations had different lengths of time, but their standard amount of time was based on experience and other research. Ten of the 15 participants talked about best practices when looking at the length of the program. Programs could run anywhere from one week to an entire school year. On average the programs were between 8-10 weeks. Participant 5 talked about the research behind their length of program and mentioned

Lynn Loar's "Teaching Empathy" might have it in there as well but eight weeks, 16 classes. It does a couple things that the dogs have an opportunity to settle in really learn to learn, develop trust in a bond with their kids their youth trainers, as we refer to them. And so when the dogs are more successful and the kids are able to measure the changes in the dog's behavior and skills and obedience and such that directly affects the success of the youth that they're able to attribute, what they gave to that dog by observation.

Participant 4 stated they run an 8-week program and Participant 15 stated that "nine weeks is a good number." Participant 8 and Participant 11 stated they run a 10-week program. While the

length of weeks varied, the amount of meeting per week and amount of the program time also differed.

Input/Outcomes. Based on getting input from the participants, volunteers and staff as well as seeing the outcomes from the participants impacted the length of the program. Nine participants talked about receiving input and looking at outcomes to determine length of program. Participant 13 stated that the length can be “based on the needs of the participant” and that in some instances there are “some advances to having short sessions...in a sequence” Participant 12 suggested “that the longer you have to work with them and with the dog definitely provides a better outcome.” Participant 8 echoed a similar statement saying that longer programs participants have a “much deeper understanding of the theory behind what we’re trying to teach them and are able to get them to a place where they are more empowered where they can be doing things more independently” Participant 8 further stated that participants develop as they have “more advanced skills, are more responsible.” In some program, volunteers and staff feedback are important. Participant 1 stated that “our staff and volunteers who are involved in the program are very adamant about not having a shorter program. According to our volunteers it’s really that third week were things start to convalesce.” Participant 5 stated, “When we’ve asked kids in our evaluations, what would they change with the program if anything. And the only feedback that we ever get is more time with the dogs.”

No Data. Some organizations do not know if the length of the programs have an effect on the outcomes. Of the 15 participants, 4 stated they had no data to compare to determine if length influenced the program outcomes. This theme emerged 6 of the 51 times from the key words, phrases and viewpoints. Participant 1 stated they had no comparison data, although the pandemic has been affecting the length of program and format. Participant 2 mentioned that they “haven’t

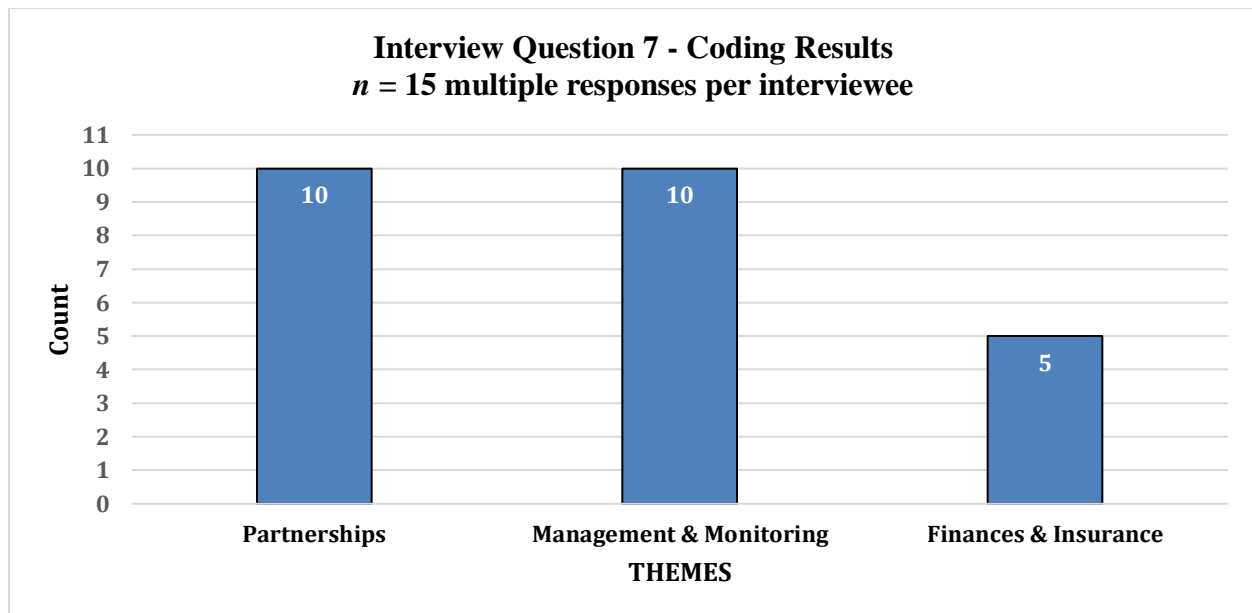
had the opportunity to notice any difference.” Participant 10 stated they “don’t have comparison because they typically do an 8-week program.”

Interview Question 7

Interview Question 7 asked: What obstacles have you faced when implementing a program? This question was important to understand as part of the challenges and obstacles faced when conducting a program. Three themes emerged: (a) partnerships, (b) management and monitoring, and (c) finances and insurance (see Figure 7).

Figure 7

Interview Question 7– Coding Results



Partnerships. Establishing and maintaining partnerships has been an obstacle faced when conducting a program. Ten participants talked about establishing and maintaining partnerships as an obstacle. Participant 2 stated that it is important to ‘find the right people for the program’ but typically have a “hard time finding a new partner.” Interestingly, Participant 14 mentioned while they “have a list of schools that have been on a waiting list for two years.”

However, partnerships with dedicated volunteers and staff have affected the amount partnerships and programs that can be engaged in during the year.

Management & Monitoring. Managing and monitoring during a program has also been a challenge. From the start, during and after program, planning and logistical issues arise and must be managed. Of the key words, phrases and viewpoints, management and monitoring emerged from 10 of the 15 participants. Participant 4, Participant 10, Participant 14, and Participant 15 mentioned having transportation for the youth and dogs. Participant 1 discussed that scheduling with youth partners was also an obstacle faced. Having appropriate dogs and holding “for the purpose of the program” was an obstacle mentioned by Participant 7. Both Participant 8 and Participant 13 talked about having a facility where program could be held. Many logistical obstacles must be thought through and managed both during planning and throughout the program.

Finances & Insurance. One obstacle faced is financing programs and having adequate insurance to run a program. Five of the 15 participants discussed finances and insurance. Participant 6 mention while finding a place to hold programs, “seeking funding” and the “fear of liability” is a true obstacle for conducting a program. Another example mentioned by Participant 13 was having facilities and insurance,

it's like this catch 22 there's facilities and insurance so if you get the money you can get the insurance. But insurance it's kind of a weird niche so you'll figuring out the, we have to work with ensure who understands that stuff and gives you the right kind of insurance.

One challenge for continuing a program was finances. Participant 2 mentioned that a school and program closed “because of financial reasons.”

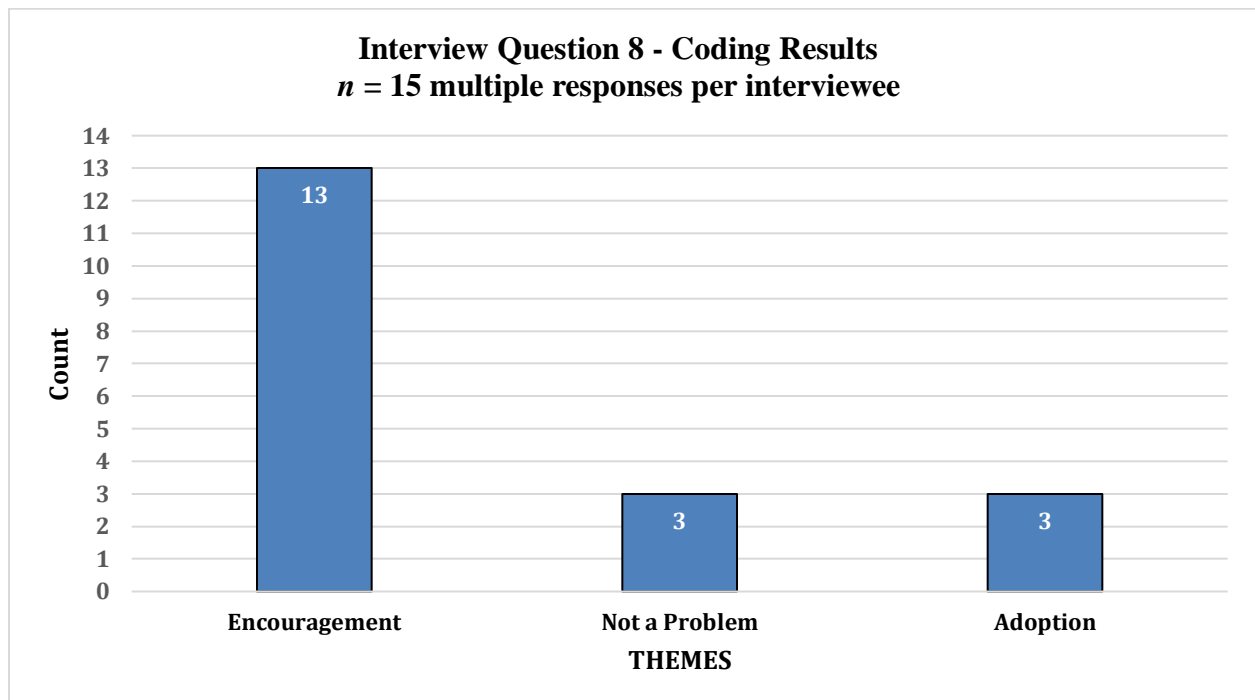
Interview Question 8

Interview Question 8 asked: How do you handle attachment during a program?

Attachment to animals and establishing healthy relationships are important. In regards to handling attachment in the program, three themes emerged: (a) encouragement, (b) not a problem, and (c) adoption (see Figure 8).

Figure 8

Interview Question 8 – Coding Results



Encouragement. During the programs, encouragement was given by 13 of the 15 participants. Encouragement included constant and transparent communication with the youth. When working with shelter or foster animals that can be adopted at any time and not return to program, that can be difficult situation for youth who have developing healthy relationships. With that in mind, Participant 1 said,

They explain that fact that their dogs could be adopted at any time and that opportunity to help another dog so while they may be sad to see that don't go that means they could to help you no more than one dog find a home so we really try to send them with the good thoughts they are doing by reminding them of the good that they're doing and opportunities to do even more good for another dog. So while they may be sad to see that dog go that means they could to help more than one dog so we really try to set them up and Empower them with the good that they are doing by reminding them the good that they're doing for these dogs and it is an opportunity to do even more good for another dog.

Similarly, Participant 4, Participant 5, and Participant 8 discussed having open communication from the beginning of program with the youth participants. Encouragement also came in the form that attachment indicates healthy relationships. Participant 14 stated that “attachment is because that means there’s good therapy going on and we encourage that.” Participant 15 mentioned while “we want to encourage healthy attachment..... we do a lot of training with our volunteers to talk about appropriate boundaries.”

Not a Problem. For some programs, attachment was not seen as a problem. 3 of the 15 participants stated that there was no problem with attachment issues. Participant 3 stated they “haven’t really had it as an issue” and furthermore, had “not seen it as a downside.” Similarly, Participant 6 stated they “haven’t had that problem.” Both Participant 3 and Participant 6 stated the animals that were used in programs were not available for the youth to keep or adopt.

Adoption. The theme of adoption as it relates to attachment emerged 3 of the 15 participants. For one organization adoption by the youth was discouraged. Participant 11 stated they “strongly discourage the kids from adopting the dog.” However, Participant 4 stated that while they discourage it, sometimes they “have a kid who really wants to try to adopt a dog but so far we’ve never had any of their parents who were keen.” More similar to Participant 4, Participant 12 stated, “they always offered the handler if there was a reason that they really did

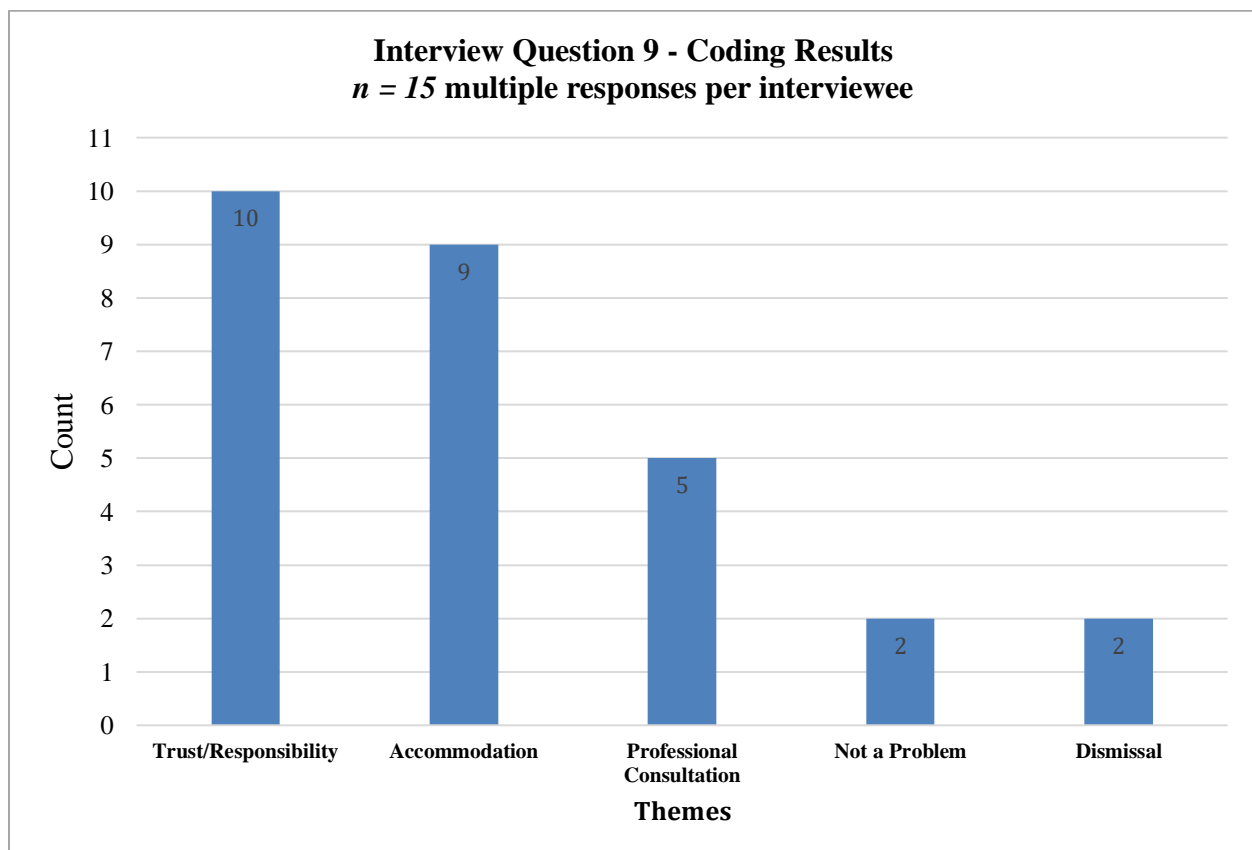
not want to part with the dog as long as their mom or dad or whoever their guardian was at home approved, we would allow them to adopt a dog.”

Interview Question 9

Interview Question 9 asked: How do you handle lack of engagement? During a program, the amount of engagement can vary for the participants, both youth and dog. This question focused on how the programs deal with lack of engagement with five themes emerging: (a) trust/responsibility, (b) accommodations, (c) professional consultation, (d) not a problem, and (e) dismissal (see Figure 9).

Figure 9

Interview Question 9 – Coding Results



Trust/Responsibility. During a program, trust and giving responsibility to the participants helps address the issue of lack of engagement. The theme of trust and responsibility emerged from 10 of the 15 participants responses. Participant 10 spoke about “always put the choice back on the student” and that “there’s no forced engagement.” It is the student’s responsibility to want to be there and to trust the participants will “choose to join when they’re ready.” Participant 3 shared an example about a student who was not engaged but when given the responsibility of caring for the dog and taking them to the bathroom. Once that student returned,

His demeanor changed because I had trusted him enough to, you know, take possession of my dog and that made him just like so. Then he helped me pack up afterwards and he was telling me about his grandmother and all his dogs I mean so he just like completely changed around because of that little piece of, responsibility or trust that I showed him. So, yeah, that definitely helps.

Accommodation. Sometime during program, accommodations are made for the participants in order to address the issue of lack of engagement. Accommodations as a common among 9 participants of the 15 responses. Accommodation includes flexibility, giving breaks, providing choices, hands-on activities and additional opportunities for animal interaction. Participant 2 talked about the structure of the program helping with the lack of engagement, it was that “giving them little bits of knowledge and little bits of presentations, bring in animals during the presentations definitely helps to keep them engaged.” Furthermore, Participant 2 stated that “trying to do hands-on activities” like making “enrichment items for our animals, such as making upgraded tug toys or making catnip socks.” Participant 15 spoke to the fact that their program offers a variety of options for the kids. Their goal is for the kids to “find one thing that they can say at the end of the hour was their favorite thing.”

Professional Consultation. Professional consultations happen between program facilitates and licensed clinicians and therapist in order to address lack of engagement. Among responses, consulting professional emerged 5 participant responses. Participant 12 said if there is an issue, “there’s usually an underlying reason.....and we always would hand off to the psychologist or clinician to find out what was really going on.” Participant 8 stated while lack of engagement “doesn’t happen often but if it does happen our program leaders are onsite.” To illustrate, Participant 8 said,

We have a licensed professional or licensed clinical, Professional Counselor there as well. They are very skilled at kind of connecting with people where they are and trying to ascertain where the engagement issue might be. And I think she's able to have success meeting some of these youth participants where they are and helping kind of influence them in target, why the lack of engagement. For example, we had one youth that seemed very disengaged. And what we found out was he went from school to the library to do homework to a job, and then directly to have dinner and then directly to our program and so it wasn't really a lack of engagement, it was just exhaustion. But he was there because he wanted to be and so it's. We also try to make sure that we're. For us it's identifying. Is it really a lack of engagement or is it something else that we have to do or don't have control over, and then trying to make sure that we are customizing our interactions with those particular participants in a way that maximizes engagement.

Not a Problem. In some cases, lack of engagement is not a problem for programs. Lack of engagement not being a problem was identified by 2 participants. Participant 9 stated they “have a pretty solid program in terms of getting people amped up and motivated.” Furthermore, that they ‘haven’t dealt with a ton of engagement issues on the human side.” Engagement problems for that organization were on the dog participant side so to address “if a dog comes out flat, we know that we can then pause the training session, go into some play.” Participant 12 said, while they have professionals to consult, lack of engagement “usually was not a problem.”

Dismissal. In some instances, dismissal is necessary. Dismissal from the program emerged in the responses from 2 participants. Participant 5 shared an experience about dismissal, not as a punishment. One of their youth participants stated,

He wanted to kick his dog his program dog. And fortunately, she was alert enough to see those concerning and she talked with me about it, several steps later, he went through and he'd been missed in his psychological evaluation intake through one of our nonprofit youth partners. And we came to learn that his program dog reminded him of his dog that was cared for by his best friend who was shot in the street and died in his arms and it's just one of those things like how do you make that up. And how would you have trailed that connection. So, he was angry and never was given a chance to mourn or process his friend who died in his arms so. So, what happened was he was pulled from class immediately we honored he didn't want to be there was too familiar, and he got therapeutic help. So we learned from that lesson, when the kids speak, we got to listen.

In some cases, however, students are dismissed as a punishment. To illustrate, Participate 6 stated that “they’ll get rid of anybody who’s been disruptive.”

Summary of RQ2

RQ2 focused on the challenges that are faced by community programs when implementing HAI as an intervention with at-risk youth. Five interview questions were asked related to the question. When looking at the biggest challenge the themes identified were (a) logistics, (b) participants, (c) safety, and (d) buy in. Looking the how the length of programs influence outcomes, the identified themes were to look at (a) best practice, (b) input and outcomes, and (c) no data was available. Some obstacles that are encountered when conducting a program include (a) partnerships, (b) management and monitoring, and (c) finances and insurance. Considering the amount of attachment that can happen during program, the themes identified were (a) encouragement, (b) not being a problem, and (c) adoption. Lack of engagement themes were identified as (a) establishing trust/responsibility, (b) providing accommodations, (c) professional consultation, (d) not a problem, and (e) dismissal from the program.

Research Question 3

Research Question 3 (RQ3) asked: How do community programs measure the success of their practices? To answer this inquiry question, participants were asked three interview questions. The three interview questions related to RQ 3 were:

IQ 10: How do you define a successful program?

IQ 11: In what ways do you know that participants are benefiting from the program?

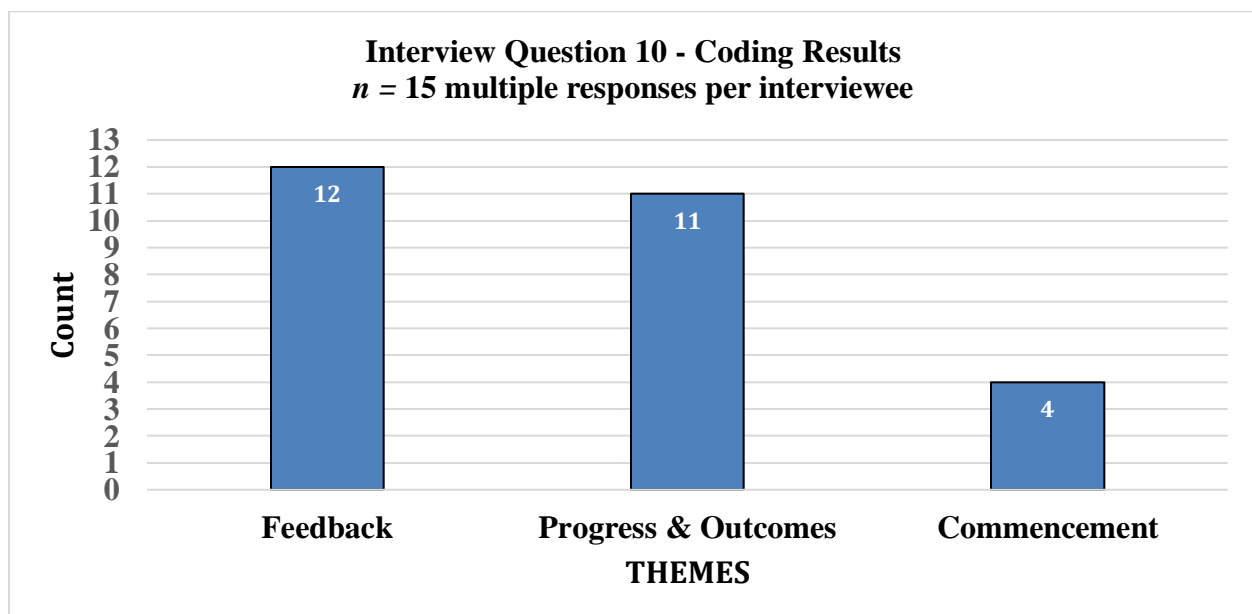
IQ 12: What measures & procedures do you use when conducting pre-surveys and post-surveys?

Interview Question 10

Interview Question 10 asked: How do you define a successful program? Three themes were identified to determine successful programs which are: a) feedback, b) progress and outcomes, and c) commencement.

Figure 10

Interview Question 10 – Coding Results



Feedback. Receiving feedback helps define a successful program. Feedback was gathered from staff, students, volunteers, professional clinicians, academic teachers and family members. Some feedback came from anecdotal notes and surveys. Of the 15 participants, 12 stated receiving feedback helped define a successful program. Participant 2 stated they received feedback from the schools and “anecdotal notes from the counselors and their therapist and teachers and principals, stating, and describing the changes that they have seen in the kids when they come back” For Participant 14, “a successful program is one where we get invited back....if a facility wants us to come and work with their people” is considered positive feedback and a successful program. Participant 11 stated that they conduct “a formal focus group” to gather feedback from the participants on what they liked best, and improvements for the program. Similarly, P6 and P7 also ask for specific feedback on how to improve the programs.

Progress & Outcomes. Progress included noticing in physical manifestations within participants. Progress refers to improvements in various behaviors and academic improvements. Long term outcomes include participants reaching out following the conclusion of the program. For this theme, key words, phrases and viewpoints emerged in 11 of the 15 participant responses. Participant 15 identified long term outcome questions they consider when determining the success of a program. Those questions include, “Can they have healthy relationships with other human beings can they hold down a job, are they staying out of the justice system? Are they availing themselves of services, are they are they going to higher education?” For Participant 8, “success is going to vary based on what those desired outcomes” that are set by program partners who know their youth best. To illustrate, Participant 8 stated, “It's identifying successes, while recognizing that a successful program may be that some of these kids stay out of trouble for, the time they were in the program.”

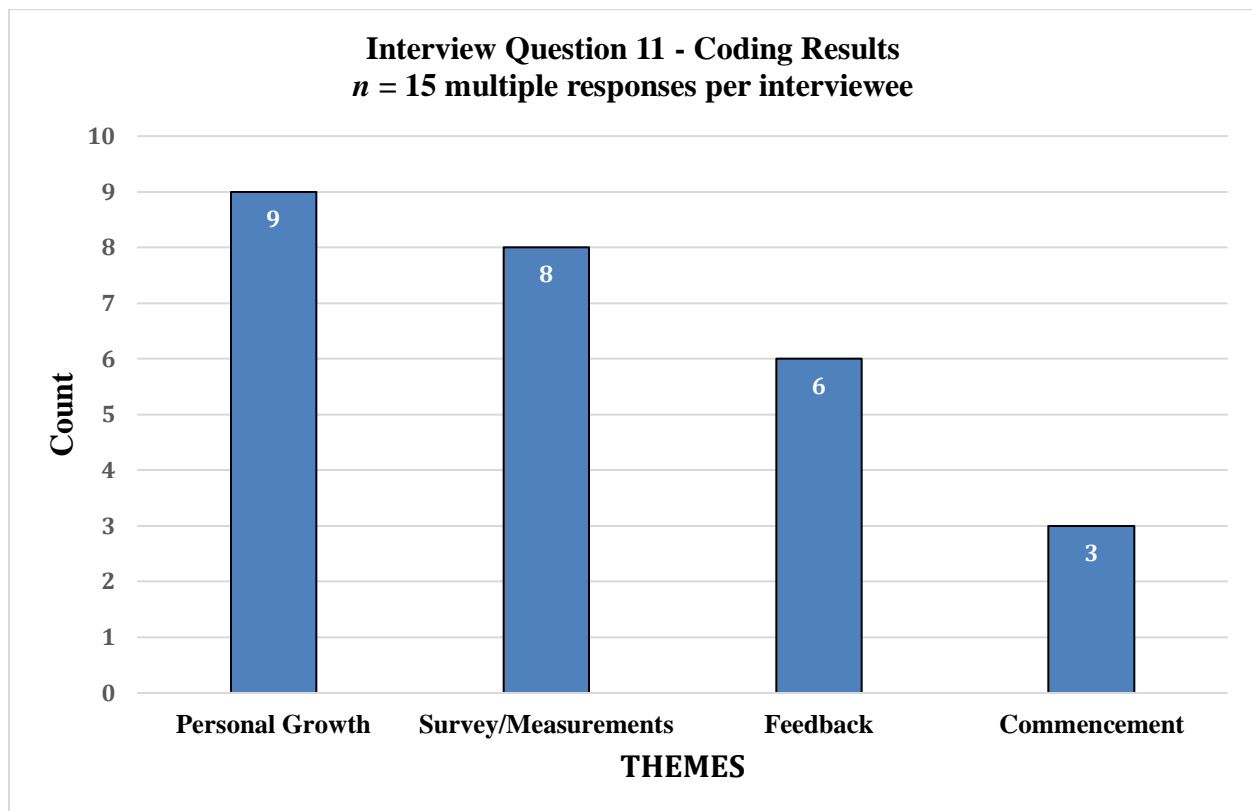
Commencement. Completion of the program and attending the graduation were identified as elements of a successful program. Commencement was identified by 4 of the participants. Participant 1 talked about the graduation ceremony held at the end of the program. To illustrate successful, Participant 1 stated that, “during their graduation or after their graduations they usually have a meet and greet and see how elated the kids are having achieved” finishing the program. Completion of the program was considered successful for Participant 4 and Participant 10. Interestingly, Participant 6 stated that following the programs they have “graduates from our program reach out” which they considered success.

Interview Question 11

Interview Question 11 asked the following: In what ways do you know that participants are benefiting from the program? Similar to Interview Question 10, this question specifically focused on aspects of how they observe and know participants benefit from the program. Following the review of the responses, four themes were identified: (a) personal growth, (b) feedback, (c) surveys and measurements, and (d) commencement (see Figure 11).

Figure 11

Interview Question 11– Coding Results



Personal Growth. Participants demonstrate personal growth. Personal growth included improvements to the areas of academic, behavior management, and engagement. Personal growth emerges among nine of the participant responses. Participant 10 stated they know their benefiting because “actions speak louder than words.... this is outside of their comfort zone; they have the choice to be at school or be at the ranch. So, when they keep showing up that is a sign that something is happening for them. Participant 3 discussed that when participants are “making progress in their academics and their behavior in the classroom.” To illustrate, Participant 3 gave the example of the “difference in behavior difference in referrals, difference in, you know, trips to the office or suspensions.” Related to behavior management and improvements, Participant 8

noted that some participants have “serious behavior problems and we have never seen an ounce of it” which was a sign of success.

Participant 9 shared examples of participants benefiting from the program,

We had one kid successfully make it through all 10 months of his probation without one probation violation. kids getting into college, them opening up their own businesses and being able to do some, some really interesting things like being featured on YouTube on different you know dog channels, and then putting titles on their dogs on that for them as a big thing and we have to balance the motivation for those kind of individual achievements, with the well-being of the dog, but a bunch of these kids have like set goals I want to get this title of that title on the dog and they're able to achieve that, and then participate in that with the animal, so for us we're able to see the benefits.

Feedback. Received feedback from the youth participants and the staff aided identifying the benefits the participants gain from the programs. Feedback from the staff and participants emerged in 8 of the participant responses. Participant 2 noted that getting “feedback from staff members, and from the participants themselves.” Some quick feedback and physical feedback Participant 14 identified was “the smiles and the laughter. And then, of course, the other is the request for more time, or to come back again.”

Survey/Measurements. Surveys and measurements are used to determine if participants are benefiting from the program. Understanding that surveys and measurements are used to identify how participants are benefiting from the program was a theme identified in 6 of the participant responses. Participant 1 noted they “track their [participants] responses on those surveys and then we recently developed a more experimental pre and post measure in conjunction that helps us out so they will be able to get qualitative data.” Participant 4 also stated they conduct “pre and post measures as well as an end of the program kind of survey and so we know from those surveys that they are benefiting in a specific area that we would like to see them benefiting from in the program.” According to Participant 8, they conduct pre and post

surveys for “concrete survey driven data.” They use a combination of “multiple choice types of survey questions as well as some open-ended narrative questions.

Commencement. Commencement was defined as the graduation ceremony. Getting to the end of program and the graduation ceremony is an aspect identified a way to determine if participants are benefiting. Among the responses, commencement emerged 4 (5%) of the 77 times. Participant 8 described their graduation ceremonies stating, “we have participants who have come to their graduation dressed to the nines and have written an entire speech about what these things have meant to them.”

Participant 4 further elaborated,

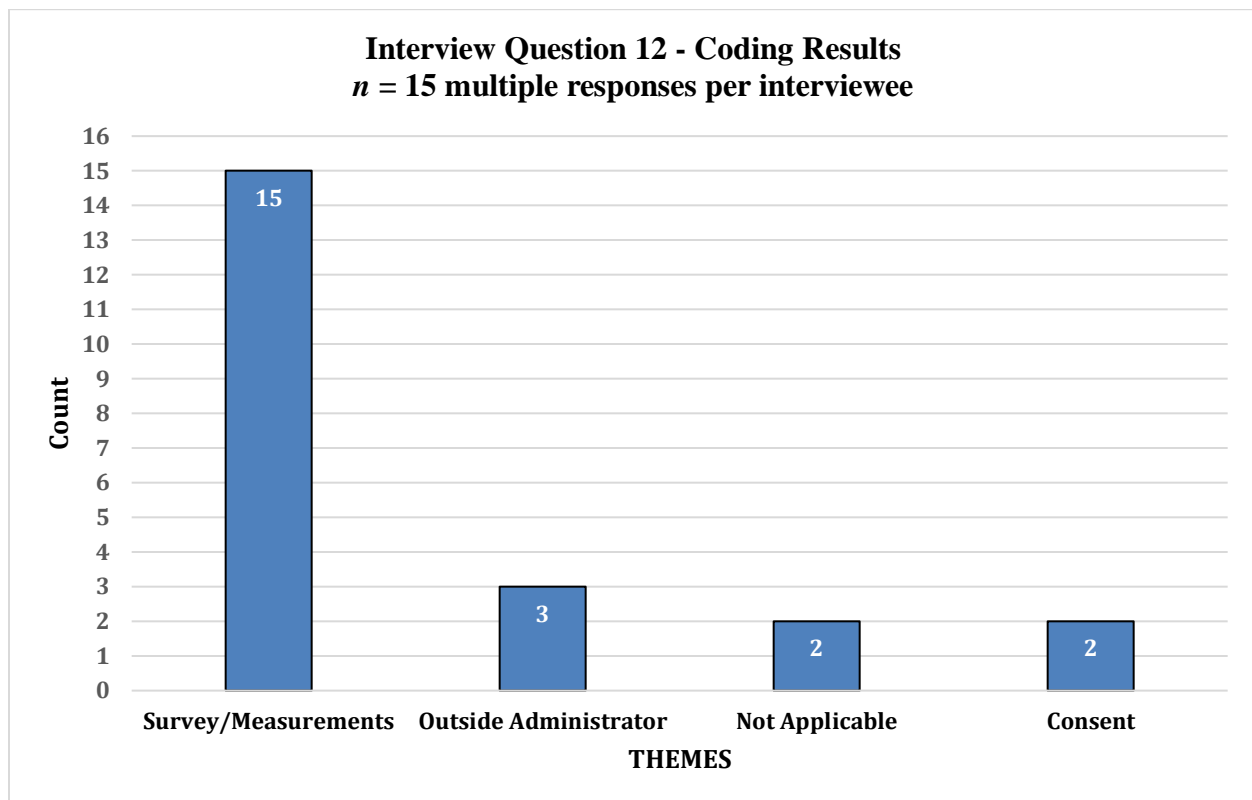
When you have a young person, who does doesn't speak hardly at all at the beginning of the program and then is like standing up at graduation to give some long speech about what they've done with their dog and they're just beaming, and you can't help but think that's because they're proud of their accomplishments and happy about the experience you know so just like totally from our own observations as well.

Interview Question 12

Interview Question 12 asked: What measures and procedures do you use when conducting pre-surveys and post-surveys? As an extension of Interview Question 11, Interview Question 12 aimed to find out if there were specific measures and procedures were considered when gathering data about the program. Interview Question 12 yielded 63 responses, which were grouped into four themes. The themes that emerged were (a) surveys and measurements, (b) not applicable, (c) obtaining consent, and (d) having an outside administrator (see Figure 12).

Figure 12

Interview Question 12 – Coding Results



Survey/Measurements. The type of measurement and survey varied among organizations. The theme survey and measurements emerged in all 15 participants responses. Types of measurements included questionnaires, researched tools, self-reporting measurements, and interviews. Participant 2 mentioned that their procedures are to include “questionnaires and interviews....one on one initial interview.....and they fill out a questionnaires evaluation form.” Participant 6 echoed using a completing a verbal and written evaluation, focused specifically on “the three golden rules of dog training and just touching on everything that we covered in the year.”

For some participants, they identified specific measurement tools and areas that they measure. Participant 5 and Participant 7 identifies their self-reporting measure is focused on

empathy. Participant 7 stated that their measure looks to examine improved empathy, master the skill balancer, restorative justice and future orientation.” For Participant 8, they looked at “trying to isolate depression and anxiety and emotional regulation or impulse control, patience, perseverance and confidence.”

For Participant 4, the “40 developmental assets model” was used “measure increases in assets in the young people.” The measurement tools Participant 10 said they use are the personal growth initiative scale, self-reflection insight measure and the connection to nature measurement. In their efforts, Participant 10 said that they “attempted to implement a behavioral measure that’s more objective by the teachers but that hasn’t been particularly successful because it’s just hard to get enough pre post data.” Another measurement used by Participant 11 was the Adverse Childhood Experience (ACE) questionnaire.

Outside Administrator. Some participants stated that they use or would prefer using an administrator for the pre and post surveys. 3 participants out of the 15 discussed using an outside administrator. Outside administrators emerged in 3 participant responses. Participant 1 discussed that as part of the procedure the “survey is conducted by someone who is affiliated with the organization but not necessarily a staff person or a volunteer person they’ll be working with directly.” Participant 12 said,

That sort of was not something that we really got too involved in just because we've really didn't have the time. So again, if the agency itself, usually would do the pre surveys, and then again if you go find an outside agency that would help with the tracking or seeing what went on afterwards. That would be a huge help.

Not Applicable. In some cases, pre and post surveys were not utilized. The reasons varied for not using them like amount of time to complete the surveys, funding or previously used but not actively using them. Of the responses, the use of pre and post surveys not being applicable emerged in 2 participants of the 15. Participant 13 mentioned that they “haven’t

settled on a specific instrument to measure some of the skills we're trying to look at." Continuing on, Participant 13 stated "they haven't settled on a good instrument that somebody else has developed yet for measuring their skills and their improvements. Participant 9 discussed that while they do have a survey and they "probably should step up our measures and procedures." Participant 3 also believed that "it's something that I think would be good to implement" however does not use surveys.

Consent. Getting consent and understanding consent was an important idea when conducting pre and post surveys. The idea of consent was identified in 2 participant responses. Participant 1 mentioned that they "have a consent form for them that says you know your participation is completely anonymous and taking a survey is voluntary on both pre and post surveys." For Participant 12 stated getting consent was "an issue because we worked with minors....there was very little information that we could receive because a lot of was sealed and confidential." Furthermore, Participant 12 stated that "because they were minors we were unable to take pictures"

Summary of RQ3

RQ3 focused on how community programs measure the success of their practices. When defining and determining a successful program through considering (a) feedback, (b) progress and outcomes, and (c) commencement. As it related to knowing if participants are benefiting from the program, look for: (a) personal growth, (b) feedback, (c) surveys and measurements, and (d) commencement. Looking at the measures and procedures for giving pre and post surveys the identified themes were: (a) surveys and measurements, (b) not applicable, (c) obtaining consent, and (d) having an outside administrator.

Research Question 4

Research Question 4 (RQ4) asked: What recommendations do community programs have when implementing HAI as an intervention with at-risk youth? To answer this inquiry question, participants were asked two interview questions. The two interview questions related to RQ 4 were:

13: What suggestions do you have for others interested in starting a community program for at-risk youth?

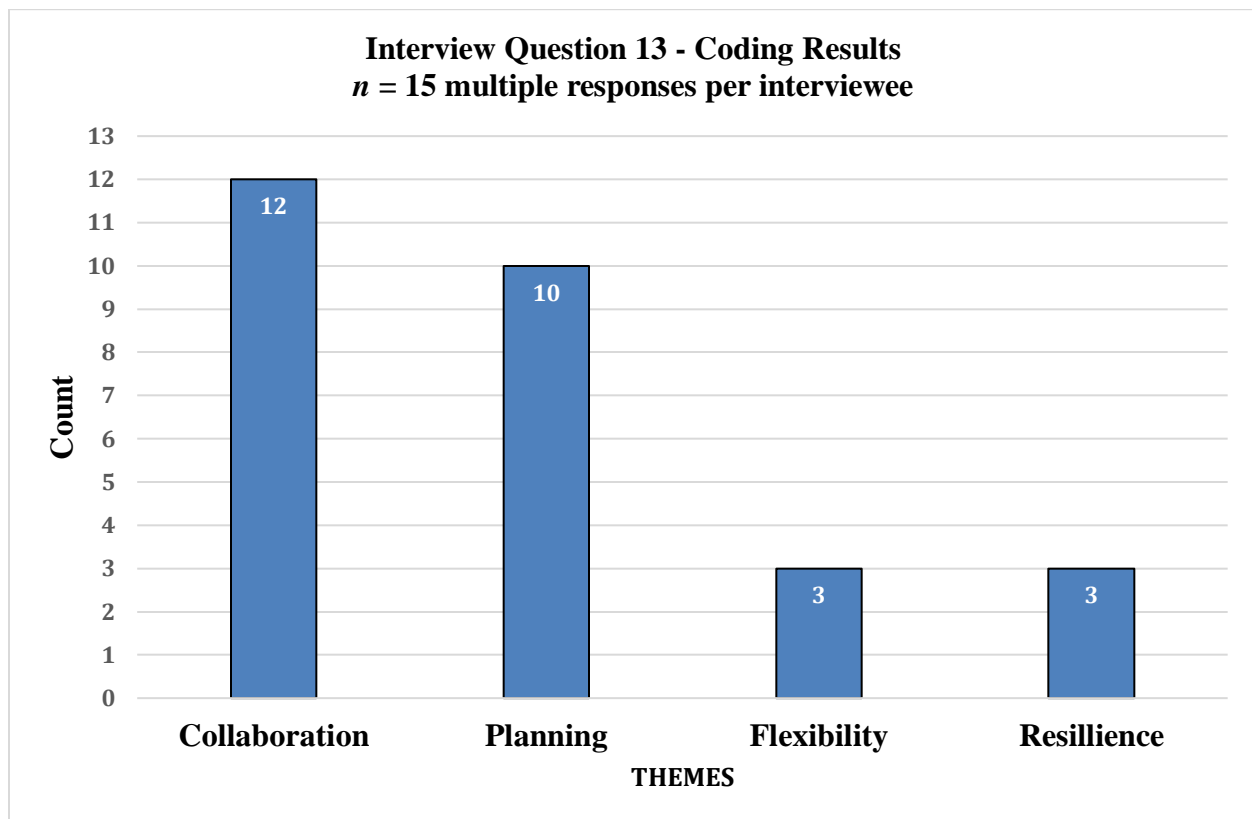
14: Is there anything else you'd like to add?

Interview Question 13

Interview Question 13 asked: What suggestions do you have for others interested in starting a community program for at-risk youth? The question was focused on steps organizations should take in order to start a community program that works with youth and dogs. The themes that emerged were: (a) collaboration, (b) planning, (c) flexibility, and (d) resilience (see Figure 13).

Figure 13

Interview Question 13 – Coding Results



Collaboration. The most common theme that emerged as part of suggestions when starting a program for at-risk youth was to collaborate. Collaborations including establishing mentorships and partnerships and gaining support from stakeholders. The theme of collaboration emerged in 12 of the 15 participant responses. Participant 1 stressed the having a mentorship was important. Participant 1 explained,

It was really helpful for us was that Organization X they have a strong mentorship program so what I did was volunteer with them and kind of see all of the elements of their program tracked their program director. Volunteer in the program, I was there for temperament testing day so it was really helpful if you're going to do a program like this with kids and dogs to see how it's being done in ways that work so you're not starting from scratch.

Similarly, Participant 5 suggested “consulting with other who run similar programs.” Participant 15 said, “don’t reinvent the wheel.” Another aspect of the collaborating that was important was gaining support. Participant 11 stated it was important to “do in service training ourselves or we’ll bring in people to talk about best practices, or find a seminar on your own and we’ll pay for seminar but we want to make sure that they are very well versed.”

Participant 8 shared,

If I were starting a program, it would be finding a partner that shared my vision, finding someone who has already kind of serving the population that you want that you're interested in serving, and shares your vision and shares your passion for helping those people.

Planning. Planning for a program was the second common theme for suggestions.

Planning emerged among in 10 of the 15 participants. Planning included scheduling, identifying goals and understanding your purpose and the population you want to serve. Participant 5 said “identifying clear goals.” Accordingly, P11, P14 and P15 touched on the idea of knowing your limits and narrowing the program focus. Participant 15 shared, “Just don't take on too much all at once, start small, find partners who are interested in the work that you want to do.

Flexibility. Being flexible was the third suggestion for individuals looking to start a HAI program with at-risk youth. Flexibility was defined as being accepting of things not going to plan and making changes to sure the best decisions and adjustments for program. In responses, three of the 15 discussed flexibility. Both Participant 2 and Participant 13 stated that patience is necessary. Participant 2 further elaborated stating the importance of,

Being flexible and being okay with things not going according to plan. Also having backups, you know after doing the program for so many years I finally got wise and learned to have things in my back pocket to do in case, what we were planning on doing didn't go according to plan, or it ran shorter, because the kids weren't engaged, or you know whatever other reasons so lots of flexibility, backup plans, patients and just knowing the population that you're working with.

Similarly, Participant 11 said,

I think that flexibility is also super, super important, because things never go according to plan, and they never work the way that they are written down on paper. So I think there has to be room for flexibility and what that looks like is different for every incident every situation every person.

Participant 13 suggested that,

You have to have people who can see and be adaptable and if they're not able to say, okay, this particular thing is not working for this dog or this youth. You've got to change it. And even though, so there's gotta be some options in there. Um, you have to kind of have people who are able to adjust on the fly.

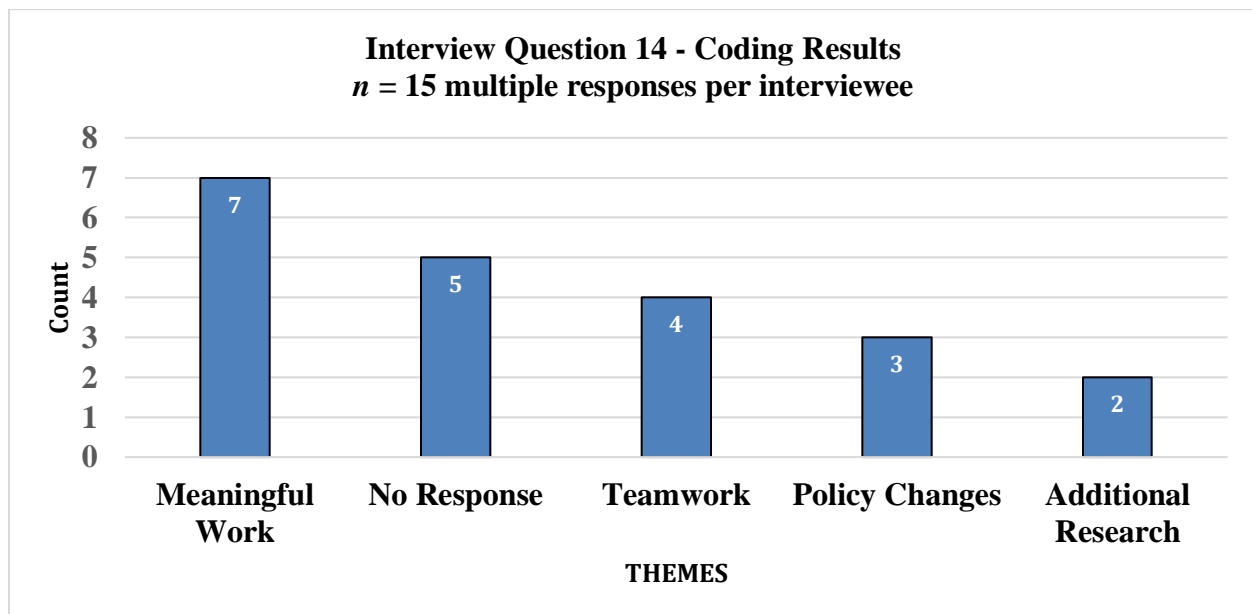
Resilience. Being resilient was the fourth suggestion individuals interested in starting at HAI program for at-risk youth. Resilience was defined as continuing on when things are challenging and being persistent. Resilience emerged among the key words, phrases and viewpoints from three of the 15 participants. Participant 10 said, “it takes a lot of resilience and risk.” Further explaining that “you have to have the heart and the passion and the risk taking. Like, entrepreneurship, to make it work.”

Interview Question 14

Interview Question 14 asked: Is there anything else you’d like to add? This question was asked to capture any information not raised in the course of Interview Questions 1-13 (IQ1-IQ13). This question also gave the participant the opportunity to share any additional insights or expand on answers. Among the 15 participants four themes emerged; (a) meaningful work, (b) no response (c) teamwork, (d) policy changes, and (e) additional research (see Figure 14).

Figure 14

Interview Question 14 – Coding Results



Meaningful Work. Of the responses based on anything else to be added, participants said the programs were meaningful work. Meaningful work was defined as important and necessary work. The theme of meaningful work was identified 18 (45%) of the 40 key words, phrases and viewpoints. Participant 9 talked about how “there’s a huge population of people out there who would benefit from this kind of work.” Participant 3 said, “it’s not an easy week I will tell you by Friday I’m exhausted but it’s so worth it. Similarly, Participant 11 stated that,

The work is extremely rewarding. I mean it's not always easy as anything is not easy, and you know it's beyond. You know it's maybe we run four hours of program week but you know you'll spend 10 hours a week, 15 hours a week, thinking about it, you know, planning meetings, you know, it's a lot more time than you anticipate. But if you love it, it's not work. It's still fun.

Participant 6 said, “I want more of these programs around and I do see just such value in them.”

Participant 6 continued, stating,

You're seeing things that you kind of wish you weren't exposed to but at the end of the day, you just know that you are being impactful and one of my favorite stories is there

was a kid that we were working with for a couple years when we brought in the cat lady and she brought in a kitten he's holding the kittens loving the kitten and she's like, what is this vibration coming from the cat's throat and like he had no idea about cat purring, he had never been exposed to that. So I think about that a lot like we're just exposing kids to positive interactions with animals that they're in high school, and they haven't had that exposure yet that's significant. So, if we can give that to them before they go out into the world and become adults. I think that's huge.

Participant 14 mentioned,

It's a very rewarding field. You make strong relationships when you're seeing and working in a facility where you're seeing the same children over again. We go to a place, where it's residential living for adults with developmental disabilities, and you become very attached to those people and it's very rewarding to go and work with you to be able to spend time with your dog and develop a really deep, meaningful relationship with your dog. And then to take, take that relationship you have with your dog and share it with others and bring some happiness into their life, or to improve their quality of life.

No Response. There were five participants who stated that there was no more they wanted to add. Those five participants stated things like no, or nothing.

Teamwork. The second theme that emerged from the additional responses was teamwork. Teamwork incorporates having strong relationships with partners as well as the staff, and participants. Teamwork was identified in four of the 15 participant responses. Participant 13 elaborated on IQ13, explaining that,

I would be really interested to see what, you know, the results and other people are saying too because I'm always liking to benchmark and I think the other thing is, I think I guess more, I would like to see more of a collaborative that compete. Well, we could see that as a competition or we could see that as an opportunity to leverage what you have and share and vice versa, you know, so it's that kind of a collaborate than compete type of mode. And I think it benefits more people.

Participant 5 said,

As long as you have a lot of support, and you know we definitely do get a lot of support from the school so just having a good partnership and everybody kind of collaborating makes it a little bit easier. So, once you have everybody on board, it definitely makes it a lot easier.

Policy Changes. One theme that emerged was a request for policy changes. This theme emerged in three of the 15 participant responses. Participant 6 stated that,

This is a great opportunity to open up dialogue...around factual studies you know like what you're doing, should be informing policy, so that people aren't being told, because of the socio economic side, no you can't have this thing that everyone else get to have like pet ownership.

Participant 2 talked about how these programs should be in more schools for “restorative justice.... in lieu of an in-school suspension program... implementing animals into that type of setting would be helpful.” Participant 6 also talked about how it is necessary to invest “a lot more up front by helping our kids be the best stewards of their communities with peoples, animals and the environment. That’s the investment that I think is more sustainable.”

Additional Research. The theme of additional research being needed was identified in two of the 15 participant responses. Participant 5 stated that there are “very few templates starting and running such a program.” Participant 6 indicated that they, “want more of these programs around.” Participant 12 said they wished programs “would become more commonplace.”

Summary of RQ4

The purpose of Research Question 4 (RQ4) was to identify recommendations for others who are interested in starting a community program for at-risk youth. Eight themes were identified by analyzing phrases and key words from the participants responses to two interview questions. When considering what suggestions there are for individuals who aim to conduct programs with at-risk youth the themes of: (a) collaborating with others, (b) planning, (c) being flexible, and (d) resilience. When asked if there was any additional information to add or expand the four themes: (a) HAI programs are meaningful work, (b) teamwork is important, (c) policy needs to change, and (d) additional research is needed.

Summary

The purpose of this phenomenological study was to identify best practices when using HAI as an intervention for at-risk youth. Fifteen individuals who have founded, volunteered with, or held the title of executive director, program director, educational director or board member of organizations who conduct HAI participated in interviews in order to inform this study. Each participant answered 14 semi-structured interview questions designed to inform the following four research questions:

- RQ1: What success strategies and practices do community programs employ when implementing HAI as an intervention with at-risk youth?
- RQ2: What challenges are faced by community programs when implementing HAI as an intervention with at-risk youth?
- RQ3: How do community programs measure the success of their practices?
- RQ4: What recommendations do community programs have when implementing HAI as an intervention with at-risk youth?

Data were collected via 15 semi-structured interviews. Once the data were collected, data coding and validation of results were conducted with a panel of inter-rater Pepperdine doctoral candidates. Analysis of the data yielded a total of 48 themes. Table 6 is a summary of all themes concluded from the data analysis. In Chapter 5, discussion of study results, implications, recommendations and conclusion is provided.

Table 6*Summary of Themes for Four Research Questions*

RQ1. What success strategies and practices do community programs employ when implementing HAI as an intervention with at-risk youth?	RQ2. What challenges are faced by community programs when implementing HAI as an intervention with at-risk youth?	RQ3. How do community programs measure the success of their practices?	RQ4. What recommendations do community programs have when implementing HAI as an intervention with at-risk youth?
Develop skills	Safety	Feedback	Collaboration
Adoption	Logistics	Progress & Outcomes	Planning
Education	Buy In	Commencement	Resilience
Relationships	Participants	Surveys/Measurements	Flexibility
Support/Resources	Input/Outcomes	Personal Growth	Additional Research
Planning/Safety	Best Practices	Consent	Teamwork
Acceptance Process	No Data Comparison	Outside Administrators	Meaningful Work
Partnerships Decision	Management & Monitoring	Not Applicable	Policy Changes
Safety	Finances & Insurance		No Response
Student Choice	Partnerships		
Presentation	Encouragement		
Assessment	Not A Problem		
Feedback	Adoption		
Benefits	Dismissal		
	Trust/Responsibility		
	Professional Consultations		
	Accommodation		

Note: This table demonstrates a summary of all themes derives from the data analysis process.

Chapter 5: Conclusions and Recommendations

Non-profit organizations engage in HAI program with at-risk youth in order to develop social-emotional skills like empathy, self-confidence, and self-efficacy. Organizations that use HAI as an intervention in jail facilities and for individuals with disabilities are the communities that are commonly researched. However, there is little to no research available on organizations that work with the at-risk youth population. The majority of research is focused on youth currently incarcerated or at juvenile detention centers. These programs and research are essential and are parallel to the at-risk youth community. There is no standard practice when looking at community programs that use animal interventions with at-risk population. This research aims to look at best practices for community programs that use human-animal interaction as an intervention for at-risk youth. Specifically, this phenomenological study aimed to review the successful strategies that community programs when working with the at-risk youth population. The challenges faced and how these type of community programs measure their success are also important purposes of this research to review. Participants shared successful strategies, how success is measured as well as challenges and recommendations for other community programs that work with the at-risk youth population.

This chapter contains a summary of the study. The summary of the study highlights the purpose, research, and interview questions as well as the study design. Following the summary of the study, a summary of the findings of the research questions are presented. Further discussion of implications, application, recommendations for future research and conclusions

Summary of the Study

The purpose of this study was to examine the best practices, challenges, and recommendations for those who engage in HAI intervention program with at-risk youth.

Following a literature review, four research questions and 14 open-ended interview questions were developed to gain the perspectives of the study participants. A phenomenological approach was used as the qualitative research design. This study investigated the phenomenon of conducting HAI interventions with at-risk youth. In order to understand the phenomenon, the participants gave their personal experiences and perspectives.

Participants were individuals who have founded, volunteered with, or held the title of executive director, program director, educational director, or board member of organizations who conduct HAI participated in interviews in order to inform this study. A sample of 15 individuals was identified for the study. Participants were located across various states in United States. They possessed 1-35 years of experience with HAI intervention programs. A purposive sample with maximum variation was applied in order to identify a diverse group of potential participants.

Semi-structured interviews were conducted to collect data. The participants responded to 14 open-ended questions. *Prima facie* validity, peer review validity, and expert review were conducted to determine the questions were reliable and valid. Each interview was audio-recorded and transcribed by the researcher. Each transcription was reviewed with key words, phrases and viewpoints coded and classified into common themes. An inter-rater review process was conducted to review and validate the common themes. Following the review with the inter-rater panel, modifications were made to the code. Following the modifications, 14 bar graphs were created to represent the results. The bar graphs represented the coding results from the participants' responses.

Discussion of Findings

Summarized in Table 6 are the key findings for each research question. The findings represent the practices, strategies, challenges and recommendations for community programs that engage in HAI interventions with at-risk youth.

Results for RQ1

Research Question 1 asked: What success strategies and practices do community programs employ when implementing HAI as an intervention with at-risk youth? Following an analysis of the participants' responses to the four related interview questions, 13 themes emerged related to the strategies and practices used when implementing HAI as an intervention focused on the following areas:

- Focusing on adoption for the animals in the program.
- Providing humane education to the youth and education to the dog participants.
- Focusing on developing healthy relationships.
- Providing and gain support and resources for partners.
- They engage in a lot of planning and safety.
- Creating an acceptance process to for the program.
- Giving the partnerships full control of the decision for student participation.
- Providing safety for all participants and staff.
- Giving students choice to participate.
- Providing an educational presentation.
- Conducting assessments and receiving feedback.
- Identifying and focusing the benefits for both the youth and dog participants.

Discussion of RQ1

The findings in RQ1 indicated that the organizations use numerous practices and strategies when conducting a HAI program with at-risk youth. One strategy for a successful program was planning ahead. Planning included thinking about the liability, training component, safety and well-being of participants and the animals (Fine, 2015; Hines & Fredrickson, 1998). (American Veterinary Medical Association, 2011; Fredrickson-MacNamara & Butler; 2010) as well as trained clinicians and therapist are essential to the safety of the participants Braun et al., 2009; Hooker et al., 2002; Thompson, 2013). American Veterinary Medical Association (2011) states that in order to have a successful program they should establish realistic goals and expectations. As Arkow (1998) discussed, by planning ahead organizers can logically think through predictable problems so that conflict can be avoided.

The second strategy participants stated was providing adequate time for establishing relationships with program partners were common practices prior to implementation of a program. Recognizing the goals of the program and focusing the mission was also a suggestion. Understanding using animal intervention to assist in reaching the program goals was another (Thompson, 2013). Getting buy-in and having all stakeholders on board is essential to having a successful program. By communicating and cooperating, many perspectives are considered and there is an increased amount of buy-in of the programs mission and vision (Arkow, 1998).

The third and fourth strategy dealt with considering the process for selecting participants. When it comes to youth participants, two options can be considered, either providing an acceptance process or partnership decision. The acceptance process could include an interview, application, increasing the student choice and ownership when deciding to participate in the program. This process of selecting youth participants was not identified during the literature

review, which can be expanded on in future research. During the literature review process, finding literature related to the selection process was only available for dog participants by not youth participants.

The fifth practice was providing the participants, both youth and the dogs, with an education. Humane education and training was a standard practice during the programs. Youth who participated in the programs were provided animal interactions but there was an educational component included. Humane education covering a variety of topics like animal welfare, nutrition, reproduction, communication and body language were covered. Fine (2006, 2010), DeGrave (1999), Rathmann (1999), and Ross (1999) suggested that the programs teach various humane topics.

Participants shared that part of the process is doing an educational presentation. During the first educational presentation, the essence of the program is shared with the youth. Arkow (2010) suggested that programs are providing new ways to integrate humane education. Traditionally, humane education focused on presentations to a class or school audience with the purpose of building community (Arkow, 2010; Fine, 2010). Subsequent educational presentations/lessons lead to student learning about empathy, emotional growth, respect, responsibility, open-mindedness and kindness (Faver, 2010; Thomas, 2013).

Developing skills was another strategy used when conducting a program. Participants discussed that developing skills included learning communication skills, empathy, trust, leadership, stress management. Research suggests that there is improved social skills and behaviors as an outcome of HAI (Corson et al., 1975; Fournier et al., 2007; Salmon et al., 1982; Schuck et al., 2013). Education on developing healthy and trust relationships was a main idea.

Many participants stated that the goal was to teach the youth and the dogs how to trust given many participants had negative interactions forming and maintaining relationships.

Another strategy was communicating the purpose of the program. Participants stressed that communicating and educating the youth participant as well as the stakeholders about the reasoning behind the program. By providing clear communication about the goals and being transparent, participants are laying the foundations for processes related to safety and assessment (American Veterinary Medical Association, 2011; Arkow, 1998).

Another practice, as it relates to education, is the adoption component. Most of the participants with the exception of three work with shelter dogs. Part of the education component is to teach youth and the community about overpopulation and animal behavior. Community programs are serving as a solution to companion-animal overpopulations, as these inmates are keeping these animals as pets as well as training them for adoption or human services like guide dogs (Fournier et al., 2007; Fournier & Geller, 2004).

Some participants suggested that planning prior to the program requires significant consideration regarding the safety of both the human participants and the dog participants. Considering the physical and emotional safety of both the youth and dogs is a top priority and practice. Participants discussed that having highly trained individuals is important to the safety of the dogs and youth. Trained handlers are important to the physical safety of the youth and the dogs (American Veterinary Medical Association, 2011; Fredrickson-MacNamara & Butler; 2010) as well as trained clinicians and therapist are essential to the safety of the participants Braun et al., 2009; Hooker et al., 2002; Thompson, 2013).

Another strategy used was temperament testing the dogs. It is an important consideration to ensure suitability (Baun & Johnson, 2010; Fine, 2010). Temperament testing for dogs is

essential for assessments and safety during programs. Completing the temperament test would help determine whether the dog would be safe and successful in a program setting. Similar to Holmes' (1988) guidelines, participants discussed the various aspects of a temperament test, including touching of the paws, pets, assessing aggression with humans, kids and other dogs. Fine (2010) and Baun and Johnson (2010) stated that trainers were necessary to complete the assessment for temperament. Many of the participants were licensed a dog trainer, behavioralist or had someone on staff to perform the temperament testing.

Assessment of the youth was also a key component of the purpose. Community programs engaged in assessing where the students were at the beginning of the programs for various skills. It was important to make sure that the youth participants were truly benefiting from the program so assessing the programs for that became apparent. Assessing the youth to ascertain what benefits they gained came in different forms (Arkow, 1998). Some participants conducting surveys, however it was not consistent across organizations. Fournier et al. (2007) noted there is a need to conduct pretest and posttest. However, due to the limited data, it is not a true representation. Furthermore, due to the lack of availability and consistency in survey questions and the measurement tools, most data is anecdotal (Arkow, 1998).

Results for RQ2

Research Question 2 asked: What challenges are faced by community programs when implementing HAI as an intervention with at-risk youth? Following an analysis of the participants responses to the five related interview questions, 18 themes emerged related to the strategies and practices used when implementing HAI as an intervention focused on the following areas:

- Challenges with establishing safety and safe practices.

- Challenges with logistical issues.
- Challenges with getting buy-in from participants and partners.
- Challenges getting input to determine outcomes.
- Challenges identifying what best practices are regarding length of the program.
- Challenges with not having data to compare.
- Challenges with management and monitoring participants.
- Challenges with finances and insurance.
- Establishing and maintaining partnerships.
- Challenges with attachment.
- Challenges with student behavior.
- Challenges establishing trust and giving participant responsibility.
- Consulting professionals during challenging situations.
- Providing accommodations for students experiencing challenges with engagement.

Discussion of RQ2

The findings of RQ2 indicate that community programs encounter many challenges and ways to address those challenges. Participants discussed that logistics was a major challenge during the program. Logistical issues of having transportation for the youth and dog participants. Identifying and having clear communication between the organization and the partners was also a challenge to overcome. Ensure and recognize how logistics affect the program goals (Thompson, 2013). Furthermore, getting buy-in from the youth participants and the partners was a challenge community programs faced. Participants stated at times, they would get resistance from that potential partners or community leaders. In order to overcome that, part of getting the buy-in was educating everyone on the benefits associated with the programs. At times that could

be challenging because there was a lack of available data to prove that these programs are beneficial. Furthermore, lack of data could affect the funding assistance to host a program should a partner not have the fund or facilities. By establishing goals and giving the partnerships opportunities to make decisions about their youth participants as well as constant communication and feedback from staff and participants (American Veterinarian Medical Association, 2011; Arkow, 1998).

Another challenge participants had to overcome was experiencing lack of engagement. Participants shared that the planning for flexibility. Multiple time participants acknowledged that curriculum and activities did not go always a planned. By maintaining a backup plan and remaining flexible helped overcome unforeseen challenges. Participants also prepared for accommodations to address the challenge of engagement. Working with youth and working with dogs in various environments can be stressful. The community program organizers stated that by planning to have and consult professionals in the moment proved to be a positive way to make accommodations for the participants during the programs. Mallon et al. (2010) stated that during on the interaction between client and animals, remain focused on achieving the goals. Youth eventually will develop, increase engagement and take responsibility (Parish-Plass, 2008).

Part of overcoming the challenges of attachment and lack of engagement faced during programs was providing encouragement and empowerment to the youth and the dogs. Encouragement and empowerment came in the forms of transparent communication, providing hands-on activities, and understanding what kind of lessons interested the youth. Using those key concepts to encourage and empower the youth to participate in the activities and create an opportunity for student ownership and responsibility.

Getting buy-in from the youth participants and the partners was a challenge community programs faced. Participants stated at times, they would get resistance from that potential partners or community leaders. In order to overcome that, part of getting the buy-in was educating everyone on the benefits associated with the programs. At times that could be challenging because there was a lack of available data to prove that these programs are beneficial. Furthermore, lack of data could affect the funding assistance to host a program should a partner not have the fund or facilities.

Another challenge mentioned by participants was finances and insurance. Having the monies to implement a program was a challenge especially if the organization did not have a facility to conduct the program. If there was not a dedicated facility, the cost of transportation for the youth or the dogs could be extremely costly. Furthermore, the insurance cost for safety reasons given the work with animals played a challenging role. If transportation was required for the dogs or youth, insurance for the vehicle was a concern that needed to be factored in as well. In regard to the challenges related to safety, risk and liability came up a lot. Participants shared in multiple responses that obtaining insurance is vital to the running a program. Arkow (1998) noted how the legal liability is a concern so programs should have adequate insurance coverage. Insurance should cover the organization, personnel, motor vehicles, facility and there should be supplemental insurance for volunteers of the program (Arkow, 1998). Although none of the participants have never filed a claim on their insurance, each participant stated their have numerous insurance policies to make sure they are covered should an incident occur. However, one costly thing is the insurance.

Another common challenge related to safety was having trained professionals. Multiple participants shared stories about instances where youth were experiencing trauma or shared a

traumatic experience with the group and they were not equip to handle the situation. Having licensed psychologist, clinicians, or other trained professionals that work with youth are essential to addressing many challenges that arise during a program. Having a licensed dog trainer or dog behavioralist to maintain safety for the youth and the dogs was a way to overcome the safety challenges faced. Individuals should be knowledgeable in animal welfare as well as have professional training or expertise in working with people and youth (Fine, 2015; IAHAIO, 2013; VanFleet, 2007).

Community programs participants also stated that in order to be successful and overcome some common challenges, consistent management and monitoring was necessary. Assessing the programs goals, developing protocols, and setting up clear expectations would be encourage and create an environment that would be manageable and could easily be reviewed and replicated. Reviewing those goals and receiving input and identifying outcomes (Arkow, 1998).

One challenge that was presented was that some participants did not have protocols that would accurately assess the programs. Another challenge was that programs used a variety of assessment tools and measurement. Participants stated that while they believe in the importance of implementing an assessment tool, some did not have the resources or the time to collect such data. However, data is collected anecdotally (Vallet et al., 2015). There is not specific protocol used across organizations (Fine, 2008; Fine & Mio, 2010; Fournier et al., 2007). Community programs experience many challenges, but as they implement more programs, they can overcome their challenges. With planning, education, safety and assessments in mind, community programs can be successful in running their programs.

Results for RQ3

Research Question 3 asked: How do community programs measure the success of their practices? Following an analysis of the participants responses to the three related interview questions, six themes emerged related to the measuring success used when implementing HAI as an intervention focused on the following areas:

- Success is measured by receiving feedback.
- Progress and outcomes should be tracked.
- Commencement celebration following completion of the program.
- Surveys and measurements are used to collect data.
- Personal growth was seen in academics, behavioral management, and engagement.
- Receiving consent from participants.

Discussion of RQ3

Participants were asked how they measure success of their programs. The first theme was receiving feedback. Feedback was received from the youth participants as well as the staff and volunteers. Feedback looked participant thoughts about the programs. Furthermore, receiving feedback from the staff and volunteers about behaviors during and outside of program is important. Receiving reports and feedback was often collected in an unstructured interview or questionnaire (Turner, 2007). Self reflection and physical manifestations of growth were noted (Syzmanski et al., 2018).

The second theme to measuring success was tracking progress and outcomes. Tracking the progress and outcomes happened in various forms. This includes participants stating that they measure success by having the youth identify goals they would like to meet during program.

Other ways of tracking included conducting pre and post surveys to analyze a participants growth before and after the program.

Similarly expressed in the RQ2 assessment, participants did not all use the same measurements. Each measurement tool varied which some organizations not implementing a tool at all. Some tools were informal and not research based questionnaires. Some measurement tools were specific, looking at scales for various skills. Discussed in the literature review, various programs used different questionnaires and scales like the Demographic questionnaire, the Human Animal Interaction Scale, the Social Skills Inventory, a basic social and emotional communication skills measurement was given to participants (Mullen, 2013; Riggio, 1986). Other programs used the Coopersmith Self-Esteem Inventory and the Institute for Personality and Ability Test Depression Scale was given pre and post program (Mullen, 2013; Walsh & Mertin, 1994). As part of recommendation for future study, identifying a common scale that community programs could use would be beneficial.

The fourth theme is the commencement ceremony at the end. Many participants who completed the programs were able to participate in a graduation ceremony. Youth participants were able to share stories about their experience during the program with their dogs. They could showcase the training they taught their dogs. Furthermore, in some instances, youth were able to meet and talk with the adoptive parents of the dog they trained. Participants shared that the physical manifestations of smiles and laughter, attitudes, body presentation, language used changed and improved overtime. From the literature review, commencement was not identified.

The fifth theme of personal growth was seen in academics, behavioral management, and engagement. Participants shared that through their collection of data, receiving feedback from various stakeholders and their own anecdotal notes, the youth experienced personal growth.

individuals are able to replace feelings of aggressions and learn behavioral, emotional and moral reasoning skills (Glick & Goldstein, 1994, Perkins-Dock, 2001, Mullen, 2013).

The sixth theme is getting consent from youth. Participants shared that due to the nature of the programs, some students were headed down a track to correctional facilities and experienced trauma as a result and respecting the youth as individuals. It was important for the youth participants to want to participate and consent to engaging in the work. Furthermore, this helped develop their skills in relationships, trust, respect and responsibility. There must be a willingness to engage in activities (VanFleet, 2008).

Results for RQ4

Research Question 4 asked: What recommendations do community programs have when implementing HAI as an intervention with at-risk youth? Following an analysis of the participants responses to the three related interview questions, six themes emerged related to recommendations when implementing HAI as an intervention focused on the following areas:

- collaborating with various partners
- engage in significant planning
- practice being resilient & being flexible
- continue to conduct additional research
- recognize and continue the meaningful work
- focus on affecting policy changes

Discussion of RQ4

The first recommendation was for collaborating with various partners. Participants stated that bringing together youth and dogs can be challenging so by partnering with a group that whose primary focus is youth or dogs is definitely beneficial. Participants also suggested

collaborating with similar organizations that have the same or similar mission. By engaging with them, the processes and the commitment that it takes is can be understood. It is also important to not reinvent the wheel. Organizations are doing the work and showing that the intervention is successful so by learning and modeling a program after an existing on is beneficial and highly recommended. Understanding that the programs of implementing HAI as an intervention for at-risk youth is a small community, working with other programs that conduct the similar programs can aid in the research collected on such programs. Furthermore, individuals would have a better understanding of what it takes to implement a program and it be successful.

The second recommendation was to engage in planning. Programs require trained individuals who have the passion and understanding of the youth, of dogs and of safety for all participants. Mentioned earlier, practitioners need to consider liability, training component, safety and well-being of participants and the animals (Fine, 2015; Hines & Fredrickson, 1998). Participants stated that planning requires providing adequate time for establishing relationships with program partners were common practices prior to implementation of a program. Recognizing the goals of the program and focusing the mission was also a suggestion. Understanding the use of animal intervention to assist in reaching the program goals is important (Thompson, 2013).

The third recommendation was to remain flexible and resilient. Humans are complex individuals and dealing with youth who have experienced trauma or are at-risk for some reason can present a more challenging dilemma. Adding shelter dogs to that equation complicates things more. Participants shared that there are many logistical things that can go wrong but just remain consistent, flexible, and adaptable. Understanding that there are also risk associated when

working with youth and dogs, so having ability to assess risk and make adjustment is important (Fine, 2010; Thompson, 2013).

The fourth recommendation was to continue additional research. This field of working with at-risk youth is relatively new. Many researchers suggest there is little written literature available for practitioners to conduct HAI and much less for community programs (Chandler, 2017; Fine, 2006, 2010, 2015; Fine & Eisen, 2008; Jalongo, 2018; Parish-Plass, 2008; Pichot & Coulter, 2007; Trotter, 2012; VanFleet, 2008).

Related to recommendation four, the fifth recommendation is to focus on how these types of programs can affect policy changes. Participants shared that these programs are beneficial and have the data to back their claims on a small scale. Should more programs like these be integrated into schools or for youth at a young age, the skills developed could help changed the trajectory they are on.

Recommendation six is to recognize that this work is meaningful. Participants shared that when trying to get partnerships, many groups thought the idea sounds good but was not sold that there were true benefits to conducting these programs. These programs have been successful in institutions like health care facilities and correctional facilities. Participants shared that this work should be implemented as an intervention and not after an individual is incarcerated.

Implications of the Study

The aim of this research study was to identify best practices for community programs that implement HAI as an intervention for at-risk youth. As HAI continues to expand beyond medical and correctional facilities, non-profits and leaders in the community should have the knowledge and skills to successfully start and implement a community program with at-risk youth. As a

result of this study, strategies and best practices were identified, creating a best practice model for non-profits and community program leaders.

The Planning, Education, Safety, Assessment (PESA) Model for Community Programs (see Figure 15) is composed of four components (a) planning, (b) education, (c) safety, and (d) assessment. The four components of this model form the foundation that is necessary when starting a community program.

The first component is planning. When planning there are three components to focus on include: (a) identifying goals, (b) practicing clear and transparent communication, and (c) getting buy in from all the potential partners. During the planning phase, identifying the goal of your program is key. This will narrow your scope of focus. By identifying goals, you can then create and communicate with individuals about your mission and vision which would lead to buy-in. Like Arkow (1998) and the American Veterinary Medical Association (2011) suggest conduct a needs assessment and identify the goals first.

The second component to consider is education. For the second component, education, consider: (a) training and trainers, (b) getting a mentor from a similar program, and (c) doing research. Having training and well-trained individuals will be crucial to the program. There is a lot of risk and liability involved when working with youth and dogs. Working with a mentor or volunteering for similar structured program is valuable. By consulting individuals or organizations that have similar missions or run similar programs would allow you to gain insight and learn from their challenges and how they overcame those should you face an issue. Another piece is do your research. Review best practices and various types of HAI programs as well as the population you intend to serve. As Arkow (2010), Ascione (2005) and Fine (2010) suggested

humane education is an intervention that is purposeful and leads to improved human behavior as well as animal welfare.

The third component is safety which requires focuses on: (a) training and (b) getting access and working with professionals and consultants for both youth and dogs. Training is key for safety. Handlers and participants, youth and dogs, must be safe. So engage in safe handling practices are necessary. The last component is assessment. Assessment focuses on: (a) getting feedback from stakeholders and (b) using a data driven measurement tool to show benefits.

Application

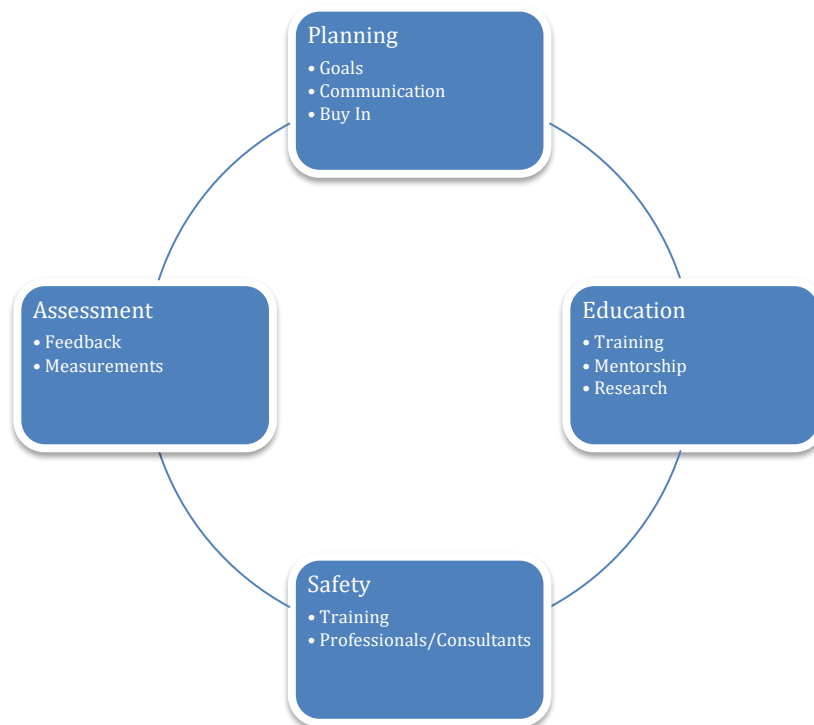
The Planning, Education, Safety, Assessment (PESA) Model for Community Programs provides a framework for current or future community program and non-profit organizers to successful start a HAI intervention with at risk youth. Arkow (1998) created a guidebook for health care professional on how to start a pet therapy program. Similarly, this model should be used as a manuscript for the important ideas to consider when starting a program focusing on at-risk youth. Many of the participants stated they had or had wished they connected with mentor from similar programs or had a manuscript of things to consider when starting a program. These four components were the most identified ideals that each participant touched on.

Of the 48 themes, planning, education, safety and assessments appeared in all 4 research questions. Planning of a program was a strategy used, as well as could be a challenge when considering participants, getting buy in and logistics. Education included humane education, training, collaboration and mentorship as well as research, which for many participants were challenges faced and had strategies for engaging. This research emphasizes some challenges faced by community programs. Furthermore, how they overcome challenges, the process for

identifying and tracking success and recommendations for other community programs. Various stakeholders can utilize the PESA model and this research study.

Figure 15

Planning, Education, Safety, Assessment (PESA) Model for Community Programs



Community Programs and Non-Profit Organizers

Working with animals and youth can be challenging. This study provides current and future community program or non-profit organizers an manuscript of the key components necessary to flesh out when implementing a program. Community programs and organizers can take this study, look at the research and benefits of these program. Furthermore, community programs and organizers can focus on the PESA model that identifies the best practices currently employed for success. PESA model, and the study overall, should be used to target key

components of implementing a successful program as these are the recommendations of program organizers that have been successful.

Universities and Colleges

Participants mentioned education and training numerous times. The findings of this study explain that there is a need to focus on training and education for community program facilitators, as well as all the stakeholders who are involved in the management and success of the program. Colleges and universities can utilize these findings further develop curriculum regarding animal related non profit management, as well as other animal related fields. Universities and colleges that have programs that focus on animals, veterinary medicine, zoology, non-profit management, child development, and psychology can share this information and model with students, should they be interested in starting a community program engaged in this work or joining an existing program to help continue better their organization practices.

Study Conclusion

This research provides a framework for best practices when using HAI as an intervention for at-risk youth. To accomplish this task, the researcher conducted a phenomenological study with 15 participants answering 14 open-ended semi-structured interview questions. The data were then collected, coded and analyzed for themes. The data resulted in informing the four research questions looking at (a) common strategies and practices used, (b) challenges faced when implementing a program, (c) ways to measure a successful program, and (d) any recommendations for others interested in starting an HAI program for at-risk youth. As a result, PESA (Planning, Education, Safety, and Assessment) Model was created to help individuals focus on the essentials when starting a program. Focusing on planning, education, safety and

assessment capture the essence of the key components that need to be in place to start and have a successful HAI program .

Recommendations for Future Research

This study focused on identifying best practices used by community programs when conducting HAI as an intervention with at-risk youth. The study sought to find the challenges faced by community programs and ways to overcome challenges experienced. Furthermore, the study sought to identify and assess successful progress, and what recommendations there are for others interested in starting a community program for at-risk youth. Given the nature of this study, certain areas are still available to research for future studies. Future researchers can contribute to the existing body of knowledge by conducting further studies on:

- Identifying measurements and scales to assess program benefits. This study could address what measurement or scales that could be used more commonly for community programs to obtain measurable data.
- Participant selection practices. This research study could focus on the practices used for selecting youth participants and how that affects outcomes.

There is a gap in practice for quantitatively and qualitatively collecting data and assessing the benefits of these programs. Looking at identify a standard measurement and scales for non-profit organizations that work with at-risk youth is necessary. Understanding that no participants share any common tools or questionnaires is concerning and further expresses the point that there is little research available around this topic. What would be an appropriate scale when implementing these programs? As for participant selection practices, the Delta Society does a good job identifying guidelines for animal and dog participants, however there are no guidelines for selecting or identifying youth that would benefit the most from these programs.

Final Thoughts

There are many factors to consider when implementing HAI as an intervention for at-risk youth. Planning, getting buy-in, and communication are all very important to implementing a successful HAI program with at-risk youth. Education for all stakeholders is vital prior to and during program to share and learn. Adhering to safe practices and having safety for all participants at the forefront of the programs is essential to the program being successful. Assessment of the program overall is critical as it leads to a variety of aspects like getting buy-in from participants, having data to support benefits and getting funding to expand and share these programs with more individuals.

Due to the nature of my personal experience with these types of programs, the findings and themes aligned strategies and challenges across the board of the organizations. Regardless of location and years of experience the individual had, and the organization has been conducting these program, challenges and practices were very much so aligned in their views with the exception of measurement tools. The consistency and commonalities of themes were interesting to see given the diversity of the participants and organizations. While many challenges are faced and should be considered when implementing HAI as an intervention for at-risk youth, the benefits outweigh the challenges and risk. This work is truly meaningful and impactful for those who engage and participate in these programs, both human and animal.

REFERENCES

- Adams, J. M. (2010). The role of animals and animal-assisted therapy in stressful life transitions. In T. W. Miller (Ed.), *Handbook of stressful transitions across the lifespan* (pp. 643-651). Springer.
- Ainsworth, M. D. S. (1963). The development of infant-mother interaction among the Ganda. In B.M. Foss (Ed.), *Determinants of infant behavior* (pp. 67-104). Wiley.
- Alberta, S. P. C. A. (2004) Humane education: An idea whose time has come. *AnimalWise*, 5(2), 4-5.
- Allen, K. M., Blascovich, J., Tomaka, J., & Kelsey, R. M. (1991). Presence of human friends and pet dogs as moderators of autonomic responses to stress in women. *Journal of Personality and Social Psychology*, 61(4), 582–589.
- Allen, K. M., Shykoff, B. E., & Izzo, J. L. (2001). Pet ownership, but not ACE inhibitor therapy, blunts home blood pressure responses to mental stress. *Hypertension*, 38(4), 815-820. <https://doi.org/10.1161/hyp.38.4.815>
- Allen, K. M., Blascovich, J., & Mendes, W. B. (2002) Cardiovascular reactivity and the presence of pets friends and spouses: the truth about cats and dogs. *Psychomatic Medicine*, 64, 727-739.
- American Veterinary Medical Association. (2011). *Animal-Assisted Intervention*. <https://www.avma.org/resources-tools/avma-policies/animal-assisted-interventions-definitions>
- American Veterinary Medical Association. (2020). *Human-Animal Bond*. http://www.avma.org/issues/human_animal_bond/default.asp
- Anderson, W. P., Reid, C. M., & Jennings, G. L. (1992). Pet ownership and risk factors for cardiovascular disease. *The Medical Journal of Australia*, 157(5), 298–301.
- Anderson, K. L., & Olson, M. R. (2006). The value of a dog in a classroom of children with severe emotional disorders. *Anthrozoos*, 19, 35–49.
- Animal & Society Institute. (2011). *Guidelines for animal-assisted activity, animal-assisted therapy and resident animal programs*. https://ebusiness.avma.org/files/productdownloads/guidelines_AAA.pdf
- Arkow, P. (1990). *Humane education*. American Humane Association.
- Arkow P. (1998). *How to start a "pet therapy" program: A guidebook for health care professionals*. The Humane Society of the Pikes Peak Region.

- Arkow, P (2003). *Breaking the cycles of violence.: A guide to multidisciplinary interventions*. Latham Foundation.
- Arkow, P (2010). Animal-assisted interventions and humane education: Opportunities for a more targeted focus. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice*, (pp. 457-475). Elsevier Academic Press.
- Ascione, F. R. (1992). Enhancing children's attitudes about the humane treatment of animals: Generalization to human-directed empathy. *Anthrozoos*, 5, 176-191. <https://doi.org/10.2752/089279392787011421>
- Ascione, F. R. (1997). Humane education research: Evaluating efforts to encourage children's kindness and caring toward animals. *Genetic, Social, and General Psychology Monographs*, 123, 55-57. www.researchgate.net
- Ascione, F. R. (2005). *Children and animals: Exploring the roots of kindness and cruelty*. Purdue University Press.
- Ascione F. R. & Arkow, P. (Eds.), (1999). *Child abuse, domestic violence and animal abuse: Linking the circles of compassion for prevention and intervention*. Purdue University Press.
- Aspen Education. 2013. *Dogs enhance copper canyon's animal-assisted therapy program*. <http://aspeneducation.crchealth.com/article-animal-assisted-therapy/>
- Axen, E. M. (2015). *Animal-assisted interactions: Impacts for at-risk youth*. Sophia, the St. Catherine University Repository. https://sophia.stkate.edu/msw_papers/416
- Baer, J., & Maschi, T. (2003). Random acts of delinquency: Trauma and self-destructiveness in juvenile offenders. *Child and Adolescent Social Work Journal*, 20(2), 85-98. <https://doi.org/10.1023/A:1022812630174>
- Banks, M. R., & Banks, W. A. (2005). The effects of animal-assisted therapy on loneliness in an elderly population in long-term care facilities. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 57, M428–M432. <https://doi.org/10.1093/gerona/57.7.M428>
- Barker, S. B., & Dawson, K. S. (1998). The effects of animal-assisted therapy on anxiety ratings of hospitalized psychiatric patients. *Psychiatric Services*, 49(6), 797-801. <https://doi.org/10.1176/ps.49.6.797>
- Barker, S. B., Rogers, C. S., Turner, J. W., Karpf, A. S., & Suthers-McCabe, H. M. (2003). Benefits of interacting with companion animals: A bibliography of articles published in refereed journals during the past 5 years. *American Behavioral Scientist*, 47(1), 94–99. <https://doi.org/10.1177/0002764203255215>

- Bartol, C. R., & Bartol, A. M. (2011). *Criminal behavior: A psychosocial approach*. (9th ed.). Prentice Hall.
- Batanova, M. D., & Loukas, A. (2011). Social anxiety and aggression in early adolescents: Examining the moderating roles of empathic concern and perspective taking. *Journal of Youth and Adolescence*, 40, 1534–1543. <https://link.springer.com/article/10.1007/s10964-011-9634-x>
- Bauman, A., Schroeder, J., Furber, S., & Dobson, A. (2001). The epidemiology of dog walking: An unmet need for human and canine health. *Medical Journal of Australia*, 175, 632–634. <https://europepmc.org/article/med/11837871>
- Baun, M., & Johnson, R. (2010) Human/animal interaction and successful aging. In A. H. Fine (Ed.), *The handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (3rd ed., pp. 283-299). Academic Press.
- Baun, M. M., Oetting, K. & Bergstrom, N. (1991). Health benefits of companion animals in relation to the physiologic indices of relaxation. *Holistic Nursing Practice*, 2, 16-23. https://journals.lww.com/hnpjournal/Citation/1991/01000/Health_benefits_of_companion_animals_in_relation.6.aspx
- Beard, W. (1984). Of people, pooches and prisons: Inmates train hand-dogs. *Dog World*, March 14-15.
- Beck, A. M. (2002). The use of animals to benefit humans: Animal-assisted therapy. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (pp. 21–40). Academic Press.
- Beck, A. M., & Katcher A. H. (1984). A new look at pet-facilitated therapy. *Journal of the American Veterinary Medicine*, 184(4), 414-421. <https://agris.fao.org/>
- Beck, A. M., & Katcher A. H. (2003). Future directions in human-animal bond research. *American Behavioral Science*, 47(1), 79-93. <https://doi.org/10.1177/0002764203255214>
- Beetz, A., Julius, H., Turner, D., Kotrschal, K. (2012). Effects of social support by a dog on stress modulation in male children with insecure attachment. *Frontiers in Psychology*, 3, 352. <https://doi.org/10.3389/fpsyg.2012.00352>
- Beetz, A., Kotrschal, K., Turner, D. C., Hediger, K., Uvnäs-Moberg, K., & Julius, H. (2011). The effect of a real dog, toy dog and friendly person on insecurely attached children during a stressful task: An exploratory study. *Anthrozoos*, 24(4), 349–368. <https://doi.org/10.2752/175303711X13159027359746>
- Benal, J. (2011). *The dog's trainer's complete guide to a happy, well-behaved pet*. St. Martin's Griffin.

- Benda, W., McGibbon, N., & Grant, K. (2003). Improvements in muscle symmetry in children with cerebral palsy after equine-assisted therapy. *Journal of Alternative and Complementary Medicine*, 9, 817–825.
- Bertaux, D. (1981). From the life-history approach to the transformation of sociological practice. In D. Bertaux (Ed.), *Biography and society: The life history approach in the social sciences* (pp.29-45). Sage.
- Bowlby, J. (1969). *Attachment and loss: Attachment*. Basic Books.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. Basic Books.
- Braun, C., Stangler, T., Narveson, J. & Pettingell, S. 2009. Animal-assisted therapy as a pain relief intervention for children. *Complementary Therapies in Clinical Practice*, 15, 105-109. <https://doi.org/10.1016/j.ctcp.2009.02.008>
- Bretherton, I. (1992). The origins of attachment theory: John Bowlby and Mary Ainsworth. *Developmental Psychology*, 28(5), 759-75. <https://psycnet.apa.org/doiLanding?doi=10.1037%2F0012-1649.28.5.759>
- Britton, D. M., & Button, A. (2005). Prison pups: Assessing the effects of dog training programs in correctional facilities. *Journal of Family Social Work*, 9(4), 79-95. https://doi.org/10.1300/J039v09n04_06
- Britton, D., & Button, A. (2007). “This isn’t about us:” Benefits of dog training programs in a women’s prison. 1-25. https://www.academia.edu/458692/_This_isnt_about_us_Benefits_of_dog_trainin_g_programs_in_a_womens_prison
- Bryant, B. K. (1990). The richness of the child-pet relationship: A consideration of both benefits and costs of pets to children. *Anthrozoos*. 3 .253-262. <https://doi.org/10.2752/089279390787057469>
- Budge, R. C., Spicer, J., Jones, B., St. George, R. (1998). Health correlates of compatibility and attachment in human-companion animal relationships. *Society & Animals*, 6(3), 219-234. <https://doi.org/10.1163/156853098X00168>
- Burger, E., Stetina, B. U., Turner, K., Lederman-Maman, T., Handlos, U., & Kryspin-Exner, I. (2009). Changes in emotion regulation and recognition in adolescents: Improvements during animal-assisted training. *Journal of Veterinary Behavior*, 4, 92-93. <https://www.sciencedirect.com/>
- Bush, C. A., Mullis, R. L., & Mullis, A. K. (2000). Differences in empathy between offender and non-offender youth. *Journal of Youth and Adolescence*, 29, 467–478. <https://doi.org/10.1023/A:1005162526769>

- Bustad, L. K. (1996). Reflections on the human-animal bond. *Journal of the American Veterinary Medical Association*, 208(2), 203-205.
<https://europepmc.org/article/med/8567373>
- Casey, J. T. (2011). *Horseback riding therapy for at-risk foster youth: A grant proposal* [Doctoral dissertation, California State University, Long Beach]. ProQuest Dissertation and Theses.
- Chandler, C. K. (2017). *Animal-assisted therapy in counseling*. Routledge.
- Charleson, S. (2010). *Scent of the missing*. Houghton Mifflin Harcourt.
- Charnetski, C. J., Riggers, S., & Brennan, F. X. (2004). Effect of petting a dog on immune system function. *Psychological Reports*, 95(3), 1087-1091.
<https://doi.org/10.2466/pr0.95.3f.1087-1091>
- Clutton-Brock, J. (1995). Origins of the dog: Domestication and early history. In J. Serpell (Ed.). *The domestic dog, its evolution, behavior and interactions with people* (pp. 7-20). Cambridge University Press: Cambridge.
- Cole, K. M., & Gawlinski, A. (2000). Animal-assisted therapy: the human-animal bond. *AACN Clinical Issues*, 11(1), 139–149. <https://doi.org/10.1097/00044067-200002000-00015>
- Cooke, B. J., & Farrington, D. P. (2016). The effectiveness of dog-training programs in prison: A systematic review and meta-analysis of the literature. *The Prison Journal*, 96(6), 854–876. <https://doi.org/10.1177/0032885516671919>
- Corson, S. A., Corson, E. O., Gwynne, P. H., & Arnold, L. E. (1975). Pet-facilitated psychotherapy in a hospital setting. In: J. H. Masserman (Ed.). *Current psychiatric therapies* (pp. 277-286). Hrune & Stratton.
- Chur-Hansen, A., McArthur, M., Winefield, H., Hanieh, E., & Hazel, S. (2014). Animal-assisted interventions in children's hospitals: A critical review of the literature. *Anthrozoos*, 27(1), 5–18. <https://doi.org/10.2752/175303714X13837396326251>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.
- Cournoyer, G. P., & Uttley, C. M. (2007). Cisco's kids: A pet assisted therapy intervention program. *Journal of Emotional Abuse*, 7(3), 117-126.
<https://doi.org/10.1080/10926798.2007.10766835>

- Daggett, H. (1792). The rights of animals: An oration delivered at the commencement of providence college, September 7, 1791, by Herman Daggett, Candidate for the Master's Degree. Sagg Harbour, NY: Frothingham.
- Damon, W. (2008). *The path to purpose: Helping our children find their calling in life*. Free Press, Simon & Schuster, Inc.
- Davis, K. (2007). Perspectives of youth in animal centered correctional vocational program: A qualitative evaluation of project pooch. [Paper Presented National Technology Assessment Conference on Animal Assisted Programs for Youth at Risk, Baltimore, MD.]
- Deaton, C. (2005). Humanizing prison with animals: A closer look at "cell dogs" and horse programs in correctional institutions. *Journal of Correctional Education*, 56(1), 46-62. <http://www.jstor.org/stable/23282783>
- DeGrave, J. (1999). People and animals learning: The PAL program. In F.R. Ascione & P. Arkow (Eds.), *Child abuse, domestic, violence, and animal abuse: Linking the circles of compassion for prevention and intervention* (pp.410-423) Purdue University Press.
- Delta Society. (1995). *Delta Society pet partners program home study course*. Delta Society.
- Delta Society. (1996). *Standards of practice for animal-assisted activities and therapy*. Delta Society.
- Delta Society. (2009). *Delta Society: The human animal health connection*. Delta Society.
- Dietz, E. F., O'Connell, D. J., & Scarpitti, F. R. (2003). Therapeutic communities and prison management: An examination of the effects of operating on in-prison therapeutic community levels of institutional disorder. *International Journal of Offender Therapy and Comparative Criminology*, 47(2), 210-223. <https://doi.org/10.1177/0306624X03251088>
- Dixon, A., Howie, P., & Starling, J. (2005). Trauma exposure, posttraumatic stress, and psychiatric comorbidity in female offenders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 44(8), 789-806. <https://doi.org/10.1097/01.chi.0000164590.48318.9c>
- Donaldson, J. (2005). *The culture clash* (2nd ed.). James & Kenneth Publishers.
- Eddy, J., Hart, L. A., & Boltz, R. P. (1988). The effects of service dogs on social acknowledgments of people in wheelchairs. *Journal of Psychology*, 122(1), 39-45.
- Endenburg, N., & van Lith, H. A. 2011. The influence of animals on the development of children. *The Veterinary Journal*, 190, 208-214. <https://doi.org/10.1016/j.tvjl.2010.11.020>

- Esposito, L., McCune, S., Griffin, J. A., & Maholmes, V. (2011). Directions in human–animal interaction research: Child development, health, and therapeutic interventions. *Child Development Perspectives*, 5, 205–211. doi:10.1111/j.1750-8606.2011.00175.x.
- Euler, F., Steinlin, C., & Stadler, C. (2017). Distinct profiles of reactive and proactive aggression in adolescents: Associations with cognitive and affective empathy. *Child and Adolescent Psychiatry and Mental Health*, 11, 1–14.
<https://doi.org/10.1186/s13034-016-0141-4>
- Ewing, C. A., MacDonald, P. M., Taylor, M., & Bowers, M. J. (2007). Equine-facilitated learning for youths with severe emotional disorders: A quantitative and qualitative study. *Child Youth Care Forum*, 36, 59-72.
<https://doi.org/10.1007/s10566-006-9031-x>
- Faver, C. A. (2010). School-based humane education strategy to prevent violence: Review and recommendations. *Children and Youth Services Review*, 32, 365-370.
- Fick, K. (1993). The influence of an animal on social interactions of nursing home residents in a group setting. *American Journal of Occupational Therapy*, 47(6), 529-534.
<https://doi.org/10.5014/ajot.47.6.529>
- Fine, A. H. (2006). Animals and therapists: Incorporating animals in outpatient psychotherapy. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy* (2nd ed., pp. 179-211). Academic Press. <https://doi.org/10.1016/B978-012369484-3/50012-8>
- Fine, A. H. (2008, September 30–October 2). Understanding the application of animal assisted interventions. [In *National institute of child and human development meeting on the impact of animals in human health*. Bethesda, MD.]
- Fine, A. H. (2010). Incorporating animal-assisted therapy into psychotherapy: Guidelines and suggestions for therapists. In A. H. Fine (Ed.), *The handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (3rd ed., pp. 169-191). Academic Press.
- Fine, A. H. (Ed.). (2015). *Handbook on animal-assisted therapy: Foundations and guidelines for animal-assisted interventions* (4th ed.). Elsevier Academic Press.
- Fine, A. H., & Eisen, C. J. (2008). *Afternoons with Puppy: Inspirations from a therapist and his animals*. Purdue University Press.
- Fine, A. H., & Mio, J. S. (2010). The role of animal assisted therapy in clinical practice: The importance of demonstrating empirically oriented psychotherapies. In A. H. Fine (Ed.), *Handbook on animal assisted therapy* (2nd ed., pp. 563–579). Academic Press.

- Forman, G. (2007). Teach your children well: How animals make kids better human beings. *The Latham Letter*, 28(1), 4.
- Fournier, A. K., Geller, E. S., & Fortney, E. V. (2007). Human-animal interaction in a prison setting: Impact on criminal behavior, treatment progress, and social skills. *Behavior and Social Issues*, 16(1), 89–105. <https://link.springer.com/article/10.5210/bsi.v16i1.385>
- Fredrickson, M., & Howie, A. R. (2006). Methods, standards, guidelines, and considerations in selecting animals for animal-assisted therapy: Part B: Guidelines and standards for animal selection in animal-assisted activity and therapy programs*. In A. H. Fine (Ed.), *Handbook on Animal-Assisted Therapy* (2nd ed., pp. 99-114). Academic Press. <https://doi.org/10.1016/B978-012369484-3/50008-6>
- Fredrickson-MacNamara, M., & Butler, K. (2010). Animal selection procedures in animal-assisted interaction programs. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice*. (3rd ed., p. 111-134). Academic Press.
- Friedmann, E., Katcher, A., & Meislich, G. (1980). Animal companions and one-year survival rate of patients after discharge from a coronary care unit. *Public Health Reports*, 95, 307-312.
- Friedmann, E., Katcher, A. H., Thomas, S. A., Lynch, J. J. & Messent, P. R. (1983). Social interaction and blood pressure: Influence of animal companions. *Journal of Nervous and Mental Disease*, 171(8), 461-465. <https://doi.org/10.1097/00005053-198308000-00002>
- Friedmann, E., & Tsai, C.C. (2006). The human-animal bond: Health and wellness. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* [2nd ed.] (pp. 95-117). Elsevier, Inc.
- Freund, A. M., & Baltes, P. B. (2002). Life-management strategies of selection, optimization and compensation: Measurement by self-report and construct validity. *Journal of Personality and Social Psychology*, 82, 642-662. [https://psycnet.apa.org/doiLanding? https://doi.org/10.1037%2F0022-3514.82.4.642](https://psycnet.apa.org/doiLanding?https://doi.org/10.1037/2F0022-3514.82.4.642)
- Freud, S. (1959). The interpretation of dreams, J. Strachey (Ed. And Trans.). Ney York Basic Books.
- Furst, G. (2006). Prison-based animal programs: A national survey. *The Prison Journal*, 86, 407-430. <https://doi.org/10.1177/0032885506293242>
- Furst, G. (2007). Without words to get in the way: Symbolic interaction in prison-based animal programs. *Qualitative Sociology Review*, III, 96-109. http://qsr.webd.pl/ENG/Volume6/QSR_3_1_Furst.pdf

- Galvin, S. L., & Herzog, H. A. (1992). The ethical judgement of animal research. *Ethics & Behavior*, 2(3), 262-286. https://doi.org/10.1207/s15327019eb0203_1
- Garrity, T. F. Stallones, L., Marx, M. B. & Johnson, T. P. (1987). Pet ownership and attachment as supportive factors in the health of elderly. *Anthrozoos*, 3(1), 35-43. <https://doi.org/10.2752/089279390787057829>
- Gebo, E., & Sullivan, C. J. (2014). A statewide comparison of gang and non-gang youth in public high schools. *Youth Violence and Juvenile Justice*, 12, 191–208. <https://doi.org/10.1177/1541204013495900>
- Gee, N. R., Harris, S. L., & Johnson, K. L. (2007). The role of therapy dogs in speed and accuracy to complete motor skills tasks for preschool children. *Anthrozoös*, 20(4), 375–386. <https://doi.org/10.2752/089279307X245509>
- Gestsdóttir, S., & Lerner, R. M. (2007). Intentional self-regulation and positive youth development in early adolescence: Findings from the 4-H Study of Positive Youth Development. *Developmental Psychology*, 43, 508-521. <https://doi.org/10.1037/0012-1649.43.2.508>
- Gestsdóttir, S., & Lerner, R. M. (2008). Positive development in adolescence: The development and role of intentional self-regulation. *Human Development*, 51, 202-224. <https://doi.org/10.1159/000135757>
- Gilger, C. (2007). *Cell dogs: No effect of dog training programs on prisoners' self-efficacy* (Publication No. 1451051) [Doctoral dissertation, Emporia State University] ProQuest Dissertation and Theses.
- Gillis, A., & Jackson, W. (2002). *Research methods for nurses: Methods and interpretation*. Davis Company.
- Giorgi, A. (1997). The theory, practice, and evaluation of the phenomenological method as qualitative research procedure. *Journal of Phenomenological Psychology*, 28(2), 235-260. <https://doi.org/10.1163/156916297X00103>
- Grandgeorge, M., & Hausberger, M. (2011). Human-animal relationships: from daily life to animal-assisted therapies. *Annali Dell'istituto Superiore Di Sanità*, 47(4), 397–408. https://doi.org/10.4415/ann_11_04_12
- Gray, D. E. (2013). *Doing research in the real world*. Sage.
- Gubrium, J., Holstein, J., Marvasti, A., & McKinney, K. (2012). *The Sage handbook of interview research: The complexity of the craft*. Sage.

- Gueguen, N., & Ciccotti, S. (2008). Domestic dogs as facilitators in social interaction: An evaluation of helping and courtship behaviors. *Anthrozoös*, 21(4), 339-349. <https://doi.org/10.2752/175303708X371564>
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108(4), 814-834. <https://psycnet.apa.org/doiLanding?doi=10.1037%2F0033-295X.108.4.814>
- Haidt, J. (2008). Morality. *Perspectives on Psychological Science*, 3, 65-72. <https://psycnet.apa.org/record/2010-03506-022>
- Halm, M. A. (2008). The healing power of the human-animal connection. *American Journal of Critical Care*, 17(4), 373–376. <https://doi.org/10.4037/ajcc2008.17.4.373>
- Hamama, L., Hamama-Raz, Y., Gadan, K., Greenfield, H., Rubinstein, C. & Ben-Ezra, M. (2011). A preliminary study of group intervention along with basic canine training among traumatized teenagers: a 3-month longitudinal study. *Children and Youth Services Review*, 33, 1975-1980. <https://doi.org/10.1016/j.childyouth.2011.05.021>
- Harbolt, T., & Ward, T. H. (2001). Teaming incarcerated youth with shelter dogs for a second chance. *Society and Animals*, 9(2), 177-182. <https://doi.org/10.1163/156853001753639279>
- Hardiman, D. (2010). Animal-assisted therapy in mental health. *The Society for Companion Animal Studies Journal*, 3, 14-17. http://www.scas.org.uk/wp-content/uploads/2013/03/SCASJournal_Aut10_PetsandMentalHealth.pdf
- Hare, B., Brown, M., Williamson, C., & Tomasello, M. (2002). Domestication of social cognition in dogs. *Science*, 298, 1634–1636.
- Harkrader, T., Burke, T. W., & Owen, S. S. (2004). Pound puppies: The rehabilitative uses of dogs in correctional facilities. *Corrections Today*, 66(2), 74-79. <https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=205437>
- Hart, L. A. (2006a). Psychosocial benefits of animal companionship. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy* (2nd ed., pp. 59-78). Academic Press. <https://doi.org/10.1016/B978-012369484-3/50006-2>
- Hart, L. A. (2006b). Methods, standards, guidelines, and considerations in selecting animals for animal-assisted therapy: Part A: Understanding animal behavior, species, and temperament as applied to interactions with specific populations. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy* (2nd ed., pp. 81-97). Academic Press. <https://doi.org/10.1016/B978-012369484-3/50007-4>

- Hart, L. A. (2010). Positive effects of animals for psychosocially vulnerable people: a turning point for delivery. In Fine, A. H., ed. *Handbook on animal assisted therapy: theoretical foundations and guidelines for practice*. (3rd ed., p. 547-571). Academic Press.
- Hart, L. A., Hart, B. L., & Bergin, B. L. (1987). Socializing effects of service dogs for people with disabilities. *Anthrozoös*, 1(1), 41–44. <https://doi.org/10.2752/089279388787058696>
- Haynes, M. (1991). Pet therapy: Program lifts spirits, reduces violence in institution's mental health unit. *Corrections Today*, 53, 120-122. <https://www.ojp.gov/ncjrs/virtual-library/abstracts/pet-therapy-program-lifts-spirits-reduces-violence-institutions>
- Hecht, L., McMillin, J. D., & Silberman, P. (2001). Pets, networks, and well-being. *Anthrozoös*, 14 (2), 95-108. <https://doi.org/10.2752/089279301786999517>
- Hediger, K., & Turner, D. C. (2014). Can dogs increase children's attention and concentration performance? A randomised controlled trial. *Human-Animal Interaction Bulletin*, 2, 21–39. <https://www.researchgate.net/>
- Hergovich, A., Monshi, B., Semmler, G., & Zieglmayer, V. (2002). The effects of the presence of a dog in the classroom. *Anthrozoös*, 15(1), 37–50. <https://doi.org/10.2752/089279302786992775>
- Herzog, H.A. (2010). *Some we love, some we hate, some we eat: Why it's so hard to think straight about animals*. Harper Collins Publishers.
- Herzog, H. A., & Golden, L. L. (2009). Moral emotions and social activism: The case of animal rights. *Journal of Social Issues*, 65(3), 485-498. <https://doi.org/10.1111/j.1540-4560.2009.01610.x>
- Hines, L. M. (2003). Historical perspectives on the human-animal bond. *The American Behavioral Scientist*, 47(1), 7-15. <https://doi.org/10.1177/0002764203255206>
- Hines, L., & Fredrickson, M. (1998). Perspectives on animal-assisted activities and therapy. In C. Wilson, & D. Turner (Eds.), *Companion animals in human health* (pp. 23-41). Sage. <http://dx.doi.org.stmarys-ca.idm.oclc.org/10.4135/9781452232959.n2>
- Holmes, A. E. (1988). Minimum temperament/behavioral criteria. Paper presented at the seventh annual Delta Society Conference, People, Animals and the Environment: Exploring Our Interdependence, Orlando, FL.
- Hooker, S. D., Freeman, L. H., & Stewart, P. (2002). Pet therapy research: A historical review. *Holistic Nursing Practices*, 17(1), 17-23. <https://journals.lww.com/hnpjournal/>
- Horsburgh, D. (2003). Evaluation of qualitative research. *Journal of Clinical Nursing*, 12(2):307-312. <https://doi.org/10.1046/j.1365-2702.2003.00683.x>

- Huetter, F. K., Bachmann, H. S., Reinders, A., Siffert, D., Stelmach, P., Knop, D., & Siffert, W. (2016). Association of a common oxytocin receptor gene polymorphism with self-reported “empathic concern” in a large population of healthy volunteers. *PLoS ONE*, 7, 1–13. <https://doi.org/10.1371/journal.pone.0160059>.
- Hunt, M., & Chizkov, R. R. (2014). Are therapy dogs like Xanax? Does animal-assisted therapy impact processes relevant to cognitive behavioral psychotherapy? *Anthrozoös*, 27(3) <https://doi.org/10.2752/175303714X14023922797959>
- Hurley, K. B. (2014). Development and human-animal interaction. *Human Development*, 57, 30-34. <https://doi.org/10.1159/000357795>
- International Association of Human-Animal Interaction Organizations (IAHAIO). (2019). IAHAIO position statement: Zoonoses and animal-assisted interventions. <https://iahaio.org/wp/wp-content/uploads/2019/10/zoonoses-and-aai-position-paper-final.pdf>
- International Association of Human-Animal Interaction Organizations. (2013). IAHAIO white paper: The IAHAIO definitions for animal assisted intervention and animal assisted activity and guidelines for wellness of animals involved. Author.
- Jalongo, M. R. (2015). An attachment perspective on the child-dog bond: interdisciplinary and international research findings. *Early Childhood Education Journal*, 43(5), 395–405. <https://doi.org/10.1007/s10643-015-0687-4>
- Jalongo, M. R. (2018). An attachment perspective on the child-dog bond: Interdisciplinary and international research findings. *Early Childhood Education Journal*, 43(5), 395–405. <https://doi.org/10.1007/s10643-015-0687-4>
- Jensen, J., Potter, C., & Howard, M. (2001). American juvenile justice: Recent trends and issues in youth offending. *Social Policy & Administration* 35, 48-68.
- Johnson, L. M. (2008). A place for art in prison: Art as a tool for rehabilitation and management. *Southwest Journal of Criminal Justice*, 5(2), 100-120. <https://web.a.ebscohost.com/>
- Johnson, R. A. Odendaal, J. S. & Meadows, R. L. (2002). Animal-assisted interventions research: Issues and answers. *Western Journal of Nursing Research*, 24(4), 422-440. <https://doi.org/10.1177/01945902024004009>
- Jolliffe, D., & Farrington, D.P. (2004). Empathy and offending: A systematic review and meta-analysis. *Aggression and Violent Behavior*, 9, 441-476. <https://doi.org/10.1348/135532506X147413>

- Julius, H., Beetz, A., Kotrschal, K., Turner, D., Uvnäs-Moberg, K. (2013). *Attachment to pets*. Hogrefe.
- Juvenile Justice Information Exchange. (2019). *Teens learn life skills training therapy dogs*. <https://jjie.org/2019/08/30/teens-learn-life-skills-training-therapy-dogs/>
- Kahn, P. H., Jr., Saunders, C. D., Severson, R. L., Myers, O. E., Jr., & Gill, B. T. (2008). Moral and fearful affiliations with the animal world: Children's conceptions of bats. *Anthrozoös*, 21(4), 375–386. <https://doi.org/10.2752/175303708X371591>
- Kaminski, M., Pellino, T., & Wish, J. (2002). Play and pets: The physical and emotional impact of child-life and pet therapy on hospitalized children. *Children's Health Care*, 31, 321 - 335. https://doi.org/10.1207/S15326888CHC3104_5
- Katcher, A, Beck, A. M. & Levine, D. (1989). Evaluation of a pet program in prison: The PAL project at Lorton. *Anthrozoös*, 2(3), 175-180. <https://doi.org/10.2752/089279389787058037>
- Katcher, A., Segal, H., & Beck, A. (1984). Contemplation of an aquarium for the reduction of anxiety. In R. K. Anderson, B. L. Hart, & L. A. Hart (Eds.), *The pet connection: Its influence on our health and quality of life* (pp. 171-178). University of Minnesota.
- Kaufmann, M. E., Beetz, A., Kinoshita, M., & Ross, S. (2015). Enhancing special education environments with animal-assisted interventions at Green Chimneys: Opportunities and practical considerations. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Foundations and guidelines for animal-assisted interventions* (4th ed., pp. 211–224). Elsevier.
- King, P. E., Carr, D., & Boitor, C. (2011). Religion, spirituality, positive youth development, and thriving. In R. M. Lerner, J. V. Lerner, & J. B. Benson (Eds.), *Advances in child development and behavior. Vol. 41: Positive youth development: Research and applications for promoting thriving in adolescence* (pp. 161–195). Academic.
- Kogan, L. (2020). Human animal interaction. *Society of Counseling Psychology*. <https://www.div17.org/sections/human-animal-interaction/>
- Kosonen, M. (1996). Siblings as providers of support and care during middle childhood: Children's perceptions. *Children & Society*, 10, 267-279. <https://doi.org/10.1111/j.1099-0860.1996.tb00595.x>
- Kruger, K. A., & Serpell, J. A. (2006). Animal-assisted interventions in mental health: Definitions and theoretical foundations. In A. H. Fine (Ed.), *Animal-assisted therapy: Theoretical foundations and guidelines for practice* (2nd ed., pp. 3-20). Elsevier.

- Kumar, R. (2014). *Research methodology: A step-by-step guide for beginners* (4th ed.). Sage.
- K9 Youth Alliance. (2020). <https://www.K9youthalliance.org>
- Lahav, S., Sarid, O., & Kantor, H. (2019). Effects of a dog-training intervention on at-risk youth. *Anthrozoos*, 32(4), 533–540. <https://doi.org/10.1080/08927936.2019.1621539>
- Lange, A., Cox, J., Bernert, D. & Jenkins, C. (2006). Is counseling going to the dogs? An exploratory study related to the inclusion of an animal in group counseling with adolescents. *Journal of Creativity in Mental Health*, 2(2), 17- 31. https://doi.org/10.1300/J456v02n02_03
- Laskowski, M., Winkle, M.Y., & Lucas Molitor, W. (2019) The meaning and motivation of children participating in animal-assisted therapy: A pilot study: People and animals. *The International Journal of Research and Practice*, 2(1) <https://docs.lib.purdue.edu/paij/vol2/iss1/1>
- Lefebvre, S. L., Golab, G. C., Christensen, E., Castrodale, L., Aureden, K., Bialachowski, A., Gumley, N., Robinson, J., Peregrine, A., Benoit, M., Card, M. L., Van Horne, L. & Weese, J. S. 2008. Guidelines for animal-assisted interventions in health care facilities. *American Journal of Infection Control*, 36(2), 78-85. <https://doi.org/10.1016/j.ajic.2007.09.005>
- Leininger, M. M. (1985). *Qualitative research methods in nursing*. Grune and Stratton.
- Lerner, R. M. (2006). Developmental science, developmental systems, and contemporary theories of human development. In W. Damon & R.M. Lerner (Eds.), *Handbook of child psychology* (pp. 1–17). Wiley.
- Lerner, R. M., Freund, A. M., De Stefanis, I., & Habermas, T. (2001). Understanding developmental regulation in adolescence: The use of the selection, optimization, and compensation model. *Human Development*, 44, 29-50. <https://doi.org/10.1159/000057039>
- Leve, L. D., & Chamberlain, P. (2004). Female juvenile offenders: Defining an early-onset pathway for delinquency. *Journal of Child and Family Studies* 13, 439–452. <https://doi.org/10.1023/B:JCFS.0000044726.07272.b5>
- Levinson, B. (1962). The dog as “co-therapist”. *Mental Hygiene*, 46, 59-65. <https://psycnet.apa.org/record/1963-01441-001>
- Levinson, B. M. (1965). Pet psychotherapy: Use of household pets in the treatment of behavior disorder in children. *Psychological Reports*, 17(3), 695-698. <https://doi.org/10.2466/pr0.1965.17.3.695>

- Levinson, B. M. (1969). *Pet-oriented child psychotherapy*. Thomas.
- Levinson, B. M. (1972). *Pets and human development*. Springfield, IL: Charles, C. Thomas
- Levinson, B. M. (1975). Forecast for the year 2000. In R. S. Anderson (Ed.), *Pet animals and society* (pp. 155-159). London: Bailliere Tindall.
- Levinson, B. M. (1978). Pets and personality development. *Psychological Reports*, 42, 1031-1038. <https://doi.org/10.2466/pr0.1978.42.3c.1031>
- Levinson, B., & Mallon, G. P. (1996). *Pet-oriented child psychotherapy* (2nd ed.). Charles C. Thomas.
- Lipton, D. S., Pearson, F. S., Cleland, C. M., & Yee, D. (2002). The effects of therapeutic communities and milieu therapy on recidivism: Meta-analytic findings from the correctional drug abuse treatment effectiveness (CDATE) study. In M. McGuire (Ed.), *Offender rehabilitation and treatment: Effective programmes and policies to reduce reoffending* (pp. 39-77). John Wiley & Sons.
- Locke, L., Silverman, S., & Spirduso, W. (2004). *Reading and understanding research* (2nd ed.). Sage.
- Lynne, M., Shaver, P. R., Collins, N. L. (1998). Attachment styles, emotion regulation, and adjustment in adolescence. *Journal of Personality and Social Psychology*, 74, 1380-1397. <https://doi.org/10.1037/0022-3514.74.5.1380>
- MacDonald, C. (2012). Understanding participatory action research: A qualitative research methodology option. *Canadian Journal of Action Research*. 13, 34-50. <https://doi.org/10.33524/cjar.v13i2.37>
- Mader, B., Hart, L. A., & Bergin, B. (1989). Social acknowledgements for children with disabilities: Effects of service dogs. *Child Development*, 60(6), 1529-1534. <https://doi.org/10.2307/1130941>
- Mallon, G. P. (1994). Some of our best therapists are dogs. *Child and Youth Care Forum*, 23(2), 89-101. <https://doi.org/10.1007/BF02209256>
- Mallon, G. P., Ross, S. B., & Ross, L. (2006). Chapter 6 - Designing and implementing animal-assisted therapy programs in health and mental health organizations. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy* [2nd ed.] (pp. 115-127). Academic Press. <https://doi.org/10.1016/B978-012369484-3/50009-8>
- Margolies, L. (1999). The long good-bye: Women, companion animals, and maternal loss. *Clinical Social Work Journal*, 27, 289-304. <https://doi.org/10.1023/A:1022894320225>

- Marks, S. G., Koepke, J. E., & Bradley, C. L. (1994). Pet attachment and generativity among young adults. *Journal of Psychology*, 128(6), 641–650.
<https://doi.org/10.1080/00223980.1994.9921292>
- Martin, F. & Farnum J. (2002). Animal-assisted therapy for children with pervasive developmental disorders. *Western Journal of Nursing Research*, 24, 657-670.
<https://doi.org/10.1177/019394502320555403>
- Martin, D., Martin, M., Dell, R., Davis, C., & Guerrieri, K. (2008). Profile of incarcerated juveniles: Comparison of male and female offenders. *Adolescence*, 43, 607-622.
<https://doi.org/10.1037/t06631-000>
- McConnell, P. B. (2002). *The other end of the leash: Why we do what we do around dogs*. Ballantine Books.
- McConnell, P. B. (2005). *For the love of a dog: Understanding emotion in you and your best friend*. Ballantine Books
- McNicholas, J., & Collis, G. M. (2000). Dogs as catalysts for social interaction: Robustness of the effect. *British Journal of Psychology*, 91, 61-70.
<https://doi.org/10.1348/000712600161673>
- Meloy, J. R. (2003). Pathologies of attachment, violence, and criminality. In A.M. Goldstein & I. R. Weiner (Eds.) *Handbook of psychology: Volume II Forensic psychology* (pp. 508-526). Wiley & Sons.
- Melson, G.F., Schwarz, R.I., & Beck, A.M. (1997). Importance of companion animals in children's lives: Implications for veterinary practice. *Journal of the American Veterinary Medical Association*, 211, 1512-1518.
- Melson, G. F. 2001. *Why the wild things are: animals in the lives of children*. London: Harvard University Press.
- Melson, G.F., & Fogel, A. (1989). Children's ideas about animal young and their care: A reassessment of gender differences in the development of nurturance. *Anthrozoös*, 2, 265-273.
- Melson, G. F., & Peet, S. H. (1988). Attachment to pets, empathy and self-concept in young children. Annual Meeting of the Delta Society, Orlando, USA.
- Merriam, S. (2001). *Discovering project pooch: A special program for violent incarcerated male juveniles*. Discover N' Education and Research.
- Merriam-Webster's Online Dictionary. (n.d.). *Best practices*.
<http://www.m-w.com/dictionary/bestpractices>

- Michalon, J., Langlade, L., & Gauthier, C. (2008). Points of view on research around interactions with animals for therapeutic and / or educational purposes: Summary. In A. Micoud & F. Charvolin F (Eds.). *Modys (UMR 5264 - CNRS)/ Fondation Adrienne & Pierre Sommer 2008, Paris, France*. <https://halshs.archives-ouvertes.fr/halshs-00671718>
- Moerer-Urdahl, T., & Creswell, J. (2004). Using transcendental phenomenology to explore the “Ripple Effect” in a leadership mentoring program. *International Journal of Qualitative Methods*, 3(2), 19-25. <https://doi.org/10.1177/160940690400300202>
- Moneymaker, J. M., & Strimple, E. O. (1991). Animals and inmates: A sharing companionship behind bars. *Journal of Offender Rehabilitation*, 16, 133-152. https://doi.org/10.1300/J076v16n03_09
- Morey, D. F. (2006). Burying key evidence: The social bond between dogs and people. *Journal of Archaeologic Science*, 33(2), 158–175. <https://doi.org/10.1016/j.jas.2005.07.009>
- Morrison, M. L. (2007). Health benefits of animal-assisted interventions. *Complementary Health Practice Review*, 12(1), 51-62. <https://doi.org/10.1177/1533210107302397>
- Moustakas, C. (1994). *Phenomenological research methods*. Sage.
- Morse, J. M. (1994). Designing funded qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 220-237). Sage.
- Mueller, M. (2014). Human-animal interaction as a context for positive youth development: A relational developmental systems approach to constructing human-animal interaction theory and research. *Human Development*, 57(1), 25-35. <https://doi.org/10.1159/000356914>
- Mullen, E. D. (2013). *Bonding behind bars: A rehabilitative program for juvenile and youthful offenders* (Publication No. 3591646) [Doctoral dissertation, University of Hartford]. ProQuest Dissertations and Theses.
- Myers, G. (2007). *The significance of children and animals: Social development and our connections to other species* (2nd rev ed.). Purdue University Press.
- Nathans-Barel, I., Feldman, P., Berger, B., Modai, I., & Silver, H. (2005). Animal-assisted therapy ameliorates anhedonia in schizophrenia patients. *Psychotherapy and Psychosomatics*, 74, 31-35. <https://doi.org/10.1159/000082024>
- Netting, F. E., Wilson, C. C., & New, J. C. (1987). The human-animal bond: Implications for practice. *Social Work*, 32(1), 60-64. <https://doi.org/10.1093/sw/32.1.60>

- New, J. C. (1995). *Quality of life of companion animals*. [Paper presented at the 7th International Conference on Human-Animal Interactions: Animals, Health and Quality of Life, Geneva, Switzerland].
- Oaklander, V. (2006). *Hidden treasure: A map to the child's inner self*. Karnac Books.
- O'Callaghan, D. 2008. *An exploratory study of animal-assisted interventions utilized by mental health professionals*. [Doctoral dissertation, Denton: University of North Texas]. ProQuest Dissertations and Theses.
- O'Connell, M. E., Boat, T., & Warner, K. E. (2009). *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities*. The National Academic Press.
- Odendaal, J. 2002. *Pets and our mental health: the why, the what and the how*. Vantage Press.
- Ormerod, E. (2008). Companion animals and offender rehabilitation: Experiences from a prison therapeutic community in Scotland. *Therapeutic Communities*, 29, 285-296. <http://www.greenfingersproject.com/>
- Overton, W. F. (2010). Life-span development: Concepts and issues. In W. R. Overton (Ed.), *Cognition, biology, and methods across the life span*: Vol. Human-Animal Interaction and PYD 1271, Handbook of life-span development. Editor in chief: R. M. Lerner. Wiley.
- Overton, W. F. (2011). Relational developmental systems and quantitative behavior genetics: Alternative of parallel methodologies. *Research in Human Development*, 8(3-4), 258-263. <https://doi.org/10.1080/15427609.2011.634289>
- Overton, W. F., & Müller, U. (2012). Meta-theories, theories, and concepts in the study of development. In R. M. Lerner, M.A. Easterbrooks, & J. Mistry (Eds.), *Comprehensive handbook of psychology: Developmental psychology* (Vol. 6, pp. 19–58). Editor-in-Chief: Irving B. Weiner. Wiley.
- Parish-Plass, N. (2008). Animal-assisted therapy with children suffering from insecure attachment due to abuse and neglect: A method to lower the risk of intergenerational transmission of abuse? *Clinical Journal of Child Psychology and Psychiatry*, 13(1), 7-30. <https://doi.org/10.1177/1359104507086338>
- Parshall, D. (2003). Research and reflection: animal-assisted therapy in mental health settings. *Counseling & Values*, 48(1), 47. <https://doi.org/10.1002/j.2161-007X.2003.tb00274.x>
- Patten, M. L., & Newhart, M. (2017). *Understanding research methods: An overview of the essentials*. Routledge.

- Paul, E. S., & Serpell, J. (1992). Why children keep pets: The influence of child and family characteristics. *Anthrozoos*, 5(4), 231-244. <https://doi.org/10.2752/089279392787011340>
- Payne, E., Bennett, P. C., & McGreevy, P. D. (2015). Current perspectives on attachment and bonding in the dog-human dyad. *Psychology Research and Behavior Management*, 8, 71–79. <https://doi.org/10.2147/prbm.s74972>
- Pearson, F. S., Lipton, D. S., Cleland, C. M., & Yee, D. S. (2002). The effects of behavioral/cognitive-behavioral programs on recidivism. *Crime & Delinquency*, 48(3), 476–496. <https://doi.org/10.1177/001112870204800306>
- Pecukonis, EV. (1990). A cognitive/affective empathy training program as a function of ego development in aggressive adolescent females. *Adolescence*, 25, 59-76. <https://search.proquest.com/openview/>
- Perkins-Dock, R. E. (2001). Family interventions with incarcerated youth: A review of the literature. *International Journal of Offender Therapy and Comparative Criminology*, 45, 606-625. <https://doi.org/10.1177/0306624X01455006>
- Pet Partners. (2019). <https://petpartners.org/blog/a-beginners-guide-to-animal-assisted-intervention-terminology/>
- Petty, N. J., Thomson, O. P., & Stew, G. (2012). Ready for a paradigm shift? Part 2: Introducing qualitative research methodologies and methods. *Manual Therapy*, 17(5), 378– 384. <https://doi.org/10.1016/j.math.2012.03.004>
- Pfau, H. (1990). *PAT at Huntington: A volunteer program of pet-assisted therapy, training manual*. Huntington Memorial Hospital.
- Pira, T., Stefanini, C., Meers, L., Normando, S., Samuels, W. E. & Odberg, F. (2010). A conceptual study about ‘animal-assisted interventions’ in Antwerp (Belgium). *Journal of Veterinary Behavior: Clinical Applications and Research*, 5(1), 49-50. <https://doi.org/10.1016/j.jveb.2009.09.024>
- Pichot, T., & Coulter, M. (2007). *Animal-assisted brief therapy: A solution-focused approach*. The Hawthorne Press.
- Poresky, R. H. (1990). The young children’s empathy measure: Reliability, validity and effects of companion animal bonding. *Psychological Reports*, 66, 931-936
- Prato, P. E., Custance, D. M., Spiezio, C., & Sabatini, F. (2003). Is the dog-human relationship an attachment bond? An observational study using Ainsworth’s strange situation. *Behaviour*, 140(2), 225-254. <https://www.jstor.org/stable/4536022>

- Prendergast, M. L., Farabee, D., Cartier, J. (2001). The impact of in-prison therapeutic community programs on prison management. *Journal of Offender Rehabilitation*, 32(3), 63–78. https://doi.org/10.1300/J076v32n03_05
- Privitera, G. J. (2017). *Research methods for the behavioral sciences* (2nd ed.). Sage.
- Prothmann, A., Bienert, M. & Ettrich, C. (2006). Dogs in child psychotherapy: Effects on state of mind. *Anthrozoos*, 19, 265-277. <https://doi.org/10.2752/089279306785415583>
- Randour, M. L. & Davidson, H. (2008). A common bond: Maltreated children and animals in the home- Guidelines for practice and policy. Englewood, CO: American Humane Association.
- Rathmann, C. (1999). Forget me not farm: Teaching gentleness with gardens and animals to children from violent homes and communities. In F.R. Ascione & P. Arkow (Eds.), *Child Abuse, Domestic Violence, and Animal Abuse: Linking the Circles of Compassion for Prevention and Intervention* (pp. 393-409). West Lafayette, IN: Purdue University Press.
- Reichert, E. (1998). Individual counseling for sexually abused children: a role for animals and storytelling. *Child and Adolescent Social Work Journal*, 15(3), 177-185. <https://doi.org/10.1023/A:1022284418096>
- Rieffe, C., & Camodeca, M. (2016). Empathy in adolescence: Relations with emotion awareness and social roles. *British Journal of Developmental Psychology*, 34(3), 340–353. <https://doi.org/10.1111/bjdp.12133>
- Riggio, R. E. (1986). Assessment of basic social skills. *Journal of Personality and Social Psychology*, 51, 649-660. <https://doi.org/10.1037/0022-3514.51.3.649>
- Risley-Curtiss, C. (2010). Social work practitioners and the human-companion animal bond: A national study. *Social Work*, 55(1), 38-46. <https://doi.org/10.1093/sw/55.1.38>
- Rosenfeld, L. B., Richman, J. M., & Bowen, G. L. (1998). Low social support among at risk adolescents. *Social Work in Education*, 20, 245-260. <https://doi.org/10.1093/cs/20.4.245>
- Ross, S. B. (1999). Green chimneys: We give troubled children the gift of caring. In F. R. Ascione & P. Arkow (Eds.), *Child Abuse, Domestic Violence, and Animal Abuse: Linking the Circles of Compassion for Prevention and Intervention* (pp.367-379). West Lafayette, IN: Purdue University Press.
- 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. <https://www.redalyc.org/pdf/337/33750210.pdf>
- Rugaas, T. (2006). *On Talking Terms With Dogs: Calming Signals*, 2nd ed. Dogwise publishing.

- Ruiter, C., van IJzendoorn, M. H., Wetenschappen, I. P. (1993). Attachment and cognition: A review of the literature. *International Journal of Educational Research*, 19, 525–540. <https://hdl.handle.net/1887/1462>
- Sable, P. (2008). What is adult attachment? *Clinical Social Work*, 36, 21-30. <https://doi.org/10.1007/s10615-007-0110-8>
- Sakai, J. (2012). *Attachment theory and the therapeutic relationship: Implications for equine facilitated psychotherapy (EFP) and the human-animal bond* (Publication No. 1549013) [Doctoral dissertation, Pepperdine University]. ProQuest Dissertations and Theses Global.
- Salmon, I. M., Salmon, P.W., Hogarth-Scott, R.S. & Lavelle, R.B. (1982). A dog in residence: A companion-animal study undertaken in the Caulfield geriatric hospital. *The Lathan Letter*, 4, 6-13. Joint Advisory Committee on Pets in Society (JACOPIS), Melbourne, Australia.
- Salvatore, L. (2016). *The healing power of pets: the benefits of animal-assisted therapy*. <https://www.northwell.edu/behavioral-health/programs-services/early-treatment-program/blog/the-healing-power-of-pets-the-benefits-of-animal-assisted%20therapy>
- Schafer, K. (2002). Human-animal interactions as a therapeutic intervention. *Counseling and Human Development*, 34, 1-18.
- Schatz, J. N., Smith, L. E., Borkowski, J. G., Whitman, T. L., & Keogh, D. A. (2008). Maltreatment risk, self-regulation and maladjustment in at-risk children. *Child Abuse & Neglect*, 32(10), 972-982. <https://doi.org/10.1016/j.chiabu.2008.09.001>
- Schneider, M. S., & Harley, L. P. (2006). How dogs influence the evaluation of psychotherapists. *Anthrozoös*, 19(2), 128–142. <https://doi.org/10.2752/089279306785593784>
- Serpell, J. A. (1991). Beneficial effects of pet ownership on some aspects of human health and behaviour. *Journal of the Royal Society Medicine*, 84(12), 717–720.
- Serpell, J. A. (2000). Creatures of the unconscious: Companion animals as mediators. In A. L. Podberscek, E. S. Paul, & J.A. Serpell (Eds.), *Companion animals and us* (pp. 108-121). Cambridge, UK: Cambridge University Press.
- Serpell, J. A. (2010). Animal companions and human well-being: An historical exploration of the value of human-animal relationships. In A. H Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (3rd ed., pp. 17-32). Academic Press.

- Serpell, J. A. (2014). *C-BARQ: Canine behavioral assessment & research questionnaire*. Penn Veterinary Medicine. <http://vetapps.vet.upenn.edu/cbarq/>
- Siegel, J. (1990) Stressful life events and use of physician services among the elderly: The moderating role of pet ownership. *Journal of Personality and Social Psychology* 58, 1081–1086
- Shallcross, L. (2011). Counselor's best friend. *Counseling Today*, 8. <http://ct.counseling.org/2011/08/counselors-best-friend/>
- Shiloh, S., Sorek, G., & Terkel, J. (2003). Reduction of state-anxiety by petting animals in a controlled laboratory experiment. *Anxiety, Stress, and Coping*, 16(4), 387–395. <https://doi.org/10.1080/1061580031000091582>
- Shamay-Tsoory, S. G. (2011). The neural bases for empathy. *The Neuroscientist*, 17(1), 18–24. <https://doi.org/10.1177/1073858410379268>
- Sherman, B. L., & Mills, D. S. (2008). Canine anxieties and phobias: an update on separation anxiety and noise aversions. *Veterinary Clinics of North America: Small Animal Practice*, 38(5):1081. <https://doi.org/10.1016/j.cvsm.2008.04.012>
- Simpson, J. A. & Weiner, E. S. C. (1989). *The oxford English dictionary* (2nd ed.). Oxford: Clarendon Press.
- Shafton, A. (1995). *Dream reader: Contemporary approaches to the understanding of dreams*. Albany, NY: SUNY Press.
- Smith, B. P. (2019). The domestic dog: its evolution, behavior and interactions with people. second edition. *Anthrozoös*, 32(5), 719–722. <https://doi.org/10.1080/08927936.2019.1645518>
- Snyder, H. N., & Sickmund, M. (2006). *Juvenile offenders and their victims: 2006 national report*. Office of Juvenile Justice and Delinquency Prevention. U.S. Department of Justice.
- Souter, M. A., & Miller, M. D. (2007). Do animal-assisted activities effectively treat depression? A meta-analysis. *Anthrozoos*, 20(2), 167-180. <https://doi.org/10.2752/175303707X207954>
- Stetina, B. U., Turner, K., Burger, E., Glenk, L. M., McElheney, J. C., Handlos, U., & Kothgassner, O. D. (2011). Learning emotion recognition from canines? Two for the road. *Journal of Veterinary Behavior*, 6, 108-114. <https://doi.org/10.1016/j.jveb.2010.11.004>
- Strimble, E. O. (2003). A history of prison inmate-animal interaction programs. *The American Behavioral Scientist*, 47(1), 70-78. <https://doi.org/10.1177/0002764203255212>

- Syzmanski, T., Casey, R. J., Johnson, A., Cano, A., Albright, D., & Seivert, N. P. (2018). Dog training intervention shows social-cognitive change in the journals of incarcerated youth. *Frontiers in Veterinary Science*, 5, 302. <https://doi.org/10.3389/fvets.2018.00302>
- Te-Riele, K. (2006). Youth “at risk”: Further marginalizing the marginalized? *Journal of Education Policy*, 21(2), 129–145. <https://doi.org/10.1080/02680930500499968>
- Terpin, J. L. (2004). *Exploring the human-animal bond in an animal-assisted therapy program for at-risk youth*. (Publication No. 3131347) [Doctoral dissertation, Antioch New England Graduate School]. ProQuest Dissertations and Theses.
- Thomas, J. (2013). *Human animal interactions as an intervention with at-risk youth: assessing the change in cognition, emotional intelligence and empathy*. (Publication No. 3599245) [Doctoral dissertation, The Chicago School of Professional Psychology]. ProQuest Dissertations and Theses.
- Thompkins, S. M., & Schwartz, R. C. (2009). Enhancing resilience in youth at risk: Implications for psychotherapists. *Annals of American Psychotherapy Association*, 12, 32-39. <https://web.a.ebscohost.com/>
- Thompson, J. A. (2013). *Exploring best practices in animal-assisted therapy with children in the Western Cape / J.A. Thompson*. (Thesis). North-West University. Retrieved from <http://hdl.handle.net/10394/9706>
- Thompson, K. L. & Gullone, E. (2003). Promotion of empathy and prosocial behaviors in children through humane education. *Australian Psychologist*, 38, 175-182. <https://doi.org/10.1080/00050060310001707187>
- Topal, J., Miklosi, A., Csanyi, V., & Doka, A. (1998). Attachment behavior in dogs (*Canis familiaris*): A new application of Ainsworth’s strange situation test. *Journal of Comparative Psychology*, 112(3), 219–229. <https://doi.org/10.1037/0735-7036.112.3.219>
- Triebenbacher, S. L. (1998). The relationships between attachment to companion animals and self-esteem: A developmental perspective. In D. C. Turner, & C. C. Wilson (Eds.). *Companion animals in human health* (pp. 135-148). Sage.
- Trotter, K. (2012). *Harnessing the power of equine assisted counseling: adding animal assisted therapy to your practice*. Routledge.
- Tsai, C. C., Friedmann, E., & Thomas, S. A. (2010). The effect of animal-assisted therapy on stress responses in hospitalized children. *Anthrozoos*, 23(3), 245–258. <https://doi.org/10.2752/175303710X12750451258977>

- Tsimicalis, A., Stinson, J., & Stevens, B. (2005). Quality of life of children following bone marrow transplantation: Critical review of the research literature. *European Journal of Oncology Nursing*, 9(3), 218–238. <https://doi.org/10.1016/j.ejon.2004.08.006>
- Turiel, E. (1998). The development of morality. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology. Vol. 3: Social, emotional, and personality development* (5th ed., pp. 863–932). Wiley.
- Turner, W. (2007). The experiences of offenders in a prison canine program. *Federal Probation*, 71(1), 38-43. <https://heinonline.org/>
- Udell, M. A. R., & Brubaker, L. (2016). Are dogs social generalists? Canine social cognition, attachment, and the dog-human bond. *Current Directions in Psychological Science*, 25(5), 327–333. <https://doi.org/10.1177/0963721416662647>
- U.S. Department of Health and Human Services. (2001). *Youth violence: A report of the surgeon general*. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute of Mental Health.
- Urichuk, L. J., & Anderson, D. (2003). Improving mental health through animal assisted therapy. The Chimo Project.
- Vahedi, S. (2010). World Health Organization quality-of-life scale (WHOQOL-BREF): Analyses of their item response theory properties based on the graded responses model. *Iranian Journal of Psychiatry*, 5, 140–153. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3395923/>
- van der Horst, F. C. P., LeRoy, H. A., & van der Veer, R. (2008). “When strangers meet”: John Bowlby and Harry Harlow on attachment behavior. *Integrated Psychology & Behavior*, 42, 370-388. <https://doi.org/10.1007/s12124-008-9079-2>
- VanFleet, R. (2006). *Group play therapy techniques: Training manual*. Boiling Springs, PA: Play Therapy Press.
- VanFleet, R. (2007). *Preliminary results from the ongoing pet play therapy study*. Play Therapy Press. http://play-therapy.com/playfulpooch/pets_study.html
- Vanfleet, R. (2008). *Play therapy with kids & canines*. Professional Resource Press.
- VanFleet, R. (2014). *What It Means to Be Humane in Animal-Assisted Interventions*. The APDT Chronicle of the Dog, Fall, 18-20.
- VanFleet, R. & Faa-Thompson, T. (2010). The case for using animal assisted play therapy. *British Journal of Play Therapy*, 6, 4-18. <http://www.bapt.info/journalofplaytherapy.htm>

- VanFleet, R., & Faa-Thompson, T. (2014). Including animals in play therapy with young children and families. In M. R. Jalongo (Ed.), *Teaching compassion: Humane education in early childhood* (pp. 89–107). Springer.
- VanFleet, R., & Faa-Thompson, T. (2015). Animal-assisted play therapy. In D. A. Crenshaw, & A. L. Stewart (Eds.), *Play therapy: A comprehensive guide to theory and practice* (pp. 201–214). Guilford.
- van Manen, M. (2014). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. Left Coast Press.
- Vallet, C., André Nicolas, Gentet, J.-C., Verschuur, A., Michel Gérard, Sotteau Frédéric, Grélot Laurent. (2015). Pilot evaluation of physical and psychological effects of a physical trek programme including a dog sledding expedition in children and teenagers with cancer. *Ecancermedicalscience*, 9, 549-576.
<https://doi.org/10.3332/ecancer.2015.558>
- Vidović, V. V., Štetić, V. V., & Bratko, D. (1999). Pet ownership, type of pet, and socio-emotional development of school children. *Anthrozoös*, 12(4), 211-217.
- Waiblinger, S., Boivin, X., Pedersen, V., Tosi, M. V., Janczak, A.M, Visser, E. K., & Jones, R.B. (2006). Assessing the human-animal relationship in farm species: A critical review. *Applied Animal Behaviour Science*, 101(3-4), 185-242.
<https://doi.org/10.1016/j.applanim.2006.02.001>
- Wallace, S. A., Neilands, T. B., & Sanders Phillips, K. (2017). Neighborhood context, psychological outlook, and risk behaviors among urban African American youth. *Cultural Diversity and Ethnic Minority Psychology*, 23(1), 59–69.
<https://doi.org/10.1037/cdp0000108>
- Walsh, F. (2009). Human-animal bonds I: The relational significance of companion animals. *Family Process*, 48(4), 462-480. <https://doi.org/10.1111/j.1545-5300.2009.01296.x>
- Walsh, P. G., & Mertin, P. G. (1994). The training of pets as therapy dogs in a women's prison: A pilot study. *Anthrozoös*, 7(2), 124-128.
<https://doi.org/10.2752/089279394787002014>
- Weaver, S. (2015). *Prison animal training programs: Attachment theory as an explanation for changes in inmate behavior* (Publication No. 3738471) [Doctoral dissertation, Northcentral University]. ProQuest Dissertations and Theses.
- Wells, D. L. (2004). The facilitation of social interactions by domestic dogs. *Anthrozoös*, 17(4), 340–352. <https://doi.org/10.2752/089279304785643203>

- Wilson, E. O. (1984). *Biophilia*. Harvard University Press
- Wilson, D. B., Gottfredson, D. C., & Najaka, S. S. (2001). School-based prevention of problem behaviors: A metaanalysis. *Journal of Quantitative Criminology*, 17(3), 247–272.
- Wohlfarth, R., Mutschler, B., Beetz, A., Kreuser, F., & KorstenReck, U. (2013). Dogs motivate obese children for physical activity: Key elements of a motivational theory of animal assisted interventions. *Frontier Psychology*, 4, 796.
<https://doi.org/10.3389/fpsyg.2013.00796>
- Wolff, A. I., & Frishman, W. H. (2005). Animal-assisted therapy in cardiovascular disease. *Seminars in Integrative Medicine*, 2, 131-134.
<https://doi.org/10.1016/j.sigm.2005.01.004>
- Zaff, J. F., Hart, D., Flanagan, C. A., Youniss, J., & Levine, P. (2010). Developing civic engagement within a civic context. In R. M. Lerner (Ed-in-chief), M. E. Lamb, & A. M. Freund (Vol. Eds.), *The handbook of life-span development: vol 2. social and emotional development* (pp. 590-630). Wiley
- Zarrett, N., Peltz, J., Fay, K., Li, Y., & Lerner, R. M. (2007). Sports and youth development programs: Theoretical and practical implications of early adolescent participation in multiple instances of structured out-of-school (OST) activity. *Journal of Youth Development*, 2
<http://jyd.pitt.edu/ojs/jyd/article/view/357>
- Zasloff, R. L. (1996). Measuring attachment to companion animals: A dog is not a cat is not a bird. *Applied Animal Behaviour Science*, 47, 43-48.
- Zasloff, R. L., Hart, L. A., & Weiss, J. M. (2003). Dog training as a violence prevention tool for at-risk adolescents. *Anthrozoös*, 16(4), 352–359.
<https://doi.org/10.2752/089279303786992044>
- Zimmerman, S., Phelps, E., & Lerner, R. M. (2007). Intentional self-regulation in early adolescence: Assessing the structure of selection, optimization, and compensations processes. *European Journal of Developmental Science*, 1, 272-299. <https://doi.org/10.3233/DEV-2007-1310>

APPENDIX A

CITI Human Subjects Training Certification



Completion Date 16-Sep-2020
Expiration Date 16-Sep-2023
Record ID 35997244

This is to certify that:

Jai Oni Sly

Has completed the following CITI Program course:

MSOD Human Subjects Training (Curriculum Group)
MSOD Human Subjects Training (Course Learner Group)
1 - Basic Course (Stage)

Not valid for renewal of certification
through CME. Do not use for
TransCelerate mutual recognition
(see Completion Report).

Under requirements set by:

Pepperdine University

CITI
Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?wf4cd20db-f80a-433f-8ae1-b26a7eb67f91-35997244

APPENDIX B

IRB Approval Notice



Pepperdine University
24255 Pacific Coast Highway
Malibu, CA 90263
TEL: 310-506-4000

NOTICE OF APPROVAL FOR HUMAN RESEARCH

Date: February 10, 2021

Protocol Investigator Name: Jai'oni Sly

Protocol #: 20-10-1452

Project Title: Best Practices for Non-Profit Organization Using Human-Animal Interactions as an Intervention with At-Risk Youth

School: Graduate School of Education and Psychology

Dear Jai'oni Sly:

Thank you for submitting your application for exempt review to Pepperdine University's Institutional Review Board (IRB). We appreciate the work you have done on your proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations 45 CFR 46.101 that govern the protections of human subjects.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an amendment to the IRB. Since your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite the best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete written explanation of the event and your written response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* at community.pepperdine.edu/irb.

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require clarification of the contents of this letter, please contact the IRB Office. On behalf of the IRB, I wish you success in this scholarly pursuit.

Sincerely,

Judy Ho, Ph.D., IRB Chair

cc: Mrs. Katy Carr, Assistant Provost for Research

APPENDIX C

Social-Behavioral Adult Participant Informed Consent

IRB #: 20-10-1452

Participant Study Title:

Best Practices for Non-Profit Organization Using Human-Animal Interactions as an Intervention
with At-Risk Youth

Authorized Study Personnel

Principal Investigator: Jai Oni Sly, MA

Secondary Investigator: Farzin Madjidi, Ph.D. Office

Key Information:

Should you agree to participate in this study, the project will involve:

- ☐ 1 virtual visit are required
- ☐ The visit will take an amount of 1 hour total
- ☐ There is minimal risk associated with this study
- ☐ There is no compensation for your participation
- ☐ A copy of this consent form will be provided

Invitation

You are invited to take part in this research study. The information in this form is meant to help you decide whether or not to participate. If you have any questions, please ask the principal investigator.

Why are you being asked to be in this research study?

You are being asked to be in this study because you are either a program director, executive director or educational director for a non-profit organization/community program that uses dogs for Human-Animal Interaction as an intervention with at-risk youth. You must be 18 years of age or older to participate.

What is the reason for doing this research study?.

The purpose of this study is to review the successful strategies that community programs when working with the at-risk youth population. The challenges faced and how these type of community programs measure their success are also important purposes of these research to review. Participants shared successful strategies, how success is measured as well as challenges and recommendations for other community programs that work with the at-risk youth population.

What will be done during this research study?

You will be asked 13 interview questions. The interview process should take approximately 1 hour to complete via a video conference platform (i.e. Zoom or Google Meet). The interview will be audio recorded. All audio recordings will be stored on a local drive and will be destroyed following transcription..

How will my [data/samples/images] be used?

Your interview responses will be sent to researchers within Pepperdine University for coding purposes. Any personal information that could identify you will be removed before the transcriptions are shared.

What are the possible risks of being in this research study?

There is minimal risk associated with this study. The participant runs the risk of feeling fatigue, boredom, or discomfort with some of the questions or the nature of the questions. Should the participant feel any of these feelings, they are welcome to pause or stop altogether.

While the PI strives to keep all documentation confidential, there is always a potential for there to be a security and/or data breach.

What are the possible benefits to you?

You are not expected to get any benefit from being in this study.

What are the possible benefits to other people?

There may be potential benefits that can possibly impact society and the business and education sectors at large by understanding benchmarks, strategies for success, and challenges that leaders face in their respective fields. Further, the findings of this study can provide an opportunity for ongoing research, training, development, and understanding in the respective fields.

What are the alternatives to being in this research study?

An alternative is to decline participating or answering interview questions you feel comfortable answering.

What will participating in this research study cost you?

There is no cost to you to be in this research study.

Will you be compensated for being in this research study?

You will not be compensated for your participation

What should you do if you have a problem during this research study?

A major concern of every member of the research team is your welfare. If a problem arises as a direct result of being in this study, immediately contact one of the people listed at the beginning of this consent form.

How will information about you be protected?

Reasonable steps will be taken to protect your privacy and the confidentiality of your study data.

The data and audio recordings will be stored electronically on a secure flash drive, located in a locked cabinet and will only be seen by the research team during the study and for 3 years after the study is complete.

The only persons who will have access to your research records are the study personnel, the Institutional Review Board (IRB), and any other person, agency, or sponsor as required by law. The information from this study may be published in scientific journals or presented at scientific meetings but the data will be reported as group or summarized data and your identity will be kept strictly confidential.

What are your rights as a research subject?

You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study.

For study related questions, please contact the investigator(s) listed at the beginning of this form.

For questions concerning your rights or complaints about the research contact the Institutional Review Board (IRB):

Phone: 1(310)568-2305

E-mail: gpsirb@pepperdine.edu

What will happen if you decide not to be in this research study or decide to stop participating once you start?

You can decide not to be in this research study, or you can stop being in this research study (“withdraw”) at any time before, during, or after the research begins for any reason. Should you decide not to be in this research study or decide to withdraw will not affect your relationship with the investigator or with Pepperdine University. You will not lose any benefits to which you are entitled.

Documentation of informed consent

Your participation in this study is completely voluntarily. Signing this form means that you have (1) read and understood this consent form, (2) had the consent form explained to you, (3) had your questions answered and (4) decided to be in the research study. A copy of this consent form will be given to you to keep.

Participant Feedback Survey

To meet Pepperdine University's ongoing accreditation efforts and to meet the Accreditation of Human Research Protection Programs (AAHRPP) standards, an online feedback survey is included below:

<https://forms.gle/nnRgRwLgajYzBq5t7>

Participant

Name:

(First, Last: Please Print)

Participant

Signature:

Signature

Date

Investigator certification:

My signature certifies that all elements of informed consent described on this consent form have been explained fully to the subject. In my judgment, the participant possesses the capacity to give informed consent to participate in this research and is voluntarily and knowingly giving informed consent to participate.

Signature of Person Obtaining Consent

Date

APPENDIX D

Recruitment Script

Dear [Name],

My name is Jai Oni Sly, and I am a doctoral student in the Graduate School of Education and Psychology at Pepperdine University. I am conducting a research study examining community programs (non-profit organizations) that use Human-Animal Intervention as an intervention for at-risk youth and you are invited to participate in the study. If you agree, you are invited to participate in an interview to share your view best practices for community programs that use HAI as an intervention for at-risk youth.

The interview is anticipated to take no more than 60 minutes to complete. I am requesting that the interview be audio-recorded. Participation in this study is voluntary. Your identity as a participant will remain anonymous and confidential during and after the study. To ensure confidentiality, your identity will be protect by use of a pseudonym. All recordings will remain on a flash drive in a locked storage and destroyed after three years.

If you have questions or would like to participate, please contact me at jaioni.sly@pepperdine.edu

Thank you for your participation,

Sincerely,
Jai Oni Sly
Doctoral Student
Pepperdine University, Graduate School of Education and Psychology

APPENDIX E

Interview Protocol

Icebreaker: What is your role and how did you get involved in the community program?

IQ 1: What is the purpose of the community program and how does the purpose manifest itself within the program?

IQ 2: What elements should be in place for a successful program?

IQ 3: What are some common practices for selecting youth participants?

IQ 4: What are some common practices for selecting dog participants?

IQ 5: What is the single biggest challenge you face in implementing HAI?

IQ6: Based on your experience does the length of the program influence outcomes?

IQ 7: What obstacles have you faced when implementing a program?

IQ 8: How do you handle attachment during a program?

IQ 9: How do you handle lack of engagement?

IQ 10: How do you define a successful program?

IQ 11: In what ways do you know that participants are benefiting from the program?

IQ 12: What measures & procedures do you use when conducting pre-surveys and post-surveys?

IQ 13: What suggestions do you have for others interested in starting a community program for at-risk youth?

IQ 14: Is there anything else you'd like to add?

APPENDIX F

Peer Reviewer Form

Dear Reviewer:

Thank you for agreeing to participate in my research study. The table below is designed to ensure that may research questions for the study are properly addressed with corresponding interview questions.

In the table below, please review each research question and the corresponding interview questions. For each interview question, consider how well the interview question addresses the research question. If the interview question is directly relevant to the research question, please mark “Keep as stated.” If the interview question is irrelevant to the research question, please mark “Delete it.” Finally, if the interview question can be modified to best fit with the research question, please suggest your modifications in the space provided. You may also recommend additional interview questions you deem necessary.

Once you have completed your analysis, please return the completed form to me via e-mail to jaioni.sly@pepperdine.edu. Thank you again for your participation.

Research Question	Corresponding Interview Question
<p>RQ1: What success strategies and practices do community programs employ when implementing HAI as an intervention with at-risk youth?</p>	<p>IQ 1: What is your community programs’ purpose and how does that manifest in your programs?</p> <p style="margin-left: 40px;">a. The question is directly relevant to Research question - Keep as stated</p> <p style="margin-left: 40px;">b. The question is irrelevant to research question – Delete it</p> <p style="margin-left: 40px;">c. The question should be modified as suggested:</p> <p>_____</p> <p>_____</p> <p>I recommend adding the following interview questions:</p> <p>_____</p> <p>_____</p> <p>IQ 2: What elements need to be in place for a successful community program?</p> <p style="margin-left: 40px;">a. The question is directly relevant to Research question - Keep as stated</p> <p style="margin-left: 40px;">b. The question is irrelevant to research question – Delete it</p> <p style="margin-left: 40px;">c. The question should be modified as suggested:</p>

Research Question	Corresponding Interview Question
	<hr/> <hr/> <p>I recommend adding the following interview questions:</p> <hr/> <hr/> <p>IQ 3: What are some practices used when selecting youth participants and dogs for programs?</p> <p>a. The question is directly relevant to Research question - Keep as stated</p> <p>b. The question is irrelevant to research question – Delete it</p> <p>c. The question should be modified as suggested:</p> <hr/> <hr/> <p>I recommend adding the following interview questions:</p> <hr/> <hr/>
RQ2: What challenges are faced by community programs when implementing HAI as an intervention with at-risk youth at-risk youth?	<p>IQ 4: Does the length of the programs play a factor in the outcomes?</p> <p>a. The question is directly relevant to Research question - Keep as stated</p> <p>b. The question is irrelevant to research question – Delete it</p> <p>c. The question should be modified as suggested:</p> <hr/> <hr/> <p>I recommend adding the following interview questions:</p> <hr/> <hr/> <p>IQ 5: What obstacles have you faced when trying to implement a program with the at-risk youth population?</p> <p>a. The question is directly relevant to Research question - Keep as stated</p>

Research Question	Corresponding Interview Question
	<p>b. The question is irrelevant to research question – Delete it</p> <p>c. The question should be modified as suggested:</p> <p>_____</p> <p>_____</p> <p>I recommend adding the following interview questions:</p> <p>_____</p> <p>_____</p> <p>IQ 6: How do you handle issues of attachment or lack of engagement during a program?</p> <p>a. The question is directly relevant to Research question - Keep as stated</p> <p>b. The question is irrelevant to research question – Delete it</p> <p>c. The question should be modified as suggested:</p> <p>_____</p> <p>_____</p> <p>I recommend adding the following interview questions:</p> <p>_____</p> <p>_____</p>
RQ3: How do community programs measure the success of their practices?	<p>IQ 7: How do you define a successful community program?</p> <p>a. The question is directly relevant to Research question - Keep as stated</p> <p>b. The question is irrelevant to research question – Delete it</p> <p>c. The question should be modified as suggested:</p> <p>_____</p> <p>_____</p> <p>I recommend adding the following interview questions:</p> <p>_____</p> <p>_____</p>

Research Question	Corresponding Interview Question
	<p>IQ 8: In what ways do you know that the youth are benefiting from HAI?</p> <ol style="list-style-type: none"> The question is directly relevant to Research question - Keep as stated The question is irrelevant to research question – Delete it The question should be modified as suggested: <hr/> <hr/> <p>I recommend adding the following interview questions:</p> <hr/> <hr/> <p>IQ 9: What measures do you use when conducting pretest/posttest with youth participants?</p> <ol style="list-style-type: none"> The question is directly relevant to Research question - Keep as stated The question is irrelevant to research question – Delete it The question should be modified as suggested: <hr/> <hr/> <p>I recommend adding the following interview questions:</p> <hr/> <hr/>
RQ4:What recommendations would community programs have when implementing HAI as an intervention with at-risk youth?	<p>IQ 10: What suggestions do you have for others trying to start a community program that works with at-risk youth?</p> <ol style="list-style-type: none"> The question is directly relevant to Research question - Keep as stated The question is irrelevant to research question – Delete it The question should be modified as suggested: <hr/> <hr/> <p>I recommend adding the following interview questions:</p> <hr/> <hr/>

Research Question	Corresponding Interview Question
	<p>IQ 11: Is there anything else you would like to add?</p> <ul style="list-style-type: none"> a. The question is directly relevant to Research question - Keep as stated b. The question is irrelevant to research question – Delete it c. The question should be modified as suggested: <hr/> <hr/> <p>I recommend adding the following interview questions:</p> <hr/> <hr/>