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EXPLORING THE PERCEPTIONS OF FACULTY AND STAFF REGARDING THE  
IMPACT A FACILITY DOG HAS ON ELEMENTARY STUDENTS' LEARNING  
ENVIRONMENT

By

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A DISSERTATION

Presented to the Affiliated Faculty of  
The College of Graduate and Professional Studies  
at the University of New England

Submitted in Partial Fulfillment of Requirements  
For the degree of Doctor of Education

It was presented on  
2/22/2022  
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EXPLORING THE PERCEPTIONS OF FACULTY AND STAFF REGARDING THE  
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**Abstract**

Over the past decade there has been a drastic increase in students' reporting and exhibiting feelings of overwhelming anxiety, depression, anger, and disengagement in the school setting (Relevette, 2020). To better appreciate these increases, one must first grasp the notion that two-thirds of school-aged students are experiencing toxic-stress, also known as long-term stress, on a daily basis. Toxic stress has been directly related to the halting of brain development in children (Rossen, 2020).

These experiences, often referred to as Adverse Childhood Experiences (ACEs), are various traumatic events children have been victims of, or directly exposed to, during their first seventeen years of life. The underlying effects of these events have left students unable to engage in their learning environment, thus changing the dichotomy of school, the role of the teacher, and the effectiveness of the classroom (Rossen, 2020).

Noddings (1984) ethics of care theory, suggests that when a caring relationship or encounter occurs, the cared-for recognizes the caring and responds in some detectable manner. Supporting Noddings theory (1984), Bustad's Human-Animal Bond theory (HAB) (1984), along with Maslow's hierarchy of needs (1943) theory, the practice of using pets as support

mechanisms to those with physical, mental, and social struggles (Fine, 2019) should be common practice in all school settings (Bradley, 2013).

A case study design was used to conduct this study. One administrator, three teachers, and three support staff from the research site were interviewed to gain their perspective and hear their observations regarding the impact a facility dog had on elementary student's engagement in their learning environment. Interviews were conducted via Zoom®, transcribed using Otter.ai®, and coded using Atlas.ti®. Findings supported a gap in literature pertaining to the use of a facility dog in a school setting to assist students with their mental health challenges, thus increasing their engagement in their learning environment.

The results of this study confirmed that a facility dog improved relationships among all stakeholders in the building. Any and all students that had the opportunity and the desire to interact with the facility dog were observed to be happier and more engaged in school. In addition, the decrease in anxiety, angry outbursts, and students that typically were unable to remain in school for an entire day due to extreme sadness was noted. The seven participants interviewed shared their personal and professional experiences and all felt strongly that the presence of a dog helped the entire school community; young and old.

*Keywords: Learning Environment, Facility Dog, Human-Animal Bond, Intervention, Maslow's Hierarchy of Needs, Social-Emotional Needs, Special Education*

## DEDICATION

To my husband Brian, who knew before I did that I could actually do this. Thank you for all that you do for me every day. I love you so much.

To Clayton; I hope your *old mom* inspires you to believe in yourself . . .  
especially when what may seem impossible really isn't;

To my family and friends who lived this journey alongside me;

To all the animals in my life that made me who I am today and inspired me to share my story  
and finally,

To “Lucy”, my amazing Borderdoodle that inspired me to share the power of a dog’s love,  
support, and companionship with our most precious asset—our kids.

## **In memory**

To Dad. While writing my admission essay for this program in April of 2019, you sat right next to me providing me with silent strength, all while watching the oyster farmers coast up and down the Damariscotta River and noting the beauty of the landscape. I wish we could have finished this journey together.

## ACKNOWLEDGMENTS

To Dr. Gizelle Luevano, my lead advisor who kept me moving forward. Your availability to chat when I had questions and immediate written feedback made the end of this journey manageable.

To Dr. Grinnell Smith, my second advisor, who gave me critical feedback to make this study the best it could be.

To Dr. Frank McCabe Jr., my affiliate, who has been in “my corner” since my first day on the job ten years ago. Every day we strive to make life better for children. As fellow dog-lovers we understand and believe that the human-animal bond may provide love and support for students who may not otherwise get any.

To Dr. Heather Wilmot for *living this* journey with me.

To Julia Levensaler, Steve Nolan, and the nine participants who supported this study. This would not have happened without any of you trusting the vision I had.

To the members of our school board that believed in this idea and changed the district policy to allow facility dogs in schools.

To my fellow colleagues at school who gave me the opportunity to try “Finnie Fridays” and then expand it to “Tilla Tuesdays.” These mini-experiences morphed into this study; ultimately welcoming a full-time dog to join our staff and making our school really special.

To Beth. There are no words. Thank you.

Lastly, *The Gigos*. Pro, Heather, Kim, Dennis, and Todd. How lucky were we to be placed together with Gizelle! Thanks for the support, Google Meets, and laughs. See you on stage.



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## **CHAPTER 1**

### **INTRODUCTION**

Over the past decade there has been a drastic increase in students' reporting and exhibiting feelings of overwhelming anxiety, depression, anger, and disengagement in the school setting (Relevette, 2020). Although a certain amount of stress is normal when entering school at any age, many students in elementary school are expected to navigate daily school expectations or events without the necessary emotional language to describe the way they are feeling or the strategies they may need to manage those feelings (Chandler, 2017). The lack of skills and knowledge mentioned above are often manifested through physiological symptoms such as fatigue, anxiety, depression, or disengagement (Crouch et al., 2019; Weber et al., 2019). To better understand the increase in student anxiety and disengagement in school, one must first understand that in the past decade students' exposure to Adverse Childhood Experiences (ACEs) has changed the dichotomy of schools, their classrooms, and the role of the teacher.

ACEs are described as traumatic events that children between the ages of zero through 17 experience and are linked to chronic health problems, mental illness, and substance use problems in adulthood (CDC, 2020). Though there are 10 criteria associated with ACEs, children who have experienced four or more ACEs often suffer from toxic stress (long-term stress), which can change or even halt brain development (Rossen, 2020). This phenomenon has a direct impact on children's inability to maintain and manage their attention span, make long-term health decisions, process information, and form stable relationships (CDC, 2020). Extended exposure to adverse or traumatic events causes the brain to experience toxic stress, thus limiting the body's ability to regulate emotion and well-being (Center for Youth Wellness, 2017; Crouch et al., 2019).

Felitti et al., 1998; Rossen, 2020). As adults, the long-term effects of trauma may cause unstable work situations, financial struggles, and depression (CDC, 2020).

Increased levels of students experiencing ACEs have changed the composition of the classroom (Rossen, 2020). In addition to the number of students who have experienced ACEs, homework, peer pressure, image concerns, social-media participation and exposure, as well as family financial worries, all account for the increasing numbers of students experiencing social and emotional dysregulation (Gudmundsen et al., 2018).

According to the Center for Disease Control and Prevention (CDC) (2020) students between the ages of six to 11 experience feelings of anxiety and depression. Data presented on the CDC website (2020) indicates that currently 2% of elementary students are diagnosed with depression while 6.5% are diagnosed with anxiety. Children in this age range often struggle to articulate the way they are feeling because they lack the emotional language necessary to convey meaning. When this occurs, students find other ways to express their emotions by displaying somatization, feeling anxious or overwhelmed, and exhibiting negative behaviors (Mullen, 2018). Until emotional dysregulation characteristics are recognized and addressed, and self-sustaining coping skills can be taught in the school setting, students' self-worth and academic performance will be impacted (Harris, 2018; Walker, 2019).

Although there is not one strategy that will assist students in adopting successful coping strategies, it is important to explore new interventions and ways to assist students socially, emotionally, and academically to meet the unique needs of elementary school students who face adversity. In her book, *Care*, Noddings (1984, 2012), suggests happiness is one of the highest aspirations of education and schools must design programs of study that will enable students to fulfil their potential with dignity (Alexander, 2013; Stone, 2019). Her ethics of care theory



supports the notion that when a caring relation or encounter occurs, the cared-for recognizes the caring and responds in some detectable manner. Supporting Noddings theory (1984), the practice of using pets as support mechanisms to those with physical, mental, and social struggles (Correale et al., 2017; Fine, 2019) should be considered as a school practice as well (Bradley, 2013). A study analyzed by Pedersen et al. (2019) found that depression and anxiety in students often co-occur and are the most pervasive disorders in children between the ages of eight through 10 years of age. Their findings indicated there is growing data that links associations between internalizing symptoms (anxiety, depression, and disengagement) and school functioning. This longitudinal study (Pedersen et al., 2019), conducted from 2000 through 2014, including schools in Norway, Europe, and the United States, indicated that students diagnosed as highly anxious when entering first grade struggled academically and remained low academically, while their anxiety and depression symptoms increased through their eighth-grade year.

Public schools in the United States are more than just buildings where learning occurs. While they are filled with nurturing adults and inquisitive and active students for nine months of each year, they provide safe spaces, warm meals, physical and mental health services, and outreach support to families all year long (Lewallen et al., 2015). What was once a space for learning reading, writing, and arithmetic in their most simplistic forms has morphed into a learning environment that consists of eight content areas that are guided by rigorous standards.

Initiatives, specifically No Child Left Behind (NCLB) Act (2002), The Common Core State Standards (CCSS) (2009), and Every Student Succeeds Act (ESSA) (2015), caused great concern to those who were expected to deliver the required material (Weingarten et al., 2018). Frustrated by the regulations imposed, the increasing expectations on teachers, and the subsequent stress that is passed down to students, it is clear that schools need to take a deep look

at their social-emotional supports. Due to this, educators who believed their role would be to teach reading, writing, math, and history are now expected to provide mental-health support by creating and following complex accommodations and interventions for students. While the majority of teachers understand students' social-emotional needs are more extensive than past years, and are willing to support students (Relevette, 2020), their concerns revolve around the lack of training regarding the mental health well-being of students, as well as the amount of time during the school day to address students' complex needs with fidelity and competence (Jones, 2020). When students receive their diploma, one expects that all recipients have met the minimal requirements to navigate their future. It is not until this time, when some fail to launch into *adulthood* successfully, that schools realize that many students do not have the level of skills or knowledge they need to thrive in the outside world (Rossen, 2020).

Humans and animals have been bonding for centuries (Grier, 2006). Until the industrial revolution (1850), farmers relied on their team of horses or oxen to plow, plant, and harvest crops to earn a living and survive. In kind, the working animal teams relied on the farmer to feed, water, and take care of their physical needs (Fine, 2019), making the relationship cyclical in nature. It has only been within the past three decades that research, supporting the use of animals to assist with cognitive, emotional, physical, and academic needs of people, young and old, has become a popular practice (Fine, 2019). The presence of dogs has become increasingly popular in both the private and corporate sector (Friesen, 2009; Hall & Mills, 2019) but there is little empirical research supporting how a dog may impact mainstream students in their school learning environment to decrease their anxiety, depression, anger, and school engagement while supporting their academic needs. With an increase in studies regarding the impact pets have on adults in private and public organizations to increase work production, climate, culture, and

rehabilitation rates, the next logical step would be to introduce appropriate pets in private and public organizations to support students in the mainstream learning environment (Ehmke, 2021; Grajfoner et al., 2017), not just those in specialized programs.

According to Brelsford et al. (2017), a systematic review of 21 peer-reviewed journals, using various methods and designs, show “promising findings and emerging evidence suggestive of potential benefits related to animals in school settings” (p. 1). Within this particular systematic review only three studies did not study a specific population of students for a specific purpose. The paucity of data regarding the use of dogs in elementary schools for all students, regardless of individual academic or social needs, economic status, or grade have not been conducted and merit further investigation.

In Chapter 1, I have introduced my potential study that explores the perceptions of teachers, educational technicians, administrative assistants, custodians, kitchen staff, and administration regarding the impact a facility dog has on elementary students’ learning environment. In addition, I have described the problem, purpose, theoretical and conceptual framework, assumptions, limitations, and the scope and significance involved to complete this research. In addition, the study’s research questions are posed, and a definition of terms section is provided.

### **Statement of the Problem**

Approximately two-thirds of children in the United States under the age of 16 have experienced ACEs and struggle to attend and engage in school mentally and physically (Spring, 2021). These struggles are directly linked to myriad adversities (Harris, 2018), including living in extreme poverty, experiencing various forms of physical or emotional trauma or abuse, forced

to live with extended family members due to addiction, and incarceration of immediate family members (Rossen, 2020).

Along with these personal challenges, there is an increase in academic rigor set forth by the Common Core State Standards (CCSS) (2009) and Every Student Succeeds Act (ESSA) (2015). States are struggling to fund their budget needs, which means trouble for schools, since states contribute about half of all public-school funding nationwide (Jackson, 2020). To complicate matters, COVID-19 has deferred tax revenues, while steep increases in spending on unemployment, insurance, social-welfare programs, and emergency services continue. Taxpayers supporting districts expect school budgets to remain flat or decrease (Nolan & Miller, 2019), yet the academic, social services, and mental health needs continue to increase. With these challenges, school leaders, along with their stakeholders, must create innovative interventions that support students' complex social-emotional needs to assist in decreasing stress and anxiety while keeping costs low. In this study, faculty and staff observations provided an opportunity to explore the human-animal bond that occurs between elementary school students and a facility dog and how that bond may provide interventions that assist students in accessing their education.

### **Purpose of the Proposed Study**

The purpose of this qualitative, phenomenological descriptive case study was to explore whether the presence of a facility dog in an elementary school may help support students' emotional needs by decreasing the feeling of anxiety and depression and thus improving student engagement. This study sought to address a gap in the literature related to the use of a facility dog in schools. Specifically, there is a paucity of research regarding the use of a facility dog to

help regulate stress and promote healthy emotional wellness to a population pre-kindergarten through sixth grade (Wein, 2020). Most of the research conducted by large organizations regarding the Human-Animal Bond theory (HAB), both domestically and internationally, focus on the effect animals have working directly with students in specialized classrooms, as cognitive therapy assistants, nursing home comfort companions during palliative care, as well as tools to assist in correctional rehabilitation services (Fine, 2019). Through the literature review it was determined that many studies were conducted regarding animals used in school settings, but they focused specifically on behavior regulation, reading fluency support, and encouraging socialization of the intellectually disabled (Boe, 2008; Elksnin & Elksnin, 2003; Esteves & Stokes, 2008; Hergovich et al., 2002; Jalongo et al., 2004; Kortschal & Ortbauer, 2003).

### **Research Questions**

The following research questions were answered:

RQ1: What observed emotional responses does a facility dog elicit from students in an elementary school learning environment through the perceptions of faculty and staff?

RQ2: In what ways do observed student emotional responses to a facility dog help or hinder students in their learning environment?

### **Theoretical and Conceptual Frameworks**

The theoretical framework that supported this study was the Human-Animal Bond (HAB) (Bustad, 1983) theory. This theory describes the unique relationships that are formed between people and animals (Grier, 2006; Fine, 2019) and the benefits this relationship has on both entities. The conceptual framework that supported this study was Maslow's Hierarchy of Needs (1943) theory. This theory suggests that human needs are organized in a hierarchy

arranged in five tiers. Maslow's belief that the first tier, the basic needs tier, must be satisfied prior to meeting the next tier with the ultimate goal of accessing tier five, self-actualization (McLeod, 2018).

### **Human-Animal Bond (HAB) Theory**

Although the human-animal connection has shown mutual benefits for both human and animal over the past 500 years (Grier, 2006), this relationship has evolved by gaining a better understanding that animals provide physical and emotional security rather than being a tool used to support survival (Fine, 2019). The relationship between humans and animals goes back to the Paleolithic Era. Just recently a drawing of a pig, nearly 45,000 years-old, was discovered in Indonesia (Wei-Hass, 2021), supporting the idea that humans and animals have relied on one another, but the term human-animal bond (HAB) did not enter scholarly discourse until 1979 (Turner et al., 2010). Two pioneers in the HAB field discussed this human/animal phenomenon and it was coined (Fine, 2019). According to the American Veterinary Medical Association:

The human-animal bond is a mutually beneficial and dynamic relationship between people and animals that is influenced by behaviors essential to the health and well-being of both. This includes, among other things, emotional, psychological, and physical interactions of people, animals, and the environment. (2022, para. 1)

Fine (2019) notes the phenomenon of the human-animal bond was coined by Levinson (1907–1984), and Bustad (1920–1998). Bustad admittedly *borrowed* the term human-animal bond from the much-studied mother-infant bond, finding the relationship between the two significant and worthy of association (Pet Partners, 2020).

Boris Levinson, a child psychologist, often considered the *father* of Animal-Assisted Therapy (AAT) discovered, quite accidentally, the role a dog's presence had on building and

maintaining relationships with his young clients, when his dog, Jingles, enthusiastically participated in some of his most complicated therapy sessions. He quickly discovered that his most challenging children were willing to converse and open up to him almost immediately because their attention was fixed on the dog rather than him. The client-doctor role was reshaped, and a new practice was pursued (Fine, 2019).

Jingles helped shift the client's anxiety to one that allowed them to listen and respond. The relationship that evolved between Jingles and young clients ended with the children trusting Levinson quickly because Jingles trusted and showed affection to him. In 1962, at the annual American Psychological Association convention in New York, Levinson shared with his professional colleagues his story regarding Jingles serving in a "co-therapist" role. After sharing his findings, and encouraging his colleagues to consider this new practice, not yet named, he was nearly laughed off the podium (Schilp, 2019). Levinson coined the term *pet-therapy* in 1964 while continuing to use Jingles in his practice. Due to the great success using a dog to share the relationship with children he wrote two books, *Pet-Oriented Child Psychotherapy* (1969) and *Pets and Human Development* (1972) to encourage others to try the practice he found so beneficial to children.

Dr. Leo Bustad, one of the founders and the first president of the Delta Society, now known as Pet Partners, was instrumental in researching, writing, and presenting the findings on the HAB and presenting these findings in accredited journals such as *Anthrozoos* (1987), a journal he helped establish, as well as the International Association of Human-Animal Interaction Organizations (1990). In addition to his two books, *Animals, Aging, and the Aged* and *Compassion: Our Last Great Hope*, Dr. Bustad co-authored *Learning and Living Together:*

*Building the Human-Animal Bond* and contributed more than 200 academic articles during his career (O'Hara, 2020).

The Leo K. Bustad Papers (1912–2005), a collection of Bustad's work as well as work conducted prior to his HAB theory is currently archived at the Washington State University library. This collection, consisting of his research, professional papers, correspondence, personal papers, and audiovisual materials provides an in-depth look at his life-long work as well as his personal interest regarding companion animals, animal-assisted therapy, and human-animal interaction (McLeod, 2018). There is no doubt that Bustad's work significantly contributed to the understanding of the changing role of companion animals in Western societies (O'Hara, 2020).

Although Animal Assisted Therapy (AAT), Animal Assisted Interaction (AAI), and Animal Assisted Education (AAE) had been used for years after Levinson and Bustad coined the phrase, it was not considered a practice to use it as a therapeutic option until 1983 (Fine, 2019). The HAB theory is recognized as not only a partnership that provides emotional and physical support for their human companions but that also helps humans regulate their behaviors by providing unconditional support and love (Fine, 2019). The study of the HAB (1983) continues to expand as humans use animals to help increase their quality of life. Scholars from across continents have collaborated to provide a comprehensive electronic bibliography and repository of materials to support the ongoing research pertaining to the positive impact animals can have on humans as well as the bond animals form with their human counterparts (Fine, 2019). Although there have been myriad anecdotal testimonials regarding the importance of animals in our day-to-day lives, it has just been recently that more randomized controlled trials (RCTs) are being conducted (Fine, 2019).

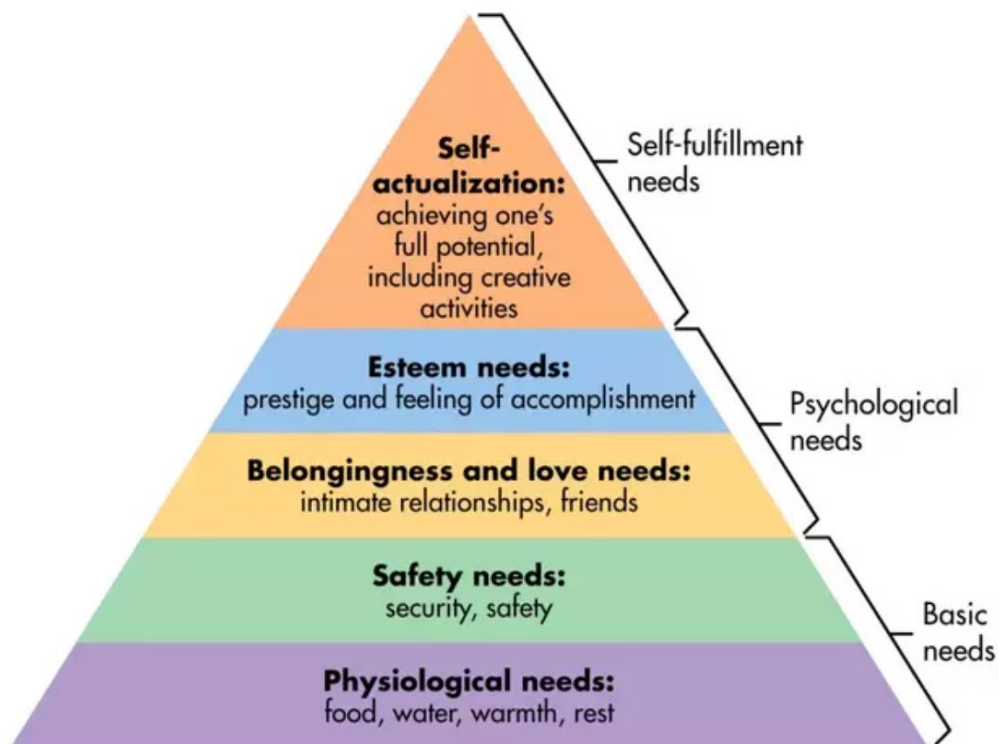


## Maslow's Hierarchy of Needs

The conceptual theory, Maslow's Hierarchy of Needs (1943), was conducted at the same time his esteemed colleagues Erikson's stages of psychosocial development theory (1958; 1963) and Rogers's self-actualization theory (1959) were being developed. Maslow (1943) suggests, through his research, that for humans to achieve their highest level of potential, the self-actualization phase, they must move through four previous tiers of physical, social, and emotional phases (McLeod, 2020). A visual representation of these tiers (Figure 1), developed by Maslow (1943) depicts the five tiers in their hierarchical order.

**Figure 1**

*Maslow's Hierarchy of Needs Pyramid (1943)*



*Note:* Five-Tiered Pyramid Developed by Abraham Maslow (1943) to depict hierarchy of needs

The first four tiers in his model are considered *deficiency needs tiers* or D-tiers, while the fifth and top tier is labeled the *growth needs tier*. The first two tiers, labeled the basic needs tiers, specifically identify physiological and physical safety requirements that must be met prior to accessing the next set of tiers. According to Crandell et al. (2020), recent models demonstrate that basic needs, safety needs, and love and belonging needs overlap with one another and form lower order needs; these lower order needs must be at least minimally met to satisfy the higher order needs.

Tiers three and four, labeled the psychological needs tiers, include the need to belong, be loved, and develop one's self-esteem needs. The last step, tier five, is the self-actualization stage. When one reaches this top tier, all previous deficits have been met, and the person desires and is able to grow creatively and cognitively (Maslow, 1943).

According to McLeod (2020), Maslow reported that in theory, we are all capable of reaching the self-actualization tier; however, most will not, and those who do will only do so to a limited degree. In 1970 Maslow estimated that only 2% of the population would reach the fifth tier. In 1970, prior to his death, Maslow expanded his original work from a five-stage model to an eight-stage model to include cognitive needs, aesthetic needs, and transcendence needs in the *growth needs* upper tiers (McLeod, 2020).

### **Assumptions, Limitations, and Scope**

This study was based on the following assumptions: (a) school faculty and staff were able and willing to share their perceptions about how a facility dog makes students feel in their learning environment, (b) school stakeholders' perceptions about students' engagement in social and emotional learning after an interaction with the facility dog approximate actual student

engagement to a useful degree, (c) students will socialize with the dog in different ways due to their personalities and previous experiences, and (4) school stakeholders' will observe positive interactions with the facility dog that will elicit a sense of happiness after the interaction is over. It is my hope that the results of this study will encourage public-school administrators to consider the practice of introducing a facility dog to their organization to help with students' connectedness to their learning environment.

I anticipated four limitations regarding this study. First, as a principal in the district where the research is being conducted, I may be viewed as having positional power though I have no supervision or evaluative position within the school. Secondly, due to being a principal in the district, those being interviewed may not be as forthright as they might be if I had no affiliation with the district. A third limitation to mention and consider is that some students are already familiar with the facility dog due to previous informal or impromptu interactions. These interactions may have occurred at my school, during community events or sports competitions, or even during previous visits at the site unrelated to this study. The familiarity with the dog may prevent students from showing *true* initial feelings when interacting with the dog, thus skewing the observations of the learning environment. The last limitation to consider was the small sample size I chose to use. Using a single-case study design, thus extrapolating data from only one site limited the study and the results it gleaned.

The scope, or parameters surrounding this case study, involves one administrator, three teachers and three support staff. The study relied on participants' perceived knowledge regarding their students pre-kindergarten through sixth grade (grades PreK–6) academic, social, and emotional needs as well as their understanding of student engagement levels in their learning

environment. Participants included only teachers and staff members currently working within an elementary educational setting and who are familiar with the role of a facility dog.

### **Rationale and Significance**

It is the job of a building leader to do whatever is within his or her power to make students' time at school as successful and manageable as possible. My philosophy as a building principal is that forming and sustaining relationships with students is the most important job school employees have. Students, no matter their race, religion, socio-economic status, or academic prowess, must feel safe, valued, and nurtured in their learning environment regardless of the circumstances they may face at home. My beliefs align with the influence dogs may have on one's outlook on life as well as Maslow's Hierarchy of Needs (1943), that until students' basic needs are met, their ability to access their potential academically, socially, or emotionally is limited.

Given the research showing the impact dogs have on student mental, physical, and social well-being, schools and universities are increasingly adopting therapy dog programs as a fiscally viable way of providing social and emotional support for students (Grove & Henderson, 2018). Introducing a facility dog into a public school is a lengthy process, not only because it is not typical practice, but rather the stigma and misinformation attached to having a *dog* in a school. Grove and Henderson (2018) note:

Despite these known benefits, many schools choose not to have therapy dog programs due to perceived risks. These range from concerns about sanitation issues to the suitability of dog temperament when working with children. But therapy dogs and owners are carefully selected and put through a strict testing

regime prior to acceptance into any program. The main reason for the lack of take up has been linked to the limited research into the benefits of therapy dogs in schools. (p. 1–2)

Under the guidelines of the Alliance of Therapy Dogs (ATD) Organization, the logistics of using the dog under a *therapy dog* title is not practical in a school setting. The dog used for this study was referred to as a *facility dog* rather than a therapy dog. Although the role of both dogs is to interact with the public and provide support, a therapy team must abide by very specific requirements. For instance, a therapy dog must remain on a 4-foot leash and be with their handler at all times. Following this rule would not be possible for a facility dog because their primary purpose is to be able to roam freely about a building to interact with as many individuals as possible without the constraint of an adult nearby. A facility dog must be able to use their sixth sense to seek groups or individuals that may need support (Bradley, 2013).

It is understood by the faculty, staff, and upper administration that a facility dog is a *general* school dog, not belonging to any one person or program, is a member of the staff, and available to anyone at any time during the school day. Teachers are supportive of a dog roaming the building freely, entering the classrooms at leisure, and interacting with as many students as possible over the course of the day. The understanding that the dog would be outside with students during their recess time to promote physical activity and increased interaction is also important. In addition, a facility dog attends field trips, class overnight trips, participates in fire and evacuation practices. In a lockdown scenario, a facility dog would remain in the room they were nearest to at the time. A facility dog wears a vest at all times with their role and name clearly depicted as well as a badge with their picture.

I found few empirical studies that have addressed therapy dogs or facility dogs in the general education setting. Most studies involve therapy dogs that are utilized for a specific purpose, most commonly in special education settings. Although the facility dog described has been through the proper certification and vetting, the policy revision process and the ultimate approval from the board of directors it is important to understand there are barriers that prevent a dog from entering and being part of a school's culture. Allergies, fear of dogs, religious or cultural restrictions, and liability are the most commonly reported concerns (Foreman et al., 2017). Kotter (2012) shares that it takes only 15% of an organization to build momentum toward change. With this in mind, and the unprecedented support of upper administration, faculty, staff, students, parents, and community members, the change in mindset regarding this new intervention is full of promise. I hoped that districts would focus on the positive aspects, rather than the few negative aspects regarding this concept and welcome facility dogs into buildings to support students in their learning environment.

### **Definition of Terms**

The following are key definitions that were used throughout this study:

***Administrator:*** For the purpose of this study, an administrator is defined as a state-certified educational professional, whose responsibilities include the management and supervision of a school building or part of a building, programming for students with and/or without disabilities, and supervising general education and/or special education teachers, paraprofessionals, and maintenance staff. An administrator makes the primary decisions about the functioning, programming, and opportunities available in the school for which they are fully

or partially responsible. The term administrator is used interchangeably with building-level principal or principal (Merriam-Webster, 2021).

***Adverse Childhood Experiences (ACEs):*** Traumatic events that occur during childhood and can have a significant impact on a person's physical, emotional, and mental health throughout their life (Harris, 2018).

***Alliance of Therapy Dogs (ATD):*** A network of caring volunteers who are willing to share their special canines to bring smiles and joy to people, young and old, in nursing homes, hospitals, airports, and schools (ATD, 2020).

***Animal Assisted Activity (AAA):*** An activity that involves animals visiting and interacting with various populations of people. The interaction provides opportunities for motivational, educational, and recreational benefits to enhance quality of life. The AAAs are present in a variety of environments, are supported by specially trained persons, and must meet specific training requirements (Fine, 2019).

***Animal Assisted Therapy (AAT):*** A term that refers to a health and human services professional who uses an animal as part of their practice. AAT is designed to promote growth in human physical, social-emotional, and cognitive functioning (Fine, 2019).

***Anxiety:*** A number of behaviors exhibited by [students] including excessive worrying, phobias, attitudes of hopelessness, and a feeling of being overwhelmed or nervous (Reynolds & Kamphaus, 2015).

***Certified Therapy Dog:*** A dog that has been certified through a third-party organization that provides support and comfort to any individuals with physical, social, or emotional needs. Therapy dog teams have specific rules and regulations they must follow while representing an organization (ATD, 2020).

***Clinical/Counseling Therapy Dog:*** A dog that works with clients in a clinical setting with therapists to help support individuals with their needs (Chandler, 2017).

***Common Core State Standards (CCSS):*** A 2010 national educational initiative outlining what students should know and be able to do while attending K–12 schools (Preparing America's Students for Success, 2021).

***Depression:*** Is symptomatology that persists for extended periods of time that can include a shift or sudden change in mood, negative outlooks, perspective on life, debilitating fatigue, and overall demeanor of sadness (Reynolds & Kamphaus, 2015).

***Educational Technician:*** Educational technicians provide supportive educational services to certified personnel in K-12 schools or to credentialed personnel in early childhood educational or developmental programs from birth to school age 5 for children with and without disabilities (Maine Department of Education, 2021).

***Elementary School:*** A school consisting of pre-kindergarten through sixth grade. Students tend to be between the ages of four to 12 years of age (Maine Department of Education, 2021).

***Emotional Dysregulation:*** The inability of a person to control or regulate their emotional responses to a situation that may cause stress (Reynolds & Kamphaus, 2015).

***Every Student Succeeds Act (ESSA):*** Every Student Succeeds Act (ESSA) is the primary education law for public schools in the United States that holds schools accountable for how students learn and achieve. ESSA aims to provide an equal opportunity for disadvantaged students, including those who get special education (National Association of Secondary School Principals, 2021).



**Facility Dog:** A dog extensively trained that partners with a facilitator working in a health care, therapy, or education setting by providing a calm and loving presence. A facility dog has few limitations regarding the use of space and is present to alleviate stress and anxiety to all (Canine Companions for Independence, 2020).

**Learning Environment:** The diverse physical locations, contexts, and cultures in which students learn. Learners must do the learning. The aim or goal is to create a total environment for learning that optimizes the ability for students to learn (Thompson & Wheeler, 2008).

**No Child Left Behind (NCLB) Act:** Initiated in 2001 under President George W. Bush, the goal of NCLB was to provide more education opportunities for vulnerable student populations. The law focused on four key groups: students living in poverty, students of color, students receiving special education services, and those who speak and understand limited or no English. In 2015, this law was replaced by Every Student Succeeds Act (ESSA) under the Obama administration due to intense criticism of its effectiveness (Lee, 2021).

**Service Dog/Assistance Dog:** A working dog is trained to work with an individual who has a physical, emotional, mental health, or sensory impairment. The dog's training is specific to the individual's disability. A service dog may assist as a seeing guide dog, mobility assistance dog, seizure detection dog, or a hearing guide dog (Fine, 2019).

**Specific Learning Disability (SLD):** A cognitive disability that interferes with a student's ability to learn the same way or at the same pace as other students in an educational setting (Maine Department of Education, 2021).

**Social and Emotional Learning (SEL):** The ability to manage and understand one's emotions and those of others, establish positive goals, engage and maintain relationships, and use decision-making skills (Hamilton et al., 2019).

**Teacher:** The legal definition of teacher includes anyone in a position that: (a) is one the Department of Education (DOE) requires be filled by a person who holds appropriate certification or license for that position and you hold that certification or license, or (b) has as its principal function introducing new learning to students (MainePERS, 2021).

**Working Dog:** Working dogs, in addition to service and therapy dogs, generally have natural instincts that are carefully honed with intensive training to perform a specific task. These include, military dogs, police dogs, detection dogs, search and rescue dogs, and herding dogs (Fine, 2019).

### **Conclusion**

Twenty-first century building leaders have been tasked with thinking outside of the box by introducing new practices to mitigate hardships that students face at school. To assist students with day-to-day stressors, I question how a dog may help elementary students navigate their academic, social, and emotional needs to help increase their engagement in their learning environment. According to Grove and Henderson (2018), considering the impact therapy dogs can have on student well-being, schools and universities are increasingly adopting therapy dog programs as an inexpensive way of providing social and emotional support for students.

Academic demands are increasing (Roder, 2018), the family unit is disintegrating (Behere et al., 2017), and the educational system is slow to enact change to help assist with the dysregulation and mental health issues of students (Souers, 2018). By implementing new practices such as introducing a facility dog to an organization, small but powerful changes may likely be made and a shift in student's learning engagement may ensue.

In Chapter 2, I have introduced the human-animal bond theory (HAB) (Bustad, 1983) as the theoretical framework and the foundation for the literature review, as well as Maslow's Hierarchy of Needs (1943) to support my conceptual framework. The review gave a comprehensive review of scholarly literature on the human-animal bond, synthesizing how dogs and humans bond and rely on one another in various settings. In Chapter 3, I introduced and reviewed the research design and methodology chosen for the study. In addition to reviewing the research design, I discussed site information, population, sampling method, instrumentation and data collection, data analysis, limitations and credibility of the study, member checking, dependability, confirmability, and ethical issues within the study. Chapter 4 described the data analysis method used to answer the posed research questions, and presented the results of the coding process. The final chapter interpreted the findings of the data collection, discussed the implications of the findings, made suggestions for action, and finally made recommendations for further studies.

## CHAPTER 2

### LITERATURE REVIEW

Animals and humans have been interacting and relying on one another for more than 10,000 years (Fine, 2019). Anecdotal and empirical evidence support that human-animal interactions have an impact on more than just economics (farming) or family dynamics (companionship) but also provide interventions and life-saving actions that allow humans to live and feel better (Grajfoner et al., 2017; Haggerty & Mueller, 2017). In a time of budget constraints and increasingly prevalent mental health needs of students, the presence of a facility dog in an elementary school may likely provide a low-cost intervention that decreases students' feelings of anxiety, sadness, and anger, thus allowing them to become more engaged in their learning environment.

An increase in students expressing, both verbally and physically, that they are feeling anxious, sad, angry, and/or disengaged in school has been evident to administrators, teachers, and support personnel for years (Revelette, 2020). Required by both local and federal organizations, schools have been reporting various student data (attendance, free and reduced lunch percentages, and major behavior infractions) for years to determine trends occurring in schools. In addition, schools have been mandated to administer health and wellness surveys for students to fill out anonymously. The purpose for these surveys is to secure additional data, from the individual student perspective, on their physical and mental well-being. This information is disaggregated and aggregated to provide information regarding the state of the schools and their students.

To affirm my observations regarding the decline of students mentally and physically, I researched a study completed by Felitti et al., (1995) that was conducted in conjunction with

Kaiser Permanente and the CDC from 1995 to 1997. This study was completed to gain a better understanding of the long-term effects of adversities that children may have experienced during their youth that increased negative health outcomes as adults. The study concluded that ACEs impact approximately two-thirds of children in the United States under the age of 16 and are directly linked to unhealthy and dangerous health risks later in life (Felitti & Anda, 1998). This compilation of information and research affirms that our most at-risk students have reason to be anxious, sad, angry, and disengaged regarding school. Noddings (1984) care ethics theory, is now widely recognized in many areas of academia and the medical field and supports the significance of caring and relationship both as an educational goal and as a fundamental aspect of education. Noddings's work supports that students (a) must feel heard, (b) must trust the *carer*, and (c) must feel empathy from those directly relating to them. With respect to teaching and learning, educators support the idea that the ethical and moral foundations of teaching, schooling, and education should be explored more (Smith, 2020).

In a responsive elementary school, gaining a better understanding of the complex academic, social, and emotional needs students and school personnel face in their daily lives is vital. Providing adequate social-emotional services and interventions to support all members of a school community to teach them coping skills is at a critical level (Chandler, 2017; Quinn, 2019). Today's schools are no longer responsible for just academics; rather, they are organizations expected to serve individuals within the context of complex societal interactions while providing a plethora of basic services to help sustain a community (Grajfoner et al., 2017; Haggerty & Mueller, 2017). Over the past 20 years schools have become multipurpose agencies for communities to receive basic healthcare, food and clothing assistance, and mental health

counseling (Institute of Medicine [US] Committee on Comprehensive School Health Programs in Grades K–12, 1997).

Considering the complex nature of teaching and learning, educators are expected to help students grow academically to meet the rigorous academic criteria of the Common Core State Standards while filling mentor and advocate roles in an underfunded public organization (Weingarten et al., 2018). Without some help, both financial and philosophical, schools simply cannot keep up with the demands communities require. School budgets are strained by heavy spending cuts in states, a decrease in revenues, and increase in tax cuts all while the cost-of-living increases and funding for most forms of state and local aid have fallen (Leachman et al., 2017).

A progressive school leader must be able to diagnose and facilitate change when the learning environment for students needs adjusting (Whitaker, 2020). Being clear and concise regarding impending change, and involving the faculty and staff in the decision-making process, an empowered group is likely to support and ultimately enact the needed shift to improve the building's culture (Collins, 2001). The challenge for this type of leader is finding the proper balance of successfully pushing the needed change forward while simultaneously providing the necessary support to lift the movement to a new level (Welsh, 2007).

The Human-Animal Bond Research Institute (HABRI) reported in 2017 that 74% of pet owners believe their mental health is stronger and symptoms of depression are lower because of their bond with their animal companion (Robinson, 2017). According to the 2019 CDC statistics, 16.4% of school-age children ages six to 11, and 23.5% of school-age children ages 12 to 17 were diagnosed with depression, anxiety, and/or a behavior disorder. Even with a staggering 39.9% of children six to 17 years of age reported to have a mental health

diagnosis, many schools avoid having a therapy dog program in their building due to unfounded, perceived risks that can be dispelled quickly through research of reputable data found in published articles and dissertations. A study published in 2019 by Thelwell declared that interacting with a dog had a positive effect on university students' mood and anxiety (para. 1). This study helped fill a gap in research and provided further support that providing students' interaction with dogs had positive psychological benefits to students, especially when they are faced with a new environment. Thelwell (2019) recognizes that the number of animal interaction studies are increasing but there should be further investigation regarding human-animal interactions. She notes, "It is hoped that this study will help to inform future best practices in designing student dog interventions, which will in turn facilitate improved psychological well-being in university students." (p. 21 para. 4)

To support this proposed research study and to better understand the gaps and patterns in the literature, it was necessary to rely on published dissertations, journal articles, and books, as well as grey literature taken from databases that included SAGE, ERIC, JSTOR, Taylor and Francis, SpringerLink, EBSCO, PsycINFO, PsycARTICLES, ResearchGate, Child Development and Adolescent Studies, and ProQuest. Additional literature was obtained from WALTHAM Science, HABRI-Central, and Anthrozoos. Databases were searched until saturation occurred and no new information appeared in the search results. This literature review includes a critical summary and analysis of scholarly literature on the use of animals, particularly dogs, in counseling, private and public corporate organizations, and school settings. Promoting this practice may be a way to promote conversation, increase work performance, and provide low-cost interventions for both physical and mental health

conditions while supporting a dog-friendly atmosphere that promotes a positive climate in an organization for any age group.

Although there is a large amount of data on the presence of dogs in special education classrooms, counseling environments, as rehabilitation resources, and helping students gain self-confidence when learning to read, there is a paucity of information regarding the use of facility dogs in schools to use as an intervention, or a means of providing social-emotional support, to improve middle school culture (Anderson & Olson, 2010; Bradley, 2013). In the past year, I have found three dissertations and one thesis written regarding the use of dogs in schools. Prior to these recent pieces, the closest research was done in 2013 in a dissertation that investigated the impact a facility dog had on learning and the learning environment (Bradley, 2013).

While investigating the use of a dog in a school setting, recurring concerns related to allergies, liability, fear, and cultural and religious factors, were common (Anderson & Olson, 2006; Esteves & Stokes, 2008; Jalango et al., 2004; Trivedi & Perl, 1995). Although the concerns merit consideration, the development of procedures and policies would address these issues separately. Yet amid these concerns, for any organization that is considering a therapy team, the process is thorough and the suitability of a handler and dog team when working with the public is taken seriously and procedures are vetted.

### **Perceived Barriers Regarding Dogs in a Learning Environment**

Allowing a facility dog to navigate the halls of a school building, interact with staff and students through informal means, attend classes, play at recess, and participate in after school activities is uncommon (Anderson & Olson, 2006; Esteves & Stokes, 2008; Jalango et al., 2004; Trivedi & Perl, 1995). If there were a way to introduce the right dog to help



promote and instill the sentiment that the learning environment can be a place of kindness, respect, responsibility, and academic perseverance while supporting a safe, calm, and consistent climate that embraces wellness and mindfulness this would prove to be a progressive movement for the educational world.

When investigating why a dog's presence is discouraged in schools, the most common concerns voiced by schools and organizations were related to allergies, liability, a fear of dogs, and cultural and religious factors (Anderson & Olson, 2006; Esteves & Stokes, 2008; Jalango et al., 2004; Trivedi & Perl, 1995).

### **Allergies**

Charlotte's Litter (2020), an organization created after the Sandy Hook Elementary School Massacre in 2012, discusses the allergy misnomer by explaining children bring more of their own pet dander into classrooms on their clothes than a dog could produce daily, making the allergy argument the least of the four concerns brought forward. In addition, qualified dog handlers are required by their organizations to meet cleanliness and grooming requirements minimizing allergic contact. Schools should require dogs to be clean and groomed, expect hand-washing routines to be followed, and have adequate air filtration systems.

### **Liability**

Liability is a valid concern for school districts since their pockets are not deep and one could find an opportunity to sue if a school dog misbehaves (Dragan, 2017). To reduce the risk of a mishap, a district must have a clear and concise policy regarding animals in schools. In said policy, there should be a specific section designated for therapy/facility dogs outlining the criteria to be in the building. In addition, school board members, teachers,

parents and students should be informed that a therapy team must pass a series of interviews and rigorous temperament and obedience tests at various sites before being deemed a team. A third-party tester must approve the team prior to acceptance in any program (Grove & Henderson, 2018).

Although organizations such as Therapy Dog International (TDI) and ATD provide insurance with a membership, a therapy team should consider having a separate insurance policy to ensure additional coverage if there were an incident involving their dog such as a trip, nip, or even bite.

## **Fear**

Cynophobia, or a fear of dogs, impacts 7 % to 9 % of the population (Taffou & Viaud-Delmon, 2014). Those who suffer from this affliction are often treated using cognitive behavior therapy (CBT) and desensitizing techniques designed to help remove the fear and encourage more helpful coping skills (Fritscher, 2020; Marcin, 2018). To provide notice to those entering the school that there is a dog on the premises, large signage prominently displayed, with an accompanying picture of the dog, should announce the dog is in the building and working. A statement offering to remove the dog from the common spaces should be clearly written. Not knowing the past experiences those in school have had with dogs, if a student, parent, or teacher has a stance on the dog being present, the dog should be removed from the space. A plan should be devised that meets the needs of all stakeholders regarding the dog and its role in the school. This plan should consider the child's needs first and foremost.

## **Religious and Cultural Factors**

Religious and cultural constraints should also be considered seriously and may be difficult to circumvent (Ismail, 2019). Although it is primarily the Muslim faith that believes

that dogs are impure, there is a wide variety of interpretations of why they are considered such (Ismail, 2019). One belief revolves around dog saliva, while another insists dog hair is unclean and therefore those that follow the faith may not be around a dog (Mattson, 2017). If there are students that follow this religious belief, the school must devise a plan that meets the needs of all stakeholders regarding the dog and its role in the school. This plan should consider the child's needs first and foremost.

### **Theoretical Framework**

The theoretical framework that supported this study is drawn from the human-animal bond theory (Bustad, 1983). Fine (2019) notes there are two accepted theories that support the phenomenon of the human-animal bond. These include animals acting as social support, (Beck, 1999) Lorenz's imprinting theory (McLeod, n.d.), and the biophilia hypothesis (Kellert & Wilson, 2013). The term human-animal bond was coined by two pioneers who studied the relationships between humans and animals: Levinson and Bustad (1983).

Levinson, a child psychiatrist, was considered the father of Animal-Assisted Therapy (AAT) and a pioneer when he began using his golden retriever, Jingles, to connect with his young clients by letting them interact with the dog during his sessions (Boe, 2008; Fine, 2019). Bustad (1983) was on the forefront of defining the movement behind human-animal interactions and their implications on society. Bustad was the founding father of Delta Society (now called Pet Partners), an organization that promotes the use of animals to enhance the health and wellness of humans (Pet Partners, 2020, para. 1). Lastly, in 1985, Beck developed the Center for the Human-Animal Bond Institute (HABRI) to gain a better understanding of the interrelationships among people, animals, and their environment. The HAB theory (Bustad,

1983) is considered to have mutual benefits to both the people and the animals with which they interact (Medicine, 2020, para. 1).

Kellert and Wilson in their book *The History of Biophilia* (2013) describe biophilia as “a human dependence on nature that extends far beyond the simple issues of material and physical sustenance to encompass the human craving for aesthetic, intellectual, cognitive, and even spiritual meaning and satisfaction” (p. 20). In essence, Kellert and Wilson (2012) believe humans need to interact with living things to be truly fulfilled emotionally, socially, and spiritually. The HAB theory (Bustad, 1983) is recognized not only as a partnership that provides emotional and physical support for their human companions but that also helps humans regulate their behaviors by providing unconditional support and love (Fine, 2019).

The review of the recent literature has revealed a lack of research to support placing a facility dog in any school setting to provide interventions for stakeholders, including students and staff. Although the data proves to be worthy as it relates to specialized programs and the impact an animal can have on an individual, most of the research found regarding use of dogs in classrooms is nearly two decades old and was conducted in Western Europe with young children (Hergovich et al., 2002; Jalongo et al., 2004; Kotrschal & Ortbauer, 2003). The scholarly articles that are 10 years old or older pay close attention to the use of dogs in behavior and special education programs as well as school counseling (Boe, 2008; Elksnin & Elksnin, 2003; Esteves & Stokes, 2008) while the fewest articles written in the past 10 years discuss the use of animals in a variety of workplace settings, not school settings, to decrease anxiety and increase work performance.

The study of the HAB continues to expand as humans use animals to help increase quality of life. Scholars from across continents have collaborated to provide a comprehensive

electronic bibliography and repository of materials to support the ongoing research pertaining to the positive impact animals can have on humans as well as the bond animals form with their human counterparts (Fine, 2019). Although there have been anecdotal testimonials regarding the importance of animals in our day-to-day lives, it is just recently that more randomized controlled trials (RCT) are being conducted (Fine 2019). Considering that nearly 35 million children have experienced three or more ACEs according to the Center for Youth and Wellness (2017), making a connection between the human-animal bond and Maslow's Hierarchy of Needs (1943) to determine if a facility dog may provide interventions to support physical and mental well-being of students and staff aligns to support the study.

### **Conceptual Framework**

The conceptual framework to support this study is based on Maslow's Hierarchy of Needs (1943). To support this framework, this study focused on how elementary school teachers and support personnel perceive interactions between elementary students and a facility dog. The purpose behind this study aims to better understand if a student/dog interaction provided a sense of safety and belongingness to the student's learning environment, thus decreasing their feeling of anxiety or depression. To support this study, two tiers of Maslow's (1943) theory regarding humans' Hierarchy of Needs serve as the platform to assess if the presence of a dog impacts the day-to-day physical and mental hardships students feel while at school. Although Maslow's pyramid depicts five tiers of needs, this study focused on Maslow's (1943) second tier, safety, and third tier, belongingness.

Maslow's Hierarchy of Needs (1943) was first discussed in his paper titled "A Theory of Human Motivation." Although dated, his work has been considered the foundation to better

understand how certain human needs must be met before a one can attain his or her highest potential in all areas of their life. The overall premise of Maslow's work is based on the humanist theory (Cherry, 2020). By working alongside Harry Harlow in his early years with young rhesus monkeys to research attachment, Maslow determined as one moves up the needs pyramid, the ability for humans to access more elements of their world grows. Other frameworks that may support this study include the works of Piaget (1936, 1950) and Vygotsky (1934); both of whom researched the development of children.

### **Human-Animal Bond**

Humans have relied on animals since the Paleolithic Era (Larson et al., 2012). Although it is impossible to pinpoint the exact time when the human-animal bond originally occurred, archeologists and geneticists theorize wolves were the first to be domesticated 12,000 years ago in the northwestern region of Europe (Fine, 2019; Grier, 2006; Yong, 2016). Originally, animals roaming the lands were used to provide food, clothing, and shelter to meet the basic need of survival.

The domestication of farm animals came 4,000 years later, when the agricultural movement began and farmers planted crops to lure grazing animals to designated areas where they could be captured, bred, and slaughtered for food. Larson et al., (2012) believes that sheep were the first animals to be domesticated, followed by goats, chickens, pigs, cattle, and then horses. The need to domesticate animals continued to grow as humans found them not only to be a sustainable food source, but also an efficient way to work the land, transport goods, and travel (Born, 2010).

The bond between people and animals started more than 10,000 years ago (Fine, 2019) and has a history that begins with the belief that the animals had souls that could heal or harm. This belief, known as animism, had hunters believe that the souls of animals could come back to haunt and seek vengeance on those that killed them. To avoid this malignant spiritual influence, all animals, dead or alive, were to be treated with great respect. Since that time, the belief that animals hold healing and helping abilities has ebbed and flowed. During the Middle Ages, the animist movement disappeared when hunters sharing their beliefs were heretics or witches and were persecuted as such. From the late 1600s to the end of the 1700s, the introduction of animals as pets (Grier, 2006), as well as to soothe those in asylums, became popular. By the 1800s animals were part of institutional practices often used as part of animal-assisted therapy until medicines to help with psychosis were developed (Fine, 2019). In 1962 Boris Levinson and his dog, Jingles, put animal-assisted therapy on the map (Chandler, 2017) by determining child clients were more relaxed and apt to converse with their psychotherapists when a dog was present. In addition, the medical field has taken great interest in the value of animal companionship after research has concluded that heart patients who own pets live longer after suffering heart attacks (Fine, 2019).

Dogs have been considered man's best friend for centuries (Grier, 2006). They play an essential part in our lives as protectors, companions, family members, therapists, playmates, and travel partners. According to Wanser et al. (2019), in 2017 there were more than 90 million pet dogs and 94 million cats in the United States, making up a 67-billion-dollar industry in the United States. Companion animals or pets fill our need to be unconditionally loved and accepted regardless of our mood, poor decisions, or lack of mindfulness, and increase age-appropriate social skills compared to children without pets at home (Gee et al., 2017). Pets provide

unwavering loyalty and acceptance of who we are without judgment or explanation (Beck & Katcher, 1996). Interested in how companion pets can help decrease social isolation, a study conducted in 2014 concluded that pet owners were more likely to get to know their neighbors than non-pet owners because pet ownership at its most basic level provides social avenues, both incidental conversations and friendship formations that would not have otherwise happened (Wood et al., 2015). The term *working dog* encompasses two categories for this literature review. When reviewing the genre of working dogs, I separated their roles into those that serve as healers and those that serve as helpers. Three additional roles have been placed in a nondescript category.

Working dogs that assume the role of *healers* include a variety of therapy dogs that are used in different environments for different purposes. Working dogs that assume *helping* roles include: (a) service/assistance dogs, (b) police dogs and, (c) medical detection dogs. Three additional roles that stand alone are discussed and include: (a) emotional support dogs, (b) companion dogs and, (c) facility dogs. Each role provides a service that benefits humans, thus further supporting the HAB theory.

### **Working Dogs: Roles They Serve as Healers and Helpers**

Levinson presented a paper to his professional colleagues in 1961 at the Annual American Psychological Association in New York City regarding pet-therapy, and was essentially laughed off stage when he reported the success he had when using his dog, Jingles, to conduct treatment for his young patients. The thought of dogs having a role in a therapeutic setting made many clinicians uncomfortable (Levinson, 1969, 1997) and they were unwilling to



accept that outside entities, especially dogs, could help clients open up and trust more quickly than a human (Levinson, 1969, 1997).

Colleagues Corson and Corson (1973), Quaytman (1973), Weigel and Straumfjord (1969), however, were intrigued by the idea and began to examine the ways animals could serve humans as workers, helpers, and healers. This began the new idea that animals should be considered not only as companions but aides to assist with mental and physical needs (Chandler, 2017; Fine, 2019; Grier, 2006). It was the continued work of Levinson (1969, 1997) and Bustad (1983) that showed others that animals were not only for pleasure but were able to serve a purpose in a role that humans may not be able to fill (Fine, 2019).

Although the majority of dogs are primarily companions, other dogs take on vital roles to support individuals with particular mental or physical needs, as well as keep the public sector safe. Working dogs are described as dogs that have natural instincts, and when combined with intensive training, can perform specific tasks that other animals cannot (Stregowski, 2021). Therapy, service, police, and search and rescue dogs are categorized under the working group according to the American Kennel Club (2021).

### **Healing Roles: Therapy Dogs**

According to the AKC, there has been a significant increase in pet owners who choose to certify their dogs for public intervention (AKC, 2020). Therapy dogs may be used as part of a medical therapeutic plan, to assist with emotional support to support the sick, injured, or visit schools of any level to help decrease anxiety and stress.

As part of the certification process, the handler and dog, known as *the team*, must complete a series of tests that are scored by an expert trainer affiliated with the organization chosen. Tests involve observing the dog's listening ability (on and off leash), temperament with

people and other dogs, and the team's ability to work together (ATD, 2020). After the team has passed the necessary requirements, registration with the organization of one's choice provides them with recent communication. In addition, most organizations provide liability insurance coverage when the team is volunteering in a therapy setting. Currently, there are five organizations that the AKC recognizes to screen and certify a team. These include ATD, Bright and Beautiful Therapy Dogs, Love on a Leash, Pet Partners, and Therapy Dogs International (TDI) (AKC, 2020).

A certified therapy dog is one that is specially trained, usually by the owner, and certified by an organization or a third party, to provide love and comfort during a particularly difficult time in someone's life (Fine, 2019). The team performs several functions, including alleviating stress, increasing happiness, and absorbing sadness (Fine, 2019). Certified teams have strict guidelines they must follow once they are certified and can often be found in nursing homes, college campuses during exam times, hospitals, veterans' centers, and hospice facilities (AKC, 2020).

Dogs of any breed, size, and age can be therapy dogs (ATD, 2021). Having the correct temperament, socialization traits, being well-trained and non-fearful are the primary criteria for a therapy animal (Stregowski, 2021). Different ways therapy animals may provide support to a teaching or healing process are listed below.

### ***Animal-Assisted Activities (AAA)***

Animal-Assisted Activities (AAA) provides support to those afflicted with psychological, social, and physiological challenges and assists with pathogenesis of chronic disease as well as the enhancement of our personal health. (Fine, 2019). Pets provide solace when it comes to

debilitating waves of stress, anxiety, and depression and are often asked to interact with children to help de-escalate and then regulate their emotional state (Fine, 2019).

AAA provides people an opportunity to interact with animals in an informal fashion to support a motivational or situational purpose (Fine, 2019). These animals are often accompanied by volunteers and there is no specific purpose except to help reduce stress. AAA are often connected to helping individuals feel validated, hopeful, social, confident, and independent (Fine, 2019). In a study conducted by Beetz et al., (2012), it was found that interacting with dogs had a positive impact on human physiological arousal. According to the data, during physical interactions (petting, touching, stroking) and nonphysical interactions (mutual gazing) the body releases extra oxytocin (the body's calming hormone), which subsequently suppresses the amount of cortisol (flight, freeze, or fight) hormone released, which aids in de-escalation. Other environments that benefit from AAA are hospital visits, correctional facilities, crisis response (Sandy Hook, 9/11, Columbine), as well as at-risk delinquent youth residential facilities.

### ***Animal-Assisted Education (AAE)***

Animal-Assisted Education (AAE) is an intervention used in academic organizations to guide and promote cognitive and behavioral outcomes directed by a general classroom teacher or a special education teacher (Fine, 2019). These interventions are often goal-oriented and can be written in functional growth plans, Individual Education Plans (IEPs) or 504 plans (Kropp & Shupp, 2017). Using AAE assists with teaching responsibility, earning special time, lessening test anxiety, and providing children an opportunity to practice their reading skills (Fine, 2019).

### ***Animal-Assisted Interactions or Interventions (AAI)***

Animal-Assisted Interaction or Intervention (AAI) is the unique idea of using animals to help heal in both the private counseling sector and public sector (Fine, 2019). The personal

intervention a dog can provide to assist with physical, emotional, social, or intellectual disabilities to achieve individual or group goals is not a new phenomenon (Bradley, 2013; Chandler, 2017; Levinson, 1967, 1997). Brief interactions with therapy dogs ease anxiety and fear as well as help those with severe depression feel more relaxed, less lonely, and experience less physical pain (Robinson, 2017). AAI is used in a variety of environments and does not work only for those with adversity. Studies conducted between 2015 and 2019 acknowledge that interactions with animals, regardless of age or environment, improves mood and alleviates stress just by being in their presence (Crossman et al., 2015; Grajforner et al., 2017; Thelwell, 2019).

### ***Animal-Assisted Therapy (AAT)***

According to the *Handbook on Animal Assisted Therapy* (Fine, 2019), there are several categories dedicated to using dogs to help aid in the healing process both physically, mentally, and emotionally for clients, as well as to help improve one's self-esteem and self-confidence levels (Boe, 2008). The most common practice, Animal-Assisted Therapy (AAT) has gained momentum in the mental health field (Born, 2010) and is used in a variety of environments including places of work, schools, hospitals, and correctional facilities. Although dogs are the most common animal to use in the psychotherapy environment, other animals including horses (both large and mini), rabbits, and guinea pigs are used as well as *pocket pets* such as mice, gerbils, and reptiles (Chandler, 2017; Gee et al., 2017). Other interventions dogs are involved with include: (a) animal-assisted social work, (b) animal-assisted physical therapy, (c) animal-assisted speech therapy and, (d) professional-paraprofessional animal-assisted therapy model (Fine, 2019).

## **Helping Roles: Service/Assistance, Police, Detection, Search and Rescue Dogs**

Dogs that are considered helping dogs perform two specific tasks: (a) to allow individuals with disabilities to be as independent as possible, and (b) by performing duties to assist the public by keeping them safe (Fine, 2019; Stregowski, 2021). These particular dogs, chosen to perform these tasks, show extreme loyalty, physical agility, and are easily trained.

### ***Service Dogs/Assistance Dogs***

According to *Frontiers of Veterinary Sciences* (Yamamoto & Hart, 2019), service dogs, or assistance dogs, is a general term used for dogs that support people with disabilities. The first service dogs were introduced after World War I in Europe (Seeing Eye, 2015). Soldiers that had been exposed to chemical warfare were offered dogs to assist them with daily functions after they lost their sight. It was in 1927 that the first blind American, Morris Frank, came across an article in the *Saturday Evening Post* and wrote to its author, Dorothy Eustis, an American in Austria training German Shepherds for the visually impaired, asking for her help. With her help, Frank and his dog Buddy trained in Europe and returned to the United States, showing the public how a service dog could enhance the life of a person with a disability (Seeing Eye, 2015). After World War II, service dogs began to be used not only to support those with hearing loss but also vision loss and mobility.

In the 1980s the use of service dogs increased to support humans with severe mobility, psychiatric, learning, and medical disabilities (Yamamoto & Hart, 2019). Unlike therapy dog certification, there is no process for which a team is cleared for work. The United States has “no governmental or federal system for registration or qualification of assistance dogs, nor are any required procedures or certain facilities specified for training of the dogs” (Yamamoto & Hart,

2019, para. 5). Most dogs have been trained in traditional assistance dog facilities but there is nothing to deter persons from training their own service dog for a personalized assistance dog (Yamamoto & Hart, 2019). Dogs that are trained in a recognized facility are paired with a person with a disability and the partners are given team training to teach them strategies for living with one another. A service or assistance dog is one specifically trained to perform work for a person with a disability. Currently there are more than 80 million dogs used to assist those with physical, psychological, and/or psychiatric disabilities (AKC, 2020). Under the Americans with Disabilities Act (1964), state and local governments, businesses, and nonprofit organizations that serve the public must allow service animals to accompany people with disabilities in all areas of the facility where the public is allowed to go (Information, Guidance, and Training on the American with Disabilities Act, 2022). The ADA considers service dogs as working animals and not as pets or companion animals (AKC, 2020). Dogs commonly used for service dogs include the golden retriever, Labrador retriever, standard poodle, and German shepherd (Stregowski, 2021).

### ***Police Dogs***

Police dogs, or K-9s, are trained specifically to assist police and other law enforcement personnel in the line of duty (Stregowski, 2021). Considered police officers, they wear a badge and protective vests, and are used to seek or draw out, chase down, and then hold criminal suspects in place until their human partner arrives on site. Some police dogs have a single purpose while others are trained to perform a variety of tasks (Finlay, 2019). Apprehension police dog breeds are typically those of the herding group due to their desire to corral and capture their flock and prey (Fine, 2019) as well as their physical strength and intelligence

needed to restrain dangerous individuals (Finlay, 2019). These breeds include: the Belgian Malinois, German Shepherd, Bloodhound, and Dutch Shepherd.

***Apprehension.*** Most K-9s are used for apprehension purposes (Finlay, 2019). Trained to bite running or noncompliant suspects in the arms or legs, apprehension dogs are able to bring suspects to the ground and restrain them until they can be secured by their human partner. The apprehension dog is considered a true partner and is often the first to enter a volatile situation to prevent their human partner from harm. Dogs and their handlers attend the police academy as a team and are required to pass extensive tests to prove their working relationship is comfortable around the public while the dog is under total voice control of their handler (Grabianowski, 2004). Military dogs may be used as trackers, sentries, and scouts in addition to an apprehension tool (Stregowski, 2021).

***Detection.*** Due to their innate sense of smell, dogs are used to detect a variety of substances or items (Finlay, 2019) that pose a threat to the public. Detection dogs are used commonly in airports or ports of entry to detect illegal drugs or explosives. They may also assist crime scene investigators with identifying arson accelerants or blood type (Finlay, 2019). Military dogs are used similarly but are also trained to seek out landmines (Stregowski, 2021).

### ***Search and Rescue***

Search and Rescue dogs, commonly called SAR dogs, are used for a variety of reasons and can search the same area as approximately 50 people on foot (Layton & Greim, 2021). The SAR dog can be utilized to find lost children, those who suffer from dementia or Alzheimer's and have wandered off, or those who have been taken unwillingly (Finlay, 2019). They are also able to detect human remains on land or in water, or those buried alive beneath snow or rubble (Finlay, 2019). The advantage to using dogs in this capacity is their ability to cover much more

terrain quickly and the fact their stamina allows them to sustain operations longer than their human counterparts (Finlay, 2019).

### ***Detection Dogs***

Detection dogs fall under three categories in the helping category. A police or military trained detection dog, used to protect the safety of the public, is trained to find a variety of explosive chemicals, devices, or illegal substances, while the second detection dog is trained to use their sense of smell to alert or detect symptoms or sickness (Stregowski, 2021). These medical detection dogs have been trained to detect specific cancers, alert diabetic persons of an on-coming sugar change, epileptics that a seizure is imminent (Stregowski, 2021) and even that a rapid infection is forming (Whiteman, 2013). Detection dogs are also used to assist wildlife biologists to find and detect certain types of flora and fauna (Stregowski, 2021).

### **Additional Roles**

Dogs also serve roles that are not affiliated with any particular service or need. These roles serve as much of a need for the general population as those needing specific assistance (Fine, 2019). Many of these roles are newly defined but are gaining popularity in today's home and workplace environment (Chandler, 2017). Each of these roles proves to be beneficial to particular persons and their individual needs (Fine, 2019).

### **Emotional Support Animals (ESA)**

The Emotional Support Animal (ESA) category was created when Section 504 of the Rehabilitation Act of 1973 (504) and the Federal Fair Housing Amendments Act of 1988 (FFHA) provided housing protections for those with an emotional disability to allow their ESA to reside with them regardless of renting stipulations. This rule dictated that a landlord (a) cannot



refuse to rent to individuals with a mental illness, and (b) if a person with a mental illness can provide documentation that supports a reasonable accommodation that can be made (like having a pet) that allows them to enjoy and use the rental unit like those with no disability, the landlord must provide the accommodation provision (Wikimedia Foundation, *Emotional support animal*, 2020).

For those who have been diagnosed with a mental or emotional illness by a doctor, their companionship and support of a dog is often what makes them able to complete basic life functions like going to the grocery store (AKC, 2020). Over the past fifteen years this label has grown in numbers since the mental health crisis has expanded. According to Mental Health America, currently 19% of adults living in the United States suffer from a mental illness (SAMSHA, 2020). For those who truly do need the support of an ESA, the idea that one can apply for an ESA label by going on the internet and paying a fee without any doctor recommendation is hurtful and fraudulent (AKC, 2020). Emotional support dogs can perform an important role in the life of a person with mental or emotional conditions. When people who do not have a disability abuse the system by misrepresenting a pet as an ESA to obtain special accommodation, they undermine important accommodations for individuals with a legitimate need for this assistance (AKC, 2020).

### **Companion**

Companion animals, also known as pets, are considered part of the family dynamic and often assume the roles of a human-to-human relationship, modeling that of the child and parent relationship (Fine, 2019). This idea is supported by Bowlby's attachment theory (1969) that supports the need for humans to be protected and to protect (Gee et al., 2017). Most pet owners play with their pets as they would with their children and assume such an attachment to their pets

that they fail to leave their animals during natural disasters, thus choosing to stay behind and putting their own lives in jeopardy (Fine, 2019). An example of this occurred when Hurricane Katrina devastated the Gulf Coast, and many refused to leave their canine companions. Even with those unwilling to leave their pets, more than 600,000 animals were killed or abandoned during the hurricane. To prevent pet owners from having to make the decision to save themselves, in 2008, after hurricane Katrina, Congress passed the Pet Evacuation Standards Act (PETS Act) requiring states to accommodate pets and service animals in all evacuation plans (Fine, 2019).

### **Facility Dogs**

A facility dog typically works in an organization daily and is considered a working member of an organization (Bradley, 2013). A facility dog can live in a residential setting, but often resides with a member of the organization for which they work. The facility dog may be found in correctional institutions, schools, places of work, and residential homes for all ages and intellectual development (Canine Companions for Independence, 2020; Kropp & Shupp, 2017). Most facility dogs have passed the Good Citizen Canine (GCC) exam given by a third-party tester accredited by the American Kennel Club (AKC, 2020). Unlike a therapy dog that must abide by strict leash, rest, and time guidelines, a facility dog may roam a building independently or with their handler, with the purpose of interacting with as many people as possible. Facility dogs have one handler, benefit a variety of people, and do not require any specialty training requirements according to U.S. laws. Facility dogs are often used in AAA and AAE (Gee et. al., 2017). Facility dogs have no special rights regarding public access to restaurants or shops, transportation, or housing.

In her qualitative study, Bradley (2013) investigated the effects a facility dog had on student learning and the learning environment. The findings of the study concluded that the facility dog improved student learning, enhanced the learning environment, encouraged social interaction helping meet the vast social-emotional needs of students, and improved the working environment for the staff (Bradley, 2013). Bradley's study helped me develop a quest for additional knowledge regarding the use of a facility dog in an elementary school setting to help meet the social-emotional needs of students and staff.

The term progressive education, although not new, follows the belief that the whole child, meaning the social-emotional, physical, and cognitive aspects of development, must be considered in the teaching world and one must focus on teaching the child, not the content (Williams, 2017). To do this effectively a school's organizational structure must focus on forming and maintaining relationships between teachers and students (Edwards et al., 2014; Ellerbrock et al., 2014). To build relationships and trust, to create a culture that exudes and lives the belief that kindness, responsibility, and respect is paramount to ensure a school environment is safe, inclusive, supportive, and inviting. These qualities do not come from a program; they come from the adults who mentor, positively interact, advocate, and believe in the adolescent and empathize with them, understanding they live in a foreign space physically, mentally, and socially (AMLE, 2020).

According to the Substance Abuse and Mental Health Services Administration (SAMHSA) (2019) the lack of resources, both financial and personnel, have limited the school organization's ability to provide necessary interventions to aid in the mental health and overall well-being of students and staff. Students suffering from three or more ACEs have included nearly one-third of our school population (Angela Arteaga, personal communication, 2019), thus

affecting their ability to function at their full potential physically, mentally, emotionally, and academically. Added to this adversity, 55% of our student population suffers from food insecurity, substandard living conditions, and a lack of parental supervision due to neglect, incarceration, or work schedules (Stormie Hendrikson, personal communication, 2020). Parent involvement is low, with less than 40% showing up for parent/teacher conferences, IEPs or 504 meetings (Laura Mewa, personal communication 2019). To add to this quagmire, students have missed many months, if not years during the 2020 to 2022 global pandemic, leaving an already grueling pace and expectations of the Common Core Standards to be nearly unattainable to the at-risk population. With this combination, public education must find ways to provide resources that can provide stability to an already stretched and tired organization. With the plethora of roles dogs currently fill to support humankind, a facility dog may provide a simple intervention to support students' social, emotional, and academic needs in their learning environment.

### **Conclusion**

Dogs and children share a bond that is similar to that of a child and a parent (Fine, 2019). Beck (2014), the director of the Human-Animal Bond Research Institute and instrumental in continuing the work started by Levinson and Bustad, wrote in a tribute to Bustad (1983), the most accredited, published, and knowledgeable person regarding the HAB, that he shamelessly borrowed the wording from the often-discussed mother-infant bond understanding that each bond is essential and mutual (Pet Partners, 2021). To support the power of the HAB, a school community that has a facility dog that may provide support and interventions to benefit students far out-weigh the potential risks. When humans interact with animals their cortisol levels decrease and oxytocin levels rise. When these two hormones work together, they act as calming

and euphoric agents, decreasing one's heart rate and thus changing the outlook for those who are feeling anxious, sad, or angry (Boe, 2008; Crossman et al., 2015; Kropp & Shupp 2017).

Although the body of literature regarding the impact a dog has in a school setting has increased since the first iteration of this literature review, many renowned researchers, including Beck (1996, 2014), Fine (2019), Gee et al. (2017) and Jalongo et al. (2004), believe the human-animal bond and the positive impact animals can have in schools needs much more research. From the limited collection of articles, books, and dissertations I have accessed, the conclusions show that animals have a positive impact on both the physiological and psychological wellness of humans (Hergovich et al., 2002; Jalongo et al., 2004; Kotrschal & Ortbauer, 2003). Districts and schools certainly must consider liability, but they risk liability daily with slips, trips, falls, and other possible allegations of misconduct with peers or teachers.

For this practice to be considered as a possible intervention to help students cope with the many adversities they face, additional research needs to be conducted. Longitudinal studies to determine if there is a long-term impact on the presence of a dog for students starting in kindergarten through twelfth grade and even after, in life, is worthy of consideration. The lack of published, peer-reviewed literature is a concern and needs to be remedied by implementing additional research on dogs in public schools and the various impacts, whether academic, social, or emotional, that they have on the stakeholders in the building. The following chapter discusses the methodology for this study.

## **CHAPTER 3**

### **METHODOLOGY**

In this study I used qualitative methodology with a case study research design to investigate what emotional responses a facility dog elicits from students in an elementary school learning environment as perceived by the adult faculty and staff, and in what ways are those responses perceived to transfer to student engagement in the classroom. A case study was chosen for this study to capture the perspectives of different participants and focus on how their different meanings illuminate my topic of study (Yin, 2018). I found limited recent research to support the use of a facility dog, as an intervention for an elementary school's non-specialized population to assist with anxiety, depression, anger, and school engagement.

According to Twenge (2019), the percentage of young Americans experiencing mental health disorders, specifically anxiety and depression, has risen significantly over the past decade. Additional research concludes that over the past two decades studies concluded children that have experienced three or more ACEs has increased and these experiences pose long-term negative implications regarding brain and body development, behavior regulation, and academic success (Murphey & Sacks, 2020; Rossen, 2020). In this chapter, I have described both the site and the population, how participants were identified and recruited, instrumentation and data collection procedures, and data analysis procedures. I also characterized some potential limitations of the study and described how ethical concerns related to this study were addressed.

#### **Purpose of the Proposed Study**

The purpose of this qualitative, descriptive case study was to explore whether the presence of a facility dog in an elementary school may help support students' emotional needs by

decreasing the feeling of anxiety and depression and thus improving student engagement. This study sought to address a gap in the literature related to the use of a facility dog in schools. Specifically, there was a paucity of research regarding the use of a facility dog to help regulate stress and support emotional wellness to a pre-kindergarten through 6th grade population (Wein, 2020). Most research conducted by large organizations regarding the Human-Animal Bond theory, (HAB) both domestically and internationally, focus on the effect animals have working directly with students in specialized classrooms, as cognitive therapy assistants, nursing home comfort companions during palliative care, as well as tools to assist in correctional rehabilitation services (Fine, 2019). Through the literature review it was determined that many studies were conducted regarding animals used in school settings, but they focus specifically on behavior regulation, reading fluency support, and encouraging socialization of the intellectually disabled (Boe, 2008; Elksnin & Elksnin, 2003; Esteves & Stokes, 2008; Hergovich et al., 2002; Jalongo et al., 2004; Kortschal & Ortbauer, 2003). I hoped to provide additional data to support whether the presence of a dog can support elementary school students' social and emotional needs, thus increasing their overall school experience and feelings of academic success. The findings of this study may provide public school administrators data that supports a new and innovative way of providing social and emotional support to students in their learning environment.

### **Research Questions and Design**

A qualitative methodology was chosen that allowed me to explore occurrences as they happen in real life and allowed the participants to shape and help me make meaning of the occurrences and their lived experiences of them (Bloomberg & Volpe, 2019; Merriam & Tisdell, 2016).

The purpose of a case study is to generate understanding and deep insights to inform professional practice, policy development, and community or social action (Bloomberg & Volpe, 2019). A descriptive case study was used for this research to gather data that supports dogs as a natural presence in schools to help students navigate their emotional needs related to anxiety and depression. Yin (2018) describes a descriptive case study design being used to provide an intervention or phenomenon as it relates to the real-life context for which it occurred. Due to the overwhelming concern regarding allergies, liability (e.g., biting), fear of dogs, and cultural and religious factors, organizations, including schools, have been discouraged to consider this intervention (Fine, 2019). The following research questions are posed:

RQ1: What emotional responses does a facility dog elicit from students in an elementary school learning environment through the perceptions of teachers, educational technicians, administrative assistants, custodians, kitchen staff, and administrators?

RQ2: In what ways do observed student emotional responses to a facility dog help or hinder students in their learning environment?

### **Site Information**

The elementary school for this study was chosen due to its convenience to me. When conducting school visits, the facility dog was accompanied to classrooms by a staff member taking part in the study. A site letter of support was signed by the superintendent in June of 2021 and endorsed by the principal of the building.

The site is located in mid-coast Maine and serves 337 students in grades pre-kindergarten through 6th grade. The building was constructed in 1953 and just this year has been through several renovation projects (replacement of windows, roof, boilers, playground equipment, and



furniture). Although this has made the facility functionally better, discussions involving the sixth grade moving up to the district middle school have been seriously considered due to a lack of space for the yearly increase experienced with enrollment numbers. This site houses 337 students and 86 employees. Of the 86 faculty and staff, 45% are self-contained classroom teachers, 10% are special education teachers, 30% serve as educational technicians in specialized programs, and the remaining 15% are support personnel. Two administrators lead the building with 50 years of combined teaching and learning experience. Attendance rates remain steady at 92% each month. The special education population is high, 22%, due to the three specialized programs (life skills, day treatment, and composite) that are housed in the building. The district tries to keep all classrooms in grades pre-kindergarten, kindergarten, and first grade limited to 15 students. The remaining classroom sizes range from 16 to 19. The reported free and reduced lunch rate is 59% according to the largest circulated newspaper (2020).

The school chosen for this site received a failing school grade in 2013 for the lack of its students meeting the academic and growth standards criteria identified in the No Child Left Behind (NCLB) Act (2002) and the following Every Student Succeeds Act (ESSA) (2015). The idea of grading schools and displaying the grade on the front door was dictated by the Governor of Maine at the time. The Maine Department of Education (MDOE) awarded the schools' grade based on student standardized test scores. As well as being reported in the state's newspapers, signs depicting the "F" score needed to be displayed in several places in and around the school, so the public was aware of the grade the school received. Currently the school is listed as a Tier 3 school due to the special education population not meeting growth projection scores on state assessments.

To help improve their failing grade, the site was placed in a tracking program that involved consultants coming to observe the teaching and learning in the school and create an improvement plan. This plan had hundreds of action steps for the administration and the staff to implement with copious accompanying paperwork that was audited and revised quarterly. In 2017 the grading system was abolished due to lack of personnel and fiscal resources. The district, and subsequent site, has since improved their pedagogy by aligning curriculum, implementing Professional Learning Communities (PLCs), and providing staff development opportunities meaningful to the staff. With these improvements the site still contends with a large percentage of students not performing well on the state standardized test.

The participants for this case study included one administrator, three kindergarten through 6th grade classroom teachers, and three support personnel (educational technicians, administrative assistants, custodians, and kitchen staff). Seven participants were interviewed separately using semi structured questions designed by me.

### **Participants**

Teachers and staff were invited to participate in this study by emailing them an invitation. The participants chosen for this study had limited familiarity with the facility dog so they may “highlight what is typical, normal, and average” (Merriam & Tisdell, 2016, p. 268) observing their students with and without dog interactions. All participants chosen represented a sector of the school community to be a data source to “provide a piece of the ‘puzzle’ with each contributing to [my] the researcher’s understanding of the whole phenomenon” (Bloomberg & Volpe, 2019, p. 50). An email communication asked for participants and was sent out once a week for three consecutive weeks. The communication asked for teacher and staff volunteers to

participate in a 30 to 40-minute interview to explore their perceptions of student/dog interactions that have occurred in classrooms, hallways, the library, on the playground, and in the administrative office. I inquired, using twenty-five interview questions (Appendix A), about the impact the facility dog has on students' emotional regulation, specifically about anxiety, sadness, and anger. Teachers and staff interested in participating in this study were asked to email me directly on my University of New England (UNE) email account to ensure that all communication was kept personal and confidential. At the end of three weeks, I gathered the names of those who volunteered and contacted them by telephone or email to discuss the purpose of the study. Participants who were chosen were notified by email. A consent form was sent to participants with directions to return them via email with necessary signatures.

### **Instrumentation and Data Collection Procedures**

The instrument used for this research study was a semi structured interview process with twenty-five questions (Appendix A). An interview protocol was created to follow so each interview is consistent. Each group of participants was asked the same set of open-ended questions as described by Merriam and Tisdell (2016). Probing questions were asked if responses required follow-up. Participants conducted their interviews at a time and place convenient to them through a web-based platform such as Zoom®. Those not wishing to use Zoom conducted their interviews via the telephone using an application such as TapeACall Pro® for accuracy. To ensure accurate transcription, software such as Otter.ai® was used simultaneously as the interview was conducted. Data analysis occurred directly after interviews were complete and was conducted using software such as Atlas.ti®.

It was my intent to build rapport quickly with each participant to ease their mind and allow them to speak freely regarding their perceptions and observations by asking some very general questions prior to the formal interview. Each participant was given a pseudonym and their school's name has been changed to maintain confidentiality. Directly after the interview, participants had the option to review their transcript for accuracy and to ensure it portrays their thoughts and beliefs as indicated in the interview. If participants chose to add or subtract information, a Zoom meeting was scheduled to discuss the concerns and make necessary revisions.

Documentation collected during the interview process was kept in a locked filing cabinet in my home office. All recordings and transcriptions are kept on a thumb drive and locked in a filing cabinet in my home office. All materials were cross-shredded in accordance with UNE's Institutional Review Board's (IRB's) protocol.

### **Data Analysis**

Flick (2014) as cited by Merriam and Tisdell (2016) notes that data analysis is “the classification and interpretation of linguistic material to make statements about implicit and explicit dimensions and structures of meaning-making in the material and what is represented in it” (p. 195). In this qualitative study I used open-ended interview questions to allow each participant to provide as much information as they wished regarding the presence of a dog at the site and the impact the dog has on anxiety and feelings of sadness during school hours for students.

The duration of individual interviews (length and word count), from each transcript was recorded and depicted in a table in Chapter 4. Each interview was transcribed by software such as Otter.ai® for accuracy and convenience and then coded using software, such as Atlas.ti®.

Creswell (2015) states that data analysis is a three-step process that begins with preparation and organization of data, then moves to common themes through the coding process, and lastly is represented in a table or discussion figure (p. 148). To further understand the coding basics outside of relying on coding software, I relied on the first four of the six coding process steps of Auerbach and Silverstein (2003). The plan was to organize and then find patterns within the data collected. In their book *An Introduction to Coding and Data Analysis: Qualitative Data*, six steps are prescribed, but since I am not using a grounded theory approach, only the first four steps were needed to conduct the coding. In addition, I also relied on Bloomberg and Volpe's (2019) Chapter 8, *Data Analysis and Representation*, to guide my coding process.

My first step was to manage and organize data. I did this by making sure that I related my interview material directly back to the theoretical and conceptual framework so as to not get lost in the data and become overwhelmed trying to discern what material was important and what was not. Auerbach and Silverstein warn researchers not to get stuck trying to "find the right way" to code the data (2003, p. 44), because researchers become paralyzed by the data and are not able to move forward with the coding process. Rather, they suggest treating all things that *seem* important as relevant and move on. They support the belief that as a theorist, any interpretation of data is fine, provided there is evidence that can support the interpretation. This step entailed preparing files, ensuring the security of the data, and determining the mode of analysis to use.

The second step in this process required reducing the *raw text* to *relevant text* by highlighting direct quotations that related to the research questions. By adding keywords and phrases in margins and memoing emergent ideas both during and after the interview process (Bloomberg & Volpe, 2019), I was able to *chunk* the data into manageable concepts (Auerbach & Silverstein, 2003), summarize my notes, and reflect on my thinking. The coding software allowed me to aggregate and disaggregate individuals' perceptions, allowing disparities and commonalities between factions to be analyzed. If this step became overwhelming regarding data immersion, I assigned each transcript a different color text. This allowed me to distinguish among the interviews once all data was added to the final document.

Step three in my process involved analyzing relevant data for repeating thoughts that participants had given and classify them into general themes. Codes were assigned to pieces of data identified as commonalities. Bloomberg and Volpe (2019) claim that "classification involves identifying five to seven general themes . . . broad units of information that consist of several codes aggregated to form a common idea" (p. 194). This can be a difficult step if a large data set was gleaned from the collection process. Any ideas expressed by three or more participants in the relevant text were considered redundant in nature and coded.

The last step in the data analysis process required organizing the general themes into larger units, which then guided the findings into categories (Auerbach & Silverstein, 2003). The effectiveness of the categories was ensured by continuously adding new information units until (a) all relevant information had been assigned a category, and (b) each unit of information had fit into one category only (Hancock & Algozzine, 2021). Developing and assessing the interpretation of the data is a "process that requires both creative and critical faculties in making carefully considered judgements about what is meaningful in the patterns, themes, and categories

generated by analysis” (Bloomberg & Volpe, 2019 p. 195). Asking my affiliate advisor for feedback on my coding process and category development provided an opportunity to ascertain “how I know what I know or think I know” (Bloomberg & Volpe, 2019, p. 195), a vital step before the data could be represented by text, tabular, or figure form.

Once the research was complete, a detailed account of the setting, participants, and an analysis of the data as it relates to themes, was submitted to add to the current gap in literature.

### **Limitations of the Research Design and Study**

Limitations of a study may include elements of a design or methodology that have a direct impact on the findings. “Every study, no matter how well it is designed and conducted, has certain inherent limitations” (Bloomberg & Volpe, 2019, p. 207). This research was conducted using a qualitative, descriptive single case study design. Since qualitative research methods require a high degree of researcher involvement, the chances of personal bias, perception or subjectivity is a possibility. In addition, I interviewed adults I may have met on a professional level, so there could be participant reactivity and their responses may be influenced or affected by my presence. The facility dog being used for the study is my personal dog and was specifically bred and raised to conduct research on the HAB. The dog and I have been certified by an outside tester and deemed a qualified therapy team for schools, nursing homes, prisons, and other community organizations.

### **Credibility**

“All research is concerned with producing valid and reliable knowledge in an ethical manner” (Merriam & Tisdell, 2016, p. 237). To ensure that I have accurately portrayed the

participants' perceptions and my research is deemed credible I completed a detailed description of the study as well as complete member checks.

The use of theory triangulation provided perspectives gathered using the same data set by colleagues (Patton, 2015) and strengthened the validity of the case study. By providing participants the opportunity to review their transcript, asking my affiliate advisor to review my data collection process, coding, themes, and categories analysis and provide on-going discourse about the study, triangulation was completed.

Finally, the validity of each question was discussed with my lead advisor. To refine interview questions to answer the two research questions, mock interviews with six school personnel, not affiliated with this study, were conducted. This process allowed me to narrow my degree of focus to allow participants to have a clearer sense of each question to ease their understanding. During this process I examined the language clarity and terminology of the questions as well as the *flow* of the questions and their relation to each research question.

### **Member Checking Procedures**

Creswell states that member checking is a “process in which the researcher asks one or more participants in the study to check the accuracy of the account” (2015, p. 259.) Member checks, also called respondent validation, allowed me to take the raw data collected during the interview process, review it after transcription, and then analyze the data for the coding and theme process. Participants had the opportunity to determine whether the analysis and synthesis of the data is accurate. I did this by emailing each participant with their transcription so that they may validate the findings and themes reported to ensure the interpretations were articulated accurately. This practice also promotes validity and reliability.



### **Transferability**

Transferability, or external validity, is “concerned with the extent to which the findings of one study can be applied to other situations” (Merriam & Tisdell, 2016, p. 253). The source of the data was collected from purposeful sampling in an elementary school. The data was collected from one administrator, three teachers, and three staff members, asking 25 semistructured questions in a telephone or web-based platform interview. The data was gathered using a web-based platform such as Atlas.ti® and was coded and analyzed to determine if the results of the case study may be transferred to another setting like this site.

### **Dependability**

According to Bloomberg and Volpe (2019) dependability means the researcher must “ensure the process is clearly documented, logical, and traceable” (p. 204). The research conducted relied on the feedback from the teachers and staff. After the data was collected, it was transcribed using a software program such as Otter.ai®. After the transcription was completed, Atlas.ti® or a similar software platform was used to code phrases or words, and themes emerged. To ensure dependability, I used inter-rater reliability by asking two professional colleagues, who have completed a qualitative dissertation, to review the process and conclusion of the coded data. When comparing the disaggregated data and finding disparities among the themes the colleagues and I reconciled our differences and interpretations. This triangulation provided an additional step to substantiate the dependability of the study.

### **Confirmability**

According to Bloomberg and Volpe (2019) confirmability must happen in qualitative inquiry as a way to “identify and uncover the decision trail for public judgement” (p. 224). To do

this I reflected on the process for which the study was conducted, shared journal entries that illustrate the roadmap of inquiry I followed, and made transcripts available from the audio recordings of the interviews. This transparency allowed the reader to determine if the findings of this study are reliable.

### **Ethical Issues in the Proposed Study**

Being able to trust the findings of the study I conducted, so that other professionals in my field have data to support a new and potentially unprecedented practice, involved conducting the research in an ethical manner. I relied on the Belmont Report (1979) to explain the many principles and guidelines that address ethical issues arising from the conduct of research with human subjects. In addition, I ensured the facility dog's usage in the school setting followed the guidelines created by ATD that limits the amount of time a dog was immersed in classrooms and with students. Frequent breaks as well as a quiet space to rest was provided by the handler during the visitation.

As an ethical investigator, Merriam and Tisdell stated, "ultimately, for better or worse, the trustworthiness of the data is tied directly to the trustworthiness of those that collect and analyze the data, and their demonstrated competence" (2016, p. 260).

### **Conflict of Interest**

Two potential conflicts of interest exist within this study. Although I have no evaluative or positional power at this site, I am a principal in the district and have likely had social and professional conversations with many of the participants. As a principal in the district, it is common practice to visit the feeder elementary schools in the district to meet students moving to the middle school. It is also a yearly practice that the middle school principal, 6th grade teachers,

guidance counselors, and special education teachers meet in May to sort the incoming seventh graders.

Second, the facility dog attached to this study is familiar with the elementary population. The dog has visited all the district schools informally and has been considered a member of the staff in the district for approximately three years. Although no research has been conducted involving the dog, this could produce a conflict of interest/bias due to the familiarity that has already been established between the dog and the students.

### **Conclusion**

One administrator, three teachers, and three staff members were asked to volunteer to participate in this case study. Communication inviting volunteers to participate occurred using the UNE's email platform. Once the participants had volunteered and necessary forms had been distributed and signed, purposeful sampling was utilized to choose participants. Open-ended interview questions allowed participants to share their personal observations regarding the interactions that occur between the students and the facility dog.

With an increase in students feeling anxious, sad, angry, and disengaged in school, finding a low-cost, high-response intervention to help alleviate these feelings is worth researching. It will be years before longitudinal studies will determine the long-term effects the Coronavirus-19 (COVID-19) pandemic posed on the already fragile mental health of school-aged children (Marques de Miranda et al., 2020). It is inevitable that the lack of in-person instruction, school structure, and the year-long social isolation students experienced in 2020 will have a drastic impact on child development socially, emotionally, physically, and cognitively. Using the HAB theory coined by Bustad and Levinson (1984), I hope to support the notion that

the presence of a facility dog will provide a sense of hope for students feeling distressed while at school. Chapter 4 will present the data collected regarding this study.

## CHAPTER 4

### DATA COLLECTION

The purpose of this qualitative phenomenological study was to examine how the presence of a facility dog in an elementary school setting impacts the learning environment. The human-animal bond (HAB) is shown to have a direct impact on all students in school settings regardless of programming or academic needs (Anderson & Olson, 2010; Bradley, 2013; Broad, 2018). This study sought to identify what a facility dog may bring to a public-school setting using the HAB theory (1984) as well as Maslow's Hierarchy of Needs (1943). This work investigated the lived experiences of administration, teachers, and support staff. The intent of this study was to provide information regarding the use of dogs in schools as a tool to help students engage in their learning environment, decrease anxiety, and provide a sense of emotional support for students experiencing Adverse Childhood Experiences (ACEs). An increase in students experiencing ACEs has changed the composition of the school, classroom, and role of the teacher (Rossen, 2020). In addition to the number of students that have experienced ACEs, homework, peer pressure, image concerns, social-media participation and exposure, as well as family financial worries, all account for the increasing numbers of students experiencing social and emotional dysregulation (Gudmundsen et al., 2018). An analysis of personal observations from those who work in an elementary school may give other districts knowledge they will need to support this practice as they work through the many misconceptions that exist regarding having dogs in schools.

Over the past decade there has been a drastic increase in students' reporting and exhibiting feelings of overwhelming anxiety, depression, anger, and disengagement in the school

setting (Relevette, 2020). To better appreciate these increases, one must first grasp the notion that two-thirds of school-aged students are experiencing toxic-stress, also known as long-term stress, on a daily basis, which can change or even halt brain development (Rossen, 2020). Based on the increase of mental health needs students exhibit (Rossen, 2020) while experiencing a decrease in funding and personnel to support these needs (National Teachers Association, 2021), using the HAB theory (1984) as a theoretical framework and Maslow's Hierarchy of Needs (1943) as a conceptual framework, the following research questions were answered:

1. What observed emotional responses does a facility dog elicit from students in an elementary school learning environment through the perceptions of faculty and staff?
2. In what ways do observed student emotional responses to a facility dog help or hinder students in their learning environment?

This qualitative phenomenological study investigated the impact a dog may have in an elementary school setting on students' overall learning experience in grades pre-kindergarten through 6th grade. Any staff member currently employed at the chosen site was asked to participate due to their daily engagement with students in the classrooms as well as other learning spaces in the building. Semi structured interviews were used to gather information from a wide variety of workplace positions as well as years of experience. Participants shared information about their observations regarding the impact a dog had on the school population.

This chapter is divided into three sections. The first section is an overview of the data collection and analysis. The second section describes the demographics of the seven participants, allowing a deeper understanding of their experience with dogs personally and professionally. The third section discusses the three themes and 7 subthemes that emerged from the interviews conducted.

### **Analysis Method**

Data collection began immediately after approval was given by the UNE's Institutional Review Board (IRB). Timely conversations and emails that contained all necessary information regarding my study were immediately sent to the administrator of the study site, which they then forwarded to the entire staff. Those interested in participating in the study were asked to communicate directly with me using my university email address. When seven participants volunteered, interviews were scheduled and conducted within one week's time.

Semi structured interviews were conducted using Zoom® individually at a time convenient for each participant. Using semi structured questions gave me the opportunity to ask a wide variety of questions. The first few questions gathered information on the participants' role in the school setting, their years of experience, and specifics regarding dog ownership, both past and present. The second part of the interview included questions about the population the participant worked with. The third and last section focused on the relationship between the facility dog and the students. This section also explored the impact the dog had on the adults in the building.

Interviews were audio and video recorded with each participant's permission. Each participant was given a pseudonym to protect their privacy. During the interview, Otter.ai®, simultaneously transcribed the conversation. When each interview was complete, I reviewed the transcripts for accuracy and sent a copy to the participant at their desired email account. This gave each interviewee the opportunity to member-check the collected data to ensure its accuracy (Creswell & Gutterman, 2019). The participants who responded approved the transcripts with no revisions needed.

To code the transcribed material I uploaded each interview to Atlas.Ti®, and used the Interpretive Phenomenological Analysis (IPA) protocol to identify themes, patterns, and trends using a structured method developed by Moustakas (1994) for IPA qualitative data analysis (Alase, 2017). Data was analyzed using descriptive, linguistic, and conceptual comments as described by Smith et al. (2009). Once uploaded, I read each transcript several times allowing the focus to change as denoted by the IPA process. After several readings, new codes, as well as codes that had been identified in previous readings, began to evolve into overarching concepts and then into themes. During the final review of each transcript, I annotated and highlighted statements that were made by participants that were significant to each research question posed. This process continued until all seven participants' responses were completed. Initially 63 labels including quotations were completed and 28 initial codes emerged. Of the 28 codes I was able to identify three themes that emerged from the interview process.

### **Presentation of Results**

This section includes demographic information of the participants of this study including their role in the chosen site, their years of experience, their history regarding dog ownership and, if applicable, the dog's role in the family unit. Participants also shared their opinion regarding the implementation of a facility dog being placed in schools and used as an intervention. Three overarching themes were extrapolated from the data analysis after different iterations of the coding process. These themes were: an increase in students' basic needs (hungry, tired, lack of stable housing, etc.) not being met; a facility dog acted as a helping and healing agent in the learning environment; and a facility dog helped create a positive culture and climate in the learning environment.



## Participants

Seven employees from one elementary school that serves pre-kindergarten through 6th grade in Mid-Coast Maine were interviewed. One administrator, three teachers, and three support personnel were interviewed. Years in each role varied from three years to 36 years. Table 1 depicts the participants' interview times and word count.

**Table 1**

*Participants' Interview Time and Word Count*

Participant	Interview Time	Word Count
Reba	21:08	2,774
Sara	30:09	3,376
Wynonna	36:21	4,597
Trisha	24:40	2,974
Faith	27:41	2,937
Natalie	38:03	4,470
Dolly	23:57	2,824

### *Reba*

Reba has spent fifteen years in the educational field. She currently teaches fifth grade and has been employed at this site for two years. Reba currently owns two dogs and she views them “As one of her children.” Reba has never worked in an organization that has allowed dogs to roam and interact with humans freely.

Currently, Reba shares 35 students with a team teacher and gives instruction in the areas of math and science. When asked if she has noticed any changes in (a) her students' basic needs not being met, or (b) her students' anxiety levels since she has been at the site, she responded:

I see an increase. There's the emotional support piece missing and I've seen an increase regarding that since the pandemic started. I feel when we came back to school a lot of kids were missing that piece. I see an increase in anxiety in students specifically this year.

I have a student in my homeroom that was remote last year that came back and she's having a really hard time adapting back into the school environment.

When asked specifically about how the dog interacts with students while in the building, she described how the facility dog (from here forward referred to as "Lucy"), accompanied by a staff member, would start her day by greeting students who were getting off the bus or being dropped off by parents, and that kids were, "So happy and excited to see her." She noted that this early morning interaction, "Set the students up for a great rest of the day and changed the whole atmosphere for the day." Reba continued to share that when Lucy would visit her classroom, an "immediate joy" to both students and staff was evident. Students seemed "happier and more upbeat." When asked if it took students time to re-engage in their academics after Lucy's visit had concluded, she was adamant that it did not. She explained that by setting clear expectations regarding Lucy's visits before, during, and after, the students were able to regulate themselves accordingly.

When asked about the impact Lucy had on individual students, rather than a group of students, she shared the following anecdotes:

Last year, I had a student that had some rough times sometimes. When Lucy would come by and see her, she would have a complete turn around and she would have a better day

afterwards. It was almost like Lucy gave her a little bit of motivation to get through the day. Just today, [a student] came in really anxious and ended up crying and really upset. In an effort to soothe her, the school counselor suggested some special time with Lucy. After a brief visit, some petting, hugging and kissing, the student was able to reset herself and return to class.

When asked about the social opportunities Lucy gave to a group of students, Reba used phrases such as, “They [students] want to talk about the visit and discuss it with each other” and “They look forward to seeing her and want to know when she is going to come back.” Given the opportunity to share if Lucy hinders or gets in the way of her schools routine or function Reba stated:

I don’t think so, because when she comes in and she sees my kids, she sees all of them and it's almost like she's got a personal connection with each one of them. She goes and sees each one of them. They have an exchange, whether it's hugging or patting her. It's like she's got a personal relationship with all the students and I think that's how they view it with her. It's a good social-emotional connection for them.

The last question I asked was if Reba felt it was a viable and worthwhile intervention to have dogs in schools as a way to engage students in a learning environment. She stated:

Yes, I think every school could benefit from having its own dog to support kids emotionally and physically. Just as a companion, a motivator. I think they're an amazing thing. So I came from Florida last year. That's where I spent the first chunk of my career. I met Lucy last year. That's the first time I've ever been in a school with an animal. I thought it was the most amazing thing I'd ever seen.

*Sara*

Sara has been in the educational field for 16 years. She is currently a third-grade teacher but has taught various other grades and has been teaching at this school for six years. She currently has dogs that she describes as “our babies” but further explained, “They are part of our family, you know, our children. They definitely help with anxiety and depression. Especially for my son. When he's really feeling anxious and depressed. They usually will cheer him up.” When asked if she had ever been employed by an organization that welcomes dogs she said she had not.

Sara currently has 16 students in her classroom but seventeen on her roster. One is not allowed in the classroom due to COVID-19. She has one student that comes and goes from the Composite room (self-contained special education room), two that are pull-out for resource room services, and three that currently receive mental health services. When asked about students’ physical and mental preparedness to attend school she shared:

Students come to school totally exhausted. They told me that they are tired because they couldn't sleep for a multitude of reasons. Students wear the same clothes every day and are always hungry. I've seen more with anxiety. I seem to have more students that need more help and support. I am trying to come up with different things to do with these students to help them cope. I have students that have no outside support so I am coming up with strategies like having comforting pictures [on their desk] of something that's going to help them at school. [This year] I am supplying journals for students that are so consumed with things [going on in their lives] they can't concentrate or focus on their schoolwork. If need be they can get out their journal and write their thoughts down in it

so that they can kind of have it there. I've been doing a lot more of that in the last couple of years than I've ever done before.

When asked about forming a bond with Lucy, she admitted that students are very excited to engage with her. They want to place hands on her, pet her, hug her, and kiss her. She stated that she heard many “oohs and ahhs” when Lucy was in close proximity. She shared that “They are totally excited to see her and they really thrive when they interact or pet her. Even seeing her through the classroom door when walking in the halls, they light up.”

As far as students losing focus when Lucy is present (in the classroom or out and about in the school) the students are very good. They get “right back to work.” When I asked a probing question about this, she remarked that when Lucy is in the classroom, the students tend to have more focus. Lucy will walk around the room and check in with each student while they are working and get a pat or a kiss and they get right back to work. She further stated that Lucy has been a great tool to use in her academic world. Sara explains that she is teaching a unit on habitats, life cycles, and selection. One whole section is on dogs. Sara explains the unit discusses domestication, why some dogs are small while others are large; why some are brown, black, or multicolored. “This has led us to have a conversation about why some dogs are great therapy dogs like Lucy. Lucy brings this concept into a real-world situation and really gets them thinking beyond what we're watching and reading about.”

According to Sara, her students' body language changes when they know Lucy is in the building and will be visiting. Sara used words like, “sheer joy, calm, and relaxed” when asked to describe what she had observed.

They just kind of . . . it's almost like they melt. It's like they're just their body melts and it's just like, ohhhhh, it is Lucy and there's no, like hesitation. It's just kind of like,

relaxed and they are just so in love in awe of this dog that they get to see in the hallway.

I've seen a lot of students that will just sit down on the floor and start giving her love. I

think she fills a void for them. They want to be close to her.

Sara also shared that students who do not normally converse with one another will actually have a conversation. "They all have something in common that they share; they love Lucy and Lucy loves them."

When asked if Sara had any stories to share about individual students that have been impacted by Lucy directly she told the story of a mainstreamed boy that has outbursts and often leaves the classroom in shambles and classmates upset. Since Lucy has been available to this student to help him reset, his outbursts have decreased and he has been able to continue with his day. She says there are several students in the building that are using this strategy and finding success.

As far as Sara is concerned, Lucy is playing a crucial role in making school bearable for many students. She mentioned that there is no downside to having a dog in the school, rather while the increase of students facing daily adversity is increasing, the ability to support those same students with adequate programs and personnel is the underlying issue. Sara ended her interview by mentioning that Lucy is not only good for students, but also staff.

I was just talking today with my team. There's three of us and we were just talking when Lucy walked by the classroom. We all were saying how good it is to have Lucy. Lucy is a support for the adult staff as well as for the students. There are days when I'm like, ohhhhh, Lucy is in the building! I go right down to the office because I need some love from Lucy right now. I know that there are some adults that seek her out as well to help them with whatever they're feeling at that moment.

***Wynonna***

Wynonna started her teaching career later in life. She has been teaching for 25 years and is currently a math and science teacher for 40 sixth graders. She has been employed at this site for 3 years and chooses to drive 75 minutes to and from work because she is so happy with the culture and climate of her building. Her previous career was in publishing, working as a freelance writer that had a “family atmosphere.” When asked if she had ever worked for an organization that allowed dogs in the workplace she smiled and said, “Yes. There were several dogs, including mine as well as two cats because we had a mouse problem. It [having animals] was a huge hit.” She currently has one dog and she says, “We do everything for the dog first. We are more concerned with what the dog will experience more than the rest of us.” She also said her current dog is a bit crazy and has some pretty intense idiosyncrasies.

When discussing her student population and the needs she sees that her students currently have she expresses some deep concerns; especially around their mental health. Wynonna describes a typical classroom consisting of special education, 504, Gifted and Talented, as well as several students who participate in a check-in check-out (CICO) routine in an effort to provide executive functioning support as well as emotional support throughout the day. She describes students as anxious but was quick to mention that her students talk about their worries regularly. Another concern she stated was the escalating angry behaviors that students are exhibiting without any antecedents. Wynonna shares:

Yeah, they've been much more anxious these past two years and they were the first year I was here. They started to get anxious in January just before we went out. They talk about being anxious. They act out. I have one kid right now in my homeroom who just all of a sudden in the past two or three weeks, has just gotten super angry and like, violently

angry immediately. All of us are just going, “Oh, my God!” like something happened to you . . . what happened? It's just shocking. I have a lot of kids this year that I think about all the time.

When conversing about Lucy, and what she has done for the student population on a whole, not just her students, Wynonna raved. She told stories about students gaining friendships that they might not have without the help of Lucy, conversations regarding personal connections, students “grew three inches taller” when they have been given the leash and responsibility to take Lucy outside, students with sparse attendance coming school just to see Lucy, smiling and laughing, and moving more during recess time. She shared that students have pictures of Lucy taped on their desk as a reminder that they have a dog that loves them unconditionally in the building.

She has helped them bond with each other. Like, “We're the kids who have a dog that loves us.” I'm sure they had no idea that the dog is going into other classrooms and loving other children, but as far as they are concerned, she belongs to our classroom. They really liked that a lot. That is very special for them. It's such a pleasant distraction. Earlier I mentioned the kid who's instantly angry lately but when he sees Lucy he becomes completely distracted and calms down immediately because he forgets whatever it was he was mad about.

During her lunch duty recently, Wynonna experienced a moment with a student and Lucy that she shared. To prepare me for this story, Wynonna gave some background on a female student who is experiencing some intense home adversities. Knowing this child was a loner and hesitant to engage, the principal brought Lucy to the student and showed her how Lucy gives hugs to students when they feel sad. After the demonstration was given, the student reluctantly gave the



command and Lucy complied with her directive. A euphoric feeling for all that witnessed the sheer joy and love that student seemed to feel in that moment. Wynonna's words:

Oh, my gosh, the other day at lunch, the principal brought Lucy down. There's a girl who's always really, really sad. [The principal] taught her how to get Lucy up on her lap just like her front paws up on her lap. That kid started giggling and laughing, it was like she just couldn't believe this dog would like her. [The student] was just so excited that this thing had happened. It never occurred to her that Lucy would pay attention to her like that. It was great. She was really happy about it.

When asked to sum up the importance of having Lucy interact and work with students in the school environment it was clear in her feelings stating, "Lucy is a positive force. She provides positive energy." She ended her interview with a few profound statements supporting this practice. "Lucy is the dog everyone gets to see and love. I feel so good about this practice. I love this idea and I am really glad you are doing this for both the students and the staff. All schools should be doing this."

### ***Trisha***

Trisha has been in the field of education for five years. She received her teaching degree from a Maine college in 2003 but never wanted to have her own classroom. She has been working at this site for two years as a paraprofessional in an intensive special education program. Prior to this job, she worked in a southern Maine elementary school in the same role she has now. Although she worked as a substitute teacher sporadically, she opted to be a stay-at-home mom to her three children. When her youngest started kindergarten at her school she went back to work fulltime. Her family has an 18 month-old Newfoundland that she describes as, "An active participant that requires lots of their time" and a playmate to her children.

The population Trisha currently works with consists of 14 students with a multitude of disabilities ranging from severe to moderate. When asked about students' basic needs requirements she said she would be unable to make any comment because she has only been working for two years with the students and during a majority of that time, students were either in school for only a day or two a week or learning remotely. She did mention that her program provides several supports other than academics, such as providing meals for many of her student's families over the weekend, teaching skills and providing supplies for basic hygiene care, and providing clothes. Although she said she is unable to determine if the needs have increased over the past few years, she does believe "[the numbers] probably are higher, but it may be that we are more mindful of the needs than we used to be in education, which is a good thing."

During our conversation regarding the impact Lucy has had on both her students and those interactions with mainstreamed students, she made the following statements regarding her observations:

- Lucy lightens the mood.
- When Lucy is present, students perk up a little bit. If they're low or down, they'll get a little bit more energy or be more talkative.
- Lucy breaks the ice and gives the students something to talk about. She provides an opportunity for kids that might not normally have something in common to have something to talk about. She's a good conversation starter. This applies to grown-ups as well.
- Students (and staff) seek her out to spend time with her.
- Everyone's important to Lucy. There is no status. She doesn't know who is poor or rich, smart or struggles. There is no judgment. Everyone is loved the same. Everyone is on a level playing field.

- She's just . . . Lucy. Sweet, gentle, and calm. Calmness is really good for kids now.

At the end of the interview when I asked if she had any concerns regarding a dog being a constant figure in a school setting she said, “Absolutely not. This has been a positive experience and I think it would be helpful in other schools. It is definitely helpful here. For sure.”

### *Natalie*

Natalie has been in the field of education for 36 years. She has been a second grade and special education teacher. Her past eighteen years have been spent leading a building as a principal. She had never had dogs, or desired to have a dog, prior to meeting her husband when she was introduced to all five of his. Currently Natalie has one dog that she says is her favorite.

When discussing her dog’s role in the family, she giggled, acknowledging that she was “their baby” and she never in a million years thought she would ever say those words.

Natalie leads a building of 330 students, thirty-five teachers, and 27 support staff. The building provides education opportunities to some of the most intensive special needs students. When asking about her assessment regarding the current needs of her students and families she stated that they are in a critical situation. Students (and their families) are faced with poverty, mental health and substance abuse issues, and a high rate of parents who are incarcerated in the state prison 13 miles down the road. When asked specifically about her students, she stated, “Anxiety in particular has become a huge issue.”

While discussing Lucy and her role in the school, Natalie at times was speechless; unable to put into words what *one dog* has done to promote and increase the culture and climate of her building. She mentions instances of seeing her staff sitting in the middle of the hallways just to

interact with Lucy when she was looking for a room to support. Over and over she would state, “I just can’t believe what she does.” Throughout the interview, Natalie reiterated what her peers had before her. She acknowledged that Lucy provided comfort, love, touch, patience, time, and acceptance to all stakeholders. Natalie noted observations that she had made of Lucy being able to “reset” escalated and potentially aggressive students when humans could not. She tells the story of a special education student who lost a parent and her inability to move past the grief and sadness until Lucy entered the building and formed a bond with her. Since the two were introduced, the student has produced more work and stayed in school more than she has in two years.

With all the anecdotes, the most powerful one involving Natalie occurred during the week of this interview. On a more personal level, Natalie shares that the principal/student dynamic has changed since Lucy has arrived. Because Lucy has formed a relationship with Natalie, students are approaching her hoping to share the Lucy experience.

Other poignant observations include: students being more playful (active) during recess time, resulting in fewer physical altercations, especially with the older students. Students and staff modeling kindness and community in the building, thus providing a sense of calmness the building hasn’t experienced in years. An increase in academic engagement and focus, habitually truant or chronically absent students coming to school. Her last words were, “This has been a great experience.”

### ***Faith***

Faith has been employed at this site for four years and is a paraprofessional in one of the special education programs working primarily with children with intellectual disabilities. Many have limited pragmatic skills; therefore, her keen observations are critical. Prior to being in the

public-school sector, Faith worked in the childcare field for 15 years. She grew up with dogs and has had dogs as an adult but does not currently have one. She commented that losing her last dog was too painful and she wasn't sure she could go through that kind of loss again.

Faith raised concerns about the increase in anxiety her students are expressing through their behaviors and believes there is a direct correlation between this and the lack of stability and routines in the home. Through her observations Faith revealed that the population of students she works with seem to be able to relate to Lucy in ways that she or her colleagues cannot. Faith notes that their body language is the true test of their emotion. When Lucy visits, students' faces light up, their bodies relax, and they look like they are filled with happy thoughts due to their smiles and giggles. Faith observes that students with intellectual disabilities often get "stuck" due to their lack of communication ability and become frustrated, so when they can relate to Lucy they feel she is saying, "I love you and you love me."

Faith also noticed that one of her students with autism at first struggled being near Lucy. "Not quite fearful, but hesitant." She went on to explain that the hesitancy to pet Lucy may be as simple as the tactile challenges this student has. However, on the day of this interview she was excited to announce that the student mentioned above actually reached out to Lucy during circle time and touched her. According to Faith, this was huge progress for the student and was celebrated by the entire class.

Like others interviewed, Faith reported that although her population are not overly talkative, Lucy has helped students communicate with one another and the adults in the classroom. She verbalized:

They all want to talk about "dogs" and their relationship with Lucy or their dog. They want us to see what the dog is doing to them, like if she kisses or if she shakes. They tell

us and then they giggle with one another. They will talk to one another and some of these students don't typically interact. Lucy helps them interact with one another and that is really nice to see.

Additionally, Faith reports that she noticed when students are escalating and unable to communicate the reason why, Lucy is able to reset them in a relatively short amount of time. She also mentioned that students who are reluctant to be touched by adults welcome physical interactions with Lucy such as hugging and kissing.

### ***Dolly***

Dolly has worked as a paraprofessional for three years. She currently works in a special education classroom providing support for two students with behavioral and academic difficulties who are primarily mainstreamed. Dolly has two dogs at home and she describes them as being head of the household. Dolly has never worked in a setting where dogs were allowed.

Dolly believes the numbers of at-risk students, both mentally and physically, has increased over the past few years but also recognizes she “may just be more aware of the number of students with their basic needs not met.” She further states that she not only *sees* students struggling with anxiety levels but also *hears* about their worries.

When describing interactions with Lucy, Dolly used adjectives like excited, happy, and relaxed. She claims students feel better during and after a visit with Lucy because “there is no judgment. Everyone is on an equal playing field. Wealth doesn’t matter, IQ doesn’t matter, they are just chilling with the dog.” Later on in the interview she circled back to this and stated, “[Being with Lucy] is a common experience for everybody. No one is left out.” When inquiring about her students’ physical interactions with Lucy she notes observing students laying down with Lucy and giving her hugs and kisses. She mentions time with Lucy outside; playing during

recess or walking the track is considered special time for all students, not just the ones she works with. As for the overall impact Lucy has during school hours, Dolly states:

I feel like her impact has been positive. All the kids are very excited when she's there. It creates a really good environment in every classroom when she's in the classroom, or even just in the building when they get to see her walking around. There's no negativity. They seem less anxious. All in all, it just creates a really positive environment in the school, even if she's not in their classrooms, just knowing she's in the building. When we all see that picture on the door that she is in school for the day it just seems to give us a great start.

Dolly's final remark complimented the work Lucy is doing in the schools and wishes every school had one or two. "I think it's great. The kids love it."

### **Emergent Themes**

In an effort to ascertain commonalities among the seven participants and the observations they made during Lucy/student interactions, saturation did not take long to occur. During the IPA (Alase, 2017) process I notated 44 descriptive, linguistic, and conceptual comments (Flower et al, 2019). From here, 14 codes emerged. When data was grouped according to Atlas.Ti® code group function, three themes emerged. By triangulating the data of all seven participants and looking for patterns, subthemes became apparent. Table 3 shows the three emergent themes and seven subthemes determined from data analysis.

**Table 2***Interview Themes and Subthemes*

Themes	Subthemes
An observed increase in students' basic needs (hungry, tired, lack of stable housing, etc.) not being met	<p>Faculty and staff observed and reported that students are coming to school tired, hungry, unkempt, or homeless more than previous years</p> <p>Students required more time and attention from faculty and staff</p>
A facility dog acted as a helping and healing agent in the learning environment	<p>A facility dog provided love and friendship regardless of students' life circumstances</p> <p>A facility dog helped foster new relationships with adults and new friendships with peers</p> <p>A facility dog helped students regulate their mental health challenges in ways adults were unable to</p>
A facility dog helped create a positive culture and climate in the learning environment	<p>A facility dog made stakeholders feel happy</p> <p>A facility dog promoted student engagement in their learning environment</p>

**Theme #1: Faculty and Staff Observed an Increase in Students' Basic Needs Not Being Met in the Learning Environment**

This theme became apparent immediately, due to all seven participants indicating that they had experienced or were more aware of an increase of students arriving at school having many basic needs not met. All seven educators felt strongly that this adversity has a direct impact on the level of engagement in student learning. By focusing on distinct statements and words, the following two subthemes that I found prevalent are described below.



***Faculty and Staff Observed and Reported More Students Are Arriving at School Hungry, Tired, Unkempt and Have a Lack of Stable Housing***

When interviewed, 100% of the study participants specifically mentioned that students were coming to school in a more fragile state. Two of the seven participants, Reba and Faith, specifically mentioned that they attribute this change to the pandemic and the isolation students endured while being at home.

When asked about her observations regarding the emotional impact within the learning environment for her students, Reba mentioned she observes students are having a difficult time adjusting to the “back to school” routines since being remote the previous year. She attributes this to the increase in absenteeism and the ability to regulate their emotions. Similarly, Faith said, “I would say for me, it’s looking worse now with COVID and everything going on. I think there is more stress. . . . I think there are a lot of children that don’t have stability or routines at home.”

Three of the remaining five participants, Trisha, Natalie, and Sara all commented that although they believe the needs of students have increased, they wonder if they are just “more aware” of the needs since they entered the profession. Trisha said, “I think those things [needs] have always been present, but I would say part if it is that we are more mindful of it than we used to be.” During her interview Natalie shared:

When I started 30 plus years ago as a substitute teacher, I may not have been aware of all those things. As a special education teacher in the resource room I saw more of that. But as an administrator, it’s gotten worse and worse. The number of kids who are homeless has grown, the transient population has grown. The number of kids who need mental health services has just skyrocketed, and the lack of available services has really become an issue.

Sara had the most to say about basic needs and the correlation between student engagement and adversities students are facing. When asked if she noticed an increase in basic needs not being met she said, “Yes! Yes! Yes!” Emphasizing that this was a serious factor facing students, she focused more on the lack of sleep students report they are getting and the impact this has on the emotional availability students have. When probed, she discussed the amount of transient and homeless students and them sharing that they are “tired because they could not sleep for a multitude of reasons.” She also stated that “Students are always hungry” supporting this by noting the amount of food and snacks the students require to maintain their focus during the day, as well as the food program that is utilized daily at the school by the families.

***Students Required More Time and Attention from Faculty and Staff***

This theme emerged when six of the seven participants discussed the increased amount of time they are spending with students to regulate their emotional needs. In the special education rooms this has always been a need, but more recently teachers, administrators, and support personnel discuss the additional pedagogical tools they are having to use to keep students in school. Sara and Wynonna were the most vocal regarding this; however, all but Dolly referred to “doing more” to make school better for students. When looking at the demographic data, this makes sense since Dolly has the least amount of years (three) in the profession with two those being remote or hybrid schedules.

Sara discussed the plethora of extra needs her students require to focus in school. With 16 years of experience under her belt she has resorted to pasting happy pictures on students’ desks and providing them journals to use at any time they deem necessary.

I seem to have more students that need more help and support. I guess you would say I am trying to come up with different things to do with students to help them cope. I have students that have not had any outside support so I am coming up with strategies like having comforting pictures of something that's going to help them at school [on their desk]. I have supplied journals for students so that when they're consumed with things and they can't concentrate or focus on their schoolwork, they can get out the journal and write their thoughts in the journal so that they can kind of have it there. So I've been doing a lot more of that in the last couple of years than I've ever done before.

Wynonna, also a teacher, chose education as a second career. Having been in the profession for 25 years she finds that she “thinks about students all of the time.” Wynonna, like Sara, is posting pictures of the facility dogs, Lucy and Patty, on students’ desks so they have them nearby at all times because they, “Bring them happiness.” When asked about why dog pictures in particular, she said, “They are prized possessions . . . they mean so much.”

Natalie, the only administrator interviewed, discussed her need to be constantly visible and vigilant during school hours so that it was evident she was around and available to support students at any time. Her primary observation when asked about her role in school was that she was, “Playing parent to parents.” When asked to describe what she meant by that statement, an example she used was the enormous increase she gets daily with parents asking for her help to get their children to school because they won’t get up in the morning, citing, “they are on their phones all night and won’t get off” and they need help. She supports this by saying her parents are “getting younger and younger” and do not have the discipline fortitude of the previous generations, giving children lots of power.

Two of the three support personnel interviewed discussed the additional hygiene support their students require this year. A remark made by Trisha was profound in my analysis, reporting, “Sometimes there are more needs than we can meet, but we do the best we can.” Although she did mention additional academic support has been required, she discussed the need for more assistance in bathing, tooth brushing, and toileting. Faith remarked that she spends much more time than past years helping students regulate their emotions by creating and executing routines. She further remarked that due to the population she works with, and their lack of expressive language ability, frustration and then escalation can occur when immediate needs are not met. She recognized that although creating and implementing these routines is time consuming, they are necessary.

## **Theme #2: A Facility Dog Acted as a Helping and Healing Agent in the Learning Environment**

This theme emerged because all seven participants discussed the many roles Lucy played in the course of a school day to support students. Each participant provided data regarding all three subthemes. At any given time all those interviewed noted that Lucy could be used to de-escalate, motivate, promote physical activity, mediate, soothe, and academically engage students. The data given by all seven participants provided an enormous amount of information on the HAB connection in a learning environment.

### ***A Facility Dog Provided Love and Friendship Regardless of a Student’s Life Circumstances***

All seven interviewed remarked on how Lucy provided a no-judgment zone for students. The many comments regarding students’ feeling unconditional love provided evidence to support this subtheme. Trisha, Dolly, and Faith provided the majority of data; however, all participants mentioned this observation to me. Trisha says:

Everyone's important to Lucy. There is no status. She doesn't know who is poor or rich, smart, or struggles. There is no judgment. Everyone is loved the same . . . everyone gets a turn . . . she loves them all the same and that is good for kids.

Dolly mentioned the importance of no-judgment three times during her interview. She stated:

There's no judgment. Everybody's on an equal playing field. Yeah, absolutely. Wealth doesn't matter. IQ doesn't matter. They're just all just chilling with a dog . . . Lucy provides a common experience for everybody. It's not something that anybody's left out of.

Faith and Dolly felt that students viewed Lucy as a friend with no expectations. They both used the same phrase, “The students seek Lucy out.” When asked what that meant, they both explained that the students they worked with valued the interactions and viewed Lucy’s patience and kindness as love. One of Faith’s students often remarks on how Lucy is “her dog” and “I love Lucy and Lucy loves me.”

The remaining participants referred to this subtheme by sharing the students' need to physically touch or be touched by Lucy. Wynonna, Sara, and Reba all mentioned the students’ tactile interaction which included: petting, kissing, floor hugging, high-fives, and asking for Lucy to “up up” on their lap with her paws around their necks in order to give and get a real hug. Natalie noted that on the days Lucy was not at school students were disappointed and inquired where *their dog* was. Natalie also shared that when students were at recess, she promoted interaction among students of all ages and backgrounds by playing tag with them. Although the students in the Composite room are unaware of Lucy’s true motive of licking food off their faces, those very at-risk students saw this as an act of kindness and love.

***A Facility Dog Helped Foster New Relationships with Adults and Friendships with Peers***

As a researcher this subtheme resonated as one of the most profound. Once again, all seven participants referred to Lucy promoting new relationships with adults and peers in the learning environment. When coding the data, Natalie mentioned this observation seven times, Trisha six times, Dolly, five times, and the remaining participants four times or less. The person who appeared to be most affected, professionally and personally, by this result was Natalie, the school administrator. She attributed Lucy's clear relationship and attachment to her allowed students to see her in a "different way, not just a principal." Her remarks describe the impact Lucy has first thing in the morning on staff when they get to school.

When staff walk in the building Lucy greets them at the door when they come in. So they're starting their day with "Oh, Lucy you're here!" and they stop in the office. They don't just walk in and just go to their room. They stop, talk, and they engage [with me]. They start their day off on a good note. You know, when I walk Lucy up and down the halls in the morning (just visiting people), I've had faculty and staff just sit down in the middle of the hallway to pat her and snuggle with her to start their day. You know, so people are engaging with me in a different way.

When asked about her relationship with students, she gave several examples that occur throughout the day. Getting on or off the bus, saying "hello" or "goodbye" for the day, the conversations occurring in the cafeteria during lunch, during recess and walking the track are three she mentioned.

My relationship with the sixth graders in particular is different. Um, you know, you know, I was always the principal and told them what to do. And now we have Lucy to talk about. Kids come up to me and ask if they can walk with me on the playground. That

never happened. So it's like, cool, we're talking to get to know each other and me not just being the principal.

When analyzing the data regarding students forming relationships they might not have without Lucy's help, the staff all commented on the conversations between unlikely students that occur. Trisha says, "Well, they talk about Lucy so like it breaks the ice or gives them something to talk about. So it gives kids that might not normally have something in common to talk about? She's a good conversation starter. . . . Have you seen Lucy today"? Trisha did comment on the principal/adult/student interactions as well, noting that when Natalie is walking around with Lucy, "Staff and students are more likely to approach her [Natalie] . . . when they can pet Lucy they can have a conversation with a grownup. It's safe." At recess Trisha noticed students playing together who wouldn't normally be interacting.

Once again, Dolly's data contributed to supporting this subtheme. Her observations included students' feeling more comfortable around other students whom they were unfamiliar with along with adults in the building. She attributed this to students feeling safer and happier when Lucy was around them and more willing to step out of their comfort zone, or at least unaware they were.

### ***A Facility Dog Helped Students Regulate Their Mental Health Challenges in Ways Adults Were Unable To***

All seven participants discussed the impact and role Lucy had when helping students navigate and regulate their anxiety, anger, and sadness. Although not named directly, when the data was disaggregated the impression that Lucy's ability to alleviate these feelings was more successful than the adults.

Through her observations Reba reported that Lucy is able to help put students in a better

place mentally when they are having “rough times.” She claimed that Lucy would be able to help students, “turn their day around” when they were able to spend time with her while also making several references to Lucy being able to change a child’s mood and enticing them to remain in school when the adults could not.

Sara indicated that Lucy was able to calm down students and bring them joy when they were anxious or sad. She believed that Lucy’s presence alone, without any particular interaction, helped students feel less hopeless and anxious. “I have one student that has difficulty with anger control. When he gets angry and has outbursts he would seek Lucy out and was able to be comforted and calmed by her and continue his day.” During the interview, Sara discussed how Lucy played an important role as an assistant to the support personnel to de-escalate students enough that they could use their communication skills to explain what they needed at a moment in time. To support this statement, she noted, “This teamwork opens up a whole array of opportunities to help our kids with anxiety, depression, and behaviors.”

Wynonna discussed three boys, their struggles, and her on-going worries about their mental health throughout her interview. She made several remarks about “how sad” they were. When asked what different types of support Lucy was able to give students in their learning environment, she was quick to tell short vignettes about them. During her lunch duty, Wynonna paid particular attention to an upper level elementary school boy who was never happy. She talked about his hood being over his head, his head often down on the lunch table, and his lack of peer relationships. One day, Natalie, the school administrator, approached this boy and whispered in his ear with Lucy by her side. The next thing she observed:

I watched Natalie give the kid Lucy’s leash as they were lining up to go out to recess so she could put on her coat. She wasn't giving this boy a huge responsibility but he didn't



know that. Knowing that this kid hates school and everything about it, I was able to notice that this was the best thing that's ever happened to him. He stood up straight—like he had just grown three inches—right there in that second. It was amazing.

Referring to a boy in her classroom whom she had a relationship with last year as well, and the outbursts of anger he has just recently started having, she said Lucy distracts him enough that he can “calm down immediately” because he forgets whatever he was mad about. She was clear to explain that when these outbursts occurred, adults and students were unable to “reach” him; however, when Lucy would arrive, he wouldn’t want to upset her, so he would agree to leave the classroom to reset with her. The last example Wynonna shared was:

I have a super, super sad guy. Natalie would invite him to her office in order to give him some private time with Lucy or invite him to walk around the school with Lucy. She would ask if he wanted to come walk and hold your leash with her, anything just to get him to feel happy. He probably has three or four dogs at home, but Lucy is much more important. You know, she's the dog who everybody gets to see and wants to be with, thinking, “I don't mind that everybody's looking at me.”

Trisha referenced observing her students being able to reset themselves when Lucy was available. “Anything to sort of break their focus from what they're upset or stressed about. Lucy gives them something else to focus on for a minute. This is a really good way for them to reset and focus on something positive for a few minutes.” She also mentioned that her students would perk up and have more energy during and after Lucy visited the classroom.

Faith shared that Lucy could change the whole atmosphere in a room. Where the most at-risk academic students spend the majority of their day can often be challenging. By allowing Lucy to participate in circle time or small group activities, students who struggled with

expressive and receptive language were able to show happiness and joy. She mentioned that she could tell Lucy made a difference because the students' body language relaxed and they giggled. These small gestures were an indication they were sharing an experience. This positivity made the room a better place to be.

When I asked Natalie about her experience with Lucy and what she had done for students during challenging times, she paused, took a breath, and said, "Usually the weeks before Christmas, stress levels are up, behaviors are up. And everyone has commented about how calm and quiet it's been this year in particular." I asked her why she thought that Lucy was responsible for this observation. Natalie simply said, "I don't know what else to attribute it to. Nothing else is different."

While Natalie had several stories to share, it was evident there were three that made an impact on her; one regarding a first-grade boy reluctant to come to school, the second involving a staff member, and the third a special education student. Regarding the first grader, Natalie shared:

Just the other day a little boy was coming in with his mother. He was having a horrible day because he'd gotten hurt and was literally kicking and screaming while mom dragged him into the building. Lucy heard him in distress and ran out of the office to intervene. As soon as he saw Lucy, albeit still crying, he stopped trying to run out the door. Then someone said, "Well, why don't you talk to Lucy about your problem?" He sat down right inside the door and began talking to her. After a few minutes we asked how he was doing and he said, "We need a little more time." They went into my office and shut the door because he wanted to be alone with her. Minutes went by and he opened up the door and

said, "Okay, I'm ready. We have solved my problem." Lucy and I walked him to class and he managed to regulate himself the rest of the day.

The second story she shared involved a staff member that, unbeknownst to Natalie, had lost a parent over Christmas break. While walking with Lucy through the halls first thing Monday morning, before students arrived, Lucy diverted down a side hall leaving Natalie alone. When Natalie followed Lucy, she found her in a classroom with her paws on a staff member's legs and her head on her shoulders. The staff member acknowledged that Lucy knew "she needed her today," sharing the news of her father. The majority of the day Lucy spent the day in the classroom supporting the teacher. This experience left Natalie speechless. She said, "How did Lucy know? It was amazing, Kate. What a gift she has and is."

The third story Natalie shared:

We have one student in the Composite room in particular who very often, you know, won't work. Her father passed away a couple of years ago and she very often talks about how she's sad about that. She thinks about him often and asks to go home. Since Lucy has started going to her classroom daily, she doesn't want to do that anymore. The first couple of days when we saw she was getting sad, we asked her, do you want to go and see Lucy and tell her how you are feeling? So either I went to her or she came to the office and saw Lucy instead of calling mom or going home. Lucy made her feel better. She wrote a note and drew a picture for Lucy. After she did that she was able to go back to class and do a lot of work. She did more work than she has done in a couple of years because she felt better. She hasn't asked to call mom or said that she is sad about her Dad. It's just amazing. Every day I go to visit that class.

### **Theme #3: A Facility Dog Helped Create a Positive Culture and Climate in the Learning Environment**

When asked the importance of a healthy and happy culture and/or climate in a learning environment, all seven participants remarked that it was very important. During the course of the interviews, it was evident that the stress level—COVID-19 related or not—was having a profound impact on all aspects of school. Modifying schedules, adjusting curriculum, limiting student interactions, providing lunches in bags, wearing masks, and students' falling behind are just some of the concerns that were expressed. When all data was disaggregated this theme was mentioned seventy-three times. Faith summed up the reality of having a facility dog in the learning environment by stating:

I think for adults, having Lucy as part of our school life is just the same as it is with children emotionally. I know when I see Lucy, I just smile and I can't wait to pat her. I see that teachers (when they see her down the hall) are happy to greet her. I think teachers need that physical touch and interaction with the dog as well. I think it takes away everybody's stresses of COVID and what's going on in the world. It's amazing what a dog can do.

#### ***A Facility Dog Made Stakeholders Feel Happy***

Once again, all seven participants remarked on how Lucy lifted students' and staff's spirits and how many relied on her presence. On one of the days she was not present, her absence was noticed. According to several of those interviewed, students and staff inquired about her whereabouts and wanted to know when she would be returning. The sign on the door announcing her visit was not posted and the disappointment from all building stakeholders was evident.

Reba and Wynonna both used the word *happy* several times to express the mood that was

prevalent in the building. Sara noted the students “lit up” when Lucy entered their room for a visit. “She is just sheer joy,” Sara stated. During the same interview question Sara really wanted me to understand that Lucy did not only brighten the day of students but also teachers and how important that was to report. Her view: happy teachers, happy students. Sara said:

You know, we [my team] were just talking like today and we were saying how good it is [to have Lucy in the building]. She is, you know, a support for the adult staff as well as for the students. There are days when I hear Lucy is in the building and I go right down to the office because I need some love from Lucy right now. I know that there are some adults that seek her out as well to help them with whatever they're feeling at that moment.

Trisha, like Sara, used the phrase, “lightens the mood.” She also stated that when she observed students meeting Lucy in the hallway, “She brings happiness and joy. This experience has been nothing but positive to everyone here.” Faith observed:

“She sees their [students'] faces light up when they see the dog. This can be when they're getting off the bus or when they see the dog walking down the hall. When Lucy comes into the classroom their faces light up. It looks like their whole body at times just relaxes and they go into happy thoughts.”

Natalie shared that Lucy has brought not only an essence of calm during a tense holiday season but also gave the entire school population something to come to school for and look forward to. Even at recess she noticed students not only engaging more with one another and physically moving around but:

Today, when they chased her around the field they told me the best recess ever and how much fun that was and, “could we do that again?” When she popped one of their kick balls, (which I knew was going to happen) they didn't care . . . she could pop every ball

we own and that would be okay because she's the best dog ever! They are just happy no matter what when Lucy is around. That's the big deal. Everybody is just happy no matter what happens. We all agree that this has been the worst year but when she is here we don't feel that way. When this was happening, the adults just stood there watching the chase game smiling.

Dolly, my last interview, raved about the positivity the school environment had when Lucy was around. She observed, "Everyone is in a better mood" and that the anticipation of seeing Lucy throughout the day made students look forward to coming to school. The even better part she said is that, "It [their happiness] carries over even when she has left the classroom. . . . She just gives them a great start to their day."

#### ***A Facility Dog Promoted Student Engagement in Their Learning Environment***

All seven participants were adamant that Lucy helped students engage not just in classroom academics but their entire school experience. Although the words all of those interviewed may have been slightly different, the message remained the same. At no time did any of the teachers, the support personnel, or the principal believe that Lucy's presence disrupted learning.

Reba responded that there was no disruption at all. She mentioned that when she came into the classroom, the students engaged with Lucy, but when she left, they "got right back on track." Sara, similarly to Reba, observed that Lucy did not stop the learning in any way, that students got "right back to work" when her visit was over adding, "In some ways, she helped students focus more." To add to Sarah's support of having a facility dog be part of the school family, she used Lucy, and her canine ancestry, as a learning tool when teaching *selection* in science class. She was quick to mention that, "Lucy brought the learning into a real-world

situation and got them thinking beyond what they were hearing, watching, and reading about. There was context.”

When Wynonna was asked whether Lucy’s presence (coming and going) in the classroom was problematic in any way, she said that she had not noticed any negatives and that the majority of her students were “ready to focus again” right after Lucy left. She said that, “Students are instantly distracted and then they are instantly done. It is not a lingering thing . . . the whole atmosphere is brilliant. It is exactly the right kind of thing for kids.”

Trisha stated, “I don't really see any change. I don't see students having a hard time getting back to focusing, so that's good.” She continued, “There have been no interruptions. . . . When she pops in for a minute, everyone gets a chance to pat her . . . but from what I've witnessed, it's quick, it's fun, and you know, it doesn't interfere.”

Trisha had lots to say regarding this question. As one of the strongest proponents of Lucy helping students engage in their learning, she reported:

I think she helps children. They feel so good and they'll reach out and pat her and I think it helps students go back to the learning piece. You know if you ever have the kids and they're getting tired while they're learning and then Lucy just comes through the door and their faces light up. They get to pat her and say hi, and it just changes their attitude to finish their work. I think she lifts their spirits is what I'm trying to say and it helps get through that learning academic piece.

Natalie, the school administrator, was quick to express that she felt Lucy never impacted student learning negatively because she, as well as the classroom teachers, had been very clear setting expectations prior to Lucy’s visits. It was made clear to the students that when “Lucy is going to come in, they will have the opportunity to pat and love her and everyone would have a chance to

see her and say hi, and then get back to work.” Natalie did mention that the staff understood there would be some unintentional behaviors with excitement at first but she did not see this as problematic. “The kids have to get used to her and they already are.”

Dolly, like the other six participants, felt there was no problem when Lucy visited classes. She said there may be disruption for a second but the “kids were able to snap right back to it and continue on with their work.” She felt as though having two or three dogs in and out of classrooms would be beneficial to students not only emotionally but also academically.

The previous three overarching themes: an increase in students’ basic needs not being met; a facility dog as a helping and healing agent; and a facility dog’s role in creating a positive culture in climate, along with the seven subthemes illustrate observations made by teachers, support personnel, and an administrator to support a facility dog’s presence in a learning environment.

### **Summary**

The purpose of this qualitative phenomenological study was to explore the perceptions of faculty and staff regarding the impact a facility dog has on elementary students in their learning environment. Seven participants, with a range of two to 36 years of experience, were interviewed and openly discussed their observations and experiences working with a variety of student class sizes and populations and Lucy, the facility dog. The participants worked at one elementary school in Mid-coast Maine, the only site chosen for this study. Three themes were determined based on data analysis: an increase in students’ basic needs (tired, hungry, lack of unstable housing etc.) not being met; a facility dog as a helping and healing agent; and a facility dog helped create a positive culture and climate in the learning environment supported by seven



subthemes. Participants viewed the facility dog's presence in the learning environment as a positive way to support students who are struggling socially, emotionally, and academically. While this study's aim was to focus on the benefits for students, data collected supported a link between the adults' happiness and student engagement as well.

Participants shared that they have seen an increase in students' basic needs not being met. Most notably, students coming to school are emotionally fragile, but they are also tired, hungry, and dirty. In addition, many students have unstable living arrangements, causing additional stress not knowing where they will be sleeping that night. To help alleviate some of these adversities, the participants shared that faculty and staff are spending more time working with students' mental health needs and less on academics. Understanding that until students' basic needs are met to some degree, their ability to "do school" is unlikely, and they must pick up those pieces. This may be by providing extra food during the day, helping with basic hygiene needs (bathing, toileting, or laundry), or just being a stable figure daily, they all shared that they are very worried about their students' overall wellbeing and future.

All seven participants shared that Lucy was able to fill a need for students that they could not when it came to behaviors and motivation. Her ability to befriend any student, regardless of economic status or educational success was vital to students feeling good about being at school. Not only were new, and often unlikely, friendships formed, students were able to relate to adults in the building on a broader scale. Students interacted with the principal differently as well as faculty and staff not associated directly with them. Informal conversations when Lucy was around provided a "common denominator" for those who love dogs and helped form new relationships. Also mentioned was Lucy's ability to "reset" or "de-escalate" student behaviors or emotions. According to the participants, students felt they could relate to Lucy and share their

feelings with her easier than they could with humans.

Lastly, the participants reported that having a facility dog present made the building a happier place. Through observations it was apparent that students and staff benefited from Lucy's presence and visits to the classroom. During a very stressful time of year, the Christmas holiday, the stress in the building was noticeably lower. The building felt kinder and calmer. The only difference this year than in past years was Lucy. When the building feels happy, the teachers and the students thrive. The last chapter will conclude my study.

## CHAPTER 5

### CONCLUSION

The Centers for Disease Control (CDC) (2021) reports that students ages five through 17 are currently experiencing increased feelings of sadness, anger, and anxiety, causing them to be unable to engage while in a learning environment (Mullen, 2018; Revelette, 2020). To better understand both the long-term and short-term effects of the social and emotional adversities children face during their most formative years, those in the education field would benefit from learning about Adverse Childhood Experiences (ACEs) and the reasons students engage in or disengage in behaviors while at school (Gudmundsen et al., 2018).

A study analyzed by Pedersen et al. (2019) found that depression and anxiety in students often co-occur and are the most pervasive disorders in children between the ages of eight through 10 years of age. Their findings indicated there is growing data that links associations between internalizing symptoms (anxiety, depression, and disengagement) and being able to function in school. This longitudinal study (Pedersen et al., 2019), conducted from 2000 through 2014, indicated that students diagnosed as highly anxious when entering first grade continued to struggle academically through their eighth-grade year while simultaneously experiencing an increase of depression and anxiety symptoms.

When researching the *why now* question regarding the increase in students' mental health needs, Kathy Remy, a school counselor reported, "Honestly, I've had more students this year hospitalized for anxiety, depression, and other mental-health issues than ever. There's just so much going on in this day and age, the pressures to fit in, the pressure to achieve, the pressure of social media" (Flannery, 2018, para 3). There is not a magical fix to this problem (Clancy, 2020).

Exploring interventions that are fiscally and logistically sustainable will provide the most benefit to students during this uptick in mental health needs that students face (Alexander, 2013).

Noddings's ethics care theory (1984) suggests happiness is one of the powerful emotions humans must have to meet their highest potential. Noddings explains that when one feels cared for and loved, the recipient of that affection responds in-kind, forming a mutual trust and deep bond (1984). Though Noddings's theory is based on human-to-human interactions, studies conducted regarding the human-animal bond (1983) share similarities with her findings; with care and love unique bonds are formed (Beck, 1999, 2014; Beck & Katcher, 1996).

The evidence supporting the use of animals to help with mental and physical health needs is growing rapidly (Fine, 2019). The use for animals has changed. Hundreds of years ago large animals were used to physically survive; used to plow fields to plant, harvest, move goods for trade, or raised to eat (Grier, 2006). As animals have become more domesticated, the dichotomy between humans and animals has changed drastically, developing a human-animal bond (HAB) that not only provides economic benefits (herding dogs), but physical (service dogs), safety (working dogs), and mental health (therapy dogs) benefits (Fine, 2019).

The use of dogs to support humans in need is not new (Beck, 1999, 2014; Beck & Katcher, 1996). According to the Seeing Eye Foundation (2015), right after World War I the notion to train dogs to be *eyes* for soldiers blinded by chemical warfare came to fruition. With the help of a popular dog trainer in Switzerland and a sight-impaired businessman, the idea became a reality (2015). Successful immediately, the idea of a seeing-eye dog gained notoriety and the idea emerged that a dog could be used as a tool to support myriad human needs (Beck, 2014; Fine, 2019). Since this time, animals of all types have morphed from being household

members to members of society helping humans gain independence (Beck, 1999, 2014; Beck & Katcher, 1996; Fine 2019).

With an increase of studies supporting the positive impact animals bring to the happiness and productivity of humans in both the private and public sector the following research questions are posed:

1. What observed emotional responses does a facility dog elicit from students in an elementary school learning environment through the perceptions of faculty and staff?
2. In what ways do observed student emotional responses to a facility dog help or hinder students in their learning environment?

This study was supported using two theories. The theoretical framework was based on the human-animal bond (HAB) theory (Bustad, 1983). Although not alone, Bustad's belief and subsequent research that animals had an innate ability to bond with humans in ways human-to-human could not was reflected in his collection of works, *The Bustad Papers*, currently archived in the Washington State University Library. This collection was amassed from his research dating from 1961 through 1995. One other notable pioneer recognized as coining the HAB theory was Boris Levinson a renowned child psychologist who unexpectedly observed that his clients were more open to therapy when his dog, Jingles, was present for sessions (Boe, 2008; Fine, 2019). To keep this theory at the forefront of possible interventions for society as a whole, veterinarians, psychologists, and psychiatrists alike continue to research the pros and cons of the HAB (Fine, 2019). The work of Bustad and Levinson is carried forward by Audrey Fine, an academic, and veterinarian Alan Beck Fine, professor emeritus, at Washington State University, a licensed psychologist, and the chair of the Human-Animal Bond Advisory Board of Pet Partners, an organization dedicated to improve human health and well-being through the human-

animal bond (Pet Partners, 2022). Working alongside Fine, Alan Beck, professor of animal ecology at Purdue University, is the Director of the Human-Animal Bond Research Institute (HABRI, 2022).

The conceptual framework that supported this study was based on the work of Abraham Maslow (1908–1970). His hierarchy of needs theory (1943) was based on his research concluding that humans have a hierarchy of needs composed of five tiers that must be satisfied to some degree in order to meet one's full self-potential. Maslow's work supported the work of Harlow (1905–1981) and Piaget (1896–1980), both of whom researched the development of children. Prior to his death in 1970, Maslow expanded his original five-tier pyramid to reflect an eight-tier pyramid that added cognitive, aesthetic, and transcendence needs (McLeod, 2020) to meet one's highest potential.

These two theories were chosen based on their direct correlation between my desire to understand if dogs can be used in a school setting to help students—at-risk or not—engage in their learning environment. Gathering demographic information on the students at this site was imperative to the research questions posed. By asking the participants if they have observed any changes in students arriving at school with their basic needs not met (hungry, tired, dirty, lack of stable housing, and so on) offered another variable to this study.

Qualitative data was collected through semi structured interviews conducted with participants to understand if the presence of a facility dog would help elementary students engage in school. Participants interviewed included one administrator, three classroom teachers, and three support staff who work with students with special needs. All seven participants currently work at the study site and have between two years to thirty-six years in the education field. After interviews were conducted, they were transcribed and sent to each participant for

member-checking. Data was analyzed through the lens of the human-animal bond (HAB) theory (Bustad, 1984) and Maslow's hierarchy of needs (1943) theory. An Interpretive Phenomenological Analysis (IPA) protocol was used to identify themes, patterns, and trends using a structured method developed by Moustakas (1994) for IPA qualitative analysis (Alase, 2017). After several readings, 63 labels, including quotations, were completed and 28 initial codes emerged. Of the 28 codes, three overarching themes and seven subthemes were identified. They included: an observed increase in students' basic needs (hungry, tired, dirty, unstable living situations and so on) not being met; a facility dog acted as a helping and healing agent in the learning environment; and a facility dog helped create a positive culture and climate in the learning environment.

This chapter includes an interpretation of findings in the context of three emergent themes as well as implications of the study, recommendations for action, and recommendations for future research.

### **Interpretations of Findings**

All seven participants viewed the dog's presence in the building as positive for not only the students in the building but also the adults. Each participant discussed their personal and shared experiences with Lucy by sharing their observations, often through short stories. These stories were not always about their (the participants) interactions with Lucy, but rather any random or impromptu interactions they witnessed while out and about the building. These authentic experiences were mentioned repeatedly, with participants explaining there was a synergy to the building when Lucy was present that was more profound than they had ever imagined.

All participants agreed that the students they work directly with, or have some connection to, are coming to school more fragile emotionally, socially, physically, and academically than in past years, supporting Revelette's (2020) and Rossen's (2020) research. Three of the participants mentioned that although they *think* there is an increase in students' basic needs not being met this year, maybe it is just because "they are more aware." Their concerns included students arriving at school hungry, tired, and sad. Additionally, all seven participants expressed their concerns regarding the number of students with debilitating anxiety and/or overwhelming anger that makes them unable to regulate their behavior in and out of the classroom. With limited resources facing districts, both fiscal and personnel, faculty and staff are asked to navigate a plethora of behavior and academic challenges with little training, limited time, and often disengaged parents (Jones, 2020). All seven participants cited that they are giving all they can and more to their students because they love them, but it is still not enough. The following two subsections describe the findings related to the two research questions of this study.

### **What Observed Emotional Responses Does a Facility Dog Elicit from Students in an Elementary School Learning Environment Through the Perceptions of Faculty and Staff?**

Humans and animals have been bonding for centuries (Grier, 2006). In 1984, Dr. Leo Bustad, Dean Emeritus of the College of Veterinary Medicine at Washington State University from 1973 to 1983 and world renowned for his many accomplishments—doctor of physiology, world-wide lecturer, researcher, and prolific author—coined the term human-animal bond along with a professional colleague, Boris Levinson (Hines, 2003). According to Fine (2009), the human-animal bond is a mutually beneficial and dynamic relationship between people and animals. He contends that this unique bond influences the emotional, psychological, and physical interactions of people, animals, and the environment.



According to the American Veterinary Medical Association (2022) in 2018 38.4 % of households in the United States had at least one dog and 25.4% had at least one cat. Participants in my study referred to their dogs as “our children, our babies, the first priority in the family, an active participant, a special member of the family, and head of the household.” When asked why their dog(s) had that status in the home, the majority of those interviewed expressed that the dog(s) provided comfort, love, and companionship. One participant divulged that they had their dogs to support their son—who suffered from mental health challenges—due to the dogs’ ability to cheer him up. A systematic review by Purewal et al. (2017) supported the observations of this study’s participants, noting in their conclusion that, overall, dogs are beneficial to child and adolescent development emotionally, cognitively, educationally, and socially.

The sentiment described in the previous paragraphs was a recurring theme during the interview process. When participants were asked about the reactions Lucy elicited from students in their learning environment, the observations included physiological, emotional, and academic responses.

### ***A Facility Dog Elicits Positive Physiological and Emotional Responses from Students in the Learning Environment***

The majority of humans react to stress by experiencing an increase in physiological symptoms. Physiological reactions affect the musculoskeletal, respiratory, cardiovascular, endocrine, gastrointestinal, nervous, and reproductive systems (American Psychological Association, 2018). Short-term reactions to feeling anxious or overly stressed may include: muscle tension, shortness of breath, an increase in heart rate, stomach aches, bowel issues, or the brain directing the body to use its energy resources to flee, fight, or freeze (APA, 2018). When short-term stress becomes long-term stress, also known as toxic stress, this can result in a change

in trajectory of a child's physical, emotional, social, or cognitive development (Rossen, 2020).

The CDC (2021) reports that currently 2% of elementary students are diagnosed with depression while 6.5% are diagnosed with anxiety. By understanding the link between students experiencing toxic stress and the physiological manifestations they present (anxiety, depression, and anger), the importance of students and staff being able to touch and engage daily with Lucy is profound. The simple act of stroking, petting, or hugging a dog, brings us back to the most basic tenets surrounding the human-animal bond theory: the unique and impenetrable relationship that is formed between dogs and people that is important to both parties to increase the quality of life (Fine, 2019; Gee et al., 2017; Grajfoner et al., 2017). All seven participants mentioned that students repeatedly sought out Lucy during the day so they could have a physical interaction with her. Five of the participants mentioned observing students and staff just sitting down on the hallway floor to pet her and be close to her. This sentiment supports the literature by Grove and Henderson (2018) that dogs in schools provide the opportunity for students to engage positively with something other than a human.

This observed phenomenon that students (and staff) had an innate need to touch Lucy supports studies that concluded physical touch of a dog helps increase oxytocin levels, the hormone that increases trust in humans while reducing cortisol levels, the stress-related hormone (Grove & Henderson, 2018; Robinson, 2017). The observations made by all seven participants support the notion that Lucy helped decrease students' feelings of anxiety, anger, and depression, thus lowering their physiological reactions. The participants mentioned the impact Lucy had when greeting students as they were getting off the bus, or being dropped off by parents. Students would go out of their way to physically touch her, while telling her to have a great day and that they would see her later. Due to this cause and effect relationship, students were

provided an opportunity to engage in their learning environment feeling happier and emotionally safer.

Students experiencing anxiety and sadness at school were the most common trends reported among those interviewed. Compounding these psychological challenges, students were often hungry, dirty, and tired. With only one school counselor and one Licensed Clinical Social Worker (LCSW) qualified to address the number of students needing mental health services during the course of the day, teachers, support personnel, and administrators often share the role of de-escalator, nurturer, parent, or nurse. At the beginning of each interview, I asked each participant several questions pertaining to their observations regarding students' emotional health. All seven used the same words repeatedly to describe the status of students. These words were: *anxious*, *sad*, *angry*, and *depressed*. Participants mentioned seeing an increase in anxiety among students as well as students reporting they were anxious, more than 100 times. When asked about students' emotional responses after Lucy immersed herself into the learning environment all seven participants used: *happy*, *excited*, *energized*, *positive*, *engaged*, *focused*, and *calm*. This observation is consistent with the literature on the use of facility dogs to treat stress and anxiety (Barker et al., 2010; Cole et al., 2007).

Noddings's care theory (1984) supports the belief that all people want to be loved and cared for. This theory empowers Faith's belief that Lucy makes students feel loved. She went on to say that she believes there are students who are shown no love or attention at home, affirming Rossen's (2020) work on the number of children facing ACEs in their early years. To emphasize Lucy's impact on students' emotional well-being, several participants referred to her being able to promote acts of kindness and positive energy in both students and adults. Studies conducted by Bradley (2013), Gee et al., (2017) and Grajfoner et al. (2017) indicated that dog-assisted

interventions had a direct impact on well-being, mood, and anxiety. All three support personnel reported that Lucy was able to change students' moods, putting them in a happier and better place mentally. Anderson and Olson (2006) conducted a study on the value of a dog in a classroom having students with severe emotional disorders, finding that dog had a “positive emotional effect” (p. 49) while also providing lessons in “respect, responsibility, and empathy” (p. 49). During her time at the study site, it was reported that even when Lucy was not able to directly intervene with students in various degrees of crisis to ensure her safety, her mere presence often de-escalated students enough so they could express their need or frustration. Participants deduced the outbursts ceased because the students did not want to place Lucy in harm’s way, scare, or disappoint her. When students showed they had regulated themselves in both body and mind, Lucy became a resetting tool and an advocate cheering on the student to make it through the remainder of the day.

A systematic review completed by Brelsford et al. (2017) was conducted to evaluate empirical evidence relating to animal-assisted interventions in the educational setting. Analyzing 25 peer-reviewed journals and four gray papers written over the course of seventeen years (1999–2016) concluded that “The results of this review show promising findings and emerging evidence suggestive of potential benefits related to animals in school settings” (Brelsford et al., 2017, p. 1). Renowned experts and researchers in a quest to gain knowledge on how the human-animal bond theory may be used to assist with increasing mental health needs provided evidence to support there are cognitive, socio-emotional behavior, and physiological benefits to having dogs in classrooms. In addition, Nimer and Lundahl’s (2007) work shared that the number of challenging behaviors displayed by students decreased while their emotional well-being increased while being in the proximity of a trained animal.

Three participants specifically mentioned the increased physical activity they witnessed during outside activities. Participants mentioned students often reluctant to become involved in any type of play or physical exercise were willing to take a risk and join the fun when Lucy started taunting them. In true Lucy fashion she was able to entice students to chase her by playing tag. The realization that they would not be able to tag her never crossed their minds. They just chased her around the field. When recess was over, students shared that recess was the best ever and wanted to know when they could play tag with Lucy again.

On a different day, one participant described an interaction between a teacher and a boy outside. This teacher, having encouraged the boy to participate in outside games many times to no avail, introduced him to Lucy, who was trotting around the playground with a popped kickball in her mouth begging students to play with her. Without any hesitation he joined a group of students and began chasing Lucy around the playground. With Lucy's encouragement students of all demographics could leave their worries behind and play. There was a paucity of literature identifying the impact the presence of a dog has on students in a school setting regarding physical activity; however, studies by Gee et al. (2017) and Westgarth et al. (2019) support the correlation between pet ownership and physical activity.

### **In What Ways Does Observed Student Emotional Responses to a Facility Dog Help or Hinder Students in Their Learning Environment?**

When participants were asked whether or not Lucy interrupted student learning while she was in the building, all seven participants remarked that there was no indication that had happened; rather, students settled down more quickly so they could have more time with Lucy. Furthermore, five of the participants said they saw students more engaged after Lucy had visited. Lucy's ability to settle a student during a lesson was apparent, often refocusing a student by

placing her head on a student's lap, reminding them in a gentle way to pay attention to the teacher. Sara even used Lucy as a teaching tool during a science lesson. Being able to involve the school's dog made the lesson come to life. Organizations such as Canine Assisted Reading Education (C.A.R.E to Read), Reading Education Assistance Dogs (R.E.A.D) and ATD support reading intervention programs that are available to children during school hours. A study done by Paradise (2007) indicated that students having direct access to the facility dog showed greater reading comprehension growth, class participation, critical thinking skills, and felt more positive about schoolwork than those not having access to the dog.

While Lucy was in school, she helped students engage in conversations and participate in social connections they may not have otherwise. Sams et al. (2006) and Kotrschal and Ortbauer (2003) found that students improved in their language use and social skills when a facility dog was present. Students were academically motivated to complete assignments, exhibit appropriate behavior, and participate in class when time with Lucy was offered as a reward.

The overall impression from all seven participants was that Lucy has made the learning environment a happier place for both students and staff: unlikely social connections that have formed, a decrease in inappropriate behaviors, an increase—as Natalie shared—in opportunities for students to see her as a “cool dog person” rather than the school principal who may be seen as an adversary rather than an advocate. The ability to shift the way a building *feels* (the culture) and *works* (the climate) is the most challenging

The participants who worked with students in the self-contained special education programs found that Lucy motivated their students to produce. For one particular student, the classroom teacher collected more evidence of learning than she had the prior two years. The student, delighted that she had a new friend, wrote Lucy notes and drew her pictures daily.

Embracing the power of the human-animal bond (Bustad, 1984; Levinson, 1983) and the work the presence of a dog may provide in schools to enhance the overall health and well-being of all stakeholders is a unique way of providing support. The contemporary research and writings of Gee, Beck, Hines, and Fine as well as the organizations studying the impact relationships between pets and their owners may have on society continue to fill the knowledge gap.

### **Implications**

This study utilized the theoretical framework of HAB (Bustad, 1984), and the conceptual framework of Maslow's hierarchy of needs (1943, 1970). The theoretical framework was chosen as a platform to understand the perceptions of seven school personnel regarding the impact a facility dog may have on students in a learning environment. The conceptual framework was chosen as it was my desire to gain a better understanding of the number of students arriving at school with their basic needs not being met and how this adversity affects students' ability to *do* school.

Introducing a dog capable of bringing a school community together will provide opportunities for students and staff to think of the learning environment differently than they have in the past (McKibben, 2018). The presence of a dog allows all stakeholders to feel better about school; encouraging new friendships, aiding in academic growth, and experiencing the human-animal bond throughout the day to support the daily stress students and staff are feeling (Zents et al., 2016). The results of this study may influence public school systems to adopt the practice of allowing dogs to assist with the vast range and increasing needs of students that schools are experiencing.

Academic demands are increasing (Roder, 2018), the family unit is disintegrating (Behere et al., 2017), and the mental health needs of school-age children are increasing with a paucity of resources available. School reform continues to be a top discussion at the federal, state, and local levels (Weingarten et al., 2018). District leadership continues to investigate ways to increase revenues and decrease costs (Nolan & Miller, 2018) but struggles to find a solution. To combat some of these challenges, an increase in district leaders considering unprecedented practices, such as allowing dogs to assist in academic, social, and emotional needs is helping to shift the mindset of all stakeholders in a school building (Gee et al., 2017; Elksnin & Elksnin, 2003; Correale et al., 2017) as results from this study confirmed the literature.

### **Recommendations for Action**

Findings from this study suggest that the presence of a facility dog in a learning environment is beneficial to the health and well-being of all persons in an academic building as indicated by the participants. It is my hope that district and building leaders of all grade spans and demographics will consider welcoming dogs into their buildings to support all stakeholders. When first contemplating the topic of my dissertation, there were very few studies that focused on a dog being used as a general resource. The majority of the studies were conducted to ascertain if a dog may benefit specialized populations and programs in school settings. The findings were clear: dogs assisted students with special academic and behavioral needs (Boe, 2008; Brelsford et al., 2017; Wanser et al., 2019).

With limited empirical evidence to support dogs' impact on a school's culture and climate in a general sense, whether or not their presence would bolster students' outlook on life and school, it was my objective to immerse a facility dog into a learning environment. My ultimate



goal was to discover if this measure may help alleviate the immense pressure both students and staff are experiencing. If a school is to consider adding a facility dog to their staff roster, my recommendations for further action are as follows:

- Do your due-diligence researching the latest scholarly articles and studies as it relates to this practice and determine if having a dog to support the learning environment will work in your district;
- Work with upper administration (board of directors, superintendent, special services director, food service director, and facilities director) closely to promote a united understanding and create a viable plan regarding implementation and sustainability of a dogs-in-school program;
- Create, review and/or revise an animals-in-schools policy with the school's policy committee to incorporate specific criteria, roles, and expectations a facility dog or a therapy dog would have in a learning environment;
- Create, review, and/or revise the criteria a facility dog or therapy dog must have to be considered for this role;
- Talk to or visit schools that have implemented this practice. Make sure one understands the potential barriers this practice could face.

It is important to note that when finding a site to conduct this study, I had few challenges pertaining to a dog being welcomed into a school. According to DogTime.com (2015), 62.9 % of all Maine families own at least one dog. Only four states have a higher percentage; Vermont, 70.8%, New Mexico, 67.6%, South Dakota, 65.6%, and Oregon, 63.6%. For one to continue this study in a demographic area with vast cultural diversity may be very difficult. Although there are

ways to address concerns regarding allergies, one must consider the religious and cultural implications of inviting a dog into a public-school setting. For many cultures, dogs are revered as sacred while others consider them a symbol of evil. Other considerations involve the possibility that children and adults have been exposed to dogs used for protective or intimidation purposes, rather than affection and companionship.

### **Recommendations for Further Study**

Based on the results of this study, the following future research is recommended:

- Expand this study to other public learning environments including vocational high schools, middle schools, and Head Start programs;
- Conduct a study on the impact a facility dog has on the teachers' mental health and if this may decrease teacher attrition;
- Conduct a longitudinal study on the impact a facility dog has on the culture and climate of a learning environment from students' point of view;
- Conduct quantitative studies to examine if a facility dog may provide "value-added measures" (VAMs) (Olofson & Knight, 2018) that consider the impact of teachers, schools, and districts on student growth versus student achievement.

### **Conclusion**

The mental health needs of school-age students continues to grow (Mullen, 2018) while the resources available to support these needs declines (Relevette, 2020). Now that these two crises have intersected, schools face their biggest challenge yet; being tasked to ensure students meet rigorous national academic standards, while a large percentage do not have their basic

needs met, and/or they daily face unfathomable adversities due to societal challenges (Harris, 2018; Rossen, 2020).

This study took the theoretical framework behind the HAB (Bustad, 1984) theory and Maslow's hierarchy of needs theory (1943) as the conceptual framework. Using the research behind these two theories allowed me to ascertain if a dog in a school setting may assist in students feeling better about being away from home, thus allowing them to access their curriculum and feel better about school. By providing students with a dog as a confidant, friend, motivator, and reward would be an innovative (and practical) way to bring a positive feeling to a building as mentioned by the study's participants.

Three overarching themes and seven subthemes emerged from this study and provided valuable insight into the impact a facility dog can have on elementary students in a school setting. The results conclude that factors first considered as barriers to having dogs present in schools—allergies, religious or cultural beliefs, and fear of dogs—were not insurmountable barriers at all. My initial concerns revolved around a facility dog hindering students' attention to completing work due to the nuisance of having a dog come and go in and out of classrooms. After all seven interviews were conducted, it was clear that my concern was invalid; in fact, the observations reported were just the opposite. Lucy's presence encouraged students to focus and access their learning environment.

In addition to students' feeling better about being in school when Lucy was present, the impact she had on the adult stakeholders in the building should be mentioned. All seven participants affirmed they relied on Lucy just as much as the students did; maybe even more. They reported that when they were greeted by Lucy, they felt better. This, they all said, made them better people and teachers.

With the current political and societal stressors our nation faces daily and the indirect way these challenges affect us personally, if a district or school can implement a program that supports a dog, or perhaps several dogs, to support school stakeholders, it should be considered, because literature and data from this study confirm that dogs can improve students' and staffs' happiness and performance in a learning environment.

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## Appendix A: Interview Questions

### General Rapport Questions

1. How many years have you been in the field of education or worked in an educational setting?
2. What is your current position at this elementary school?
3. How many years have you held your current position at this elementary school?
4. Do you currently have or have you had any dogs?
5. How would you describe your dogs' role in your household?
6. Have you ever been employed in an organization that has allowed dogs to be part of the workplace prior to Lucy?

### Interview Questions

#### *Correspondence of Research Questions, Interview Questions and Literature Support*

Research Questions	Interview Questions	Literature Support
<b>RQ1: What observed emotional responses does a facility dog elicit from students in an elementary school learning environment?</b>	<p>[Questions 7 through 9 are about the student population only]</p> <p>7. Tell me about the population of students you currently work with.</p> <p>8. During your time in your current position, have you observed a change in the number of students coming to school with their basic needs not met? i.e. food insecurity, lack of adequate clothing, shelter, cleanliness.</p> <p>a. can you elaborate or share some examples to support your answer?</p> <p>9. During your time in your current position, have you observed any changes in students' levels of anxiety, depression, anger, and/or school engagement?</p> <p>a. can you elaborate or share some examples to support your answer?</p>	<p>Anderson &amp; Olson, 2006</p> <p>Bradley, 2013</p> <p>Bustad, 1979</p> <p>Chandler, 2017</p> <p>Esteves &amp; Stokes, 2008</p> <p>Jalango et al., 2004</p> <p>Fine, 2019</p> <p>Grajfoner et al., 2017</p> <p>Grove &amp; Henderson, 2018</p> <p>Gudmundsen et al., 2018</p> <p>Haggerty &amp; Mueller, 2017</p> <p>Kotrschal &amp; Ortbauer, 2003</p> <p>Levinson, 1973</p> <p>Quinn, 2019</p> <p>Relevette, 2020</p> <p>Robinson, 2017</p> <p>Rossen, 2020</p> <p>Trivedi &amp; Perl, 1995</p> <p>Weber et al., 2019</p> <p>Yin, 2018</p>

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[The remaining questions (10 through 24) are about the students' bond with the Lucy the facility dog]

10. Through your observations, have you witnessed a bond between Lucy and the students?

a. can you elaborate or share some examples to support your answer?

11. When Lucy is present is there a change in the dynamics of the learning environment (classroom, cafeteria, hallway, library, etc.)?

12. When Lucy has left the classroom after visiting, have you observed a change in the students' academic engagement?

13. During your time in your current position, have you observed any student relying heavily on Lucy when they first entered school but as they have grown and acclimated to their learning environment, relied on her less?

a. can you elaborate or share some examples to support your answer?

14. During your time in your current position, have you observed any students display fear, disengagement or resistance to Lucy initially, but as they acclimated to their learning environment grew to rely on her for support?

a. can you elaborate or share some examples to support your answer?

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15. When students are engaged or interacting with Lucy, what changes have you observed in their emotional demeanor?

16. When students are engaged or interacting with Lucy what changes have you observed in their social conversations or demeanor?

17. When students are engaged or interacting with Lucy what changes have you observed in their physical demeanor?

18. During your time in your current position, have you observed any student-initiated physical interactions occur with Lucy? i.e. hugging, kissing, sit, down, stay commands, rollover, etc.

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Research Questions	Interview Questions	Literature
<b>RQ2:</b> <b>In what ways do observed student emotional responses to the facility dog help or hinder students in their learning environment?</b>	<p>19. Through your observations, does Lucy's presence have an impact on the students' school experience? a. can you elaborate or share some examples to support your answer?</p> <p>20. Through your observations, does Lucy help students alleviate or help feelings of anxiety, depression or anger in their learning environment? a. can you elaborate or share some examples to support your answer?</p> <p>21. Through your observations does Lucy's presence help students feel emotionally and/or physically</p>	<p>Gee et al., 2017 Kropp &amp; Shupp, 2017 Maslow, 1943 McLeod, 2020 Wanser et al., 2019 Wood et al., 2015</p>

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safer in their learning environment?

a. can you elaborate or share some examples to support your answer?

22. Through your observations, does Lucy provide a sense of comfort and/or belongingness to students in their learning environment?

a. can you elaborate or share some examples to support your answer?

23. Through your observations, does Lucy help students increase their self-esteem or feelings of accomplishment in their learning environment?

a. can you elaborate or share some examples to support your answer?

24. Through your observations, does Lucy's presence in school hinder (or get in the way of) students' in their learning environment?

a. can you elaborate or share some examples to support your answer?

25. Through your experience and observations with Lucy and students, do you think dogs should have roles in school settings?

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