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An Exploration of Child Life Programming and Facility-Canine Assisted Therapy In Pediatric Hospital Settings

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AN EXPLORATION OF CHILD LIFE PROGRAMMING AND FACILITY-CANINE ASSISTED THERAPY IN PEDIATRIC HOSPITAL SETTINGS

A Master's Thesis

Presented to

The Graduate College of

Missouri State University

In Partial Fulfillment

Of the Requirements for the Degree

Master of Science, Child Life Studies

By

Bailey N. Barnett

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AN EXPLORATION OF CHILD LIFE PROGRAMMING AND FACILITY-CANINE ASSISTED THERAPY IN PEDIATRIC HOSPITAL SETTINGS

Childhood Education and Family Studies

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Master of Science

Bailey N. Barnett

ABSTRACT

The field of Child Life and of canine-assisted therapy have both been shown to facilitate opportunities for patients to cope more positively during hospitalization. The purpose of this study is to explore the attitudes, experiences and perceptions of current Certified Child Life Specialists (CCLSs) who are primary or secondary FCAT handlers within child life departments that also run facility canine assisted therapy (FCAT) programs in a pediatric hospital. Qualitative data were collected from the participants using an online one-time survey through, Qualtrics. Four research questions were explored, specifically inquiring about the positive and negatives of FCAT programs, specific interventions where facility canine assistants were a part of, and how the presence of a facility canine assistant changes/impacts the basic interventions of a CCLS. Results indicated that patient interventions and support, and positive culture change were the most recognized positives. While, 'having to say 'no'', was the most recognized challenge or negative associated with FCAT. After reviewing the data, it makes sense to explore the combined role of the CCLS as the facility canine handler, and how the natural interventions provided by a CCLS could have a more meaningful or impactful influence on patients, families and staff with the facility canine assistant.

KEYWORDS: child life specialist, canine-assisted therapy, facility canine assisted therapy, coping, hospitalization

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In the interest of academic freedom and the principle of free speech, approval of this thesis indicates the format is acceptable and meets the academic criteria for the discipline as determined by the faculty that constitute the thesis committee. The content and views expressed in this thesis are those of the student-scholar and are not endorsed by Missouri State University, its Graduate College, or its employees.

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CHAPTER ONE: INTRODUCTION

Hospitalization is an experience most individuals will face at some time during their life. Being in the hospital can be associated with several different emotions. Stress occurring specifically for pediatric patients and their families during hospitalization has been well-documented throughout history (Braun et al., 2009; Kaminski et al., 2002; Wu et al., 2002). With this, several resources exist to aid children and their families in adjusting with the hospital experience. One of these notable professions is a child life specialist. A Certified Child Life Specialist (CCLS) is a trained professional who works with children and their families during stressful or traumatic experiences (American Academy of Pediatrics [AAP], 2014). A CCLS's goal is to use their scope of development to help children cope with these experiences, specifically revolving around healthcare, while promoting a reduction of pain, anxiety and fear ([AAP], 2014). According to Gaynard et al. (1998), a variety of developmentally appropriate, psychosocial interventions are used by CCLSs, including play, preparation for healthcare procedures, emotional support for both patients and their families, self-expression activities and education regarding the hospital and coping techniques.

A growing phenomenon in the field of child life is the concept of using canines as therapeutic resources for patients, families and staff. Canine-assisted therapy (CAT) is a form of animal-assisted therapy that specifically uses dogs for therapy interactions (Ballarini, 2003; Cevizci, Erginoz, & Baltas, 2009; Elmaci & Cevizci, 2015; Laun, 2003; Macauley, 2006; Sockalingham et al., 2008).

Although there is a growing body of research on CAT, at this time there is little research on facility-canine assisted therapy (FCAT), which, for the purpose of this study, is defined as the

combination of child life services and CAT, where a CCLS is the trained handler of the facility canine and implements the FCAT in everyday practice.

Rationale for the Study

Researchers have recognized that children experience high levels of stress and anxiety in medical environments (Braun et al., 2009; Kaminski et al., 2002; Wu et al., 2002). Urbarnski and Lazenby (2012) found that the implementation and use of CAT programs could be an effective method to enhance patient's quality of life during their hospitalization. As introduced above, the services of a CCLS, as well as a therapy canine, exist to buffer the associated emotional and psychological effects of hospitalization for families. Kaminski, Pellino, and Wish (2002) created a study that compared child life programs with CAT programs. They found that both programs filled the therapeutic needs of hospitalized children, adolescents, and teens, including: boredom, normalcy, distraction, comfort, and companionship (Kaminski, Pellino, & Wish, 2002).

The rationale for the current study comes from the concept of combining and developing child life services with FCAT programs to create the most optimal experiences for pediatric patients and their families. To eventually explore the different ways the presence of these canines affects or manipulates healthcare experiences, research must first explore the actual FCAT programs individually. Once FCAT programs are explored as individual entities, they need to be explored as a merged program with child life services to identify how these programs benefit each other and, in turn, the experiences of those they interact with.

Purpose of the Study

The purpose of this descriptive study is to explore the attitudes, experiences and perceptions of current CCLSs who are primary or secondary FCAT handlers within child life departments that also run FCAT programs in a pediatric hospital.

Research Questions. This research study explored four research questions (RQ). (See Appendix B).

RQ 1: What types of psychosocial interventions does a CCLS, who is also a facility canine handler, provide for patients and families?

RQ 2: What are the differences between CCLS interventions with a facility-canine assistant and without a facility-canine assistant?

RQ 3: What are the benefits of having a FCAT program within a child life department?

RQ 4: What challenges do CCLSs encounter with a FCAT program at a pediatric hospital?

Research Design. This study used a descriptive method to assess the facility canine assistant handler's perceptions and opinions regarding the use and presence of facility canines in the pediatric hospital environment. Data for this study was collected through a one-time online survey called, Facilitated Canine-Assisted Therapy Survey (see Appendix B) through Qualtrics. Survey was completed by primary and secondary facility dog handlers, most of whom are CCLSs.

Theoretical Framework. For this study, Bronfenbrenner's (1979) ecological systems theory was used as a theoretical framework. This theory aims to explain how different environmental factors impact human development (Bronfenbrenner, 1979). Ecological systems theory is relevant to this study because this study aims to explore how the presence and interventions of facility canine assistants and their handlers impact the hospital environment for

patients, families and staff. Bronfenbrenner's (1979) ecological systems theory be was used as a lens when interpreting the results for this study.

Significance of the Study

This research study is relevant to the profession and practice of child life because the research and data aim to provide information regarding the new phenomenon of facility assistant canines, their programs and the implications that these canines and programs have on the daily interventions of a CCLS. There is a current gap in research regarding the integration of facility canine assistants and the profession of child life; however, according to data gathered by the Association of Child Life Professionals' ([ACLP]; 2018) Child Life Professional Data Center, 12% of child life programs in the nation have FCAT programs and only 13% of these programs are managed by either child life or volunteer services departments. According to this data, 76% of responding child life programs currently do not have a program offered (ACLP, 2018). This data supports the need for more research exploring the relationship between FCAT programs and child life programs. Along with the associated benefits, this research study aims to explore the challenges and basic informational pieces (e.g., cost) of FCAT programs.

Summary

In summary, this chapter reviewed essential background information for this study. The purpose of this study is to further explore the perceptions of CCLSs regarding FCAT programs and canines. Four research questions will be implemented. For further emphasis, this study will use Bronfenbrenner's Ecological Systems Theory as theoretical framework. In conclusion, this

research study is significant to the profession and practice of child life because the research and data aim to provide information regarding the new phenomenon of facility assistant canines, their programs and the implications that these canines and programs have on the daily interventions of a CCLS.

CHAPTER TWO: LITERATURE REVIEW

Canine-assisted therapy (CAT) is the use of specially trained canines, or dogs, by trained handlers that aid in achieving specific goals for patients (Calcaterra et al., 2015; Wohlfarth et al., 2013). Canine-assisted therapy can be implemented in various environments with various populations. The literature reviewed in this chapter will be: (a) pediatric stress and anxiety during hospitalization, (b) canine assisted therapy, (c) psychological benefits of canine assisted therapy, (d) physiological benefits of canine assisted therapy, (e) canine assisted therapy and specific patient populations, and (f) facility canine assisted therapy.

Pediatric Stress and Anxiety During Hospitalization

Stress occurring for pediatric patients and their families during hospitalization has been well-documented throughout history (Braun et al., 2009; Kaminski et al., 2002; Wu et al., 2002). Several studies have found and documented that pain is not always assessed and treated properly with children (Linhares et al., 2012; Oliveira & Linhares, 2015; Taylor, Boyer, & Campbell, 2008).

Many stressors exist for individuals during hospitalization, including pain, stress, and anxiety (Calcaterra et al. 2015; Urbanski & Lazenby, 2012). Based on the multiple stressors that exist, canine assisted therapy could be used as a method to enhance patients' quality of life and hospital experience (Urbarnski & Lazenby, 2012).

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Certified Child Life Specialist Purpose and Role

Child Life Specialists are trained and certified professionals who work with children and their families during stressful or traumatic experiences. Their goal is to help children cope with these experiences, specifically related to healthcare, while promoting a reduction of pain, anxiety and fear. A variety of developmentally and psychosocially appropriate interventions are used by Child Life Specialists including play, preparation, self-expression activities and education ([AAP], 2014). These professionals also work with populations outside of child and adolescent patients, including; patient siblings, relatives and families, and even adult patients who might face developmental delays.

Child Life Departments and Canine Assisted Therapy. Child life departments and canine assisted therapy, known more commonly as pet therapy programs, both utilize face to face interventions with children and their families in healthcare. CAT programming usually falls under the direction of the child life department. Kaminski, Pellino and Wish (2002) conducted a study that compared the benefits of both child life and CAT programs in a pediatric healthcare facility and found that both programs' goal was to facilitate opportunities for children to cope. The study's goal was to explore the affects that child life and CAT programs had on video-taped observations of rated and observed mood by patients and their parents/caregivers (Kaminski, Pellino & Wish, 2002). Participants viewed both program interventions as positive experiences and impacts during their healthcare endeavor (Kaminski, Pellino & Wish, 2002). The findings of this study revealed that both child life and CAT program interventions fill a therapeutic need for hospitalized children in terms of distraction, companionship and providing a sense of normalcy for this population (Kaminski, Pellino & Wish, 2002). Notably, this study was able to identify that parents of hospitalized children, both chronic and short term, felt less guilty having to leave

their children for work or other circumstances, knowing that their children would have access to both child life and CAT program interventions. Although there is still a major gap in literature and research on the child life and CAT programs, it could be determined that when combined, the most optimal interventions are created for patients and their families.

Canine-Assisted Therapy

Animal-assisted therapy (AAT) is an example of a non-pharmacological strategy used as distraction to decrease stress, anxiety, pain and discomfort while promoting coping skills (Oliveira & Linhares, 2015). There has been a high level of acceptance for AAT among patients and their families, as well as healthcare professionals (Chur-Hansen et al., 2014). Also, the therapeutic outcomes of AAT have been documented for individuals of all ages. (Braun et al., 2009). Canine-assisted therapy (CAT) is a form of AAT that specifically uses canines, or dogs, for therapy interactions (Ballarini, 2003; Cevizci, Erginoz & Baltas, 2009; Elmaci & Cevizci, 2015; Laun, 2003; Macauley, 2006; Sockalingham et al., 2008).

Canine-assisted therapy includes supportive and goal-oriented interventions of many kinds. Most of these goals stem from physical, mental or emotional interventions (e.g., patient ambulation). CAT is the most common form of AAT in pediatric hospitals (Chur-Hansen et al., 2014 & Elmaci, Cevizci, 2015).

Psychological Benefits of Canine-Assisted Therapy. Children who underwent a CAT session reported lower levels of stress and pain, while occurring within appropriate, calm environments (Braun et al., 2009; Eggiman, 2006; Wells, 1998). Several studies have identified that the use of CAT can facilitate coping strategies (Calcaterra et al., 2015 & Kaminski et al., 2002). One study found that the canine present during the therapy sessions psychologically took

on the pain of the pediatric patient present during the session (Braun et al., 2009). The same study also found that pain was reduced by four times in children who participated in sessions with canines, compared to those who did not (Braun et al., 2009).

Physiological Benefits of Canine-Assisted Therapy. It has been documented that the presence of CAT created positive feelings of well-being as well as an improved immune system, based on the distribution of certain endorphins throughout the body (Braun et al., 2009 & Calcaterra et al., 2015).

Canine-Assisted Therapy and Specific Patient Populations. Canine-assisted therapy has also provided many benefits when implemented with individuals who are diagnosed with autism as well as other physical disabilities and psychological illnesses. (Elmac & Cevizci, 2015; Siewertsen, French & Teramoto, 2015)

Canine-Assisted Therapy and Autism Spectrum Disorder. Individuals with autism spectrum disorder (ASD) have hindered communication and language skills which affect their overall behavior and how they form relationships with others (Siewertsen, French & Teramoto, 2015). Deficits for these individuals can also be found within sensory stimuli, focused attention and communicated responses (Siewertsen, French & Teramoto, 2015). Interactive experiences between therapy animals and children with ASD are usually guided with specific goals in mind. Studies have presented several cognitive, social and emotional function improvements with autism spectrum disorder children (Siewertsen., French. & Teramoto., 2015). All of these challenges have shown progress with the implementation of canine-assisted therapy (Siewertsen., French. & Teramoto., 2015). Other studies (Berry., Borgi., Francia., Alleva. & Cirulli., 2013) promote the benefits CAT has in reducing stress and anxiety for ASD children and their environments. Canine-assisted therapy makes a clear advancement in the quality of life for these

children, and their families (Berry., Borgi., Francia., Alleva. & Cirulli., 2013). Researchers have advocated for the benefits that CAT can provide for the enhancement of prosocial mannerisms with which children with ASD often struggle (Grandgeorge et al., 2012).

Several benefits emerge with the implementation of CAT with children, specifically with ASD (Siewertsen., French. & Teramoto., 2015). Regulated and managed feelings of stress and anxiety which creates a more positive and inviting environment (Siewertsen., French. & Teramoto., 2015). As found through research, sometimes children are more receptive of animals compared to humans (Siewertsen., French. & Teramoto., 2015). When interactions between the child and canine are frequent and over the course of several months, gradual decreases of undesirable behaviors became evident. (Siewertsen., French. & Teramoto., 2015 & Grandgeorge et al., 2012) Several conclusions have been made in regard to the relationship between canineassisted therapy and children with ASD (Berry et al., 2013; Siewertsen., French. & Teramoto., 2015). Primarily, the relationship has shown an effective decrease in ASD symptom severity, which can be correlated with an improvement in an individual's overall quality of life (Berry et al., 2013; Siewertsen., French. & Teramoto., 2015). It has also been documented that families feel that the benefits of canine-assisted therapies with their children are more notable compared to intervention strategies not involving therapy canines (Burrows. & Adams., 2008; Siewertsen., French. & Teramoto., 2015).

Facility Canine Assisted Therapy

Facility Canine Assisted therapy (FCAT) is a new and developing phenomenon in the world of pediatric healthcare. In theory, it is a program developed and supervised by Child Life departments that aims to create new and improved forms of healthcare interventions for pediatric

patients, their families, and staff. These programs differ from other CAT, or pet therapy, programs that currently exist based on a few factors: The canines used for these programs are handled by members of the healthcare staff, which might include Child Life Specialists, Social Workers, or other members of the interdisciplinary staff. The handlers are certified and trained with the canines to ensure best practice. Facility canine assistants come to the hospital daily to provide comfort, distraction and engagement with patients, their families, and even staff members. There are large gaps in the literature on this topic. The purpose of this study is to explore how FCAT programs are being used in child life departments across the country.

Theoretical Framework

For this study, Bronfenbrenner's (1979) ecological systems theory was identified and applied as a theoretical framework. A theoretical framework connects the research topics and findings to an established theory for emphasis. Bronfenbrenner's (1979) ecological systems theory aims to explore how different environmental factors impact individuals and their development. Four different environmental systems that impact individuals were identified by Bronfenbrenner. Each system acts as a level that includes a specific set or idea of factors that could impact the individual and the environment around them (Bronfenbrenner, 1979). For the purpose of this study, the researcher aims to use Bronfenbrenner's (1979) theory to identify how the hospital environment and the individual's environment interact to impact each other.

The microsystem is the first level of environmental factors that impact a child's development and includes family, school and peers (Bronfenbrenner, 1979). An example could be how peer's attitudes and perceptions about reading in school might impact what a child thinks and feels about reading, either positive or negative. Mesosystem is the next level of environmental factors that serve to explain the connections between relationships in the

microsystem (Bronfenbrenner, 1979). For adults, this might include how their family life impacts their work and social life. For children, the mesosystem might explain how their parents (home) influence how they act at school or with peers in the neighborhood (Bronfenbrenner, 1979). In relevance to this study, this could be applied between a child's (the patient's) parents and the relationship to medical staff, including, physicians, nurses and other clinical support staff. The next level or system is the exosystem, which explains how two different systems indirectly impact the individual child through the involvement or impact of associated systems (Bronfenbrenner, 1979). An example of this could be if the child's parent has an argument with a close friend or peer and is upset because of the argument, the child would feel or might be impacted by the parent's emotional response, even though the child was not a part of the argument. The last level of environmental factors is the macrosystem, which explores how attitudes or ideals of a culture impact the individual child (Bronfenbrenner, 1979).

All in all, Bronfenbrenner's (1979) ecological systems theory can help researchers and readers identify how the hospital environment could impact the child on several levels. The different systems showcase all the different implications that these environmental factors, both from the individual and the hospital, could impact the child's development. Facility-canine assistants and their handlers play a role in this because they work to support individuals emotionally, mentally, developmentally and physically in the hospital environment in order to have a more positive experience.

Summary

This chapter reviewed relevant literature to build a foundation of knowledge for study readers. Several topics were explored including information regarding hospitalization and stress,

certified child life specialists and their role, canine assisted therapy and more. More information regarding Bronfenbrenner's Theory of Ecological Systems was also a part of this chapter to provide a basic overview. This theory will be related to data results in the discussion chapter. With this foundational information, the study results can be better analyzed and explored.

CHAPTER THREE: METHODOLOGY

Research Design

This qualitative study using descriptive measures utilized a one-time online questionnaire responded to by CCLSs and other hospital support staff within child life departments, that were also facility canine assistant handlers. As defined by Mills and Gay (2016), descriptive studies are conducted through surveys and questionnaires. These types of study look to detect the perceptions or attitudes of the participants on a specific matter. This research study meets this criterion because it is an exploratory study that collected and analyzed CCLSs' perception on the implementation of FCAT into their practice. The research study uses a cross-sectional sample, meaning that the data is collected from participants at a single point in time. The questionnaire was distributed via electronic mail and collected using the secure online data management program, Qualtrics. This study was approved by the Institutional Review Board on July 8th, 2018 (See Appendix B).

Site of Study. This research study was a national study in the United States, which took place online through the data collection website, Qualtrics.

Participants. Participants consisted of facility canine handlers who were also psychosocial support team members, including CCLSs, psychologists, or FCAT program leaders. All participants were employed at one of the participating pediatric hospitals. This sampling is purposive because it seeks to gain answers from a specific population. Eleven total participants completed the survey. According to the data collected, 90.9% (n = 10) participants were female. The average age of participants was 30.9 years old. All participants identified themselves as being employed in full-time roles. Approximately, 81.8% (n = 9) of participants had earned a

graduate or professional degree, while 18.2% (n = 2) of participants had earned a bachelor's degree.

Approximately 81.8% (n = 9) of the participants were CCLSs, 9.1% (n = 1) of participants identified themselves as a family therapist and 9.1% (n = 1) identified themselves as a facility dog program coordinator. Of these participants, 36.4% (n = 4) were primary facility canine assistant handlers, 54.5% (n = 6) were secondary facility canine assistant handlers, and 9.1% (n = 1) of participants identified themselves as the manager of the FCAT program. Two participants were removed from data analysis because they did not answer the qualitive questions used to answer the research questions for this study.

Procedure. Research study was approved by Institutional Approval Board (IRB) in July 2017 (see Appendix C). Participants for this study were identified and contacted in two different ways. First, United States based hospitals with FCAT programs associated with the PetSmart Paws for Hope grant were contacted via email with information regarding the study, inclusion criteria and link to the online survey. These hospitals included; St. Louis Children's Hospital, Rady Children's in San Diego, Orlando Health System, Children's Health Dallas, Seattle Children's Hospital, and Phoenix Children's Hospital. Second, participants attending the 2nd Annual Facility-Dog Summit at Cincinnati Children's Hospital in October 2018 were contacted via email with information regarding the study and link to the survey. The participants from the 2nd Annual Facility-Dog Summit at Cincinnati Children's Hospital received the recruitment email from the host of the summit, post-summit. For all participants, informed content was gathered at the beginning of the online survey. If the respondents agreed to participate, the survey progressed. If the respondents decided not to participate, the survey ended. Researchers used the online data management system, Qualtrics, to gather the data using a questionnaire.

Qualtrics allows the researchers to collect data in a secure online environment while protecting the identity of the participants. While individual participants were anonymous, the hospitals that the individuals represented were not. The questionnaire took approximately 30 minutes to complete.

Instrumentation

Facilitated-Canine Assisted Therapy Survey. The study's researchers created the Facility-Canine Assisted Therapy Survey, which aimed to gather data about child life programs that had FCAT programs. (See Appendix B). The 37-item questionnaire consisted of four sections: demographic information and work experience (13 questions), facility-dog handler (primary or secondary) information (4 questions), hospital facility dog program information (8 questions), handler's perceptions of facility dog interventions (6 questions) and facility dog information (6 questions).

Demographic Information and Work Experience. These questions created a baseline of information regarding each participant's basic demographic information, including age, gender, race, ethnicity and education level. Other questions in this section explored the participant's current work place (hospital) and information regarding the participant's current position, role and employment status. This section further explores what area/unit or diagnosis unit each participant works with as well as if their role is of an out-patient role or in-patient role. This information allows the researcher to gain a basic understanding of each participant's background experiences and what factors might lead them to answer questions in a certain way.

<u>Facility Canine Assistant Handler.</u> This section specifically focuses on the participants in their role as a facility canine assistant handler. Questions about handler status (primary or

secondary), how long the participant has been in this role as a handler, and work experience with canines prior to becoming a handler are all outlined in this section. There is also a question about how long the CCLS was a child life professional prior to becoming a facility canine assistant handler, for those applicable.

Facility Canine Assistant. This section includes questions specifically focused on the facility canine. Questions regarding the sex and age of the canine are listed, as well as how old the canine was when paired with the handler, and if the canine had previous handlers. The researcher also thought it was important to identify if each canine was working as a facility canine assistant at their facility for the first time, or if the canine assistant had worked at a previous facility as a facility canine assistant.

<u>Facility Canine Assistant Therapy Program.</u> The following questions identified specific information regarding individual hospital facility canine programs using open-ended questions for the participants to answer. Researchers created questions to identify how long each individual hospital's program has existed, how many canines are working as facility canine assistants at their facility, and specifically if the canines were trained from a breeder, agency or other institution prior to being at the hospital. Other questions in this section outline the cost of the facility canine, the cost of care for the facility canine and how the costs are covered. Lastly, there are questions regarding the training associated with becoming a facility canine handler.

Handler's Perception of Facility Canine Assistant Interventions. This last section in the survey explores how the facility canine assistants are integrated into the hospital environment. The researcher desired to know how often facility canine assistants were integrated into the interventions provided by their CCLS handlers. This section also offered open-ended questions for the participants to answer regarding the type of interventions that their facility canine

participants in, as well as their perceived benefits and challenges of having a facility canine assistant as a part of their program and hospital. The researcher also inquired about how their role with patients, families and staff has changed since becoming a handler of a facility canine assistant. Lastly, participants were asked what they would say to another CCLS or hospital support individual who was considering becoming a facility canine handler.

Data Analysis

To answer all four research questions (See Appendix A), a qualitative thematic analysis was used, derived from grounded theory. All participant transcripts were blind-reviewed by two researchers (graduate student and faculty member) and coded for themes. The final themes were decided by the two researchers who reviewed the participant transcripts. The two researchers blind-coded all participant responses using the themes decided from the previous step. Blind-coded responses were analyzed for reliability of themes. (See Appendix D, E, F, and G for identified themes for each research question). Inter-rater reliability was determined by calculating intraclass correlation coefficients (ICC) with 95% confident intervals of ICC estimate values (Koo & Li, 2017). The ICC were analyzed using a two-way mixed effects model. Per this guideline, values of less than 0.50 equaled poor reliability, values between 0.50 and 0.75 equaled moderate reliability, values between 0.75 and 0.90 equaled good reliability and values greater than 0.90 equaled excellent reliability (Koo & Li, 2017).

Summary

In review, this qualitative study used descriptive measures implemented a one-time online questionnaire through Qualtrics. CCLSs and other hospital support staff within child life

departments, which were also facility canine assistant handlers, from several pediatric hospitals in the United States participated in this national based study. Participants were identified and contacted via email to take part in this study. Responses were blind reviewed and blind coded by graduate study and faculty member to identify and analyze common themes relevant to research questions. Inter-rated reliability was identified with intraclass correlation coefficients.

CHAPTER FOUR: RESULTS

Introduction

In this chapter, each research question's results will be documented and shared. This does include each question's identified themes and statistic values calculated for each theme. In review, four different research questions were explored for this study.

Research Question 1 (RQ1) Results

Based on the identified research questions, one goal of this study was to identify different interventions that facility canine assistants and their handlers were able to provide to patients, families and sometimes staff. Researchers used a blind coding method to identify prominent themes that emerged from the data. For RQ 1, five themes were identified, including (1) therapeutic support, (2) coping, (3) procedural support/preparation and (4) motivation (See Appendix D). The category of therapeutic support consisted of normalization, therapeutic play sessions, psychosocial and medical support. Per the data, 83.3% of the participants identified therapeutic support as an intervention where the facility canine assistant was utilized. The category of *coping* consisted of positive coping, de-escalation, clinical interventions as a CCLS and keeping patients calm. Approximately 66.7% of participants identified using coping as a tool for intervention. The category of *procedural support/preparation* consisted of therapeutic interventions to help with procedures and reducing pain/distress. Per the data, 61.1% of participants identified procedural support/preparation as an intervention. The category of motivation consisted of motivation to cooperate with plans of care and goals, accompaniment, individual therapy and family therapy. Approximately 33.3% of participants identified motivation as an intervention used.

Research Question 2 (RQ2) Results

Researchers asked participants to think back before they were a facility canine handler and to think about how the presence of a facility canine and the role of being a handler has impacted their daily interactions with patients, families and staff. Using the blind coding method, four themes emerged, including (1) overall rewarding (seeing/experiencing patients, families and staff benefit from and love on the canine), (2) quicker rapport building, (3) canine becoming a part of everything the handler does, and (4) some participants found the facility canine assistant handler more challenging compared to their previous role. (See Appendix E). The category of overall rewarding consisted of seeing the incredible benefit the canine brings to patients and families, network with people that the handler wouldn't usually, and the canine makes everything better. According to the data collected from participant's responses 27.8% of participants found the facility canine handler role rewarding. The category of rapport building consisted of quicker rapport and less agitation, building rapport a lot faster and provides new ways to engage with patients and families. Per the data, 33.3% of participants recognized that having a role as a facility canine assistant handler allowed them to build rapport with patients and families quicker. The category of canine becomes a part of everything the handler does consisted of the canine is a part of all daily interventions with patients and families, the canine impacts everything the handler is able to do like getting rapport from staff, walking through the hallways and interacting with patients and staff. 38.9% of participants found that the canine becomes a part of everything you do as a handler and professional. The category of *more* challenging consisted of feeling 'on' all the time, taking longer amounts of time to get between places, being mindful of canines needs like bathroom breaks, water and breaks in general. Per the data, 16.7% found being a facility canine assistant role to be more challenging compared to their previous job and role.

Research Question 3 (RQ3) Results

Part of this study was to recognize what the facility canine assistant handlers identified as the benefits of the facility canine assistant program at their respected hospital. Researchers used a blind coding method to identify prominent themes that emerged from the data. For RQ3, six themes emerged, including; (1) patient and family satisfaction levels, (2) staff satisfaction, (3) rapport building, (4) patient intervention and support, (5) positive culture change and morale, and (6) normalizing behavior/environment. (See Appendix F). The category of patient and family satisfaction levels consisted of increased patient satisfaction, reducing pain, reducing anxiety, reduce negative behaviors and provide comfort. According to the data, 22.2% of participants recognized patient and family satisfaction levels as a benefit of FCAT. The category of staff satisfaction levels consisted of staff support, provide comfort and increased satisfaction for staff. Per the data, 33.3% of participants identified that staff satisfaction levels were a benefit. The category of rapport building consisted of easier rapport building, quicker rapport building, and canines are able to motivate patients in ways that often staff cannot. Approximately 11.1% of participants acknowledged that quicker and better rapport building was a benefit. The category of patient intervention and support consisted of provides alternate focus, different modality to work with patients, opportunities for unique interventions and canine can provide so much more comfort compared to a human. Per the data, 61.1% of participants identified patient interventions and support was a benefit. The category of *positive culture change* consisted of morale booster, motivation for patients, makes clinic feel more like home and positive culture change in our

facility. Approximately 66.7% of participants recognized a positive culture change as a benefit. The category of *normalizing behavior/environment* consisted of softens a difficult environment, increased compliance, increased understanding, less anxiety and comfort. Per the data, 16.7% of participants acknowledged normalizing behavior as a benefit to having facility canine assistant program at their hospital and as a part of their programming.

Research Questions 4 (RQ4) Results

Results gathered from the data recognized some challenges associated with facility canine assistant programs at their respected hospital. With a blind coding method, researchers identified three pronounced themes, including (1) the feeling of always being 'on', (2) having to say 'no' to people/being in high demand and feeling like people are disappointed, and (3) being stopped frequently. (See Appendix G). For the purpose of this research study, the operational definition of, "always being on", is; to feel like the handler doesn't have a break either physically, emotionally or socially. The category of always being "on" consisted of feeling constantly 'on', people forgetting the role of the CCLS, inappropriate referrals and notoriety. According to the data, 11.1% of participants identified the feeling of always being 'on' as a challenge associated with the program. The category of having to say, 'no' to people consisted of walking through the halls and having to say 'no', everyone wants the canine all the time, canine can only see so many patients in one day, disappointing people and not meeting the need. Per the data, 66.7% of participants recognized that having to say 'no', being in demand and feeling like they were disappointing people was a challenge associated with being a handler and having a facility canine assistant program. The category of stopped frequently during the day consisted of constantly being stopped by people and getting from one place to the next without being stopped.

Approximately 27.8% of participants identified that being stopped frequently throughout the day was also a challenge associated with the handler role and facility canine program.

Summary

In summary, this chapter provided insight regarding each research question and identified themes in which researchers blind-coded for statistic values. These values, including the ICC values are provided for readers (See Appendices D, E, F, G). In the next chapter, data and information from this chapter will be further analyzed using relevant literature.

CHAPTER FIVE: DISCUSSION

Introduction

In this chapter, researchers will review each research question's results in order to further analyze, apply and further explore findings. Below, each question sectioned to include applied and relevant literature, as well as the theoretical framework, Bronfenbrenner's Theory of Ecological Systems. This chapter aims to explore how current literature can be associated with data collected from current study.

Types of Interventions Performed by Facility Canine Assistants and Their Handlers (RQ 1)

There are several interventions that facility canine assistants and their handlers are able to provide to patients, their families and staff while in the hospital. The stress of hospitalization is well-documented for pediatric patients (Kaminski et al., 2002; Braun et al., 2009; Wu et al., 2002). According to Urbarnski & Lazenby (2012), using canines that are trained for therapeutic roles could enhance these patients' quality of life. While implementing facility canine assistants in the hospital serves as a basic intervention for patients, families and staff, using these canines for more specific and developed interventions can be even more beneficial. This research study found that the use of facility canine assistants during pediatric psychosocial interventions specifically aided in the overall therapeutic support, coping, procedural support/preparation, motivation, and ambulation for the patient.

In addition, it has been documented that when facility canines were present during events in the hospital, including physical therapy sessions, the canine psychologically took on the pain of the patient, which patients reported pain was reduced by four times more in sessions with the

25

facility canines present compared to when they were not (Braun et al., 2009). While this study did not specifically study pain, the present study's findings align with Braun et al.'s (2009) study in that patients use facility canine assistants to copes with pain and provide therapeutic support. Pain could also inhibit patient motivation and does play a specific role in whether patients struggle to ambulate during hospitalization. While pain could inhibit a patient's motivation to achieve care goals or ambulation, the data further supports the idea that facility canines can aid in creating a normalizing environment to help not only motivation patients but also provides a more effective level of support and comfort.

RQ1 and Application To Theoretical Framework. In review, ecological systems theory essentially explores how different levels of environmental factors surrounding the individual, impact and influence their development (Bronfenbrenner, 1979). When considering Bronfenbrenner's theory of ecological systems, the findings from this research question connects with the therapeutic support intervention. Patients in this research study represent the idea of the 'individual' in his theory. The individual can feel supported either directly or indirectly in this theory, meaning that the individual's or patient's parents might directly provide support, but the patient could also feel support indirectly by the parents feeling support from their friends. The facility canines can be applied in a similar manner, making direct and indirect impacts on patients who need extra support, might be alone for periods of time or could benefit from other interventions. Kaminski, Pellino, and Wish (2002) further supported this idea through their research study in which parents felt less guilty having to leave their children at the hospital alone while they worked when a canine assistant was available to visit and spend time with their child.

Daily Impact of Facility Canine Assistants on Their Handler's Interactions (RQ 2)

Participants recognized several ways that their daily role within the hospital was impacted by being a facility canine assistant handler. Most participants were currently CCLSs, while approximately 18% of participants held a different supportive position or title, including family therapist and facility dog program coordinator. As part of their profession, CCLSs use their training in development to help children of all ages cope with the pain, anxiety and fear that is often associated with stressful and traumatic experiences in the hospital ([AAP], 2014). These professionals achieve these outcomes through psychosocial interventions, including play, preparation, education, emotional expression opportunities, normalization and other developmentally appropriate activities for patients, their siblings and other family members ([AAP], 2014).

While CCLSs use their training and a variety of tools to provide interventions to patients, this data showcases the combined interventions that facility canine assistants and their handlers are able to provide for patients, families and staff. If considering taking on the role as a facility canine handler, it is essential to explore how the presence of a facility canine assistant impacts or changes the daily role of the individual in the hospital. The findings reveal that about half of participants reported that their role as a facility canine handler allowed them to build rapport with patients and families quicker. As a CCLS, to have an impact with patients and families, the professional must work to build rapport and a trusting relationship. Now considering that the most participants held both CCLS roles and facility canine handler roles, it only makes sense to assume that facility canines do have the ability to strengthen some of the interventions naturally provided by CCLS on a daily basis.

To further support this idea, about one-third of participants reported that the facility canine assistant handler role was rewarding because they were able to see the impact the facility canine had on patients, families and medical staff. According to Chur-Hansen et al., (2014), there is a high level of acceptance for therapies involving the use of animals in the hospital from patients, families and healthcare professionals. These canines are able to decrease stress and anxiety possibly felt by all individuals in the hospital regardless of being a patient, family or staff (Olivera & Linhares, 2015). While several positive impacts have been discussed, approximately 20% of participants did report that the role of facility canine assistant handler did make their role more challenging. This concept will be further explored in the discussion of RQ 4.

RQ 2 and Application To Theoretical Framework. Bronfenbrenner's theory of ecological systems can be applied to the daily impacts facility canine handlers might face and how it could impact their interactions with individual patients. Facility canine assistant handlers who work in the hospital would fall under Bronfenbrenner's environmental level, exosystem, because it includes how outside support systems could impact the handler, which would then indirectly impact the patient (Bronfenbrenner, 1979). For example, if the facility canine assistant handler feels that the facility canine is a challenge to their day or role, they might feel frustrated. The handlers in return might interact with the patient in the same day and indirectly expose the patient to their frustrations, which could then impact the patient's mood or perception of the facility canine assistant which is intended to provide them with comfort and support (Bronfenbrenner, 1979; Chur-Hansen et al., 2014 & Elmaci & Cevizci, 2015).

Benefits of having a Facility Canine Assistant Program at Pediatric Hospitals (RQ 3)

Part of this study explored benefits associated with facility canine assistants and their programming within pediatric hospitals. Six major benefits were identified from the data analysis, including patient and family satisfaction, staff satisfaction, rapport building, patient intervention and support, positive culture change and normalizing behavior/environment.

As documented through literature, many stressors (e.g., anxiety and pain) exist for patients during hospitalization (Calcaterra et al., 2015; Urbanski & Lazenby, 2012). It can be assumed that when pediatric patients feel pain, anxiety and stress, this could lead to upset or negative emotions with parents and other family members. According to several studies, children who had sessions with canine assistants reported lower levels of pain and stress and even identified that the use of canines can facilitate coping techniques and strategies (Braun et al., 2009; Calcaterra et al., 2015; Eggiman, 2006; Kaminski et al., 2002; Wells, 1998).

While just the canine assistants were able to report these findings, it could be assumed that when added to the role of the child life specialist and their scope of practice, that these results with preparation, guided imagery and therapeutic intervention, might positively impact the data. With reported lower levels of pain and stress, patients would have more positive experiences in the hospital which again could correlate to the satisfaction of their parents and family members. In fact, another study by Siwertsen, French and Teramoto (2015) specifically notes when feelings of stress and anxiety are regulated and managed, a more positive and inviting environment is created. The data in this research study supports this idea because two-thirds of participants identified patient and family satisfaction as a benefit associated with facility canine assistant programs. As mentioned previously, the ability of facility canines to assist in

rapport building allows stronger, trusting relationships to form between patients and the facility canine handlers, which allows for more interventions to be successfully implemented.

The implementation of canines for programs such as facility canine assistants in healthcare promotes both supportive and goal-oriented physical, mental and emotional interventions (Chur-Hansen et al., 2014; Elmaci & Cevizci, 2015). The current research study found that about half of participants recognized that facility canine assistant support during patient interventions (including procedures) and overall therapeutic support was a benefit to FCAT programs.

RQ 3 and Application to Theoretical Framework. Data collected from RQ 3 connects to Bronfenbrenner's theory of ecological systems on a few levels. When considering patient and family satisfaction, it would be best to consider the mesosystem from Bronfenbrenner's theory, which is the concept that direct influential factors (e.g., a child's parents) might influence how the child thinks and feels about an event (Bronfenbrenner, 1979). Furthermore, if the patient's parents are not satisfied with the hospital environment, or medical staff, it could directly influence how the patient perceived the hospital environment and medical staff. When parents and patients feel they are supported and listened to by medical staff, they can develop a trusting relationship (rapport). When rapport and a relationship exist, the entire ecological system could be affected by an overall culture morale and positive environment (Bronfenbrenner, 1979).

Challenges of Having a Facility Canine Assistant Program at Pediatric Hospitals. (RQ 4)

While many benefits of FCAT programs have been outlined in this discussion, it is important to review the data on the identified challenges with FCAT programs, the facility

canines themselves, and the role of being a facility canine handler. Three themes emerged from the data collected regarding associated challenges.

First, facility canine handler's felt that they always have to be "on" because of their constant facility canine assistant companion. This challenge could be applied to several different roles and positions within healthcare. In an institution that is open 365 days a year and 24 hours a day, people are constantly coming and going. Most participants were currently CCLSs, which is a role that has been identified in literature as someone who aids in making the hospital less stressful and traumatic for patients and their families ([AAP], 2014). With this information, it is natural to assume that these individuals would be in high demand at pediatric facilities. Now, to pair a facility canine assistant to this role with the CCLS serving as the handler, and more demand is only added. As described by participants, the canine could make it more difficult for the CCLS to have downtime, or time to perform tasks efficiently, because they have an animal that gathers a lot of attention, making them feel constantly "on."

Second, facility canine handlers stated they felt like they had to say "no" to people who showed interest in the canine, which made them ultimately feel that they were disappointing people. This challenge exists for several reasons: Is there only one facility canine assistant at their hospital, leading to a supply and demand problem? Perhaps the facility canine assistant is attached to a specific unit, like the pediatric intensive care unit (PICU) or outpatient surgery, which means when they are passing a patient's family in the hallways who requests the facility canine assistant and handler, the handler has to say "no." Maybe in hospitals with more than one facility canine assistant this may not be as big of a challenge, but more research would need to be collected specifically about this topic to make a more data supported consensus.

Lastly, facility canine handlers reported that being stopped frequently throughout the day while they were moving from one task or patient to the next was a challenge. Like any hospital professional, facility canine handlers are constantly on the move. Handlers have additional challenges when considering meeting the basic needs of the canine (e.g. drinking water and taking multiple bathroom breaks in one day). Hospitals are constantly full of people, whether it is patients, family member, visitors, or those scheduled for outpatient clinic visits. It would be interesting to gather data regarding how many people the canine and handler come into contact with, how many touches the canine receives and more descriptive information about how other handlers overcome these challenges.

RQ 4 and Application to Theoretical Framework. Data collected from RQ 4 can be applied Bronfenbrenner's theory of ecological systems much like the previous research question RQ3. When considering Bronfenbrenner's concept of mesosystem, where direct influential factors impact the individual, it is easy to understand how challenges felt by the facility canine handler could impact the patient (Bronfenbrenner, 1979). Challenges that the handler associates with their role or the facility canine assistant program could either directly or indirectly impact the patient. For example, if the handler, who is with the facility canine assistant on a constant basis, is in a bad mood because they are unhappy due to feeling constantly 'on', or because it took them double the amount of time to get between patients, has the potential to influence the patient's mood or perception of whatever is happening in that moment.

Summary

In this chapter, each of the four research questions was applied to relevant literature and further analyzed for application. The results for each research was then further applied to the

theoretical framework, Bronfenbrenner's Theory of Ecological Systems. Much of the explored literature can be applied to the results from this current study's research questions. Below, implication of practice for this data and the field of Child Life as well as FCAT will be explored.

Implication for Practice

This research study directly relates to the field of child life and other coordinating fields, such as hospital volunteer services, because it further explores the implications and interventions of FCAT programs. Other studies have identified that both child life departments and facility canine programs in pediatric hospitals facilitate opportunities for patients to cope (Kaminski, Pellino & Wish, 2002). Specifically, this study highlights the influence facility canine assistants have on the patients, families, staff and their handlers, which the current study identified to mostly be CCLSs. When considering the literature on child life specialist roles/interventions and the role/interventions of facility canines, it makes sense to explore the combined role of the CCLS as the facility canine handler, and how the natural interventions provided by a CCLS could have a more meaningful or impactful influence on patients, families and staff with the facility canine assistant.

The data collected in this study are crucial to the implication of FCAT programs in pediatric hospitals because it gives a wholistic picture of what the canines are able to be a part of, how their presence positively impacts the hospital environment, and how their handlers as CCLSs are able to use them as a tool in their daily interventions. With these programs expanding their growth throughout hospitals nationally, the more information that can shed light on the specific implications of practices, the better.

While this research study provides significant insight on FCAT programs and their handlers, this data also showcases the need for more research. Specifically, regarding facility canine assistants and, more importantly, their role and impact on aspects such as, pain management, comfort and normalization. More information regarding program cost and lifetime cost for the canines could also be further explored.

Limitations

This study has some limitations. First, this study only included participants within U.S. pediatric hospitals. While the research collected could still be applicable at adult medical facilities, no data were collected to explore the possibility. Since only pediatric hospitals were included in the data collection process, only a small number of participants responded to the research study survey. Within the pediatric hospitals themselves, only facility canine primary and secondary handlers were invited to participate.

Another limitation to this research study could be the hospital demographics. The number of facility canine assistants at each facility, could have impacted how facility canine assistant handlers answered some survey questions due to lack of accessibility or other factors. Another limitation could be the training of the canines. The different hospital's facility canines could have all come from different agencies or breeders therefore receiving different training, which could impact how handlers implement the canines with their role.

Conclusion

In summary, this research study further explored facility canine assistant handler's perception of FCAT programs. Data were collected from primary and secondary facility canine

handlers (n=11), where 81.8% (n=9) were certified child life specialists, 9.1% (n=1) of participants were a family therapist and 9.1% (n=1) of participants were a facility canine program coordinator. Data were collected regarding the prominent interventions provided by facility canine assistants and their handlers, overall impact of facility canines on the interventions of their handlers and the benefits and challenges associated with facility canine assistant programs.

Results indicated that there are several benefits associated with FCAT programs, specifically highlighting the satisfaction levels of patients, families and staff members, and facility canine assistants' ability to provide support during interventions and interactions with patients and their families. When considering the data collected for this study and the relevant literature, it appears that the presence of facility canine assistants not only reduce stressors like anxiety and pain but also create a therapeutic and supportive environment for patients, families, and hospital staff.

Overall, the majority of facility canine handlers considered their role with facility canines and the use of them in their daily interventions to be rewarding and beneficial to building stronger rapport at a quicker rate with patients and families. Data reveals that these handlers reported that the facility canine assistant naturally became a part of everything they do on a daily basis. Some handlers viewed their handler role as more challenging due to being stopped more throughout the day, always feeling that they had to be "on," and feeling like they were disappointing patients when under high request and unable to meet all needs.

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APPENDICIES

Appendix A. Research Questions

	Research Questions	Corresponding Survey Questions
RQ 1:	What types of psychosocial interventions does a CCLS,	Question 34
	who is also a facility canine handler, provide for patients	
	and families?	
RQ 2:	What are the differences between interventions/ role	Question 37
	with a facility-canine assistant and without a facility-	
	canine assistant?	
RQ 3:	What are the benefits of having a FCAT program within	Question 35
	a child life department?	
RQ 4:	What challenges do CCLSs encounter with a FCAT	Question 36
	program at a pediatric hospital?	

Appendix B: Facilitated- Canine Assisted Therapy Survey

This Section is about you and your work history.
1. Gender: Male Female Other:
2. Age:
3. Marital Status: Divorced Never married Now married/domestic partner Separated Widowed
4. Race: White/European American Black/African American Native American or Alaska Native Asian American Native Hawaiian or Other Pacific Islander Two or more races Other:
5. Ethnicity: Hispanic or Latino Non-Hispanic
6. Education Level: High school graduate (includes equivalency) Some college, no degree Associate's degree Bachelor's degree Graduate or professional degree
7. What hospital institution do you currently work?
8. What is your current position at your hospital? Child Life Specialist Director/Manager of Child Life Department Other (please specify):

9. What shift do you primarily work? Day Shift
Night Shift
Other:
10. What is your employment status?
Full-time
Part-time
PRN
Other:
oner
11. How long have you been employed at your hospital facility?
12. What area do you primarily work in?
Inpatient
Outpatient
Other (please specify):
13. What patient population do you primarily work with? (Choose all that apply).
Bone Marrow Transplant
Cardiology
Day Surgery
Emergency Department
General Pediatrics
Hematology
Imaging/Radiology
Intermediate Care/Step-Down Unit
Neurology
NICU
Oncology
Orthopedics
Outpatient Specialty Clinic
PICU
Post-Surgery/Trauma
Psychiatry
Rehabilitation
Respiratory/Pulmonary
Transplant
Other:

The following section is about you as a facility dog (facility-canine assisted therapy) handler.

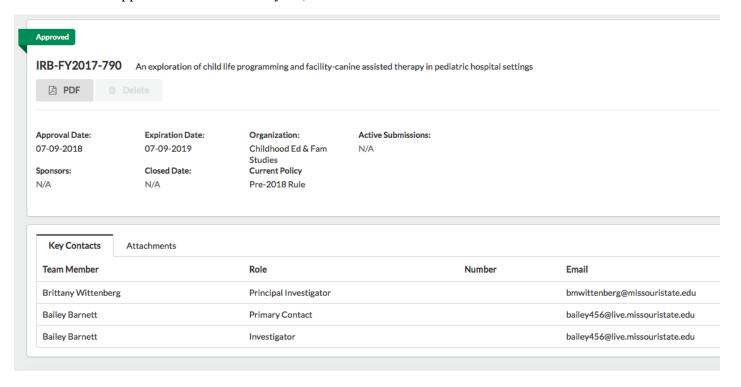
14. Are you the primary or secondary facility dog handler? Primary
Secondary Other:
15. How long have you been a handler for a facility dog at your hospital?
16. How long did you work as a child life professional prior to becoming a facility dog handler?
17. What is your prior experience with dogs as pets before becoming a facility dog handler? (Choose all that apply).
I've never lived with a dog. I've lived with a dog before.
I've always lived with a dog.
I currently live with a dog. I've trained dogs.
Other:
The following section is about your facility dog.
18. Sex of facility dog:
Female
19. Current age of facility dog (years):
20. What is the breed of your facility dog?
21. How old was your facility dog when you became his/her handler?
22. Has your facility dog had previous handlers?
Yes No
Other:
23. Is this your facility dog's first facility to be a facility dog?
Yes No
Other:
The following section is about your facility dog program.

24. How many years have you had a facility dog program at your healthcare facility?

25. How many	facility dogs are at your healthcare facility?
26. Where did y Agency Breeder Other:	your facility-dog come from?
27. How much	did it cost to purchase your facility-dog?
28. What is the	cost for your facility dog's care? (grooming, food, medical)
29. Are any of	your facility dog's costs covered by your facility?
30. What is the	cost associated with becoming a handler (e.g., training costs)?
31. As a CCLS	, what training did you go through to become a facility dog handler?
The following sect	ion is about your perception of facility dog interventions.
32. On average a daily basis	how frequently is your facility dog used with your child life interventions on s?
0% 25% 50% 75% 100% Other:	
34. What type of	of interventions does your facility dog participate in?
35. In your opin	nion, what are the benefits of having a facility dog program at your hospital?
36. In your opin hospital?	nion, what are the challenges of having a facility dog program at your
-	ack to before you were a facility dog handler, how has becoming a facility dog pacted your daily interactions with patients, families, and staff?
38. What would	d you say to CCLSs who are considering becoming a facility dog handler?

Appendix C: IRB Approval Certification

The IRB approved research on July 9th, 2018



Appendix D. Research Question 1 (RQ1) Data

Interventions	Direct Quotes from	% of participants	ICC
provided by facility	Data		
canine assistants			
and their handlers			
Therapeutic Support	Normalization,	83.3%	0.78
	therapeutic play		
	sessions,		
	psychosocial and		
	medical support.		
Coping	Coping, de-	66.7%	0.71
	escalation, clinical		
	interventions as a		
	CCLS. Keeping		
	patients calm		
Procedural	Therapeutic	61.1%	0.88
Support/Preparation	interventions to help		
	with procedures,		
	reducing		
	pain/distress		
Motivation	Motivation to	33.3%	0.71
	cooperate,		
	accompaniment,		
	individual therapy		
	and family therapy		

Appendix E. Research Question 2 (RQ2) Data

How Facility Canine Assistant Handler role has impacted	Direct Quotes from Data	% of participants	ICC
daily interactions			
with patients,			
families and staff			
Rewarding	Network with people that generally wouldn't, get to see the incredible benefit of what a canine	27.8%	0.86
	brings to patients and families. He (the canine) makes everything better.		
Quicker Rapport Building	Quicker rapport and less agitation, build rapport a lot faster, provide new ways to engage with patients and families,	33.3%	1.00
Canine becomes a part of everything the handler does	The canine is a part of all interventions, having the canine with you impacts everything that you do like getting rapport from staff and walking through the hallways, interacting with patients and staff	38.9%	0.50
More challenging than previous role before canine	Feeling "on" all the time, takes a longer amount of time to get anywhere, being mindful of canine's	16.7%	0.78

needs (bathroom,	
water, breaks)	

Research Question 2 (RQ2) Data

Appendix F. Research Question 3 (RQ3) Data

Benefits of Facility Canine Assistant Programs	Direct Quotes from Data	% of participants	ICC
Patient and family satisfaction levels	Increased patient satisfaction, reducing pain, reducing anxiety, reduce negative behaviors, comfort	22.2%	0.56
Staff satisfaction levels	Staff support, increased staff satisfaction	33.3%	1.00
Rapport building	Dogs are able to motivate patients in ways that often we cannot, easier rapport	11.1%	1.00
Patient intervention and support	Provides alternate focus, different modality to work with pts, opportunities for unique interventions, canine can provide so much more comfort compared to a human	61.1%	0.50
Positive culture change and morale	Morale booster, motivation patients, makes clinic feel more like home, positive culture change in our facility	66.7%	0.69
Normalizing behavior/environment	Softens a difficult environment, increased compliance, increased understanding, less	16.7%	0.78

anxiety,	
normalization,	
comfort	

Research Question 3 (RQ3) Data

Appendix G. Research Question 4 (RQ4) Data

Challenges of	Direct Quotes from	% of participants	ICC
Facility Canine	Data		
Assistant Programs			
Feeling always 'on'	Feeling constantly	11.1%	1.00
	'on', people		
	forgetting that I am a		
	CCLS also,		
	inappropriate		
	referrals (people just		
	liking dogs),		
	notoriety		
Having to say, "no"	Walking through the	66.7%	0.69
to people	halls and having to		
	say 'no', everyone		
	wants her (the		
	canine) at all times,		
	can only see so many		
	people in one day,		
	disappointing people,		
	not meeting the need		
Stopped frequently	Constantly being	27.8%	0.86
during the day	stopped by people,		
	getting from one		
	place to the next		
	without getting		
	stopped		