LOUISIANA CERTIFIED CHILD LIFE SPECIALISTS’ PERSPECTIVE ON THE EFFECTS OF COVID-19 ON CHILD LIFE SERVICES

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LOUISIANA CERTIFIED CHILD LIFE SPECIALISTS’ PERSPECTIVE ON THE EFFECTS OF COVID-19 ON CHILD LIFE SERVICES

A Thesis
Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the degree requirements for the degree of Master of Science in Child and Family Studies

by
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B.S., Louisiana State University, 2020
May 2022
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ABSTRACT
The medical field has faced challenges throughout the COVID-19 pandemic, significantly changing the ways hospitals function and healthcare professionals serve patients and families. Healthcare professionals, specifically Certified Child Life Specialists (CCLs), have continuously adapted their roles, programs, and services to ensure they adhere to the ever-changing infection control policies and mitigation efforts put in place by government officials and institutions. CCLs provide pediatric patients and their families with interventions, hospital normalization, and opportunities to engage in play, contributing to pediatric patients’ healing environment during hospitalization. This study focuses on pediatric healthcare in the state of Louisiana, gaining insight from CCLs’ perspectives across the state. The purpose of this study is to provide new information on how COVID-19 has impacted the standard practice of child life departments within the state of Louisiana, measuring aspects of care prior to the pandemic, at the onset of the pandemic, and post-onset of the pandemic.
INTRODUCTION

Beginning in December of 2019, the novel coronavirus began rapidly sweeping across the globe, eventually reaching the United States in January of 2020 (World Health Organization, 2021). The first confirmed positive case of COVID-19 in Louisiana was reported on March 9, 2020 (NOLA Ready, 2020). Responding to efforts to prevent and halt the transmission of COVID-19, the Louisiana governor issued a Stay at Home Order to ensure the highest level of safety for healthcare professionals (HCP), hospitalized patients, and Louisiana residents (Office of the Governor, 2020a). Along with the increasing number of COVID-19 cases in the state came significant impacts on healthcare facilities including understaffing, over-capacitated hospital facilities, and a scarcity of supplies and resources to help COVID-19 patients (Emanuel et al., 2020; Essien et al., 2020; Russi et al., 2020). The impacts on healthcare facilities included those working within child life departments, along with the programs and services available to pediatric patients and their families (Winkie & Kinnebrew, 2021). The purpose of this study is to provide new information on how COVID-19 has impacted the standard practice of child life departments within the state of Louisiana, measuring aspects of care prior to the pandemic, at the onset of the pandemic, and post-onset of the pandemic.
REVIEW OF LITERATURE

Common/Standard Child Life Programming and Services

The field of child life exists to advocate for and provide pediatric patients and their families with psychosocial care during stressful life experiences, such as hospitalization. Child life specialists collaborate with other members of the interdisciplinary healthcare team, as well as family members to develop care plans to best suit each patient (Romito et al., 2021). Psychosocial care includes building empathetic and supportive relationships, establishing healthy coping strategies, preparing patients for medical procedures, and developmentally appropriate activities to positively impact patients’ hospital stays (Romito et al., 2021). Through individualized interventions, building rapport and trustworthy relationships, and fostering an environment that respects the patient and their family, child life specialists achieve these goals to bring children familiarity and even confidence while coping with stressful life experiences. Child life services are “associated with improved quality, outcomes, and patient and family experiences as well as decreased costs in pediatric care,” according to Romito et al. (2021, p. 6).

Four broad categories regarding child life interventions incorporated into child life programs include psychological preparation, pain-management and coping strategies, the therapeutic value of play, and partnering with families to provide support. These categories have each been connected to data supporting the idea that child life programs and services have a positive impact on pediatric patients’ hospitalizations (Romito et al., 2021).

As the principle of family-centered care (FCC) continues to develop within the healthcare field, HCPs “acknowledge the significant impact child life specialists have on the patient experience as well as the role child life plays in helping the concept of patient experience continue to evolve and grow” (Romito et al., 2021, p. 6). Recent research studies are revealing
the positive influence of child life programs and interventions within patient experiences and parent perception of hospitalizations (Romito et al., 2021). Child life specialists are taking the lead in many healthcare programs to advocate for FCC (Romito et al., 2021).

Child life practices are continually developing beyond inpatient acute care settings and are being included in many unique settings, including education settings, outpatient clinics, dentist offices, and nonprofit organizations to serve surrounding communities (Romito et al., 2021). In North America, there are over 430 active child life programs, with the majority located in children’s hospitals (Romito et al., 2021). Of the 430, approximately 400 of the child life programs are within the U.S. (St. Jude Children’s Research Hospital, 2022a). While the field has expanded beyond pediatric care within the hospital setting, the present study focused on child life programs and services offered within Louisiana pediatric hospitals across the state.

**Volunteers**

Volunteering within pediatric hospitals has become popular over the years, benefitting patients, supporting employees, and providing volunteers with professional experience in their field of interest. Children who are hospitalized greatly benefit from engaging in normal life experiences during their stay, like celebrating holidays and birthdays, playing, and bonding with peers (Texas Children’s Hospital, 2022). Litchfield (2004) describes pediatric volunteers as valuable resources who “enhance the experience of children and families” who are hospitalized (p. 28). Hospitals across the U.S. offer volunteer opportunities to those who are eligible to apply and meet hospital requirements. Common requirements to volunteer in a children’s hospital include being at least 18 years of age, passing a criminal background check, passing a tuberculosis (TB) test, and being willing to commit to a certain number of volunteer hours over a time span that varies with each institution.
St. Jude Children’s Research Hospital in Memphis, Tennessee is home to many volunteer opportunities, with over one thousand volunteers contributing each year through various roles (St. Jude Children’s Research Hospital, 2022b). St. Jude, like many other children’s hospitals, offers individual opportunities, as well as group volunteer opportunities. Both individual and group volunteers contribute to child life departments by “providing respite care to caregivers, playing games and providing activities for children, helping families in the cafeteria, collecting wagons and wheelchairs around the hospital, and working in the St. Jude Garden” (St. Jude Children’s Research Hospital, 2022b, p. 1).

Volunteers greatly contribute to child life departments, interacting with patients one-on-one and in groups. Child life volunteers work to ensure that children have a safe environment to play in, often providing patients with games and art projects (Children’s Hospital Los Angeles, 2022a). They create and implement recreational activities and opportunities for children to engage in play, as well as support CCLSs by sanitizing toys, organizing playrooms, stocking storage shelves, and prepping for activities and events (St. Jude Children’s Research Hospital, 2022c). Child life volunteers serve in both inpatient and outpatient settings to normalize the hospital environment for patients by escorting patients to appointments, playing with patients in the waiting areas, and engaging in bedside play (St. Jude Children’s Research Hospital, 2022c; Children’s Hospital Los Angeles, 2022b). However, as COVID-19 cases began to rise volunteer programs were halted to protect and ensure the safety of patients, families, and staff members.

While accessibility to volunteer programs varied across different states and within different hospitals, many volunteer programs did not resume until April of 2021 (Children’s Health, 2021). Some volunteer programs have begun welcoming returning volunteers into their program, while new volunteer onboarding remains on hold (University of California San
Francisco Benioff Children’s Hospitals, 2022). In some hospitals, volunteer programs are still prohibited (Joe DiMaggio Children’s Hospital, 2022).

**Playroom/Teen Room Accessibility**

For decades theorists have studied play and how it influences children’s development and reduced children’s emotional distress (Romito et al., 2021). Research shows play is essential for healthy development in children, especially in children who are experiencing adverse childhood events, like traumatic experiences or hospitalization (Frost, 2012; Gleave & Hamilton, 2012). Play has a positive influence in children’s emotional well-being, as well as their physical health and future (Gleave & Hamilton, 2012). Children also learn social and cognitive skills through play, developing an understanding of the world around them. While the benefits of play are both immediate and long-term, contributing to all aspects of a child’s health and development, so are the consequences of play deprivation (Gleave & Hamilton, 2012).

The field of child life aligns with the beliefs of these theorists and the importance of play, encouraging and providing patients to engage in play during hospitalization. Play in the hospital setting is often adapted to individualize activities or play plans to meet each patient’s needs and help them to cope with medical experiences (Romito et al., 2021). Each patient’s developmental level, interests, physical abilities and psychosocial vulnerabilities are considered during child life assessments to determine the needs of each patient (Romito et al., 2021). In many instances, CCLs utilize child life playrooms and teen rooms located within hospitals to provide patients with a healing environment outside of their patient rooms. CCLs engage children in developmentally appropriate play, often in group activities with peers. The opportunity to engage in play with parents is beneficial for patients as well as family members, contributing to the patient’s adjustment to the hospital environment (Romito et al., 2021).
During the onset of the COVID-19 pandemic, many child life departments were called to close the playrooms and teen rooms adhering to infection control policies (ICP). This left CCLSs with fewer opportunities to engage in play with patients and limited the activities offered to patients and families.

**Donations/Available Resources**

Across the U.S., children’s hospitals receive an influx of donations for patients including toys, books, puzzles, games, electronics, art supplies, stuffed animals, clothing, hygiene products, cosmetics, and other resources from their surrounding community (Barnes, 2018). Organizations and institutions, including businesses, churches, schools, clubs, sports teams, and universities, as well as individuals contribute to the donations to meet the needs of hospitalized children and families facing stressful life experiences. The holiday season brings in a flood of donations across the nation each year from those celebrating the Christmas season, reaching millions. Although donations are accepted year-round, the number increases during the holidays. Hospitals are reliant on donations to provide pediatric patients and families with tangible resources that positively impact the patient experience. Providing children with play materials can help normalize the hospital environment for children, as well as meet the needs of patients and parents who may be without objects that make the hospital feel more comfortable, including blankets, stuffed animals, hygiene products, and cosmetics. Child life departments are often responsible for the intake and management of donations from contributors, according to Barnes (2018).

The purpose of including survey items surrounding this area of child life programs and services in the research study is to find out how the COVID-19 pandemic hindered pediatric
hospitals’ donations. With protocols being put into place, the question arises of whether hospitals were able to continue to accept donations or if donor support decreased as a result of COVID-19. 

Visitor Policies

Pediatric healthcare professionals (HCPs) value collaborating with patients’ caregivers to provide individualized care plans, which is recognized as family-centered care (FCC). FCC has become the standard of care in pediatric healthcare to promote psychological well-being in patients (Virani et al., 2021). Due to the COVID-19 pandemic, hospitals adapted visitor guidelines to adhere to infection prevention and control (IPC) protocols (Vance et al., 2021). Limiting, and in some cases prohibiting, visitors was one of the ways hospital administrators across the U.S. believed they could control the spread of COVID-19 within the hospitals (Silvera et al., 2021). According to a study on 211 pediatric hospitals’ visitor policies, each hospital explicitly stated that changes were direct results of the COVID-19 pandemic (Vance et al., 2021). This expectation to adhere to ICPs through changing visitor policies disrupted the very principles of FCC, which pediatric HCPs and CCLSs align themselves with to provide the best care for patients and their families. Concerns regarding disrupted FCC in children’s hospitals during COVID-19 continue to rise due to the potential impact in care and patient outcomes (Vance et al., 2021). Dissatisfaction with care, patient experience, emotional strain, and isolation are all areas of concern regarding the shift in visitor policies across the U.S. (Vance et al., 2021). In one study of 32 hospitals, researchers found that limiting visitation was correlated with lower patient care quality (Silvera et al., 2021). The study describes that prohibited visitation was “detrimental for both patient experience and patient safety outcomes” (Silvera et al., 2021, p. 31). Participants in this study express that the opportunity for visitation provided support during their hospitalization, as well as lessened levels of anxiety that were connected to their
hospitalization (Silvera et al., 2021). Visitation during hospitalization also created a sense of familiarity for patients and provided patients with a sense of trust with family members and HCPs (Silvera et al., 2021).

**Staffing Models**

Pediatric HCPs operate within interdisciplinary models, working with one another to provide patient and family-centered care, often including CCLSs for psychosocial care (Romito et al., 2021). The collaboration between CCLSs and other healthcare teams, including palliative care teams, behavioral health teams, trauma teams, and child protective services, are increasing (Romito et al., 2021). Child life programs are continually growing to meet the evolving needs of patients and families in the hospital and to support medical HCPs (Romito et al., 2021).

With the need of child life programs and services increasing, the American Academy of Pediatrics (AAP) described child life as a necessary aspect of pediatric healthcare (Romito et al., 2021). In 1994, the AAP suggested that each pediatric unit have one CCLS to each group of 24 or fewer patients; however, the AAP has since adapted its recommendation that each unit should have one CCLS to each group of 15 to 20 patients (Committee on Hospital Care & Child Life Council, 2014). It is common for a CCLS to allocate his or her care on multiple units within the hospital. The Child Life Council states that staffing ratios should be determined based on factors such as the patient’s age level, developmental level, mobility level, acuity of diagnosis, and presence of caregivers, among others (Child Life Council & Committee on Hospital Care, 2006). The Child Life Council (2006) states that when staffing allocations are decided upon, ratios from the AAP should be considered to ensure each patient is receiving adequate care and that the CCLS is capable of catering to the needs of each patient he or she is responsible for.
Many child life departments experienced job status changes during the COVID-19 pandemic (ACLP, 2020a). In June of 2020, the ACLP conducted a survey that consisted of 1,048 respondents, 721 of which were CCLSs in the U.S. (ACLP, 2020a). In the U.S., 24.15% of participants indicated they are working normal hours, but have experienced changes to shifts, assigned units, or job duties, while 6.21% of participants indicate they are experiencing partial hospital-based work hours and partial work-from-home hours, 16.38% of participants identify they are working reduced hours, and 5.51% of participants indicate they have been furloughed (ACLP, 2020a).

COVID-19 Pandemic

In December of 2019, the World Health Organization (WHO) began investigating outbreaks of what was later discovered to be clusters of COVID-19 cases in Wuhan, China (World Health Organization, 2021). Soon following the outbreak in China, WHO (2020b) published the first Disease Outbreak News report, informing the public of the novel coronavirus and instructing government officials to establish IPC protocols across the globe (WHO, 2021). In January of 2020, the first documented death resulting from COVID-19 occurred, as well as the first confirmed case in the United States (WHO, 2021). The COVID-19 outbreak was soon declared a “public health emergency of international concern” by the director-general, which is the highest level of concern (WHO, 2020b, p.1).

Throughout the early months of the pandemic, many Americans were uncertain about the transmission status of the coronavirus. According to WHO (2020a), the coronavirus is known to be transmitted through both respiratory droplets and contact. As early as March 29, 2020, WHO stated that the coronavirus is primarily transmitted between humans through airborne respiratory droplets (WHO, 2020a; Wu et al., 2020). However, along with confusion regarding the
transmission status of the virus, there were disagreements and conflicting information being presented to the public regarding the severity of the virus (Nagler et al., 2020). WHO states that droplet transmission typically occurs between individuals in close contact with one another who have respiratory symptoms (e.g., coughing or sneezing) that cause them to potentially spread droplets (WHO, 2020a). The spread of the virus can also occur through direct contact with an infected individual or indirect surface contact that infected individuals have touched (WHO, 2020a). However, it was later discovered that airborne transmission is also a possibility with the COVID-19 virus (WHO, 2020a). Ongoing confusion and uncertainty throughout the pandemic resulted in inconsistencies across the nation regarding intervention methods, including the usage and effectiveness of facemasks (Nagler et al., 2020).

**COVID-19 in Louisiana**

In March of 2020, the first confirmed case of COVID-19 in Louisiana was reported, contributing to the surpassing of 100,000 global cases, which led WHO to declare COVID-19 as a pandemic (WHO, 2021). The governor of Louisiana, John Bel Edwards, issued a Stay at Home Order on March 22, 2020, which ordered residents to remain in their homes to avoid interaction with individuals outside of the home beyond essential needs, to limit potential transmission of COVID-19 (Office of the Governor, 2020a). Essential needs permitted during the Stay at Home Order included visiting the grocery store, getting gas at convenience stores, retrieving medication and healthcare necessities at pharmacies, attending essential medical appointments, and visiting restaurants for take-out meals or drive-thru meals. (Office of the Governor, 2020a).

This IPC measure was then extended until May 15, 2020. Louisiana entered Phase One of reopening on May 15, 2020, which expanded the list of permitted businesses that could open while enforcing strict social distancing measures and the use of face masks for limiting
transmission of COVID-19 (Office of the Governor, 2020c). Governor Edwards and health officials continued to encourage state and U.S. residents to remain in their homes as much as possible to avoid exposure to COVID-19 (Office of the Governor, 2020a). On June 4, 2020, Gov. Edwards announced Louisiana would enter Phase Two, which still encouraged the use of masks in public areas, but allowed places such as churches, gyms, barber shops, beauty salons, shopping malls, museums, massage establishments, and event centers to reopen with social distancing measures in place (Office of the Governor, 2020d).

The state of Louisiana was one of the hardest-hit states in the U.S. by the first wave of the pandemic in March of 2020 (Dyer, 2020). Prior to the outbreak of COVID-19 and the declaration of a global pandemic by WHO in March of 2020, the state of Louisiana was celebrating Carnival season of Mardi Gras during February of 2020. This regionally celebrated holiday attracts tourists from all over the U.S., and even the world, to celebrate Louisiana culture and contribute to the tourism economy that is prominent in the city of New Orleans. Tourists come to attend heavily populated parades and balls to engage themselves in the cultural experiences of Mardi Gras. Approximately 1.4 million visitors traveled to New Orleans, Louisiana in February 2020 to celebrate Mardi Gras, which later resulted in a surge of COVID-19 cases in April of 2020 leading to Louisiana becoming an epicenter for the pandemic (Gee, 2020). Almost two weeks to the day after Mardi Gras celebrations, the first positive case of COVID-19 was confirmed in Louisiana (Gee, 2020).

As cases continued to rise in Louisiana, so did the number of casualties from COVID-19. The COVID-19 pandemic has exposed social and structural inequities in the U.S. healthcare system and has raised concerns regarding racial disparities across the country (Essien et al., 2020; Gee, 2020). The racial disparity in minority communities throughout the U.S. began to
emerge, especially among the Black American population in Louisiana. Dr. Fauci, the director of the National Institute of Allergy and Infectious Diseases (NIAID), stated that disproportionate death rates in the population of Black Americans is “shining a very bright light on some of the real weaknesses and foibles in our society” (Dyer, 2020, p. 1). This racial disparity has been attributed to higher rates of underlying health conditions and chronic disease existing in Black Americans, compared to non-Black Americans (Dyer, 2020; Gee, 2020). In addition, Black Americans are more likely to work in essential jobs, which expose them to more human interaction than those who do not work essential jobs and remained at home during the COVID-19 lockdowns (Dyer, 2020). This picture is evident in Louisiana, as Black people account for nearly 70% of the number of deaths resulting from COVID-19 between March and October of 2020 (Dyer, 2020). While Black Americans account for only 32% of the Louisiana population, the percentage of deaths among this population surged (Dyer, 2020). The death rate of those in the Black American population is 2.65 times the rate for all other racial groups (Osofsky et al., 2020).

As the spread of COVID-19 continued unfolding in hard-hit Louisiana, there was no state-wide mask mandate enforced throughout the first five months of the pandemic. Shortly following WHO’s statement regarding the virus’ transmission status in March of 2020, the CDC released a statement in April of 2020 recommending the usage of non-medical grade facemasks when entering public spaces to prevent further spread of COVID-19 (National Public Radio, 2020). However, despite both WHO and CDC recommendations, the first Louisiana state-wide mask mandate was not issued by Gov. Edwards until July 11, 2020 due to a significant influx of COVID-19 cases during Phase Two (Office of the Governor, 2020b). Inconsistencies among
various communities throughout the nation, like the delay of mask mandates in Louisiana, posed threats to surrounding communities, especially those working in the healthcare system.

**Impact of COVID-19 Pandemic on Healthcare**

During the widespread outbreak of the COVID-19 pandemic, as early as February 2020, the visible strain on HCPs, scarcity of resources, and over-capacitated health systems became evident (Emanuel et al., 2020). U.S. government officials across the nation implemented isolation precautions and quarantine measures to mitigate the spread of the infectious coronavirus, as well as to reduce the impact HCPs and facilities were enduring (Schuchat, 2020). Hospitals and healthcare facilities were significantly impacted, being forced to create and implement updated protocols to protect their own staff, hospitalized patients and the entire population, all of whom were at a high risk of being infected by coronavirus (Schuchat, 2020).

**Scarcity of Resources**

To limit the spread of COVID-19, HCPs used personal protective equipment (PPE) to prevent themselves from contracting and spreading the virus. PPE is described by the Food and Drug Administration (FDA) as clothing such as medical gowns, facemasks, face shields, and medical gloves that protect individuals using the equipment from injury or the spread of infection or illness (Food and Drug Administration, 2020). The single-use, high-filtration N-95 masks were used by HCPs until there were not enough (Emanuel et al., 2020). PPE began to be rationed in February of 2020 in anticipation of the influx of COVID-19 cases, which could have caused global shortages (World Health Organization, 2021).

The increasing use of facemasks within healthcare systems, as well as the increasing number of mask mandates across the U.S., led to concern of a global shortage of facemasks for HCPs (Wu et al., 2020). With China, the leading producer of facemasks in the world, also being
one of the hardest-hit areas of COVID-19, the concern strengthened (Wu et al., 2020). The Center for Disease Control (CDC) released a statement regarding crisis capacity strategies when shortages of facemasks occurred (2020). Within this statement, the CDC recommended that when no single-use, disposable facemasks were available, HCPs were advised to use cloth masks when necessary to care for patients suspected to have COVID-19 (CDC, 2020). The CDC disclosed that cloth masks do not meet the requirements to be considered PPE; however, HCPs were facing desperate circumstances during the shortage (CDC, 2020). On July 11, 2020, John Bel Edwards issued a statewide mask mandate, which made the concern real for Louisiana HCPs, as well as residents (Office of the Governor, 2020a).

**Healthcare System Capacities**

Hospital bed shortages quickly surfaced in the U.S., despite the estimated number of 5,407 hospitals in 2018 (Emanuel et al., 2020). Within these 5,407 hospitals, including both community and federal hospitals, there were 792,417 hospital beds in total. This number included an estimated 85,000 intensive care unit (ICU) beds according to American Hospital Association data (Emanuel et al., 2020). The lack of available ventilators needed for severe cases of COVID-19 also rapidly increased, along with the lack of healthy and trained respiratory therapists. Although approximately 180,000 ventilators were accounted for, hospitals quickly became over-populated, and a clear lack of critical care staff emerged (Emanuel et al., 2020; Russi et al., 2020). Healthcare systems quickly became “overwhelmed with new cases that exceeded their ability to provide safe efficient care to everyone while simultaneously conserving personal protective care for their workforce” (Russi et al., 2020, p. 2065).
Strain on Healthcare Professionals

The COVID-19 pandemic has significantly impacted HCPs, placing physical, emotional, and mental strains on many in the profession (Blanco-Donoso et al., 2020; Penwill et al., 2021). HCPs not only struggled with practical issues such as staffing changes due to illness and interruptions to training programs, but also experienced psychosocial struggles and personal battles with mental health as a result of the workplace stress during the COVID-19 pandemic (Blanco-Donoso et al., 2020; Penwill et al., 2021). HCPs were exposed to heightened workplace stress, endured longer shifts, and experienced higher-risk of contracting COVID-19 (Blanco-Donoso et al., 2020; Penwill et al., 2021). Many HCPs reported increases in anxiety, depression, and post-traumatic stress disorder since the start of the pandemic (Penwill et al., 2021). HCPs who experienced the ongoing crisis are at heightened risk for experiencing symptoms of secondary traumatic stress, emotional exhaustion, and burnout (Blanco-Donoso et al., 2020). Symptoms associated with secondary trauma include intrusive thoughts, traumatic memories, insomnia, irritability, fatigue, difficulty concentrating, avoidance of people and places, and sadness according to Blanco-Donoso et al. (2020).

There is also concern that HCPs who were involved with the COVID-19 pandemic may experience what is known as moral injury, which is “psychological distress that has resulted from actions, or the lack of actions, that violate one’s moral and ethical standards” (Blanco-Donoso et al., 2020, p. 2). As the COVID-19 pandemic is continually unfolding, HCPs are still facing these effects during new waves and surges in the number of cases, which has caused concern for psychological impact on HCPs’ short, medium, and long-term mental health (Blanco-Donoso et al., 2020). The concern of the quality of care being provided by HCPs
experiencing these psychological effects are rising, as is the possibility of HCPs leaving the profession (Blanco-Donoso et al., 2020).

In a study conducted by the ACLP (2020b), CCLSs indicate common struggles were loss, constant changes at work, fear of the unknown, lack of support, inability to see friends and family, anxiety, and isolation. These participants also noted concerns regarding financial security, job security, stability, the COVID-19 pandemic, health, and worry (ACLP, 2020b). Out of 1,045 responses, when asked about their risk of burnout, 13.8% of CCLSs indicated they have a high risk for burnout, while 42.7% of CCLSs indicate a moderate risk for burnout (ACLP, 2020b). When asked if they see indicators of burnout in colleagues, 55.8% of CCLSs indicated yes. This study highlights similar concerns the literature suggests regarding the strain on HCPs across other medical positions and emphasizes the need to address the unmet needs of CCLSs and their departments post-onset of the COVID-19 pandemic.

**Impact of COVID-19 Pandemic on Pediatric Healthcare**

Pediatric HCPs were also hard-hit during the onset of the COVID-19 pandemic, which forced changes within hospital regulations and mitigation efforts (Penwill et al., 2021). The practice of family-centered care (FCC) has become an essential practice in children’s hospitals internationally (Tallon et al., 2015). FCC has been integrated into pediatric healthcare based on the belief that children’s primary caregivers play an integral role in patient care and restoration of health (Tallon et al., 2015). FCC encourages primary care givers to participate in frequent communication with HCPs, help to make decisions, and provide emotional support for the patient throughout the duration of the child’s hospitalization (Hart et al., 2020; Tallon et al., 2015). Patients and families desire FCC, as do HCPs, because it is associated with reducing family members’ levels of anxiety, depression, and posttraumatic stress resulting from
hospitalization, as well as increasing the feeling of respect among caregivers (Hart et al., 2020). FCC reduces the likelihood of HCP burnout and moral injury, explained previously (Hart et al., 2020). However, the COVID-19 pandemic made a significant impact on HCPs’ abilities to implement FCC in hospitals across the U.S. due to IPC and mitigations to reduce the spread of COVID-19 (Vance et al., 2021). While these infection control policies are important, the standard of psychosocial care that has developed within pediatric healthcare must be considered (Virani et al., 2020).

In one study, researchers analyzed how pediatric hospitals shifted their protocols and created new policies to provide the best care for hospitalized patients (Penwill et al., 2021). New policies and protocols were broken down into four groups in this study: limiting in-hospital COVID-19 exposures; using PPE directly; ensuring adequate space and staffing; and guiding COVID-19 testing, screening, and medical management (Penwill et al., 2021). In a second study, researchers conducted an analysis of 239 children’s hospitals updated visitor guidelines in response to COVID-19 (Vance et al., 2021).

As a part of IPC in many pediatric hospitals, visitor guidelines were altered in response to COVID-19 (Vance et al., 2021). Prior to COVID-19, it was common for hospitals to put visitor restrictions in place to mitigate surges of illnesses (i.e., respiratory viral infections). However, visitor restriction policies seen throughout pediatric hospitals in response to COVID-19 were much stricter, ultimately imposing on principles of FCC within pediatric hospitals (Vance et al., 2021). For example, Vance et al.’s (2021) study reported that 3% of hospitals in the sample did not permit any kind of visitation for pediatric patients, 5% permitted one designated caregiver for the duration of the hospitalization, 49% permitted one caregiver at all times allowing caregivers to alternate, 36% permitted two caregivers, and 5% permitted two adult visitors with no
specification of relation to the patient. Researchers state that the hospitals who did not permit visitation were located in geographical regions that were hardest hit by COVID-19, such as New York and California (Vance et al., 2021). While limiting COVID-19 exposures in hospitals to protect patients, families, and HCPs is important, the need for FCC in pediatric healthcare remains: “The COVID-19 pandemic has led to situations in which healthcare professionals and institutions must compromise values that, in other circumstances, seem primary and essential” (Virani et al., 2020, p. 5).

**Impact on Child Life Services/Programming**

In addition to HCPs facing numerous boundaries providing quality care to pediatric patients and their families, child life departments across the nation also experienced impacts making it difficult to provide standard child life services to patients and families (ACLP, 2020a). While HCPs are facing psychological and social effects resulting from COVID-19, pediatric patients are also subject to direct and indirect impacts of the COVID-19 pandemic (Meherali et al., 2021). The ongoing challenges in the healthcare systems have resulted in pediatric patients receiving a lower quality of care, such as decreased psychosocial care and peer interaction during hospitalization (Meherali et al., 2021).

The COVID-19 pandemic halted many face-to-face child life programs and services in adherence to infection control policies, impacting the opportunities for CCLTs to provide developmentally appropriate activities and interventions to normalize patients’ hospital experiences (ACLP, 2020a; Winkie & Kinnebrew, 2021). In a previously mentioned survey conducted by the ACLP (2020a), there was documentation of several changes implemented on child life interventions and services as a result of COVID-19. These changes included limits or bans on sibling visitation, limits on parent/caregiver visitation, limits on playroom usage,
playroom closures, restricted access to COVID-19 positive patients, restricted access to isolation rooms, limits on child life assistant/activity coordinator activities, and suspension of these activities (ACLP, 2020a). Out of 721 respondents, 88.3% of CCLSs indicated there were bans on sibling visitation, 84.4% of CCLSs indicated there were limits on parent/caregiver visitation, 76% of CCLSs indicated their hospital experienced playroom closure, and 54.7% of CCLSs indicated they were unable to enter patient rooms in which COVID-19 could not be ruled out or the patient was COVID-19 positive (ACLP, 2020a).

In addition to these challenges, child life departments struggled with a loss of assistance from volunteers due to suspension of programs, limitations on access to patient rooms due to IPC restrictions, a loss of access to resources and donations that support child life departments, as well as impacts on staffing models. These struggles all affected CCLSs who worked during the onset of COVID-19. Acknowledging the potential impacts on child life programs and services that have resulted from COVID-19 restrictions increases awareness of how child life departments have continued to provide social and emotional support to hospitalized patients through interventions that adhere to COVID-19 protocols.

**Theoretical Perspective**

Recent literature stands consistent with the theoretical perspective of Urie Bronfenbrenner, regarding the influence one’s environment has on an individual, especially children. Bronfenbrenner, an American psychologist, began creating the ecological systems theory in the 1970s, which theorized an interdependence between individuals and their surrounding environment (Thompson, 2009). Bronfenbrenner’s theory organizes the complexity of one’s biological, psychological, and social processes (Talón et al., 2015). Bronfenbrenner
breaks down his theory into five systems: microsystem, mesosystem, exosystem, macrosystem, chronosystem (Bronfenbrenner, 1986).

Three of the five systems involve external factors, often impacting not only the individual, but also the individual’s family and society as a whole (Thompson, 2009). The microsystem focuses on the immediate setting the child develops in, including the family home, childcare facilities, and schools (Thompson, 2009). The mesosystem refers to the interaction between multiple Microsystems and the relationships associated with each, such as the overlapping of an individual’s home environment and school environment (Thompson, 2009). The exosystem focuses on “those systems separate from the individual but which have an effect on the microsystems” (Thompson, 2009, p. 50). An example of the exosystem is the individual’s caregiver’s place of employment. The macrosystem refers to the societal influence of cultural beliefs, ideologies, and practices, such as differing beliefs between a family unit and a medical institution or an academic institution (Thompson, 2009). Finally, the chronosystem includes changes within individuals and their environments over time (Bronfenbrenner, 1986). This includes changes in family structure and dynamics over the life course, socioeconomic status, employment status, and location of residence (Bronfenbrenner, 1994).

Bronfenbrenner further categorizes changes in the individual’s chronosystem as being normative or nonnormative (Bronfenbrenner, 1986). While external factors such as beginning school, starting new jobs, or entering retirement are categorized as normative transitions, events like death, severe illness, or divorce are nonnormative experiences (Bronfenbrenner, 1986). Bronfenbrenner (1986) explained how these transitions indirectly impact the individual in multiple ways, one being altering the family unit’s processes.
According to Talon et al. (2015), Bronfenbrenner’s ecological model has become the most popular metatheoretical perspective among researchers and practitioners. This is most likely due to the argument that hospitalized children are at a higher risk for emotional problems, behavioral problems, and diminished cognitive development, emphasizing the need of socioemotional care during hospitalization (Tallon et al., 2015). The COVID-19 pandemic and its ongoing impacts to individuals, families, and communities across the globe fit into the category of nonnormative transitions, ultimately affecting the individual and their environment. Hospitalization provides healthcare professionals with an opportunity to serve patients and families with interventions that are designed to support the family system, as well as the patient’s overall health and developmental outcomes (Tallon et al., 2015). Healthcare professionals involved in patients’ care often become an important context for the child’s development (Tallon et al., 2015). Understanding and considering the additional factors experienced by patients and families aside from hospitalization is important in providing individualized care that supports patients and families, which is often provided by child life programs and services (Tallon et al., 2015).

The Present Study

The purpose of this study is to provide new information on how COVID-19 has impacted the standard practice of child life departments within the state of Louisiana, measuring aspects of care prior to the pandemic, at the onset of the pandemic, and post-onset of the pandemic. This study surveyed current CCLSs who were full-time employees in December 2019, before the onset of COVID-19 in the U.S., and who worked throughout the pandemic. Survey questions assessed the frequency of child life interventions and services prior to the pandemic, during the onset of the pandemic, and post-onset impact of the pandemic to determine how the pandemic
impacted the standard of practice. The following research questions were used to guide this study:

1. What were the standard child life programs and services provided in Louisiana hospitals before the onset of the COVID-19 pandemic (Group 1)?
2. How did child life programs and services at the onset of COVID-19 (Group 2) compare with pre-pandemic child life programs and services (Group 1)?
3. How do post-onset pandemic child life programs and services (Group 3) compare to child life programs and services during the onset of COVID-19 (Group 2)?
4. How do post-onset pandemic child life programs and services (Group 3) compare to child life programs and services prior to the COVID-19 pandemic (Group 1)?
METHOD

Research Design

To answer the research questions, a survey research design was used to measure the difference of mean between three groups: child life services prior to COVID-19, child life services during the onset of COVID-19, and child life services post-onset of COVID-19. Group 1 refers to child life programs and services prior to the COVID-19 pandemic (before March 2020), Group 2 refers to child life programs and services during the onset of COVID-19 (March 2020 to June 2020), while Group 3 refers to child life programs and services post-onset since hospitals and child life departments have adapted to COVID-19 protocols (June 2020 to present day). As a specific method of conducting a quantitative research study, a survey was used to collect data. Survey research allowed data collection from the chosen sample, providing participants with an opportunity to contribute their responses to survey questions or items.

Sample

This study used convenience sampling, targeting individuals who were believed to meet the inclusion criteria. Convenience sampling is often used by researchers in need of easily accessible participants, whether that be by proximity, willingness to participate, or availability (Etikan et al., 2016). The researcher invited all known CCLS contacts in the state of Louisiana, which were obtained by public webpages and through colleagues/committee members. The researcher determined that the sample population was normally distributed.

The sample size for this study was 37 (N = 37). The researcher received 11 survey responses (n = 11). Participants were required to be full-time CCLSs in the state of Louisiana in December 2019 throughout the duration of the COVID-19 pandemic, up to the current date, to be included in the study. Respondents who began working after December 2019, as well as those
who were not holding full-time positions during this time or did not have an active child life certification from the Association of Child Life Professionals (ACLP), were excluded from the study. Child life practicum students, as well as child life interns were also excluded from the study. Respondents from other states have been excluded from the study, as well, as this study focuses on the effects of COVID-19 in Louisiana.

The sample consists of 11 females (100%). Participants are White/European American (100%) and non-Hispanic (100%). Participants held Bachelor’s degrees (73%) and graduate degrees (27%). Ten participants are married (91%) and one participant has never been married (9%). The mean age of the participants is 36 years old.

Procedure

After obtaining approval from the university Institutional Review Board and ensuring the protection of human subjects participating in the study, the researcher began collecting names of Louisiana CCLSs. The names were obtained through the ACLP’s child life directory, the Louisiana Child Life Professionals website, and Louisiana hospital websites. The e-mail addresses of these CCLSs were collected through websites of their respective institutions, as well as child life department applications, and through colleagues/committee members.

Before sending the invitational e-mail, the committee chair distributed a pre-survey e-mail to the Louisiana CCLSs in the contact list created by the researcher. The committee chair introduced herself and the researcher to the recipients. This e-mail provided recipients with a brief description of the present study and invited them to contribute. This also provided the researcher with the opportunity to ensure the contact information collected was accurate to reach the sample, as well as to exclude nonactive names and e-mail addresses from the contact list. It also allowed the researcher to obtain corrected contact information. In the first e-mail sent by the
researcher, personal survey links were distributed, as well as an explanation of the study. The researcher distributed personal survey links directly to the participants, striving to increase the response rate and feasibility.

Once participants accessed their personal survey link, they were directed to the survey in Qualtrics, where they were first prompted to read the study consent form. Qualtrics allows researchers to design individually crafted surveys, while protecting participant identity (Qualtrics, 2021). Qualtrics securely stores survey data and contact information for the current research study in a password-protected account accessible only to the researcher. The consent form explained the purpose of the study, minimal risks, benefits, contact information for the researchers, and inclusion and exclusion criteria. Participants were informed of their right to refuse the study and of the protection of their privacy throughout this study. Included in the consent form was the contact information to the Louisiana Office of the Governor’s Keeping Calm through COVID-19 Hotline, connecting participants who may be experiencing stress related to their COVID-19 experiences with trained counselors (Louisiana Department of Health, 2020). The confidential phone line is available 24 hours a day, seven days a week. As an incentive for completing the survey, participants were entered into a drawing for a $25 Amazon gift card upon completion.

Participants who selected yes to participate in the study were prompted to provide electronic consent by typing their first and last names in the provided text boxes as a signature. If the participant selected no to participating in the study, they were directed to the end of the survey. Once participants provided informed consent, they were asked to respond to questions to ensure they met inclusion and exclusion criteria for the present study. If a participant did not meet inclusion or exclusion criteria for the study, they were directed to the end of the survey.
Those who did meet inclusion criteria continued to respond to the survey questions. Following the survey questions were demographic questions, including the total years of child life experience, the total years of child life experience in Louisiana, employment status, hospital unit specification, gender, age, marital status, education level, race, and ethnicity. The survey took approximately ten minutes for participants to complete.

The participants’ personal survey links remained active for two weeks, allowing participants time to complete the survey. One week into the open survey window, the researcher sent a follow-up e-mail to remind participants to complete the survey. In addition, one day before the survey closed, the researcher sent another follow-up e-mail to participants who had not responded. After the survey closed, the researcher sent an additional e-mail to participants thanking them for their time and contribution. The researcher also contacted the winner of the $25 Amazon gift card at this time. The researcher used a random generation website, where the participants first names were entered. The website generated one participant name, who was identified as the winner of the gift card. The winner was contacted and sent an electronic gift card paid for by the researcher.

**Measure**

Participants completed a newly created survey, Louisiana CCLSs’ Perceived Effects of COVID-19 on Child Life Services, measuring their retrospective perception of how the COVID-19 pandemic and hospital protocols have affected standard child life programs and services offered to patients and families. See Appendix B for the survey questions. This survey study collected quantitative data from Louisiana CCLS’s perspectives regarding changes in standard child life programs and services prior to COVID-19, during the onset of COVID-19, and post-onset of COVID-19. The survey items were broken up into sections. The first two items refer to
consent status, while the next two refer to inclusion and exclusion criteria. The following 66 items, used to answer the four research questions, were grouped into three sections. Each section measures 22 identical interventions; however, they were measured during three different time periods: prior to COVID-19, during the onset of COVID-19, and post-onset of COVID-19. These items were measured on a scale ranging from 0 (never; not offered) to 6 (daily), documenting the frequency of programs and services. The last 12 survey items were demographic questions.

Five categories were identified by the researcher after discussing in which areas child life departments are most involved in the hospital setting with two full-time clinical CCLs in Louisiana. The 22 survey items were created based on these over-arching categories of the areas within child life departments, which encompass the roles and services within child life departments. Examples of the 22 items include the following: child life volunteers supported the child life department, patients engaged with peers in child life playrooms, donors provided the child life department with resources, hospital allowed multiple caregivers at a time inside patient rooms, and CCLs provided services across multiple units within the hospital. Some survey items overlap categories to combine topics that are often integrated within child life departments (i.e. volunteers facilitating activities within child life playrooms).

This survey measure was created by the researcher, with the help of three CCLs, two full-time clinical CCLs in Louisiana and one CCLS faculty advisor to ensure content validity from both clinical and research perspectives. The idea of measuring the frequency of services came second to the initial plan, which was to survey how strongly participants agree or disagree with written statements regarding child life services and interventions during the COVID-19 pandemic. The survey items were revised between the experts five times, ensuring the best use of language and order of the survey items. The researcher, as well as the clinical experts,
recognized that the hospitals, despite being within close geographical locations, each handled protocols and mitigation efforts differently throughout the COVID-19 pandemic. This made it clear that measuring the frequency of interventions would provide more concrete data. By switching the scale to include frequency rather than an answer based on level of agreement, the researcher decided to compare the means of each group, reflecting the three defined points of time during the COVID-19 pandemic to show how it affected the frequency of child life services based on accessibility to resources and hospital protocols.

**Data Analysis**

The data analysis process began with importing the data from Qualtrics into Microsoft Excel. Survey questions regarding frequency and accessibility of child life interventions and services were answered on a seven-point scale, ranging from 0 to 6, created by the researcher. Participants responded with qualitative answers (i.e., daily, 2-3 times per week, weekly, 2-3 times per month, monthly, occasionally or less than once a month, and never or not offered). Each qualitative response was coded to reflect numerical values correlating with the scale. The demographic survey questions were also coded to reflect numerical values (i.e., yes =1; no=0).

Each survey item within the three groups was designated a variable label to reflect the group number and key descriptions of the item. For example, the survey item “child life volunteers supported the child life department” in Group 1 was labeled “G1VolSupp.” After labeling each variable, the researcher calculated the means of each group within the data set with assistance from a committee member. To answer research question 1 (RQ1), the researcher calculated the mean and standard error for Group 1. To answer research question 2 (RQ2), the researcher calculated the mean and standard error for Group 2 and used an independent samples t-test to compare the means of Group 1 and Group 2 data. To answer research question 3 (RQ3),
the mean and standard error of Group 3 was calculated and followed by running an independent samples $t$-test to compare the means of Group 2 and Group 3 data. To answer research question 4 (RQ4), an independent samples $t$-test was run to compare the means of Group 1 and Group 3 data.

After identifying the means of each group, the researcher ran an additional 66 $t$-tests on the 22 individual variables to compare the level of significance between each intervention or service offered by CCLSs. The researcher hypothesized a non-directional change between the groups. Running individual $t$-tests allowed the researcher to identify where the most statistically significant changes were within the three time periods. Identifying these specific differences allowed the researcher to compare the findings with the existing literature surrounding each survey item. These findings also allowed the researcher to identify gaps within the literature, form implications regarding current practices and the future of child life departments in Louisiana.
RESULTS

The sample of this study consisted of 11 White/European American females who indicated they were full-time CCLSs between the period of December 2019 and the current date ($n = 11$). This sample was normally distributed. The researcher imported the data from Qualtrics into Excel to organize the data, excluding those who did not fully complete the survey or who did not meet the inclusion criteria. The data was then imported into Stata SE 17.0. The researcher converted the data, which were string variables to be floating variables, to calculate the means of each group in the survey. String variables display integers, while floating variables reflect real numbers with decimals. Using floating variables allowed the researcher to see more exact results with the inclusion of decimals, rather than whole numbers. Difference of means between the three groups were compared to one another to note the changes in frequency of child life interventions and the availability of services throughout the three periods of the COVID-19 pandemic being measured: pre-pandemic, onset of the pandemic, and post-onset of the pandemic. The means of each group, based on the seven-point frequency scale created by the researcher, were calculated in Stata SE 17.0.

To answer research question 1 (RQ1), the researcher identified the mean and standard error of Group 1 (pre-pandemic) through the survey question, which was answered on a scale of 0 (never; not offered) to 6 (daily). The overall mean of Group 1 was identified as 5.020661, reflecting a high level of frequency in child life interventions and accessibility of services prior the COVID-19 pandemic in March 2020.

To answer research question 2 (RQ2), the researcher identified the mean and standard error of Group 2 through the survey questions answered by participants on the same scale. The means were then compared between Group 1 and Group 2 to determine the difference of means.
pre-pandemic and at the onset of the pandemic. The mean of Group 2 was identified as 1.446281. This was significantly lower than Group 1, reflecting a notable decrease in the frequency of child life interventions and services during the onset of the COVID-19 pandemic from March 2020 to June 2020. Based on a 95% significance level, the t-test reflected a difference of 3.57438 between the means of Group 1 and Group 2.

To answer research question 3 (RQ3), the researcher identified the mean and standard error of Group 3 found within the survey question results, also answered by participants using the existing scale. The means of Group 2 and Group 3 were then compared to identify differences between the onset of the pandemic and post-onset of the pandemic. The mean of Group 3 was identified as 2.53719. Compared to Group 2, this reflects an increase in the frequency of child life interventions and accessibility to child life services since child life departments have begun to adapt to COVID-19 related hospital protocols since June 2020. Based on a 95% confidence interval, the t-test reflected a difference of -1.090909 between the means of Group 2 and Group 3.

To answer research question 4 (RQ4), the researcher used the descriptive statistics found regarding Groups 1 and 3 to compare the difference of means between the two, displaying the differences pre-pandemic to post-onset of the pandemic. Comparing pre-pandemic to post-onset of the pandemic shows a decrease from 5.020661 (Group 1) to 2.53719 (Group 3). These data suggest that, while child life programs and services are continually becoming more accessible post-onset of the pandemic, they have not returned to the full capacity at which they once were being used prior to the COVID-19 pandemic. Based on a 95% confidence interval, the t-test reflected a difference of 2.483471 between the means of Group 1 and Group 3.
The researcher then ran additional t-tests and compared the difference of means between each labeled variable in each time period, or Group. (See Table 1.) For example, volunteer support in the child life department was measured to compare the difference between pre-pandemic and onset of the pandemic, onset of the pandemic and post-onset of the pandemic, as well as pre-pandemic and post-onset of the pandemic. This provided the researcher with specific data to interpret which areas of child life experienced the most statistically significant changes. The researcher connected existing literature to the findings and applied it to potential implications for child life departments and future research surrounding this topic.

**Group 1 Findings**

When asked about volunteer support in their child life department prior to the COVID-19 pandemic, 91% of respondents indicated that volunteers supported their child life department daily and 9% of respondents indicated that volunteers supported their child life department two to three times per week. Prior to the pandemic, 64% of respondents reported volunteers in their department engaged in bedside play with patients daily, while 36% of respondents reported volunteers engaged in bedside play with patients two to three times per week.

Findings show that 9% of respondents indicated pet therapy was available daily prior to the pandemic, 27% of participants reported pet therapy was available two to three times per week, 18% reported that pet therapy was available weekly, 37% indicated pet therapy was available two to three times per month, and 9% reported that pet therapy was never available at their hospital prior to the pandemic.

The data found that 82% of respondents indicated interventions were facilitated daily in child life playrooms prior to the pandemic, 9% of respondents indicated interventions were facilitated two to three times per week, and 9% of respondents indicated they were facilitated
occasionally. Interventions were facilitated in child life teen rooms daily, prior to the pandemic, according to 73% of respondents. An additional 18% of participants reported interventions were facilitated in teen rooms two to three times a week. Lastly, 9% of respondents indicated interventions were facilitated in the teen room occasionally.

Prior to the COVID-19 pandemic, 73% of respondents indicated volunteers facilitated activities in child life playrooms daily, while the remaining 27% indicated volunteers facilitated activities in child life playrooms two to three times per week. Volunteers facilitated activities in child life teen rooms daily, according to 55% of participants. Activities were facilitated in teen rooms two to three times per week, 27% of respondents reported. The remaining 18% of respondents indicated that volunteers facilitated activities weekly.

The data showed that 91% of respondents indicated that patients engaged with peers in child life playrooms daily, while the remaining 9% reported that patients engaged with peers in child life playrooms two to three times per week, prior to the pandemic. Findings showed that 73% of respondents reported patients engaged with peers in child life teen rooms daily prior to the pandemic, while 18% indicated this occurred two to three times per week, and 9% of respondents indicated it occurred two to three times per month.

Group activities were facilitated in child life playrooms daily, according to 37% of respondents. Group activities were facilitated two to three times per week, 27% of respondents reported. The data showed that 18% of participants indicate group activities were facilitated weekly, 9% reported group activities were facilitated two to three times per month, and the remaining 9% indicated that group activities were facilitated occasionally. According to 27% of respondents, group activities were facilitated in child life teen rooms daily prior to the pandemic, while 18% reported they were facilitated two to three times per week, 18% indicated they were
facilitated weekly, 10% reported they were facilitated two to three times per month, and 27% indicated they were facilitated occasionally.

Prior to the pandemic, the data showed that 18% of respondents indicated their department received donations daily, 18% of participants reported they received donations two to three times per week, 9% of respondents indicated they received donations weekly, 18% of respondents reported they received donations two to three times per month, 28% of participants indicated their department received donations monthly, and 9% reported they received donations occasionally. According to 9% of respondents, donors engaged in activities with patients daily prior to the pandemic. However, 36% of respondents indicated that donors engaged in activities with patients two to three times per month, 9% reported that donors engaged with patients in activities monthly, while the remaining 46% indicated that donors engaged in activities with patients occasionally.

Visitor policies prior to COVID-19 allowed multiple caregivers, regardless of their relation to the patient to stay in the patient room. This included siblings, as well. For each question regarding visitor policy, 100% of respondents indicated that caregivers and siblings were allowed inside of patient rooms. In addition, 91% of respondents reported that visitors were able to stay inside patient rooms overnight; however, 9% of respondents indicated that visitors were occasionally allowed to stay in patient rooms overnight. Prior to the pandemic, 100% of participants reported that caregivers were allowed to accompany patients into the pre-op areas of the hospital.

The findings showed that 91% of respondents reported that CCLSs covered multiple units within their department, prior to the COVID-19 pandemic. The remaining 9% of respondents indicated that CCLSs covered multiple units two to three times per week.
When asked about the ability to have CCLSs in the operating room (OR) prior to patient procedures or surgeries, 100% of respondents reported CCLSs were allowed in the OR prior to procedures or surgeries daily. Lastly, 91% of respondents indicated that CCTV was never used or was not offered within their department prior to the pandemic, while 9% of respondents reported that CCTV was occasionally used within their department prior to the pandemic.

**Group 2 Findings**

During the onset of the COVID-19 pandemic, from March 2020 to June 2020, 100% of respondents indicated that volunteer support, bedside play with volunteers, pet therapy, volunteer-facilitated activities in child life playrooms and teen rooms, peer engagement in child life playrooms and teen rooms, group activities in child life playrooms and teen rooms, and donor engagement in activities with patients were either not offered or never occurred. Non-family members were also never allowed in patient rooms during the onset of the pandemic, according to 100% of respondents.

Patient interventions in child life playrooms were offered daily within their departments, according to 18% of the respondents. Another 18% of participants reported interventions were occasionally offered during the onset of the pandemic, while the remaining 64% of respondents indicated interventions in the child life playrooms were never offered during the onset of the pandemic. Patient interventions in child life teen rooms were available daily during the onset of the pandemic, according to 18% of respondents. An additional 18% of participants indicated that interventions in the teen rooms were occasionally available during the onset of the pandemic. The remaining 64% of respondents reported that interventions in child life teen rooms were not offered during the onset of the pandemic.
Donations were received daily during the onset of the pandemic, according to 9% of the respondents. Donations were provided two to three times per week during the onset of the pandemic, according to 9% of respondents. An additional 9% of participants reported donations were received monthly during the onset of the pandemic. The data showed that 55% of respondents indicated their department received donations occasionally during the onset of the pandemic. The remaining 18% of respondents indicated that donations were never received during the onset of the pandemic.

Patients were allowed to have a single caregiver in the patient room daily during the onset of the pandemic, according to 100% of the respondents. In addition, 18% of respondents indicated that multiple caregivers were allowed to be in patient rooms during the onset of the pandemic, while another 18% reported that multiple caregivers were occasionally allowed inside patient rooms. The remaining 64% indicated that multiple caregivers were never allowed inside patient rooms during the onset of the pandemic. Siblings were occasionally allowed inside patient rooms during the onset of the pandemic according to 18% of respondents, while the remaining 82% of respondents reported that siblings were never allowed inside of patient rooms during the onset of the pandemic. When asked about having visitors stay in patient rooms overnight, 27% of respondents reported that visitors stayed in patient rooms overnight daily. The remaining 73% of participants indicated that visitors were not allowed to stay in patient rooms overnight during the onset of the pandemic. The data found 91% of respondents indicated caregivers were allowed to accompany patients into pre-op areas daily during the onset of the pandemic, while 9% reported caregivers were not allowed in pre-op areas during this time.

Findings showed that 91% of respondents reported CCLSs covered multiple units daily during the onset of the pandemic, while the remaining 9% indicated that CCLSs occasionally
covered multiple units during this time. In addition, 100% of respondents reported that CCLSs were allowed in the OR prior to patient procedures and surgeries daily. Lastly, 18% of respondents indicated that CCLSs utilized CCTV daily to engage with patients during the onset of the pandemic. While an additional 9% reported that CCLSs utilized CCTV weekly, the remaining 73% reported that CCTV was never used or was not offered during the onset of the pandemic.

**Group 3 Findings**

Post-onset of the pandemic, from June 2020 to the current date of which the surveys were completed, 45% of respondents indicated daily volunteer support in their department, 18% reported volunteer support two to three times per week, 9% reported volunteer support two to three times per month, 18% indicated volunteer support occasionally, and the remaining 9% indicated volunteer support was not offered. The data found that 27% of respondents reported daily bedside play with volunteers post-onset of the pandemic, an additional 27% reported volunteers engaged in bedside play two to three times per week, 37% of participants indicated volunteers occasionally engaged in bedside play, while 9% of respondents reported that bedside play with volunteers was not offered during this time.

Pet therapy was available two to three times per month after the onset of the pandemic, according to 9% of respondents; however 18% of participants indicate pet therapy was occasionally available and the remaining 73% of respondents reported pet therapy was not offered.

The data found that 28% of participants reported daily interventions conducted in child life playrooms post-onset of the pandemic, while 36% indicated interventions were conducted in playrooms occasionally. The remaining 36% reported that interventions in child life playrooms
were not offered. Interventions in child life teen rooms after the onset of the pandemic were offered daily, according to 27% of the sample. However, 27% of respondents indicated interventions in child life teen rooms were occasionally offered and 46% of participants reported they were not offered.

Volunteer-facilitated activities in child life playrooms were available daily, according to 9% of the respondents. These activities were available two to three times per week, according to another 9% of participants. An additional 36% of respondents reported volunteer-facilitated activities were occasionally available, while 45% indicated they were not offered after the onset of the pandemic. Volunteer-facilitated activities in child life teen rooms were available daily, according to 9% of the sample. They were available two to three times per week, according to 9% of the respondents. The data showed that 27% of respondents indicated the activities were occasionally offered, while the remaining 55% of participants reported volunteer-facilitated activities in child life teen rooms were not offered after the onset of the pandemic.

Peer engagement in child life play rooms was not offered, according to 100% of the participants. In addition, 91% of respondents reported that peer engagement in child life teen rooms was not offered; however, 9% of participants indicated that peer engagement in child life teen rooms occasionally occurred post-onset of the pandemic. Group activities in child life play rooms and teen rooms were not offered during this time either, according to 100% of the respondents.

Daily donations after the onset of the pandemic were received daily, according to 18% of the participants. Donations were received two to three times per week, according to 9% of the respondents. An additional 18% reported weekly donations to their department, while 47% indicated they received donations weekly. The remaining 9% reported occasional donations.
Donors engaged in activities with patients monthly, according to 10% of respondents. The findings showed 45% of participants indicated donors engaged with patients occasionally, and 45% did not offer engagement between donors and patients after the onset of the pandemic.

A single caregiver was allowed in patient rooms daily, according to 100% of the sample, after the onset of the pandemic. In addition, 64% reported that multiple caregivers were allowed inside patient rooms daily during this time, while 9% of respondents indicated that multiple caregivers were allowed in patient rooms two to three times per week. Occasionally multiple caregivers were allowed in patient rooms, according to 18% of the participants. Lastly, 9% of respondents reported that multiple caregivers were never allowed in patient rooms after the onset of the pandemic. The findings showed that 18% of respondents reported siblings were allowed in patient rooms daily. However, 55% of participants indicated siblings were occasionally allowed in patient rooms and 27% of respondents reported siblings were never allowed in patient rooms after the onset of the pandemic. Non-family members were allowed in patient rooms daily, according to 28% of participants. Additionally, 36% of participants indicated non-family members were occasionally allowed in patient rooms and the remaining 36% of respondents reported non-family members were never allowed in patient rooms during this time. According to 27% of participants, visitors were allowed to stay in patient rooms overnight daily after the onset of the pandemic. However, an additional 27% of participants indicated visitors were occasionally allowed to stay overnight in patient rooms and 46% reported visitors were never allowed to stay in patient rooms overnight. Caregivers were allowed to accompany patients into the pre-op area daily, according to 100% of participants.
Post-onset of the pandemic, 100% of respondents indicated CCLSs covered multiple units daily. The data also showed that 100% of participants reported CCLSs were present daily in the OR prior to patient procedures or surgeries.

CCTV was utilized by CCLSs daily to engage with patients post-onset of the pandemic, according to 55% of respondents. In addition, 9% of participants reported CCLSs utilized CCTV occasionally, while the remaining 36% of respondents indicated CCTV was never utilized or was not offered post-onset of the pandemic.

Comparison of Groups 1 and 2

The findings showed significant decreases between the differences of Groups 1 and 2. The most statistically significant changes within these groups included the following: interventions conducted in child life playrooms and teen rooms, and donations received. These items were significant at the 0.001 level. The ability to have visitors stay overnight in patient rooms was significant at the 0.01 level. In a number of variables, the means of responses were reported as 0 (never; not offered) or 6 (daily), which reflected either a complete halt to the variable or a daily utilized intervention, respectively. However, looking at the difference of means shows the significance of the decreases in the following areas: volunteer support, bedside play with volunteers, pet therapy availability, facilitation of activities in child life playrooms and teen rooms, peer interaction in child life playrooms and teen rooms, group activities in child life playrooms and teen rooms, donor engagement in activities with patients, the ability to have multiple caregivers in patient rooms, and the ability to have siblings in patient rooms.

Comparison of Groups 2 and 3

The findings showed statistically significant changes in several areas when comparing Groups 2 and 3. The areas with the most significant changes were donations received and the
ability to have multiple caregivers in patient rooms. These were significant at the 0.01 level. In addition, there were several areas where the mean of Group 2 was reported as 0 (never; not offered), which reflects a significant increase in these survey items between Group 2 and Group 3. These areas included volunteer support, bedside play with volunteers, donor engagement in activities with patients, and the ability to have non-family members in patient rooms.

**Comparison of Groups 1 and 3**

The findings showed statistically significant changes in the following areas: pet therapy availability, volunteer-facilitated activities in child life playrooms and teen rooms, and peer interaction in child life teen rooms. These were each significant at the 0.001 level. The following areas were significant at the 0.01 level: bedside play with volunteers, interventions conducted in child life playrooms and teen rooms, donor engagement in activities with patients, the ability to have visitors stay overnight in patient rooms, and the utilization of CCTV by CCLSs. Lastly, volunteer support was significant at the 0.05 level. Several areas reported means of 0 (never; not offered) or 6 (daily), reflecting a significant change. This can be seen by comparing the means of Group 1 and Group 3. These areas included the following: peer interaction in child life playrooms, group activities in child life playrooms and teen rooms, the ability to have siblings in patient rooms, and the ability to have non-family members in patient rooms.
### Table 1. Variable means for each group and statistical tests of differences of means across groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Means</th>
<th>Difference of Means / t-score</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Group 1</td>
<td>Group 2</td>
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<tr>
<td>Volunteer support in child life department</td>
<td>5.909</td>
<td>0.000</td>
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<tr>
<td>Volunteer engagement in bedside play</td>
<td>5.636</td>
<td>0.000</td>
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<tr>
<td>Pet therapy availability</td>
<td>3.727</td>
<td>0.000</td>
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<td></td>
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<tr>
<td>Interventions conducted in playrooms</td>
<td>5.455</td>
<td>1.273</td>
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<td></td>
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<tr>
<td>Interventions conducted in teen rooms</td>
<td>5.364</td>
<td>1.273</td>
</tr>
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<tr>
<td>Volunteers facilitated activities in playrooms</td>
<td>5.727</td>
<td>0.000</td>
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<tr>
<td>Volunteers facilitated activities in teen rooms</td>
<td>5.364</td>
<td>0.000</td>
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<td></td>
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<tr>
<td>Patients engaged with peers in playrooms</td>
<td>5.909</td>
<td>0.000</td>
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<tr>
<td></td>
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<tr>
<td>Patients engaged with peers in teen rooms</td>
<td>5.545</td>
<td>0.000</td>
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<tr>
<td>Group activities facilitated in playrooms</td>
<td>4.636</td>
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<td></td>
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<tr>
<td>Group activities facilitated in teen rooms</td>
<td>3.818</td>
<td>0.000</td>
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<tr>
<td>Variable</td>
<td>Means</td>
<td>Difference of Means / t-score</td>
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<td>----------------------------------------------</td>
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<tr>
<td></td>
<td>Group 1</td>
<td>Group 2</td>
</tr>
<tr>
<td>Donors providing resources to department</td>
<td>3.545</td>
<td>1.727</td>
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<td></td>
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<tr>
<td>Donor engagement in activities</td>
<td>2.273</td>
<td>0.000</td>
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<td></td>
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<tr>
<td>Single patient caregiver allowed in patient</td>
<td>6.000</td>
<td>6.000</td>
</tr>
<tr>
<td>room</td>
<td></td>
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<tr>
<td>Multiple patient caregivers allowed in</td>
<td>6.000</td>
<td>1.273</td>
</tr>
<tr>
<td>patient room</td>
<td></td>
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<tr>
<td>Siblings allowed in patient rooms</td>
<td>6.000</td>
<td>0.182</td>
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<td></td>
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<tr>
<td>Non-family members allowed in patient room</td>
<td>6.000</td>
<td>0.000</td>
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<td></td>
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<tr>
<td>Visitors allowed to stay in patient rooms</td>
<td>5.545</td>
<td>1.636</td>
</tr>
<tr>
<td>overnight</td>
<td></td>
<td></td>
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<tr>
<td>Patient caregiver allowed in pre-op</td>
<td>6.000</td>
<td>5.455</td>
</tr>
<tr>
<td>units with patient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCLS working on multiple units within</td>
<td>5.909</td>
<td>5.545</td>
</tr>
<tr>
<td>department</td>
<td></td>
<td></td>
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<tr>
<td>CCLS allowed in surgery unit and</td>
<td>6.000</td>
<td>6.000</td>
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<tr>
<td>operating rooms with patients prior to</td>
<td></td>
<td></td>
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<tr>
<td>procedures or surgeries</td>
<td></td>
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<tr>
<td>CCLS utilized closed circuit TV (CCTV) to</td>
<td>0.091</td>
<td>1.455</td>
</tr>
<tr>
<td>engage patients in activities</td>
<td></td>
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Table 1. Cont’d
DISCUSSION

The purpose of this study was to provide new information on how COVID-19 has impacted the standard practice of child life departments within the state of Louisiana, measuring aspects of care prior to the pandemic, at the onset of the pandemic, and post-onset of the pandemic. The survey studied various practices and aspects of child life departments, as well as FCC, that were believed to encompass the roles of CCLSs in their department. Literature regarding the child life field consistently illustrates the effectiveness of child life programs and services throughout recent years (Romito et al., 2021). Through various interventions (i.e. psychological preparation before procedures, developmentally appropriate education of disease, establishment of pain-management and coping strategies, implementation of play, integration of FCC, and bereavement support), CCLSs offer aspects of care that leave a lasting effect on pediatric patients’ hospital experiences, as well as their families (Romito et al., 2021).

The onset of the COVID-19 pandemic in March of 2020 set healthcare systems across the nation, including child life departments, into a whirlwind of adjustment. CCLSs and HCPs adapted their roles to adhere to government-issued state-wide mandates and hospital infection control policies (Penwill et al., 2021; Virani et al., 2020). Healthcare professionals experienced scarcity of resources (CDC, 2020; Emanuel et al., 2020); facilities that were exceeding their capacity (Russi et al., 2020); as well as physical, emotional, and mental strain (Blanco-Donoso et al., 2020; Penwill et al., 2021). As Louisiana was one of the hardest-hit states in the U.S. (Dyer, 2020), the healthcare systems across the state felt significant blows from these impacts. Child life departments faced staffing changes, playroom closures, and some level of inaccessibility to patient rooms (ACLP, 2020a).
Despite facing these ongoing challenges throughout the COVID-19 pandemic, CCLSs are working to create new ways to provide psychosocial care needed by pediatric patients and their families, while continually adhering to the changes in protocols (Lurie Children’s Hospital of Chicago, 2021; Townsend, n.d.). Child life programs continue to create ways to virtually support patients and families: supporting patients’ understanding about the ongoing pandemic, providing therapeutic sensory carts, and focusing on eliminating patients’ uncertainty (Lurie Children’s Hospital of Chicago, 2021). Facing numerous barriers and challenges, CCLSs are navigating through the pandemic to continue providing individualized care that supports patients and families (Lurie Children’s Hospital of Chicago, 2021). This study focused on the known effects in the field of child life, emphasizing the population of CCLSs in the state of Louisiana. Identifying the changes between each period, including current practices, provides information regarding what level of function child life departments have returned to since the onset of the COVID-19 pandemic in June of 2020.

Using Bronfenbrenner’s Ecological Systems Theory allowed the researcher to consider the potential effects on hospitalized pediatric patients and their families as a result of the changes in child life programs and services during the onset of the COVID-19 pandemic. The researcher was also able to consider the effects on HCPs and CCLSs working in the field during the COVID-19 pandemic using this model. The known effects of this change in societal routine, emotional stress, risk for burnout, and strain in the workplace connect these impacts to the theoretical model (ACLP, 2020b; Blanco-Donoso et al., 2020; Penwill et al., 2021).

**Comparing Pre-Pandemic to Onset of Pandemic**

Findings suggested a significant decrease in overall provision of child life services and interventions during the onset of the COVID-19 pandemic, which supports existing literature.
Some of the most significant decreases from before March 2020 to the onset of the pandemic include volunteer support, bedside play, volunteer engagement in child life playrooms and teen rooms, peer engagement among patients in child life playrooms and teen rooms, multiple patient caregivers being allowed in the patient room, patient siblings being allowed in the patient room, and non-family members of the patient being allowed in the patient room. In these areas, they were completely halted within the departments. Literature states that volunteer services were suspended across many child life programs, which aligns with the findings. In addition, a study conducted by the ACLP indicates that 76% of CCLSs in the U.S. report playroom closures, while 35% report limits on playroom usage as a result of COVID-19 (ACLP, 2020a). This is consistent with the significant decrease in the usage of playrooms and teen rooms for interventions, activities, and peer interaction seen in the study findings. Limitations on the number of caregivers allowed in patient rooms, as well as sibling visitation, occurred; these practices are associated with lower patient care quality, dissatisfaction in patient experiences, emotional strains, and feelings of isolation (Silvera et al., 2021; Vance et al., 2021). Disruption within family dynamics can have effects on pediatric patients, as well as caregivers, which is a cause for concern.

One area that opposed the pattern of overall decrease was the use of CCTV within child life departments. According to a survey conducted by the ACLP (2021), CCLs have increased their use of CCTV to continue to engage with patients through virtual activities during the COVID-19 pandemic. This technology allowed CCLs to “provide therapeutic interventions, social engagement, play programming, and virtual guest visitors” to provide pediatric patients with socialization and opportunities to connect with CCLs, despite numerous limitations.
The ACLP states that CCTV has a positive influence on patients’ experiences in the hospital, allowing them to learn and express themselves (ACLP, 2021).

**Comparing Onset of Pandemic to Post-Onset of Pandemic**

Several areas of care provided within child life departments increased when compared to the onset of the pandemic. Volunteer programs in Louisiana resumed in many hospitals, which is reflected in the findings, allowing for improvement in some areas. Volunteer presence allowed hospitalized patients access to bedside play, as well. The findings show a slight increase in one-on-one engagements with volunteers in the playrooms, despite many playrooms and teen rooms remaining closed to group activities. Pet therapy availability has not seen a significant increase since the onset of the pandemic, which is interesting. The data suggests donations began to increase again, which supports the child life department in meeting the needs of patients, as well as providing them with fun activities and toys to normalize the hospital setting. The findings reflect that hospitals in Louisiana began to allow multiple caregivers to be present in patient rooms, which is associated with increased support and satisfaction with patient experiences, as well as caregiver collaboration in FCC (Vance et al., 2021). The study shows there was a continual increase in the use of CCTV within Louisiana child life departments, which provides patients with an opportunity to engage with the child life staff (ACLP, 2021).

An interesting increase suggested by the findings is in CCLSs working across multiple units within their department. Although this is common in hospital settings, the increase in this could be associated with the 24.15% of CCLSs who report a change in shifts, assigned units, or job duties in the ACLP’s study of staffing and programming changes as a result of COVID-19 (2020a). This could also be associated with the 16.38% of CCLSs in the study who report a reduced number of hours, the 6.21% of CCLs who report partial work-from-home, along with
the 5.51% of CCLSs who report being furloughed (ACLP, 2020a). Although there is no breakdown of these percentages by state, it is important to note.

**Comparing Pre-Pandemic to Post-Onset of Pandemic**

Comparing the current practices within child life departments post-onset of the COVID-19 pandemic to the standard of practice prior to the pandemic is essential in noting how Louisiana child life departments are recovering since adaptations have been made. The results show that while volunteer support has not fully returned to its original level, it has increased significantly. Bedside play between hospitalized patients and volunteers has also not returned to its initial level pre-pandemic. Pet therapy has not returned to its original level of functioning. The usage of child life playrooms and teen rooms remain lower than pre-pandemic, as well. This includes CCLSs using playrooms and teen rooms for interventions and volunteers facilitating activities in the playrooms and teen rooms. Group activities among hospitalized patients remain at a very low level, significantly lower when compared to pre-pandemic frequencies. Donations of resources has nearly returned to its original level of frequency, while donor engagement in activities with patients has remained low. Limitations on siblings being allowed in patient rooms remains significantly lower when compared to the pre-pandemic frequency.

**Implications for Practice and the Future of Child Life**

Literature consistently argues for the need of psychosocial care and developmentally appropriate intervention during a child’s hospitalization (Romito et al., 2021). As CCLSs fulfill the role of focusing on the well-being of hospitalized children through minimizing stress and providing familiarization and education in the hospital environment, the American Academy of Pediatrics defines child life programs and services as a necessary aspect of pediatric healthcare (Romito et al., 2021). This is reflected in the findings of Group 1, measuring the frequency of
child life services and interventions prior to the COVID-19 pandemic in March of 2020. The findings show there were daily interventions in many areas of care. However, during the onset of the pandemic, data collected supports the literature in showing that psychosocial care, provided by CCLSs in this case, exponentially decreased and was even suspended in some areas. This is supported by the data found in Group 2 of the study, measuring the frequency of child life services and interventions during the onset of the COVID-19 pandemic between March of 2020 and June of 2020.

Infection prevention and control measures taken during the onset of the COVID-19 pandemic limited child life programs and services in many areas, contradicting the argument that the psychosocial care provided by CCLSs is essential, as it is described by the American Academy of Pediatrics (Romito et al., 2021). The support of FCC and its influence on patient and family experiences were disregarded during this time of the COVID-19 pandemic in many ways. Concerns for the future of child life rise, of whether current programs and services will ever fully recover and return to the level of operation prior to the COVID-19 pandemic.

**Limitations**

There were several limitations to acknowledge regarding the data collected for the present study. One limitation is the small sample size, which limits the generalizability of the data collected. By collecting a larger sample size, the data may provide more in-depth findings, or may provide more prevalent themes throughout the findings. A second limitation is the type of sample chosen for this study. As a convenience sample, the possibility exists that not every CCLS in the state of Louisiana was provided with the opportunity to respond to the survey. The inclusion criteria required participants to have worked full-time, in a Louisiana hospital since December 2019. In the time that has passed since this period, there is a possibility of newly hired
CCLSs in the state of Louisiana being excluded. In addition, it is important to consider the number of CCLSs who worked full-time during this period but have since relocated outside of Louisiana. It is also possible that CCLSs who once worked full-time are now part-time, or vice versa, excluding them from the study.

Another limitation is the reliance of the participants to use their retrospective memory to recall the frequency of available child life programs and services prior to the COVID-19 pandemic and during the onset of the COVID-19 pandemic. Lastly, a limitation exists within the differing protocols and adherences to government mandates and mitigation efforts expected of each hospital, based on varying geographical location. For example, while New Orleans experienced a significantly higher number of COVID-19 cases than Shreveport, there is potential that the data will reflect differing results based on a participant’s geographical location.
CONCLUSION

The purpose of this study was to provide new information on how COVID-19 has impacted the standard practice of child life departments within the state of Louisiana, measuring aspects of care prior to the pandemic, at the onset of the pandemic, and post-onset of the pandemic. This study used a survey study to collect first-hand data from CCLs across the state of Louisiana to identify the areas of child life departments that were impacted by the COVID-19 pandemic. The study identified areas that were significantly impacted, as well as those areas that are in need of further development to return to the initial level of operation prior to the COVID-19 pandemic. This study brought awareness to the impact of COVID-19 on the child life field, and illustrated the importance of continuing to develop and rebuild child life programs that suffered major changes as a result of the COVID-19 pandemic.

The findings from this study identified that standard child life programs and services were impacted as a result of COVID-19 mitigation efforts and infection prevention and control within hospitals across Louisiana. Findings suggested there was a significant decrease in frequency of child life interventions and services when comparing available resources prior to March of 2020, pre-pandemic, and at the onset of the pandemic between March and June of 2020. The data also suggests a slight increase in the frequency and availability of child life services after June of 2020 until present time, defined as the post-onset of the COVID-19 pandemic.

While child life departments have worked to create new ways to provide interventions and provide psychosocial support for pediatric patients and their families, they still face ongoing struggles. This is suggested by the data, which reflects that the frequency and availability of child life services has not returned to the same level it was functioning at prior to the COVID-19 pandemic.
pandemic. This is shown in various areas measured within the survey items, which do not reflect the same level of frequency when compared to Group 1 (pre-pandemic).
APPENDIX A IRB APPROVAL FORM

Date: 18-Feb-2022
To: Laura Ainsworth
LSUAM | Col of HSE | Social Work
From: Alex Cohen
Chair, Institutional Review Board
Re: IRB # IRBAM-21-1441
Title: Louisiana Certified Child Life Specialists’ Perspective on the Effects of COVID-19 on Child Life Services
Submission Type: Amendment
Brief Amendment Description: Removing Brittany Wittenberg, Adding new PI, Laura Ainsworth, and Pamela Monroe.
Review Type: Exempt Review
Review Date: 17-Feb-2022
Risk Level: Minimal
Status: Approved
Approval Date: 17-Feb-2022
Approval Expiration Date: 09-Feb-2025
LSU Proposal Number: (if applicable)

By: Alex Cohen, Chairman

Continuing approval is CONDITIONAL on:

1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the Belmont Report, and LSU’s Assurance of Compliance with DHHS regulations for the protection of human subjects*
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.
3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration date, upon request by the IRB office (irrespective of when the project actually begins); notification of project termination.
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants, including notification of new information that might affect consent.
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the
APPENDIX B SURVEY

Certified Child Life Specialists’ (CCLSs) Perceived Effects of COVID-19 on Child Life Services
Survey Questions

Q1: Consent Form and Signature

1. Study Title: Louisiana Certified Child Life Specialists’ Perspective on the Effects of COVID-19 on Child Life Services

2. The purpose of this study is to gather information on how COVID-19 has impacted the standard programs and services provided by child life departments in Louisiana hospitals. The survey focuses on child life programs and services: volunteers, access to child life playrooms and teen rooms, donations and available resources, visitor policies, and staffing models. We expect approximately 20 participants in this study.

3. Risks: There is minimal psychological risk involved in this study, as participants will be recalling potential stressful work experiences related to the COVID-19 pandemic while completing the online survey; however, this psychological risk is no more than what individuals experience on a daily basis due to the COVID-19 pandemic. Information to seek help through the Louisiana Office of the Governor’s Keeping Calm through COVID-19 Hotline will be provided to participants. Participants may contact trained counselors who are available 24 hours a day, 7 days a week. Phone calls are kept confidential. Participants may call 1-866-310-7977.

4. Benefits: Participants will be eligible to enter a drawing to receive a $25 gift card to Amazon.com

5. Investigators: The following investigators are available for questions about this study, M-F, 8:00-4:30 p.m., Abby Johnson, 337-529-2161, ajoj369@lsu.edu; Dr. Laura Ainsworth, lainsworth@lsu.edu; Dr. Pamela Monroe, pmonroe@lsu.edu.

6. Performance Site: Louisiana State University and Agricultural and Mechanical College

7. Number of subjects: 20

8. Inclusion Criteria: Participants must be over the age of 18 to participate in the study. Participants must hold an active Certified Child Life Specialist certification, and must have worked full-time in a Louisiana hospital in December 2019 throughout the duration of the COVID-19 pandemic.

9. Exclusion Criteria: Those who did not begin working as a full-time Certified Child Life Specialist in a Louisiana hospital before December 2019 will be excluded from the study. Child life students are excluded from the study. CCLSs from all other U.S. states will be excluded from the study.
10. Right to Refuse: Your participation is entirely voluntary. You can refuse to participate or exit the survey at any time without penalty or loss of benefits to which you are otherwise entitled. You are free to decline to answer any particular question you do not wish to answer for any reason.

11. Privacy: Survey responses will be stored in the Qualtrics database, which is a secure website. The website does not store identifying information such as hospital names, participant names, e-mail addresses, or IP addresses. The LSU Qualtrics account is protected by a password, only accessible to the primary investigator. Therefore, your responses will remain anonymous. Your survey responses will not be identifiable and neither will whether you participated in the study. The records of this study will be stored securely in password-protected and encrypted electronic documents, only accessible to the primary investigator.

12. Signatures: The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the primary investigator. If I have questions about subjects’ rights or any other concern, I can contact Abby Johnson at ajoh369@lsu.edu, Institutional Review Board, (225) 578-8692, or e-mail irb@lsu.edu. I agree to participate in the study described above and acknowledge the investigator’s obligation to provide me with a signed copy of this consent form.

Q2: Do you consent to participate in this study?
   - Yes
   - No

Q3: Write your name below to affirm your confirmation to participate in the present study.

Q4: Do you have an active Child Life Specialist certification?
   - Yes
   - No

Q5: Did you work full-time in a Louisiana hospital from December 2019 throughout the duration of the COVID-19 pandemic (December 2019-present)?
   - Yes
   - No

Q6: Please respond to the following survey statements to reflect your perception of standard child life programs and services according to the following scale:

6 – daily
5 – 2-3 times per week
4 – weekly
3 – 2-3 times per month
2 – monthly
1 – occasionally; less than 1x per month
0 – never; not offered
**Standard Child Life Programs and Services (Before March 2020)**
- Child life volunteers supported the child life department.
- Child life volunteers engaged in bedside play with patients.
- Pet therapy was available for patients through the child life department.
- CCLTs utilized playrooms for child life interventions.
- CCLTs utilized teen rooms for child life interventions.
- Patients engaged in activities with volunteers in child life playrooms.
- Patients engaged in activities with volunteers in child life teen rooms.
- Patients engaged with peers in child life playrooms.
- Patients engaged with peers in child life teen rooms.
- Group activities were facilitated in the child life playrooms.
- Group activities were facilitated in the child life teen rooms.
- Donors provided the child life department with resources.
- Child life department donors engaged in interactive activities with patients.
- Hospital allowed patient’s caregiver to stay inside patient room.
- Hospital allowed multiple caregivers at a time inside patient rooms.
- Hospital allowed siblings to visit inside patient rooms.
- Hospital allowed non-family members visit inside patient rooms.
- Hospital allowed visitors to stay inside patient rooms overnight.
- Hospital allowed patient’s caregiver into pre-op units with patient.
- CCLTs provided services across multiple units within the hospital.
- CCLTs were allowed into surgery operating rooms with patients before procedures.
- CCLTs utilized closed circuit TV (CCTV) to engage patients in activities.

**Q7: Standard Child Life Programs and Services at Onset of COVID-19 Pandemic (March 2020 to June of 2020)**
- Child life volunteers supported the child life department.
- Child life volunteers engaged in bedside play with patients.
- Pet therapy was available for patients through the child life department.
- CCLTs utilized playrooms for child life interventions.
- CCLTs utilized teen rooms for child life interventions.
- Patients engaged in activities with volunteers in child life playrooms.
- Patients engaged in activities with volunteers in child life teen rooms.
- Patients engaged with peers in child life playrooms.
- Patients engaged with peers in child life teen rooms.
- Group activities were facilitated in the child life playrooms.
- Group activities were facilitated in the child life teen rooms.
- Donors provided the child life department with resources.
- Child life department donors engaged in interactive activities with patients.
- Hospital allowed patient’s caregiver to stay inside patient room.
- Hospital allowed multiple caregivers at a time inside patient rooms.
- Hospital allowed siblings to visit inside patient rooms.
- Hospital allowed non-family members visit inside patient rooms.
- Hospital allowed visitors to stay inside patient rooms overnight.
- Hospital allowed patient’s caregiver into pre-op units with patient.
- CCLSs provided services across multiple units within the hospital.
- CCLSs were allowed into surgery operating rooms with patients before procedures.
- CCLSs utilized closed circuit TV (CCTV) to engage patients in activities.

Q8: Current Standard Child Life Programs and Services (July 2020 to Current Date)
- Child life volunteers supported the child life department.
- Child life volunteers engaged in bedside play with patients.
- Pet therapy was available for patients through the child life department.
- CCLSs utilized playrooms for child life interventions.
- CCLSs utilized teen rooms for child life interventions.
- Patients engaged in activities with volunteers in child life playrooms.
- Patients engaged in activities with volunteers in child life teen rooms.
- Patients engaged with peers in child life playrooms.
- Patients engaged with peers in child life teen rooms.
- Group activities were facilitated in the child life playrooms.
- Group activities were facilitated in the child life teen rooms.
- Donors provided the child life department with resources.
- Child life department donors engaged in interactive activities with patients.
- Hospital allowed patient’s caregiver to stay inside patient room.
- Hospital allowed multiple caregivers at a time inside patient rooms.
- Hospital allowed siblings to visit inside patient rooms.
- Hospital allowed non-family members visit inside patient rooms.
- Hospital allowed visitors to stay inside patient rooms overnight.
- Hospital allowed patient’s caregiver into pre-op units with patient.
- CCLSs provided services across multiple units within the hospital.
- CCLSs were allowed into surgery operating rooms with patients before procedures.
- CCLSs utilized closed circuit TV (CCTV) to engage patients in activities.

Demographic Questions (Not a required response):

Q9: Total years of child life experience

Q10: Total years of child life experience in Louisiana

Q11: What year did you begin working as a CCLS in Louisiana?

Q12: Employment Status:
- Full-time
- Part-time

Q13: What area do you work within your respective child life department?
- Inpatient
- Outpatient
Q14: Which unit do you work on within your child life department?
- Emergency Department
- Hematology
- Inpatient Surgical
- Medical
- Oncology
- Outpatient Clinic
- Pediatric Intensive Care Unit
- Radiology
- Surgery
- Other

Q15: Gender
- Male
- Female
- Prefer not to say

Q16: Age

Q17: Marital Status
- Never married
- Married
- Separated
- Divorced
- Widowed

Q18: Education Level
- High school graduate or equivalent
- Some college, no degree
- Associate’s degree
- Bachelor’s degree
- Graduate or professional degree

Q19: 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

Q20: Ethnicity
- Hispanic or Latino
- Non-Hispanic
REFERENCES


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Dyer, O. (2020). COVID-19: Black people and other minorities are hardest hit in US. *British Medical Journal* 369, 1-2. [https://doi.org/10.1136/bmj.m1483](https://doi.org/10.1136/bmj.m1483)


VITA

Abby Johnson is a Louisiana native, born and raised in Lake Charles. She grew up looking forward to attending Louisiana State University and has since graduated with a Bachelor of Science in Child and Family Studies in May of 2020. Abby plans to receive her Master of Science in Child and Family Studies in May of 2022. She plans to pursue a career path in the field of child life, hoping to accept an internship position in the next few months. Two of her passions are to grow and to serve others; Abby is thankful to have found opportunities to do both in her time here at Louisiana State University.