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The role of a child life specialist in a paediatric healthcare setting: A Scoping review

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A Research Report submitted to the School of Therapeutic Sciences, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of MSc Med Child Life and Paediatric Psychosocial Care.

Johannesburg, 2025

Declaration

I Varisha Hutheram-Jhina declare that this Research Report is my own, unaided work. It is being submitted for the MSc Med Child Life and Paediatric Psychosocial care at the University of Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other University.



Varisha Hutheram- Jhina
Name of candidate

Signature of candidate

20th day of September 2025 in Centurion

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Dedication

Thank you to my Dearest Husband.

Abstract

Child Life Specialists (CLS) play an essential role in supporting the psychosocial, emotional needs and well-being of paediatric patients and their families within various healthcare settings and medical encounters. They are certified healthcare specialists who form part of the multidisciplinary team, with their training in early childhood development and play. Their focus is on the optimal growth and development of the child, by aiding in reducing the negative effects children may experience in healthcare or other potentially stressful healthcare encounters.

This scoping review explores the roles of the CLS within the healthcare setting. It further looks at the various interventions that the CLS utilises in these healthcare settings, which aid in reducing stress, anxiety, and trauma associated with medical interventions and hospitalisation.

The Joanna Briggs Institute methodology for scoping reviews guided the scoping review. Literature searches were conducted using specific inclusion and exclusion criteria. The literature search included the databases CINAHL, EBSCOHOST, Pubmed and childlife.org. These were searched for publications and studies which examined the roles and interventions utilised by CLSs within various paediatric healthcare settings during the time period 2020-2024. The reviewers screened the literature to ensure that the data collected met the inclusion criteria of this scoping review. Excel was used during the data extraction phase to chart the most relevant information obtained from each article that met the study's objectives. This was further reviewed to ensure no reporter biases were present.

The research yielded 203 papers after the removal of duplicates. The title and abstract of each article were further reviewed, where 139 papers were identified for full-text reviews. The final number of papers included in this scoping review was 37. Most of the studies identified utilised a qualitative methodology design. It was determined that many of the publications were by other healthcare professionals, the CLS was acknowledged in various roles within the healthcare setting, either as research participants or those providing the interventions.

The scoping review included 37 full text publications from different countries, with the

USA being the most prominent source of information related to the role of the CLS. The contexts of the studies were in various medical settings, with hospitals being the most prominent with health centres and communities to a lesser extent. The roles and interventions of the CLS were well described across these various healthcare settings.

This scoping review was able to answer to the objectives of this study, which were to better understand the role of the CLS and the interventions that they provide in various paediatric healthcare settings. The CLS roles include promoting optimal development and growth, facilitating coping and adjustment, education and preparation, support during medical procedures, palliative and hospice care, as well as school reintegration to a lesser extent. The interventions utilised by the CLS were noted to be through the use of expressive modalities, psychological preparation, coping and pain management techniques, distraction techniques, family involvement, therapeutic play, as well as grief and bereavement support.

This scoping review addressed the study's objectives by clarifying the roles of Child Life Specialists (CLS) and the interventions they provide across various paediatric healthcare settings. The roles of the CLS include promoting optimal development and growth, facilitating coping and adjustment, and providing education and preparation. They also support children during medical procedures, offer palliative and hospice care, and assist with school reintegration, though the latter is less common.

CLS interventions involve expressive modalities, psychological preparation, coping and pain management techniques, distraction strategies, family involvement, therapeutic play, and support for grief and bereavement. For example, a CLS might use art therapy or play sessions to help a child express fear before surgery. They may organise family meetings to prepare siblings for a loved one's end-of-life care, or employ distraction techniques such as storytelling or include interactive games during painful procedures. By tailoring these interventions to each child's needs, CLS play a vital role in reducing stress, supporting emotional well-being, and fostering resilience in healthcare environments.

The findings of this study highlighted the vast roles which are undertaken by the child life specialist and the significance of the interventions they provide within the healthcare setting. The scoping review identified that interventions such as play therapy, education,

and emotional support in mitigating the challenges faced by the paediatric population within healthcare environments were beneficial. The research illustrates the importance and necessity of integrating child life services into paediatric healthcare settings, which in turn promote holistic patient care and long-term well-being.

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Table of Contents

Declaration 2
Plagiarism declaration 3
Dedication 4
Abstract 5
Acknowledgements 7
List of Tables 10
List of Figures 10
List of Appendices 10
List of Abbreviations 11
Chapter 1 Introduction 12
1.1 Background 12
1.2 Problem Statement 12
1.3 Research question 13
1.4 Aims of study 13
1.5 Objectives 13
1.5.1 describe the role of the child life specialist within the paediatric healthcare setting. 13
1.5.2 describe the interventions utilised by child life specialists within the paediatric 13
1.6 Significance 14
1.7 Outline of this Research Report 14
Chapter 2 Literature Review 15
2.1 Introduction 15
2.2 Introduction to Child Life 15
2.3 Psychosocial needs of the child and family 16
2.3.1 Psychosocial Needs of the Child 17
2.3.2 Psychosocial Needs of the Family 18
2.4 Factors which may be relevant to South African healthcare settings 19
2.5 Psychosocial needs of children and their families within the South African Healthcare setting 20

2.6 Addressing psychosocial needs of children and families within the South African Healthcare setting 22
2.7 A Potential role of the Child Life Specialist in the South African Healthcare setting 24
2.8 Conclusion 25
Chapter 3 Methods 27
3.1 Study Design 27
3.2 Study Setting 27
3.2.1 Inclusion Criteria 27
3.4 Article selection 29
3.5 Data Extraction 29
3.6 Data analysis and presentation 29
3.7 Ethical Considerations 30
Chapter 4 Results 31
4.1 Introduction 31
4.2 Demographics of studies 48
4.2.1 Country of publication 48
4.2.2 Year of publication 49
4.2.3 Research design and methodologies used 49
4.3 Child life specialist roles and interventions used 51
4.3 Summary of findings: 53
Chapter 5 Discussion 56
5.1 Introduction 56
5.2 Demographics of the included literature 56
5.3. Identified roles of the Child Life Specialist in Paediatric healthcare settings 58
5.4. Interventions utilised by the Child Life Specialist in a Paediatric Healthcare settings 60
Chapter 6 Conclusion and Recommendations 65
6.1 Conclusion 65
6.2 Recommendation for Future Research in South Africa 65
6.3 Strengths and Limitations 66
6.4 Implications for the South African Context 66

References 68
Appendix 79

List of Tables

Table 0.2 Data collected for timeframe 2020-2024 33-47
Table 4.3 Role of the CLS represented by %..... 52
Table 4.4 Interventions provided by the CLS % 52

List of Figures

Figure 4.1 Number of studies collected during initial review……..... 49
Figure 4.2 Countries of publication for included studies …….. 50
Figure 4.3 Articles published per year 51
Figure 4.4 Child Life Specialist roles and interventions..... 53

List of Appendices

Appendix A Information sheet 79
Appendix B Consent form..... 79
Appendix D Turnitin Report 17

Operational Definitions:

Child Life Specialist: Healthcare professionals, with specific focus on psychosocial aspects of care with training in child development, family systems, and evidence bases supportive interventions (Boles et al., 2020).

List of Abbreviations

CLS- Child Life Specialist

CINHALH- Cumulative Index to Nursing and Allied Health Literature

EBSCOhost- Elton B. Stephens Company

LMIC- Low middle income countries

HIC- High income countries

Chapter 1 Introduction

1.1 Background

Meeting the psychosocial needs of children and their families in paediatric healthcare settings is essential for ensuring overall well-being and positive health outcomes (Balakas et al., 2015; Bandstra et al., 2008). These needs include emotional, social, and psychological support, which may be challenged by illness, family separation, prolonged hospital stays, or invasive medical procedures (Romito et al., 2021). Addressing these challenges requires a holistic, family-centred approach that prioritises both the child's and the family's needs (Rosenblatt et al., 2024). Although healthcare professionals strive to provide comprehensive care, the psychosocial experiences of patients and their families are sometimes overlooked due to heavy caseloads or competing clinical responsibilities (Claridge et al., 2020).

Lookabough et al. (2018) emphasise that Child Life Specialists (CLS) are vital members of the interdisciplinary paediatric healthcare team. Their expertise enhances the well-being of patients and families during stressful experiences associated with illness, injury, or the hospital environment.

The CLS is a healthcare professional whose training focuses on child development, family systems, and holistic, evidence-based support interventions (Boles et al., 2020). CLS professionals deliver individualised support, helping to educate and prepare children and families for medical procedures. For example, CLS professionals may use therapeutic play, distraction techniques, or age-appropriate explanations to help children cope with anxiety before surgery. These interventions can lead to reduced distress, improved cooperation during procedures, and better overall patient and family experiences (Claridge et al., 2020).

1.2 Problem Statement

Children and their families who are not prepared for the healthcare setting are often left with traumatising experiences, which could have lifelong effects on their perceptions of healthcare procedures and settings, including staff roles. This could lead to parents

and children feeling burdened or overwhelmed in these stressful environments (Claridge et al., 2020).

Child life should be a profession which forms part of essential healthcare services in aiding and providing quality healthcare (Brown et al., 2014). Child Life, as a profession, is not yet recognised in South Africa. Education and training in this field are indicated to provide holistic services to our patients and to aid in the sharing of knowledge and, best practices being upheld for patients and their families who find themselves in times of uncertainty and stress within healthcare settings. Romito et al.(2014), state that child life services are the "gold standard" in providing quality services, which encompasses an integrated approach to family and health-centred care. The results of this study can be used to advocate for the importance and need of determining the significance of the child life specialist and the interventions utilised, especially within the diverse context of South Africa, which would ultimately assist in ensuring that appropriate and efficient forms of interventions are used for the South African population, which is culturally diverse.

1.3 Research question

What is the role of a Child Life Specialist within the paediatric healthcare setting?

1.4 Aims of the study

The aim of this study was to identify the existing literature on the role of the child life specialist and to map the role and the interventions used by CLS within the paediatric healthcare setting.

1.5 Objectives

The objectives of this study were to:

- Describe the role of the child life specialist within the paediatric healthcare setting.
- Describe the interventions utilised by child life specialists within the paediatric healthcare setting.

1.6 Significance

Child Life, as a profession, is well established in North America and many high-income countries (HICs); however, it is not widely practised in lower-middle-income countries (LMICs). The purpose of this research study was to identify and discuss the role of the CLS and the interventions adopted in their practice to provide holistic care to their patients in various healthcare settings. The outcome of this research project could be used to advocate for the importance and recognition of this profession within South Africa.

This research project aimed to provide a better understanding of the scope of practice and interventions used by child life specialists so that we may introduce this in a South African healthcare context.

1.7 Outline of this Research Report

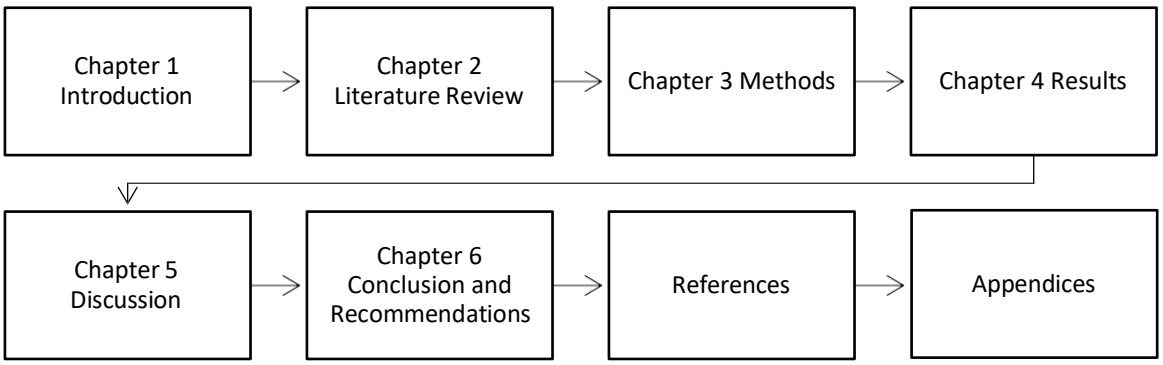


Figure 1.1. Outline of the research report

Chapter 2 Literature Review

2.1 Introduction

The literature in this scoping review looks at the various aspects of paediatric psychosocial care, which includes Child Life. The gaps in healthcare and the needs of the South African healthcare system are highlighted.

Literature was sourced from research platforms such as CINAHL, Pubmed, Childlife.org and Google Scholar. Only literature published in English was included for review in this scoping review.

The search terms used included paediatric psychosocial care, child life specialist, interventions, scope of practice, role of the child life specialist, and child life interventions, to name a few. Search terms included in this research project included: child life, psychosocial care, medical play, child life roles, therapeutic play, and child life interventions.

2.2 Introduction to Child Life

Child Life programmes have their roots based in play-based programmes which were created for children in hospitals in the United States in the 1920s (Wittenberg, 2020). Later, in 1955, Emma Plank, who was at the forefront of psychosocial paediatric intervention, created an educational support program which later developed into the child life profession (Wittenberg, 2020).

Child life specialists play an integral part of the interdisciplinary team in providing patient and family centred care in collaboration with the family and their physicians as well as other members of the healthcare team (The American Academy of Paediatrics, 2020). Child Life is recognised as a service which looks at the psychological, social, and intellectual needs of paediatric patients and their families (Bandstra et al., 2008) within the healthcare setting.

Child life programmes are widely recognised and accessible in high-income countries (HICs), and their services are recommended and offered in a variety of healthcare settings, not only in hospitals. Child Life Specialists not only work in hospitals but, with

the continuous change in the types of healthcare being provided, have expanded in their outreach to provide these services in other healthcare settings. These include outpatient services, ambulatory clinics, rehabilitative settings, palliative care facilities, emergency departments and even within dental or physician offices (Basak, et al., 2019; Brown et al., 2020; Claridge et al., 2020; Jerriann et al., 2006; Romito et al., 2021).

Healthcare is not limited to a healthcare setting, and healthcare professionals often overlook patients' needs other than those which are medical in nature. Patients and their families often face challenges when accessing healthcare and at other times of adversity (Lookabaugh et al., 2018). Child Life Specialists recognize these adversities as well as the stress and anxiety families may experience within healthcare settings and help children, parents and their families through providing therapeutic play, education and psychosocial services (Bandstra et al., 2008).

Healthcare settings are inherently traumatising in nature. Studies suggest that children who have been hospitalised often are overwhelmed, withdraw from their environment and families, have a longer recovery time, and sometimes regress developmentally (Sylva, 1993). Families or their support network go through the same anxiety, and stress in these healthcare settings as many staff members do not have the time to address every patient and families psychological and social needs. This leaves long-standing adverse effects on these patients and their families, who cannot cope with the stress and anxiety brought upon by these healthcare settings.

2.3 Psychosocial needs of the child and family

In paediatric healthcare settings meeting psychosocial needs of children and their families plays a major role to ensuring overall well-being and positive health outcomes for these families (Balakas et al., 2015; Bandstra et al., 2008). These needs include and are not limited to emotional, social, and psychological aspects which can be affected by their illness, separation from the family, long hospitalisation stays, or invasive medical treatments (Romito et al., 2021). Addressing these needs requires a holistic, family-centred approach to intervention to ensure we are being mindful of the meeting the child's and family's needs (Rosenblatt et al., 2024).

Children and families often experience stress and anxiety in a medical paediatric setting, and require forms of support, or intervention to help cope with the stressors that these impose (Claridge et al., 2020).The psychosocial needs of children and their families often get overlooked or are not fully understood in many healthcare settings.

2.3.1 Psychosocial Needs of the Child:

Children in healthcare environments often experience a range of emotions, including fear and anxiety, especially when faced with unfamiliar procedures, pain, or separation from their caregivers (Burns & Goldstein, 2023; Claridge et al., 2020). Emotional reassurance is therefore essential for helping children cope with these challenges. For instance, healthcare professionals can offer comforting words, maintain a calm presence, or simply allow time for children to express their feelings. In addition to emotional support, the physical environment also plays a crucial role in a child's well-being.

Children thrive best in settings that feel safe and familiar, which can help reduce feelings of isolation or distress (Thompson, 2018). This might include providing comfort objects—such as a favourite toy, stuffed animal, or blanket—or ensuring that families and caregivers can remain present during medical procedures (Grissom et al., 2016). Moreover, clear and age-appropriate communication empowers children by giving them a sense of control over their surroundings.

Explaining medical conditions and treatments in language suited to the child's developmental stage has a measurable impact: According to Romito et al. (2021), children who receive such explanations show significantly lower levels of anxiety during hospital stays. Methods of communication can vary, including the use of drawings, storybooks, or simple demonstrations to ensure comprehension (Burns-Nader et al., 2021).

Play is another essential element of psychosocial support in paediatric healthcare. Not only does play maintain normalcy and routine, but it also aids emotional regulation and expression (Grissim et al., 2020). For example, play therapy can involve activities like medical play, where children use dolls or toy medical kits to act out and better understand their experiences.

Distraction techniques, such as blowing bubbles or watching cartoons, are often used by nurses during procedures to divert a child's attention and minimize distress. Social activities, like group games or art projects, further help children connect with peers and express their emotions (Burns-Nader & Hernandez-Reif, 2016; Grissim et al., 2020).

Supporting children in managing stress also involves teaching healthy coping strategies. This may include guiding them through simple breathing exercises, engaging them in storytelling, or using relaxation techniques such as guided imagery (Burns-Nader et al., 2021; Thompson, 2018; Romito et al., 2021). For example, a child anxiously awaiting a procedure might be encouraged to listen to calming music or visualize a favourite place, which can help reduce anxiety.

Maintaining social connections is equally important for emotional well-being. Facilitating regular visits or video calls with family and friends, or encouraging participation in group activities, enables children to maintain a sense of normalcy and support during their hospital stay (Shea et al., 2021).

Finally, for children facing prolonged hospitalization or chronic illness, support for educational needs should not be overlooked. Hospital-based academic programs, such as bedside tutoring or virtual classrooms, help ensure that children keep pace with their schooling and remain engaged in learning (Briana et al., 2023; Hope et al., 2023; Thompson, 2009). These initiatives not only support academic achievement but also promote a sense of accomplishment and continuity in children’s lives.

By integrating these diverse strategies—emotional reassurance, familiar environments, clear communication, therapeutic play, effective coping mechanisms, and educational support—healthcare teams can holistically address the psychosocial needs of pediatric patients, contributing to more positive experiences and outcomes for both children and their families.

2.3.2 Psychosocial Needs of the Family:

Hospitalisation of a child is a traumatising for any parent or caregiver. These families

may experience stress, guilt, fear or grief during these trying times and would need constant emotional and psychosocial support to help them navigate this difficult time (Keller et al., 2023). Families and caregivers need clear, honest, and compassionate communication about the child's condition, therapies or treatment, and prognosis through education and constant communication from the healthcare teams (Love et al., 2022).

Some families may lack access to medical aid or insurance, which can increase the burden of healthcare expenses—including costs related to transportation and lost work time—thereby impacting their need for additional support services (Claridge et al., 2020). It is essential that families and caregivers are consistently engaged in decision-making and care planning throughout their healthcare journeys to ensure that their needs, as well as their cultural and religious values, are respected and addressed at all times (Thompson, 2009).

Many families have more than one child, and children with a sibling who is ill may feel neglected by the family as all attention is being provided to the sibling that is ill (Boles et al., 2020; Brosnon et al., 2021). They may further feel confused or worried during these times, and being in the hospital not only impacts the ill child but also indirectly affects the entire family’s experiences. Sibling support needs to be addressed by providing them with attention and educated explanations, which would assist in addressing their

emotional needs (Thompson, 2009). The same goes for caregivers and parents, who need to be supported by encouraging and seeking support through groups or professionals, as well as practising self-care. This support would in turn help them better support their child.

Hospitalisation, especially for children, can be distressing for both patient and family members (Bandstra et al., 2008).Children are particularly prone to the adverse effects of these psychological stressors, which impact their overall psychological state and development (Rokack, 2016; Shea et. al., 2021).

2.4 Factors which may be relevant to South African healthcare settings

South Africa is classified as a low-middle-income country (LMIC) (Bamford et al., 2018). Many regions, especially rural and remote areas, are underserved when it comes to healthcare delivery. In these places, families might only have access to a small clinic staffed by a nurse and a single doctor. Such facilities are often inadequate for accommodating both children and their families. Healthcare professionals may not be equipped to address the complex needs that arise. As a result, many families are referred to larger city centres, where more comprehensive care is available at public or private hospitals. When they arrive, they frequently encounter long waiting times, crowded and noisy waiting rooms, and not enough staff to provide thorough support. These conditions can make the healthcare environment stressful and overwhelming for both children and their families.

Key Challenges Impacting Care

Socioeconomic Disparities

In South Africa, the psychosocial needs of children and their families are shaped by numerous factors. Socioeconomic inequality is a significant challenge. Families living in poverty struggle with issues such as access to adequate nutrition, safe housing, and transportation to healthcare facilities (Bezuidenhout et al., 2021). For instance, a family living in a rural village may need to travel several hours by taxi to reach a hospital in the city. This journey can be expensive and exhausting, adding to the family's stress.

Language Barriers

Language barriers are another major obstacle. South Africa recognises 12 official languages, yet healthcare providers may only speak one or two of them. This can

make communication difficult and may lead to misunderstandings. For example, a child from a rural area who speaks isiZulu may struggle to explain their symptoms to a doctor who only speaks English or Afrikaans. Without a translator, important details about the child's condition might be overlooked, resulting in gaps in care.

Cultural and Religious Diversity

Cultural and religious differences require sensitivity and awareness from healthcare teams. South Africa's cultural diversity, known as the "Rainbow Nation," brings many traditional healing practices and beliefs about health. Healthcare providers must respect and incorporate these beliefs into their care plans. For example, some families may wish to consult a traditional healer in addition to seeking medical treatment. Recognising and honouring these preferences can help the family feel respected and supported.

Burdens of Chronic Illness and Disease

Children in South Africa often face chronic illnesses such as HIV/AIDS, malnutrition, and tuberculosis (Bamford et al., 2018). Managing these conditions requires long-term medical care and consistent emotional support. For example, a child diagnosed with HIV may need to visit the hospital regularly for treatment and check-ups, which can disrupt their daily life and schooling.

Healthcare System Limitations

Resource limitations in the healthcare system present additional challenges. Overcrowded facilities and a shortage of trained staff can make it difficult to address the full range of psychosocial needs. Long wait times and limited privacy can add to a family's anxiety and frustration.

Psychosocial Needs of Children

Emotional and Psychological Support

Hospitalisation, illness, and medical procedures can cause significant fear, anxiety, or trauma for children (Romito et al., 2021). These emotions are often heightened by exposure to violence, abuse, or poverty—challenges that are unfortunately common in some South African communities (Hendricks et al., 2019). Children need consistent emotional and psychological support to help them manage distress. For example, a child separated from their family during a hospital stay may benefit from regular visits

or video calls, which help maintain a sense of security and comfort.

Language Barriers in Emotional Care

Communication is also essential in providing emotional support. If healthcare providers cannot communicate in a child's home language, the child may feel isolated or misunderstood. For instance, a young child who cannot express their fears in English may become withdrawn and less likely to cooperate with treatment.

Disruption of Normal Routines and Play

Hospitals are unfamiliar and intimidating places, especially for children who are far from home. Normal routines are disrupted, and opportunities for social interaction with peers are often limited (Claridge et al., 2020). Children need outlets for play and normalcy to help them cope with treatment and hospitalisation. Incorporating play therapy or structured activities can provide comfort and support a child’s emotional well-being. For example, offering art activities or storytelling sessions can help children express their feelings and reduce anxiety.

Educational Disruption

Prolonged hospital stays can interrupt a child's education and academic development (Briana et al., 2023). This disruption can create additional stress and anxiety, particularly if children fall behind in their studies. Hospital-based academic programs, such as bedside tutoring or virtual classrooms, are essential for maintaining continuity in learning and supporting a child's sense of accomplishment.

Meeting These Needs: A Context-Specific Approach

Addressing these challenges requires a context-specific approach. Interventions must account for socioeconomic disparities, language and cultural differences, and the higher prevalence of chronic diseases like HIV/AIDS (Hendricks et al., 2019). Healthcare providers should build communication skills, provide culturally sensitive care, and ensure access to emotional, educational, and social support for children and their families. By doing so, they can help alleviate the stress of hospitalisation and improve outcomes for pediatric patients in South Africa.

2.5 Psychosocial Needs of Families in the South African Healthcare Setting

Children and their families often experience high levels of stress and anxiety during hospitalization, medical procedures, or when coping with the financial challenges of healthcare. Unemployment, poverty, and transport costs can all create significant barriers to accessing care (Bradshaw et al., 2003). Families benefit from emotional and psychological support, as well as financial assistance, to reduce the effects of these stressors.

For example, hospitals may offer counselling services for children and parents. Social workers can help families navigate financial aid programs and access government social grants. Community organisations often provide transport assistance to medical facilities or offer educational workshops on health literacy and coping skills.

Limited access to healthcare and a lack of knowledge about medical conditions and treatment options can make it difficult for families to support their children. Therefore, families and caregivers need assistance with information sharing and health literacy to better understand their child’s condition and provide appropriate support (Wittenburgh and Stickley, n.d). This might include receiving clear explanations from healthcare providers, connecting with support groups, or attending educational sessions organised by local clinics.

By offering a range of targeted supports related to emotional, psychological, financial, and educational systems, healthcare teams and communities can help families navigate these challenges more effectively.

Many families are larger in South Africa, and there are many siblings who may be involved in the care of their ill sibling or family member. This may negatively impact on these family members by making them feel neglected, or they may further experience emotional distress or anxiety when their sibling is being hospitalised (www.doh.gov.za). It is important that the healthcare team and family be mindful of this and provide appropriate support and coping strategies to these siblings and family members.

South Africa is a culturally diverse nation, well known as the “Rainbow Nation”. Families may hold varying traditional and cultural beliefs and practices related to healing and healthcare. It is crucial to be knowledgeable of this and always take into consideration the cultural and spiritual beliefs of these families (Bradshaw et al., 2003).

2.6 Addressing psychosocial needs of children and families within the South African Healthcare setting

The psychosocial needs of children and their families within the healthcare setting should not be overlooked. By addressing these needs, healthcare providers can enhance a child’s emotional well-being, strengthen family resilience during adversity, and improve overall health outcomes for patients and their families in South Africa’s often overwhelmed healthcare environments.

Advocating for mental health services, such as counselling and trauma-informed care, is essential yet often under-resourced in the country (Hendricks et al., 2019). The stigma surrounding mental health support remains a significant barrier. For example, some families may avoid seeking psychological services for fear of being judged by their communities or misunderstood by providers. In addition to overcoming stigma, it is also essential to consider the role of family dynamics in supporting children’s well-being.

Many South African families are close-knit and often live in multi-generational households, which can be both a source of support and stress. Family presence and inclusion in healthcare decision-making and treatment planning, especially when approached with cultural sensitivity, can provide comfort and reassurance during times of uncertainty (Hendricks et al., 2019; Downing et al., 2010). For example, allowing parents to stay with their hospitalised child has been shown to reduce anxiety and promote faster recovery. Siblings, too, may benefit from involvement in hospital

activities or the provision of age-appropriate information to help them understand and cope with a family member's illness, rather than feeling excluded or neglected.

Clear and age-appropriate explanations of treatments, illnesses, and procedures help reduce fear and anxiety in children during hospitalisation (Claridge et al., 2020). For instance, when healthcare providers use play or visual aids to demonstrate what will happen during a procedure, children often feel more in control and less distressed. Families form an integral part of a child's social circle, and when the CLS partners with families, they offer support not just to the child but to the entire support system. This partnership is a cornerstone of the patient- and family-centred care approach that guides the CLS's role (Wittenberg & Stickley, 2020). Studies have found that when parents are actively engaged in their child's care, children adjust better to the hospital environment and exhibit fewer behavioural regressions and emotional difficulties (Romito et al., 2021).

Transitioning to the economic context, socioeconomic disparities present substantial barriers to healthcare in South Africa. Financial burdens from medical costs, travel expenses, and lost income due to caregiving responsibilities can be overwhelming for families. Access to social grants, support from non-governmental organisations, and financial aid programs may help alleviate these challenges (Bamford et al., 2018; Hendricks et al., 2019). For example, social workers can assist families in applying for government grants that offset transport or medication costs, making it more feasible for children to receive consistent care.

Many hospitals in South Africa are highly clinical in appearance and atmosphere, often lacking spaces that provide comfort for children. Creating child-friendly environments—such as playrooms, colourful murals, or designated quiet spaces—helps children feel safer and more at ease, supporting their psychological and emotional well-being (Hendricks et al., 2019). For example, access to a playroom can offer hospitalised children a sense of normalcy and opportunities for peer interaction, both of which are vital for healthy development.

In addition, many communities are located far from city centres, making access to centralised healthcare challenging. It is vital, therefore, to develop community-based support programs that can strengthen local networks, advocate for improved healthcare access, and foster social connections. These relationships help ensure healthcare is

culturally sensitive and appropriate, enhancing cooperation among families, caregivers, and providers (Van Niekerk et al., 2020). For instance, community health workers can provide home visits to educate families about ongoing treatment, reducing the need for costly or difficult travel to distant hospitals.

Within the South African paediatric healthcare context, psychosocial support is currently available in various forms (Hendricks et al., 2019). Referrals to psychologists, social workers, and professionals trained in play-based interventions are more common in the private than in the public health sector, due to resource limitations. However, even in the private sector, services may be inaccessible to some families due to high costs or the need for medical insurance (Bezuidenhout et al., 2021). For example, families relying on state hospitals may face long waiting times for specialist appointments, while those seeking private care might encounter steep fees for counselling or therapy sessions.

The South African healthcare system is thus divided into public and private sectors, each with distinct barriers to accessing psychosocial professionals (Bezuidenhout et al., 2021). In the public sector, families may wait weeks or months for appointments due to understaffing, whereas in the private sector, only those with sufficient resources or comprehensive medical aid can regularly access support services. As a result, children and families in under-resourced areas may not benefit from the full scope of psychosocial interventions that could mitigate the challenges of hospitalisation and chronic illness.

By weaving together family engagement, community support, culturally sensitive care, and the strategic use of available resources, the South African healthcare system can more effectively address the psychosocial needs of children and families, thereby improving outcomes and fostering resilience in the face of adversity.

2.7 A Potential role of the Child Life Specialist in the South African Healthcare setting

In South Africa, the paediatric population is met with high rates of illness and mortality (Bezuidenhout et al., 2021). However, this has improved in the last decade, but still

poses a great threat to this vulnerable population (Bamford et al., 2018). The paediatric population, which has high rates of malnutrition and infection in South Africa, demands a higher need for psychosocial interventions in both public and private sectors (Bamford et al., 2018).

The CLS forms an integral part of the multidisciplinary team in paediatric healthcare settings (Rudder et al., 2019). The inclusion of the CLS, who are trained professionals to help children and their families cope with the inherent trauma they experience in healthcare settings through the use of various modalities, such as play, education and emotional support (Thompson, 2009).

The CLS will be better versed in collaborating with other healthcare members, such as the psychologist or social worker, for counselling, therapy and other crisis interventions (Claridge et al., 2020). They may assist in sourcing appropriate support groups, which helps connect families who may be experiencing similar situations. This allows for better communication and builds on understanding and shared experiences (Desai et al., 2020). The CLS will advocate for normalcy within the hospital setting to allow for optimal development and growth of children of all ages (Grissim et al., 2020).

Within the South African healthcare setting, which is overwhelmed by increased case loads, long working hours and staff shortages, the CLS would act as bridging the gap to provide a family-centred care approach which involves the families in care decisions and aids in collaborating a healing healthcare environment (Bezuidenhout et al., 2021, Van Niekerk et al., 2020).

Children who receive CLS reported significantly lower levels of anxiety than children who did not receive these services (Claridge et al., 2020). Further studies indicate that the involvement of Child Life services improve patient and family satisfaction ratings, are cost effective by reducing hospital stays and use of pharmacological medications, as well as reducing overall stress and anxiety of children and their families, leaving them with a better healthcare experience and lesser long lasting trauma (Claridge et al., 2020; Lookabough et al., 2018). Including child and family participation in meeting healthcare needs will support the children and their families in playing an active role in the healthcare they receive, which in turn will strengthen healthcare delivery and assist in optimising healthcare services received (Demirbag & Ergin, 2024).

By addressing these psychosocial needs, South Africa can create a more child- and family-centred healthcare system, ultimately improving health outcomes and the emotional well-being of this vulnerable population.

2.8 Conclusion

A greater awareness of Child Life may foster a collaborative environment for the child and family, which would enhance the model of patient and family centred care (Lookabough et al., 2018).

CLSs play a multifaceted role in paediatric healthcare settings, addressing the emotional, developmental, and psychological needs of children and their families (Boles et al., 2020). The interventions provided by CLSs are crucial in transforming potentially traumatic medical experiences into opportunities for coping, growth, and resilience of the paediatric population (Rosenblatt et al., 2024)

Bezuidenhout et al. (2020) indicate that South Africa has a large number of children who are accessing healthcare on a daily basis in either the public or private sector (2021).

This creates a suitable position for the CLS services in these settings at assist in addressing the psychosocial gap in healthcare.

The health professional councils in South Africa do not recognise Child Life as a profession. Advocacy, training and policy change would need to be implemented to aid in introducing the profession into our healthcare system.

There have been many forms of interventions which have been adopted by child life specialists. CLS's use interventions which are tailored to the emotional, cultural, developmental and social needs of the child and their families. As previously mentioned, their roots are set in that of play. Play forms an important part of their daily practice as this is the main modality of communication and building on interaction for a child (Juan Tai, 2008). Play for children creates a sense of normalcy, acts as a distraction to a new and overwhelming environment, and allows the child to express their emotions in an age-appropriate way (Zengin et al., 2020). It is a valued form of

interaction for CLS and is an essential component of the child life program and practice in all healthcare settings.

Chapter 3 Methods

3.1 Study Design

This study has taken the form of a scoping review. This has enabled the researcher to identify existing research on Child Life and its importance within the paediatric healthcare setting. The use of a scoping review rather than a systematic review was indicated as the researcher aimed to identify the literature on the topic, as well as any emerging themes which came from the literature (JBI, 2025; Munn et al., 2018). Using a scoping review format, the researcher aimed to inform practice in this field of study rather than address specific questions, which a systematic review would be more suited to answer (JBI, 2020; Munn et al., 2018). Through the analysis of the available literature, this scoping review can inform future research conducted in this field and its applicability within the paediatric population in the healthcare setting in South Africa.

The Joanna Briggs Institute (JBI) Guidelines were used as a reference and guided the methodology used in this research project (Peters et al., 2020). According to Munn et al., (2018), a scoping review is a detailed search of the available literature on the given topic, through various databases, by evaluating the available literature through a set of predetermined inclusion and exclusion criteria, it is possible to create a broad view of the available information and identify key characteristics and themes related to the topic by mapping an overall view of the available literature (JBI, 2015).

3.2 Study Setting

3.2.1 Inclusion Criteria

In accordance with the JBI guidelines, certain inclusion and exclusion criteria were established pertaining to the population, concept and context before conducting a scoping review, as this ensured that the literature used was relevant to the research aims and objectives (Peters et al., 2020).

The articles considered for use in this research project met the following criteria:

a. Population: Published and unpublished literature between January 2020 and December 2024 within the field of child life was explored. Research from 2020 to 2024 has been reviewed as the Child Life profession is a rapidly developing

profession which was heavily impacted by the COVID-19 pandemic in 2020, and a more recent look at the role of the CLS was reviewed. Articles which were published in languages other than English were excluded from this research project.

b. Concept: The concept that was being explored in this research project is the role of the CLS and the interventions they utilise within the paediatric healthcare setting.
c. Context: Articles published specifically in the field of Child Life were explored in the scoping review. Child Life includes various domains such as paediatrics, play therapy, and psychology, within various contexts; all these domains were explored and included in the scoping review.

3.2.2 Exclusion Criteria

Articles that were not freely available through the University of Witwatersrand library, as well as articles published in languages other than English, were excluded from the study. This was to avoid the articles not being translated correctly, leading to misinterpretation of information.

3.3 Search Strategy

The search strategy identified both published and unpublished literature. Initially, a limited search was conducted of CINHAL and PubMed to identify articles on the research topic. This allowed for further search terms to be identified, and the initial terms were amended to include a comprehensive search. The texts reviewed in the titles and abstracts were then reviewed from these articles to ensure that the criteria of the study were being met.

A full search strategy was then conducted of CINHAL (Ebscohost), childlife.org and Pubmed. This search strategy was developed with the assistance of the supervisors on this research project. The references of all articles were then reviewed for further publications and articles that met the inclusion criteria of the study. Search dates were established strategically to look at the role of the CLS within the healthcare setting between 2020-2024. This allowed for more recent publications and research to be identified for this review.

Language restrictions were applied to the search strategy, where articles published only in English were included. The search strategy for sources of unpublished and grey literature included a Google Scholar search as well as the use of the Childlife.org website. The search strategy made use of Boolean operators such as “and” and “or” to broaden the search reach to include not only the role of the CLS but healthcare settings, the types of

services they render, as well as the psychosocial impact on the paediatric population.

3.4 Article selection

After the search was completed, all identified citations were uploaded to Mendeley and duplicate articles were removed. Titles were then screened by the researcher and two supervisors, using the inclusion and exclusion criteria laid out at the beginning of this study to prevent bias in article selection.

Articles that did not meet the criteria were excluded. Exclusions were made based on the review of the articles retrieved and whether the search terms were included or excluded in the full text. Those that appeared relevant were highlighted for full-text review. After reviewing the full texts, sources not meeting the inclusion criteria were discarded. Any disagreements between reviewers were resolved through discussion.

3.4 Data Extraction

Using a data extraction table created in the initial protocol, data was extracted by a single reviewer from the research collected in this scoping review. The data extraction tool was in Excel format with the following headings: country of publication, year of publication, study type, area of discipline, roles and interventions of the CLS utilised in paediatric healthcare settings. As described in the scoping review protocol, the data extraction allowed for data to be collected on the most relevant factors, ensuring a comprehensive overview of the literature that met the inclusion and exclusion criteria. A second reviewer checked and confirmed that the data extracted met the inclusion criteria of the scoping review. Any disagreements between reviewers were resolved through discussion; if consensus could not be reached through discussion, a third supervisor was consulted to make the final decision. No authors were contacted to request additional data in this scoping review.

3.5 Data analysis and presentation

During the review process of this scoping review, a descriptive analysis was used to look at how many of the articles mentioned the role of the CLS, as well as the interventions utilised by the CLS in these studies. The data extraction table created in the

initial protocol was utilized to indicate the roles and the interventions of each article included in this study. The reviewers partook in the review of the charted data and helped establish the clear roles and interventions utilised. This was then presented graphically in a tabular format in Table 4.3.

Figures are provided to graphically represent the volume by year of publication, geographic location of published literature, and the roles of the CLS and interventions utilised by the CLS in healthcare settings. A narrative summary is provided under each figure to address the research questions of this scoping review.

3.6 Ethical Considerations

This research project has taken the form of a scoping review and therefore not made use of human participants. By having clear guidelines such as date of publication, roles and interventions as well as the accumulated data being reviewed by the supervisors, researcher bias was limited as clear guidelines for the inclusion and exclusion criteria for this study were established, along with amendments made throughout, which were reported on (JBI, 2020).

Chapter 4 Results

4.1 Introduction

Including child life specialist as a search term initially arose from the desire to recognise the crucial role the CLS play within the healthcare system, more specifically within paediatric healthcare settings and how this could be applied to the South African healthcare system. Using just the term child life specialist, or CLS roles, and CLS interventions initially yielded a large number of studies which did not meet the parameters of this research project. This further allowed for a review of the search terms, and the amendment of the year of publication aided in identifying the upward trend in published literature and the role of the CLS in paediatric healthcare settings between 2020 and 2024. Much of the research did not identify the CLS in the title of the article, which led to a full-text review of these articles where the CLS was the healthcare practitioner who administered the interventions. Here, it was identified that the role of the CLS, the scope of the CLS role and the interventions they utilise were identified.

Articles used in this research project were analysed using the charting table and the results obtained are presented to meet the objectives of this research project. Firstly, a table was used to illustrate the various roles of a the CLS within the paediatric setting. Secondly, the research was tabulated mapping the available literature within the field. This is accompanied by narratives to help further illustrate how the research was integrated into the objectives of the research study (JBI, 2015; Peters et al., 2020).

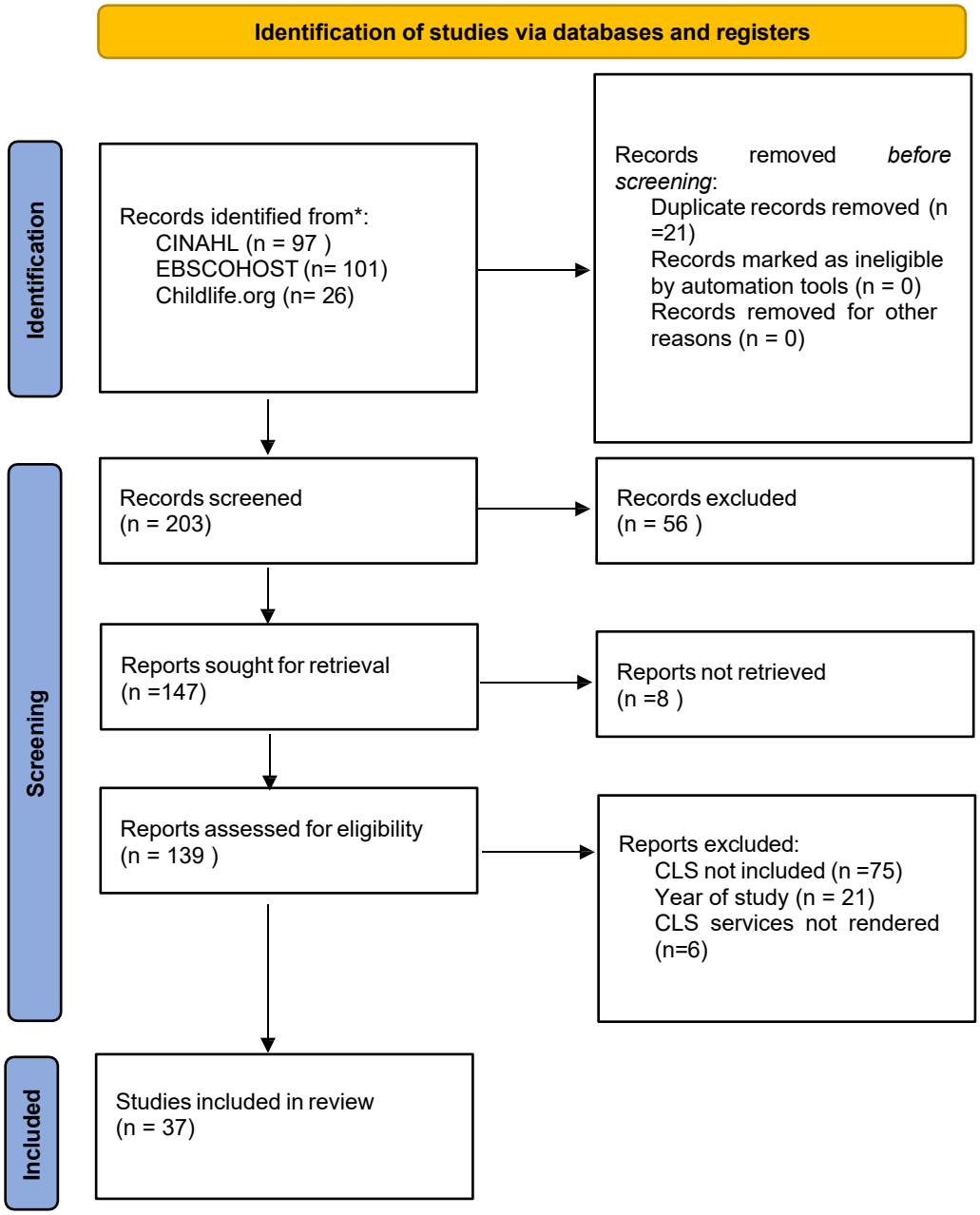

Identification of studies via databases and registers
Identification
Records identified from*:
CINAHL (n = 97)
EBSCOHOST (n= 101)
Childlife.org (n= 26)
Records removed *before screening*:
Duplicate records removed (n =21)
Records marked as ineligible by automation tools (n = 0)
Records removed for other reasons (n = 0)
Screening
Records screened
(n = 203)
Records excluded
(n = 56)
Reports sought for retrieval
(n =147)
Reports not retrieved
(n =8)
Reports assessed for eligibility
(n = 139)
Reports excluded:
CLS not included (n =75)
Year of study (n = 21)
CLS services not rendered (n=6)
Included
Studies included in review
(n = 37)

Figure :

Table 4.2 Data collected for timeframe 2020-2024

Name of study	Author(s)	Year of publication	Country in which the study was conducted	Aim/ Objectives/ purpose of study	Methodology	Outcomes of the study	Roles of CLS	Key Interventions provided by the CLS
1. Child and parent psychological experiences of Hospitalisation: An Examination of the Role of Child Life Specialists	Amy M, Lauren P Hajec, Lindsay P. Montgomery, Brittany M. Knapp	2020	United States of America	Examine whether the receipt or intensity of child life services was associated with children's distress and anxiety during hospitalisation. * Receipt or intensity of child life services was associated with the frequency or intensity of parents' stress or parent-child relationship quality.	Qualitative Study	Results revealed that children who received child life services reported significantly lower levels of anxiety than children who did not receive child life services.	Promoting optimal development and growth, facilitating coping Support during medical procedures Education and preparation	Therapeutic play Psychosocial support Procedural preparation Therapeutic art and music
2. Play-Based Interventions Delivered by Child Life Specialists: Teachable Moments for Youth with Type 1 Diabetes	Rebecca Ortiz La Banca, Deborah A. Butler, Lisa K. Volkening, Lori M. Laffel	2020	United States of America	Distinguish how a Child Life Specialist can improve the experience of children living with diabetes.	Qualitative Study	CCLSs may improve the experience of a child living with diabetes.	Facilitating coping and adjustment Education and Preparation Support during medical procedures	Medical play, Developmentally appropriate recreational play, Therapeutic activities, Health education, Coping and coaching support,

Name of study	Author(s)	Year of publication	Country in which the study was conducted	Aim/ Objectives/ purpose of study	Methodology	Outcomes of the study	Roles of CLS	Key Interventions provided by the CLS
								and procedural support. Family involvement Distraction techniques
3. The Value of Certified Child Life Specialists: Direct and Downstream Optimization of Patient and Family Outcomes	Jessika Boles Camille Fraser, Katherine Bennet, et al	2020	United States of America	Mapped roles of Child Life Specialist	Scoping Study	Inclusion of CLS in healthcare to reduce the financial, developmental and psychosocial costs associated with discomfort and distress.	Promoting optimal development Transitional care Education and preparation Support during medical procedures School re-entry Palliative and hospice care	Preparation Procedural support Coping skills Education Developmentally appropriate medical play/ play Sibling support Bereavement support Legacy building
4. Exploration of Relationship Between a Group Medical Play Intervention and Childrens Preoperative Fear and Anxiety	Maile T. Jones, Marissa Kirkendall, Lesilie Grissim, Sarah Daniels, Jessika C. Boles	2020	United States of America	Explore the relationship between group medical play activity and children's preoperative fear and anxiety.	Qualitative Study	Statistically significant decrease in anxiety and self-reported fear were observed after the intervention, suggesting that medica play may generate additional coping benefits when offered in group formats.	Group medical play session facilitated by a Certified Child Life Specialist	Medical play intervention in the preoperative waiting room, Coping and pain management techniques Therapeutic play

Name of study	Author(s)	Year of publication	Country in which study was conducted	Aim/ Objectives/ purpose of study	Methodology	Outcomes of the study	Roles of CLS	Key Interventions provided by the CLS
5. The Role of Certified Child Life Specialist with Adolescent and Young Adult Patients in Japanese Hospitals	Brittany M. Weittenberg, Yukari Stickley	2020	United States of America	Understanding the role of the child life specialist in providing psychosocial interventions for AYA patients in Japanese hospitals.	Qualitative Study	Child life specialists in Japan encounter several challenges to providing psychosocial interventions for their patients. These include the promotion of emotional expression, lack of developmentally appropriate resources and low child life prioritization due to the limited number of child life specialists.	Psychosocial interventions Education and preparation Promoting optimal development	Providing emotional support to the patient and their family Culturally appropriate expressive modalities Distraction techniques Therapeutic play
6. Exploring Child Life Role and Impact of Providing Psychosocial Care During Short-Term Medical Missions	Priti Desai, Emily Brock, Katherine Didericksen, John Olsson	2021	United States of America	Identify roles, experiences of CCLs who volunteered to provide psychological care for children and families on STM.	Survey Study	Non-pharmalogical pain management and education for capacity building regarding psychosocial care were not routinely provided.	Education and preparation Support during medical procedures	Psychological preparation Play/ normalization Emotional support

Name of study	Author(s)	Year of publication	Country in which study was conducted	Aim/ Objectives/ purpose of study	Methodology	Outcomes of the study	Roles of CLS	Key Interventions provided by the CLS
7. Supporting Children Experiencing a Pediatric-Sexual Assulut Forensic Examination: Preperation fir and Persceptions of the role of the Child Life Specialist	Sherwood Burns-Nader, Anna Schmitz, Blake Berryhill, Julie Parker	2021	United States of America	Examine child life Specialists' perspectives on their preparation for the role in P-SAFEs	Exploratory Study	Child Life Specialists felt valued by the multidisciplinary team, especially for their role in procedure report.	Coping and adjustment Education and preparation Support during medical procedures	Preparation Play Procedure support and distraction
8. Group Medical Play and Children's Self-Reported Fear in the Pre-Operative Setting	Leslie Grissim, Marissa Kirkendall, Maile Jones, Jessika Boles	2020	United States of America	Examine the impact of a group medical play intervention on children's self-reported fear and observed anxiety in the pre-operative waiting area, and determine the feasibility of	Pilot study	Participant fear ratings were analysed using a two-tailed, paired samples t-test, revealing that the group medical play activity was associated with a statistically significant decrease in participant fears about surgery.	Promoting optimal development Educational nd preparation Support during medical procedures	Group medical play Psychological preparation Therapeutic play Distraction techniques

				group medical play as a research intervention while balancing clinical care.				
Name of study	**Author(s)**	**Year of publication**	**Country in which study was conducted**	**Aim/ Objectives/ purpose of study**	**Methodology**	**Outcomes of the study**	**Roles of CLS**	**Key Interventions provided by the CLS**
9. Using social robot PLEO to enhance the well-being of hospitalized children	Emily Fraatz, Tina M. Durand	2021	United States of America	Examine the perspectives of two key members of the health care team, certified child life specialists and nurses, on how to meet the needs of children who have ASD and their families in hospital settings.	Qualitative Study	Themes that addressed ways to serve children who have ASD: 1. partner with the family 2. individualize care 3. advocate for more education 4. understand ASD is a spectrum of differences 5. think psychosocially 6. consistency in care.	Facilitating coping and adjustment Education and preparation Support during medical procedure	Expressive modalities (story telling) Coping Distraction techniques Therapeutic play
10. Virtual Reality as a Form of Interactive Distraction for Pediatric Patients Receiving Immediate Hypersensitivity Skin Tests: A Randomized Controlled Trial	Danielle N. Coleman, Michelle L. Hurley, Kira S. March, Katherine W. Schommer, Amy M. Curry, Mary D. Gordon, Joseph L. Hagan	2021	United States of America	Assess low-cost virtual reality with the standard of care as a form of interactive distraction on pediatric patient's cooperation and perception of negative procedural outcomes	Qualitative Study	None of the primary outcomes differed significantly for patients in the control versus experimental group, although patients in the experimental group were significantly more likely to fail to complete the assessment	Education and preparation Promoting optimal development	Procedure support Interactive Distraction techniques musical intervention/ medical clowning

11. Effects of Virtual Reality During Pediatric Vaccinations	Sherwood Burns-Nader, Emily Goldstein	2023	United States of America	Examine the effectiveness of virtual reality as a distraction on	Mixed method study	A significant difference in children's pain behaviors displayed during the	Non pharmacological interventions	Coping interventions, positioning, diaphragmatic

Name of study	**Author(s)**	**Year of publication**	**Country in which study was conducted**	**Aim/ Objectives/ purpose of study**	**Methodology**	**Outcomes of the study**	**Roles of CLS**	**Key Interventions provided by the CLS**
				minimizing pain in children receiving a vaccination.		vaccinations using a facial analogue scale to assess pain levels.	administered by CLS. Facilitating coping and adjustment Support during medical procedures Education and preparation	breathing, environmental adaptions, imagery, pharmacologic assistance, Family involvement Therapeutic play
12. The Impact of Child Life Interventions on a Clinical Vaccine Trial	Hope E. Wright, Jennifer S. Gerson, Jennifer H. Staab	2023	United States of America	Impact of Child Life Specialists on children during needle-related procedures	Quantitative Study	Children supported by a Child Life Specialist exhibited less distress than those who were not.	Education and preparation Procedural support	Coping strategies Breath work Distraction techniques Positive self talk Vibration at †he injection site Counting Squeezing stress ball Comfort holds

Name of study	Author(s)	Year of publication	Country in which study was conducted	Aim/ Objectives/ purpose of study	Methodology	Outcomes of the study	Roles of CLS	Key Interventions provided by the CLS
13. Child Life Services for Siblings of Chronically Ill Children	Briana P. Keller, Miles Abney, Jessika C. Boles	2023	United States of America	Examine the type and frequency of child life services available to siblings in pediatric healthcare settings in North America, and to identify barriers to sibling support provision.	Survey Study	Multiple sibling support frequencies and service types were identified, as well as barriers related to lack of clinical staffing. Limited sibling support referrals from multidisciplinary team members.	Education Emotional support Facilitating coping and adjustment	Psychological preparation Therapeutic play Family involvement Educational interventions Peer support groups and workshops
14. The Impact of a Child Life Video Preperation on Preoperative	Natalie Chicas, Hannah Knott, Daphne Lew, Selina Poon	2023	United States of America	Provide insight into the impact of a video modeling intervention on	Survey Study	Informational videos designed by Child Life Specialists were found to assist in reducing	Promoting optimal development	Psychological preparation Distraction techniques
15. Anxiety and Post-Hospital Behaviors				preoperative anxiety and postoperative behaviour changes.		preoperative anxiety and postoperative behavior changes in children ages 5 to 10 years old who are undergoing surgery.	Education and preparation Support during medical procedures	Therapeutic play

Name of study	Author(s)	Year of publication	Country in which study was conducted	Aim/ Objectives/ purpose of study	Methodology	Outcomes of the study	Roles of CLS	Key Interventions provided by the CLS
16. Complicating 'Voice' and 'Choice': The Role of Child Life Specialists in Shaping Children's Health Care Participation Rights in the Netherlands	Amarens Matthiesen, Alison J. Gerlach, Donna Koller,Fiona J. Moola	2024	Netherlands	Report findings from a qualitative study exploring the experiences of child life professionals with children's participation in decision-making in pediatric hospitals in the Netherlands.	Survey Study	Children's involvement in decision-making were shaped by adult-dominated and (age-based) developmental discourses even though an importance was placed on children participation.	Promoting participation rights in hospital Facilitating coping Education and preparation	Promoting children social agency Shared decision making Providing choices Therapeutic play developmentally appropriate Allowing for non verbal strategies of communication
17. Evaluating the Feasibility and Acceptability of Surgery Prep, a Virtual Reality Perioperative Walkthrough Designed to Help Pediatric Patients Psychologically Prepare for Surgery	Jasen Liu, Tracy Reyes Serrano, Tracy Nguyen, Charles A. Newcomer, Justin P. Wagner, Warren S. Comulada	2024	United States of America	Evaluates the feasibility and acceptability of surgery preparation with gamified virtual reality app that features a perioperative walkthrough designed to help pediatric patients psychologically prepare for surgery.	Qualitative Study	Acceptability was highlighted by patients and parents reporting the VR experience to be fun, interactive, engaging, and a tool for distraction and psychological surgery preparation.	Facilitating coping Education and preparation Support during procedures	Distraction techniques with VR walkthrough Psychological preparation (surgery preparation)

Name of study	Author(s)	Year of publication	Country in which study was conducted	Aim/ Objectives/ purpose of study	Methodology	Outcomes of the study	Roles of CLS	Key Interventions provided by the CLS
18. The Efficiency of Procedural Support Interventions on Coping and Distress for Children With Newly Diagnosed Leukemia: A Prospective Pilot Study	Alexandra M. DeLone, Anna George, Mattea Miller,Taylor M. Dattilo, Kyra M. Georgas, Palak Patel, Larry L. Mullins, Stacy L. Cooper	2024	United States of America	Evaluate serial comprehensive procedural support interventions provided by a certified child life specialist on mood, distress, and pain ratings during Infusaport access procedures for children newly diagnosed with leukemia.	Pilot study	Pain ratings significantly decreased during the study period. Repeated measures correlations demonstrated distress behaviours, pain rating, and mood were all significantly correlated within participants across time.	Education and preparation before use of infusaport Support during medical procedure	Procedural support interventions Building coping strategies Therapeutic play Review of procedural steps, Sensory experiences, rehearsal and teaching of Coping strategies(distractions and diaphragmatic breathing)
19. Child Life Specialist Services, Practice, and Utilization Across Health Care: a scoping review	Audrey Rosenblatt, Renee Pederson, Tyler Davis-Sandfoss, Lauren Irwin, Rebecca Mitsos, Renee Manworren	2023	United States of America	Map evidence regarding the scope of child life specialist practice and utilization.	Scoping Study	Research publications have increased over the past ten years, with more than 50% of studies published in the past 5 years. Multidisciplinary author tea depicted child life specialist services in a variety of roles were found to author these articles.	Facilitating coping and adjustment Promoting optimal development Support during medical procedures	Patient preparation and expectation setting, Distraction vocalization physical comfort Therapeutic play Family involvement

Name of study	Author(s)	Year of publication	Country in which study was conducted	Aim/ Objectives/ purpose of study	Methodology	Outcomes of the study	Roles of CLS	Key Interventions provided by the CLS
20. Piloting a Collaborative Psychosocial Intervention for Hospitalized Infants and their Caregivers	Dana Kim, Morgan Perrotti, Briana Keller, Jessika Boles	2024	United States of America	Pilot an interdisciplinary psychosocial intervention including songwriting, an expressive journal and activity book,	Pilot study	Increased caregiver–child bonding and increased caregiver confidence. Caregivers reported high levels of satisfaction with the intervention in qualitative responses.	Promoting optimal development and education and Preparation of games that can be used. Facilitating coping	ABC you're part of me program Expressive modalities with music therapists and art therapists Emotional support and Problem solving
				and a bonding assessment. Interventions were facilitated by a board-certified music therapist and Certified Child Life Specialist.			Support during medical procedures and Play	Reading books positive touch by parent Memories page and hand/footprints *expressive modalities

21. A retrospective cohort study of predictors and interventions that influence cooperation with mask induction in children	Juan L. Marquez, Ellen Wang, Samuel T. Rodriguez, Chloe O'Connell, Farrukh Munshey, Curtis Darling, Ban Tsui, Joseph Caruso, Thomas J. Caruso	2020	United States of America	Identify patient characteristics associated with cooperative mask inductions. The secondary aim was to determine whether preoperative interventions were associated with increased cooperation	Retrospective cohort study	Preoperative intervention by a Child Life Specialists was the sole intervention associated with improved cooperation.	Education and preparation: Preoperative intervention Promoting coping	Therapeutic play Techniques and coping strategies to foster trust and understanding, leading to cooperation
Name of study	**Author(s)**	**Year of publication**	**Country in which study was conducted**	**Aim/ Objectives/ purpose of study**	**Methodology**	**Outcomes of the study**	**Roles of CLS**	**Key Interventions provided by the CLS**
22. Psychosocial Support for Pediatric Patients at Proton Therapy Institutions	Nicole Boik, Matthew D. Hall	2020	United States of America	Assess the supportive care services provided at proton therapy institutions in the United States with a specific focus on education, parental involvement, and coping techniques	Qualitative Study : Questionnaires	Physicians (82.6%; 19 of 23), nurses (73.9%; 17 of 23), and child life specialists (69.6%; 16 of 23) most commonly provided education to paediatric patients and their families.	Promoting optimal development Facilitate coping Education and preparation Support during medical procedures	Psychological preparation Therapeutic play Coping techniques Family involvement

23. Child Life Specialists Decrease Procedure Time, Improve Experience, and Reduce Fear in an Outpatient Blood Drawing Lab	Kirsten Getchell, Kate McCowan, Erin Whooley, Christine Dumais, Addie Rosenstock, Alexandra Cole and Michele DeGrazia	2022	United States of America	Describe the impact of Child Life Specialist facilitated play on children's fear and caregiver satisfaction in an outpatient blood drawing lab	Prospective Cohort Study	Caregivers in the intervention group reported the atmosphere (P = .032) and experience (P < .001) more positively, and children reported lower fear scores (P = .007) as compared to the control group.Caregivers in the intervention group reported the atmosphere (P = .032) and experience (P < .001) more positively, and children reported lower fear scores (P = .007) as compared to the control group	Promoting optimal development Facilitating coping and adjustment Education and preparation	Play, Preparation, and procedural support Coping strategies Distraction techniques Therapeutic play Family involvement
Name of study	**Author(s)**	**Year of publication**	**Country in which study was conducted**	**Aim/ Objectives/ purpose of study**	**Methodology**	**Outcomes of the study**	**Roles of CLS**	**Key Interventions provided by the CLS**

24. Implementation of a Humanoid Robot as an Innovative Approach to Child Life Interventions in a Children's Hospital: Lofty Goal or Tangible Reality?	Tanya N. Beran, Jacqueline Reynolds Pearson and Bonnie Lashewicz	2021	Canada	Identify how Child life specialists (CLSs) implemented an innovative approach to providing therapeutic support to paediatric patients.	Qualitative study	The first was in regards to the adoption process whereby CLS challenges, successes, and surprises were revealed. Second, CLSs explained how using MEDiR aligned with the roles and responsibilities of their profession. The third area of understanding was in CLS explanation of the	Facilitating coping and adjustment Education and preparation Support during medical procedures	Psychological preparation Play and Therapeutic support.

						friendly emotional impact MEDiR seems to have on the hospital environment.		
Name of study	**Author(s)**	**Year of publication**	**Country in which study was conducted**	**Aim/ Objectives/ purpose of study**	**Methodology**	**Outcomes of the study**	**Roles of CLS**	**Key Interventions provided by the CLS**

25. Pediatric Coping During Venipuncture With Virtual Reality: Pilot Randomized Controlled Trial	Therese Canares, Carisa Parrish, Christine Santos, Alia Badawi, Alyssa Stewart, Keith Kleinman, Kevin Psoter, Joseph McGuire	2021	United States of America	Assess the feasibility of conducting a trial of VR in a pediatric emergency department and the feasibility of documenting observed coping behaviors during pediatric procedures. Secondarily, this study examined whether VR affects child and caregiver coping and distress during venipuncture in the pediatric emergency department.	Pilot Study	Patient coping differed across groups with higher coping in the VR group and child life specialist group than in the reference group	Promoting optimal development Facilitating coping Education and preparation Support during medical procedure	Psychological preparation Coping and pain management techniques Distraction techniques Therapeutic play

Name of study	Author(s)	Year of publication	Country in which study was conducted	Aim/ Objectives/ purpose of study	Methodology	1. **Outcomes of the study**	Roles of CLS	Key Interventions provided by the CLS
26. Child Life Interventions for Pediatric Dental Patients: A Pilot Study	Ty Hinze, Cinda McDonald, Carolyn A. Kerins, Alton G. McWhorter	2020	United States of America	The purpose of this pilot study was to assess whether child life intervention can be an effective alternative to pharmacologic behaviour management in uncooperative paediatric dental patients	Pilot Study	2. Child life intervention may be a promising addition to other behaviour guidance techniques. 3. Further investigations with statistical power should be conducted to evaluate the effectiveness of child life interventions on behaviour as well as on child and parent satisfaction.	Promoting optimal development Support during medical procedures Education and preparation	Distraction techniques Therapeutic play Expressive modalities: Book developed by CLS showed pictures of the operator and assistant, as well as pictures of the different segments of the appointment, such as placement of the rubber dam (RD).

Name of study	Author(s)	Year of publication	Country in which study was conducted	Aim/ Objectives/ purpose of study	Methodology	Outcomes of the study	Roles of CLS	Key Interventions provided by the CLS
27. Play-based interventions delivered by Child Life Specialists: Teachable moments for youth with Type 1 Diabetes	Rebecca O. La Banca, Deborah A. Butler, Lisa K. Volkening	2020	United States of America	Provide overview of CLS program in MDT paediatric diabetes program. Objective: types of interventions and innovative programs	Survey	Child Life interventions can help set the foundation for successful future self-care as these young children mature, help build more positive experiences in the clinic, reduce anxiety regarding CGM and pump insertions, and provide ongoing support and education for youth and families living with type 1 diabetes.	Developmentally appropriate play Support during medical procedures Health education	Teddy bear clinic Play based interventions Procedural support Medical play use of toys or medical equipment in playful, exploratory, Interactive educational games Educational ways in the presence of a supportive and knowledgeable adult.

Name of study	Author(s)	Year of publication	Country in which study was conducted	Aim/ Objectives/ purpose of study	Methodology	Outcomes of the study	Roles of CLS	Key Interventions provided by the CLS
28. Retrospective Review of the Safety and Efficacy of Virtual Reality in a Pediatric Hospital	Thomas J. Caruso, Chloe O'Connell, Jimmy J. Qian, Tiffany Kung, Ellen Wang, Susan Kinnebrew, Molly Pearson, Madison Kist, Maria Menendez, Samuel T. Rodriguez	2020	United States of America	Review the safety of VR by analyzing adverse events after the utilization of VR under CCLS supervision. Secondary objectives were to characterize the efficacy of VR in enhancing patient cooperation, describe the integration of VR into Child Life services, and identify interventions that accompanied VR.	Retrospective Study	Patients were more likely to be cooperative after receiving VR compared to pre-intervention.	Developmentally appropriate play Support during medical procedures	Medical play Procedural support

Name of study	Author(s)	Year of publication	Country in which study was conducted	Aim/ Objectives/ purpose of study	Methodology	Outcomes of the study	Roles of CLS	Key Interventions provided by the CLS
29. Child and Parent Psychosocial Experiences of Hospitalization: An Examination of the Role of Child Life Specialists	Amy M. Claridge, Lauren P. Hajec, Lindsay P. Montgomery, Brittany M. Knapp	2020	United States of America	Examined differences in child anxiety and distress, parent stress, and parent-child relationship quality between families who received child life services and those who did not.	Qualitative study	Children who received child life services tended to exhibit lower anxiety, but there were no differences in parent outcomes based on receipt of child life services.	Child and family centred care promote optimal development Education and preparation Support during medical procedures	Therapeutic play Psychological preparation Normalize unfamiliar environment explain diagnosis provide coaching during interventions Distraction techniques

Name of study	Author(s)	Year of publication	Country in which study was conducted	Aim/ Objectives/ purpose of study	Methodology	Outcomes of the study	Roles of CLS	Key Interventions provided by the CLS
30. Child Life Services	Barbara Romito, Jennifer Jewell,Meredith Jackson	2021	United States of America	Child life programs and the interventions utilized to facilitate coping and adjustment	Policy Statement	Policy statement	Facilitating school continuation/ integration Support during medical procedures Education and preparation Family support Developmentally appropriate support	Therapeutic play Coping techniques Activities to promote self esteem Expressive modalities: Art, music and story telling Family involvement
31. Child Life Specialists Decrease Procedure Time, Improve Experience, and Reduce Fear in an Outpatient Blood Drawing Lab (CLS Decrease Procedure Time)	Kirsten Getchell, Kate McCowan, Erin Whooley, Christine Dumais, Addie Rosenstock, Alexandra Cole and Michele DeGrazia	2022	United States of America	Describe the impact of Child Life Specialist facilitated play on children's fear and caregiver satisfaction in an outpatient blood drawing lab.	Prospective Cohort Study	Children and caregivers in the intervention group spent less time in the procedure room, with a median time of 3 min as compared to 5 min for the control group.	Support during medical procedures Education and preparation	Therapeutic play Psychological preparation Coping strategies Family involvement

Name of study	Author(s)	Year of publication	Country in which study was conducted	Aim/ Objectives/ purpose of study	Methodology	Outcomes of the study	Roles of CLS	Key Interventions provided by the CLS
32. Children's Rights to Participate in Health Care Decision-Making and the Role of Child Life Specialists in the Netherlands: A Critical and Focused Ethnography	Amarens Matthiesen	2022	Netherlands	Explore the role of CLSs in shaping children's participation rights in the context of two children's hospital in the Netherlands.	Qualitative study	Participants associated value and importance to children's participation in decision-making processes. However, children's participation processes were predominantly conceptualized as adult-dominated and shaped by developmental discourses on children's age-based decision-making abilities.	Promoting optimal development Facilitating coping Education and preparation Support during medical procedures	Psychological preparation Expressive modalities Distraction techniques Family involvement
33. "Doc McStuffins: Doctor for a Day" Virtual Reality (DocVR) for Pediatric Preoperative Anxiety and Satisfaction:	Jeffrey I Gold, Erin T Annick, Arianna S Lane, Katherine Ho, Ryan T Marty, Juan C Espinoza	2021	United States of America	Examine the feasibility and efficacy of DocVR for preoperative anxiety.	Feasibility Study	Patients who tried the DocVR experience responded overwhelmingly positively to both the VR technology and to the game itself.	Promoting optimal development Facilitating coping Education and preparation Support during medical procedures	Psychological preparation Coping and pain management Distraction techniques Therapeutic play

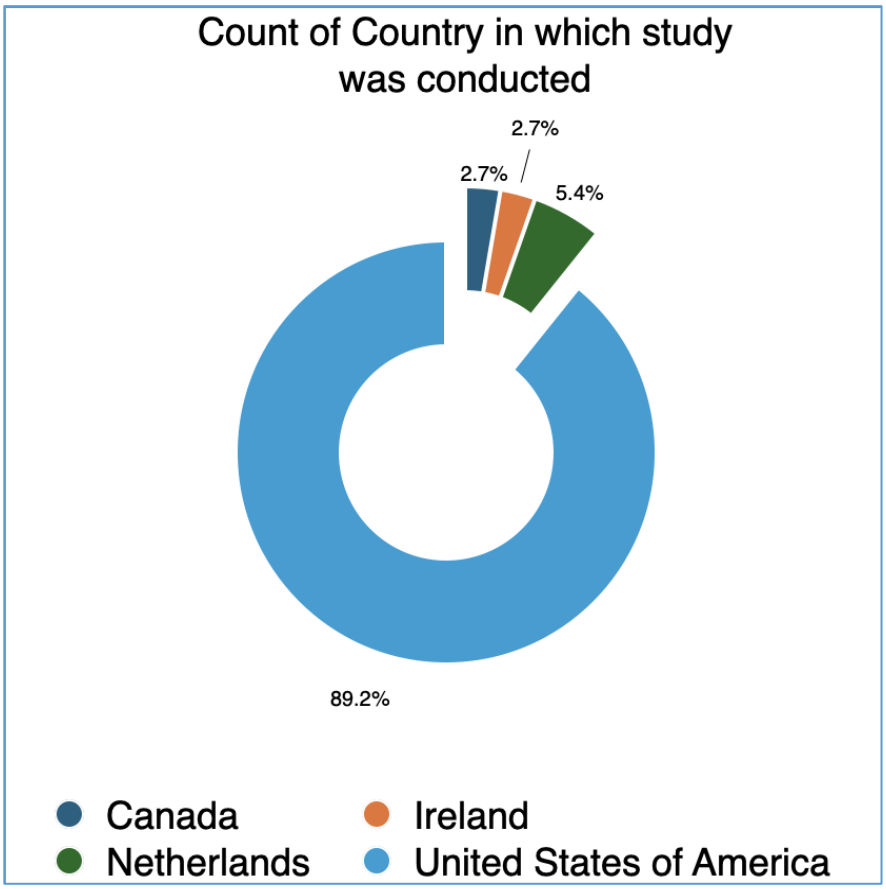
Pediatric Medical Technology Feasibility Study								
Name of study	**Author(s)**	**Year of publication**	**Country in which study was conducted**	**Aim/ Objectives/ purpose of study**	**Methodology**	**Outcomes of the study**	**Roles of CLS**	**Key Interventions provided by the CLS**
34. Legacy Building in Pediatric End- of-Life Care through Innovative Use of a Digital Stethoscope	Elyse Andrews, Amelia Hayes, Laura Cerulli, Elissa G. Miller and Nicholas Slamon	2020	United States of America	To better understand legacy making's effect on bereaved parents, this study examined (1) the presentation of legacy making to parents, (2) parent satisfaction, and (3) parent utilization of the project.	Survey	All respondents would recommend the MTHS program to other families experiencing end-of-life decision making.	Facilitating coping and adjustment Palliative and hospice care	Expressive modalities Bereavement support

Name of study	Author(s)	Year of publication	Country in which study was conducted	Aim/ Objectives/ purpose of study	Methodology	Outcomes of the study	Roles of CLS	Key Interventions provided by the CLS
35. The Impact of a Child Life Video Preparation on Preoperative Anxiety and Post-Hospital Behaviors	Natalie Chicas,Hannah Knott, Daphne Lew, Selina Poon	2023	United States of America	Provide insight into the impact of a video modelling intervention on preoperative anxiety and postoperative behaviour changes.	Qualitative Study	This study found that an informational video designed by a child life specialist is an effective tool for reducing preoperative anxiety and postoperative behaviour changes in children ages 5 to 10 years old undergoing ambulatory surgery	Promoting optimal development Facilitating coping and adjustment Education and preparation Support during medical procedures.	Psychological preparation Coping and pain management Distraction techniques Therapeutic play developmentally appropriate play activities, verbal and visual explanation of the surgery process with pictures,

4.2 Demographics of studies

The literature search resulted in n=37 articles that addressed the objectives of this study. To provide an overview of the included literature, the distribution of the studies will be discussed with regard to the country of publication, year of publication, research design and methodologies used.

4.2.1 Country of publication



Research involving the CLS was most prevalent within the USA (n=33), which represented over 89.2% of the research. Research in the Netherlands (n=2), followed by a lesser amount of 5.4% research, is still significant. Further studies based in Canada (n=1), representing 2.7% and Ireland (n=1) 2.7%. Lack of research involving the CLS in the African, Eastern and South American countries suggests an absence or lack of research on the role of CLS or that the title of the CLS may be different in these countries. Studies that met the inclusion criteria, however, which were not published in English, were not included in this research report.

Figure 4.1: Countries of publication for the included studies in this scoping review.

4.2.2 Year of publication

This figure represents the data collected over the period from 2020 to 2024. The number of studies which included CLS involvement has increased since 2020.

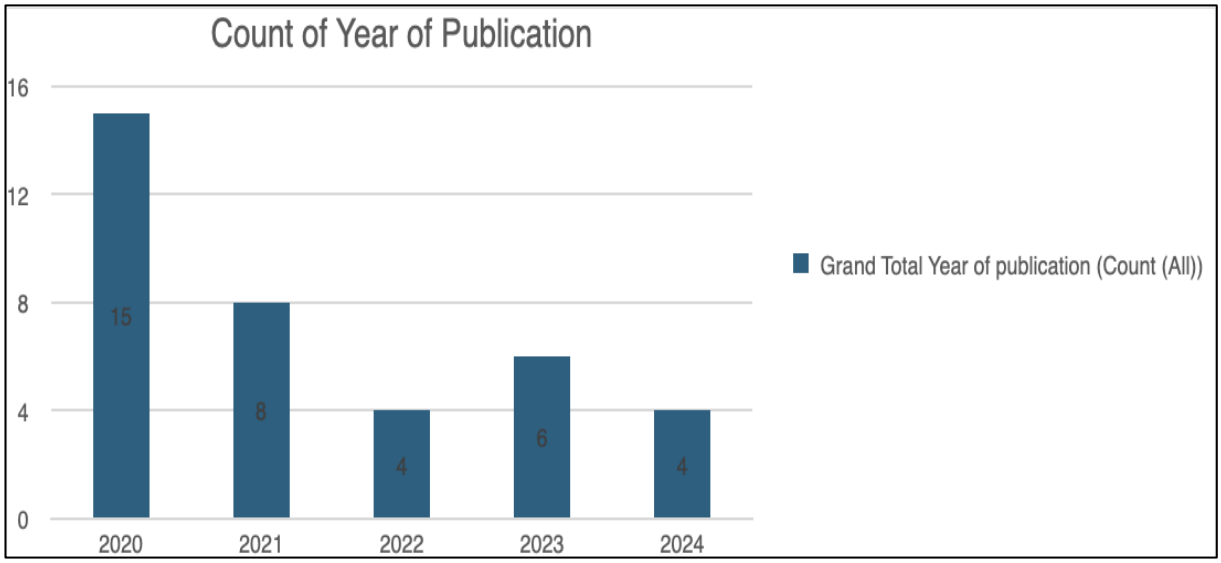


Figure 4.2 Articles published per year

This could have been because of the involvement of the CLS within the multidisciplinary team during and after the COVID-19 pandemic. It also indicates that CLS is a rapidly growing field of study, which is being recognised as a crucial part of rendering healthcare services. There is an identified drop in research published between 2022-2023, however it is evident that there is an upward trend with increased publications in 2024.

4.2.3 Research design and methodologies used

In this scoping review, through descriptive analysis of included publications, the research describes a wide variety of research designs and methodologies utilised.

Thirteen publications in this study followed a qualitative study design, which included research participants, and methodologies utilised included thematic analysis of the data collected from the studies and descriptive statistical analysis performed on computerised checklists of the studies.

Survey studies were the second most utilised study design identified in this scoping review, which included six of the publications in the included studies. In these publications, semi-structured interviews were conducted over a specified time frame with CLS and then with other hospital staff and/or participants in the study. Here, the data was then analysed through thematic analysis of the data and information collected. This aided in the coding of key themes and emerging ideas.

Five of the publications utilised in this scoping review were pilot studies, which included small groups with a pre- and post-study design. This allowed for the analysis of the feasibility of the design of the study and therefore increases the chance of success for future larger-scale studies being completed with this design. These studies included narrative and sign test methodologies, which included inductive, open coding approaches to analyse the data collected.

Prospective cohort studies were a lesser-used methodology identified during this scoping review, with only three studies making use of this research design. Here, data was collected over a period of time with research participants who had similar characteristics. The data was then analysed through comparisons attained from the control or experimental groups using t-tests, Fisher tests or Wilcoxon-Mann-Whitney tests for different variables of the studies.

One study included in this scoping review was identified as a policy statement, which did not make use of a study design or analysis of data but rather referred to the credentials of the CLS and the potential roles they encompass in healthcare settings through child life programs.

Retrospective study designs were further utilised by two of the publications included in this scoping review. In these studies, they made use of examination of pre-existing data and identified the association between these pre-existing factors and the outcomes of interventions after a period of time. Both publications included made use of VR systems. The data was further analysed using R-statistical computing software, p-value tests to identify the significance of the data collected, as well as an exploratory analysis of the data, which looked at the pre- and post-intervention variables.

Survey study designs were included in two of the publications attained. Here, the study design made use of checklists and patient satisfaction surveys to analyse the data, focusing on the interventions provided by the CLS and patient satisfaction with services rendered during and after the intervention.

Scoping reviews, which included two publications, were identified. Here, the Joanna Briggs Scoping review methodology was used to analyse the data collected, which looked at emerging themes where a descriptive analysis of data was utilised. Data was analysed over a set period of time with specific inclusion and exclusion criteria.

One study followed the methodology of a feasibility study. In this study, they made use of a Doc VR system to preoperatively with patients undergoing surgery. The results were analysed through the use of facial rating scales and surveys. Descriptive statistical analysis of the data accumulated was used to measure the differences in pre- and post-anxiety scores.

A mixed-method methodology was utilised by one study. In this study the researchers made use of non-pharmacological interventions rendered by the CLS to reduce the pain, fear and anxiety children may feel pre-operatively. This study took the form of an experimental study with a control group, and the data were reported on using descriptive analysis.

4.3 Child life specialist roles and interventions used

Articles were analysed to investigate the specific roles of the child life specialists and the interventions they use. Figure 4.4 summarises the roles of the CLS within healthcare settings as well as the interventions that the CLS may utilise during practice.

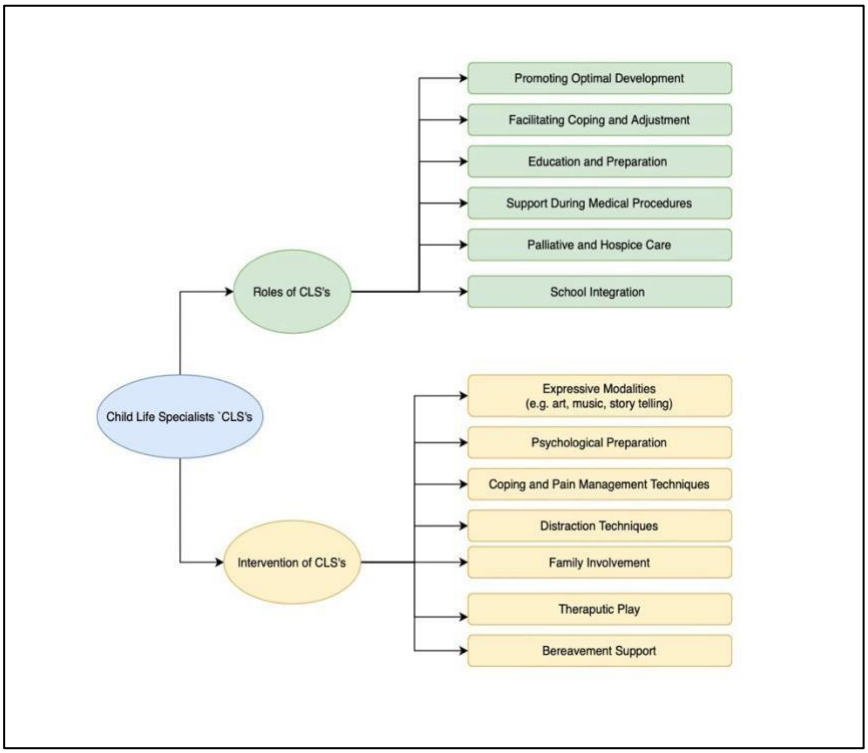


Figure 4.3 Child life specialist roles and intervention

Table: 4.4 Role of the Child Life Specialist represented by %

Role of CLS	Frequency (%)
Promote optimal development and growth	19 (51.35)
Facilitating coping and adjustment	18 (48.6%)
Education and preparation	27 (72.97%)
Support during medical procedures	11 (29.72%
School integration	11 (29.72%)
Palliative and hospice care	1 (2.7%)

Some of the included literature looks at the roles of the CLS. Roles identified included promoting optimal development and growth, which was mentioned in 19 articles, representing 51.35%. Facilitating coping was reported in 18 articles, which formed 48.6% of the data., Education and preparation were notably mentioned the most as a role of CLS, as this was included in 27 articles, which represented the majority (72.97%)

of the published articles. Support during medical procedures was mentioned in 11 articles, which is a lesser amount of 29.72% of the data; school integration was reported in 11 articles, which represents 29.72%. Lastly, palliative and hospice care were mentioned the least in one article, representing 2.7% of the data reviewed.

Table 4.5: Table representing the interventions provided by the CLS

CLS Interventions	Frequency (%)
Grief and bereavement support	3 (8.1%)
Therapeutic play	28 (75.6%)
Distraction techniques	17 (45.9%)
Non- Pharmacological pain management	18 (48.6%)
Family involvement	12 (32.4%)
Expressive modalities	12 (32.4%)

The analysis further included the interventions utilised by the CLS in healthcare settings, which included grief and bereavement support, which was mentioned in 3 articles, representing 8.1% of the publications included. Therapeutic play was mentioned the most, with this being included in 28 articles, which represents 75.6% of the data extracted. Distraction techniques were mentioned in 17 of the publications, representing 45.9%. Non-pharmacological pain management, which was included in 18 articles representing 48.6% of the included publications, Family involvement represented 12 articles, which is 32.4% of the publications and expressive modalities were mentioned in 12 articles, representing 32.4% of the data reviewed.

4.3 Summary of findings

This scoping review looked at the literature available between 2020 and 2024, which describes the role of the CLS and the interventions provided by the CLS in the paediatric healthcare setting. This was included in the research, with clear definitions and descriptions extracted from the research accumulated. There was no standardisation represented across studies.

The role of the CLS, as indicated in the research, was wide ranging, with multiple roles

being described in some of the studies. These include promoting optimal development, facilitating coping and adjustment within healthcare settings, education and preparation, support during medical procedures, palliative and hospice care, as well as school integration.

From the data analysis, it is recognised that the most prominent role of the CLS in healthcare settings is medical education and preparation for medical procedures, which was mentioned in a majority of the publications included. This was followed by the role of promoting optimal development and growth as well as facilitating coping and adjustment. The CLS further has a role in assisting with school re-entry or integration, which was still significant, however, to a lesser amount. To at least extent, the role of the CLS as in the included publications was that of providing palliative and hospice care, which was mentioned in a single article.

Child Life Specialists have been recognised as key players whose role is in helping children and their families navigate and adjust in varying healthcare settings and through their experiences, thereby helping in reducing the stress and anxiety experienced during paediatric hospitalisation or other healthcare experiences (Boles et al., 2020).

Child Life Specialists aim to provide child and family-centred care by tailoring the hospital environment to the needs of the children, communicating with children in their language, and listening and responding to the fears and anxieties of children and their families (Zengin et al., 2020). Child Life Specialists provide psychosocial interventions which aid the child and their family to cope with these stressful healthcare environments. These interventions include providing emotional support, coping techniques and strategies, medical procedural preparation, therapeutic play which is developmentally appropriate, family support, bereavement counselling and care, as well as child and parent education on diagnosis. All these interventions are focused on individual child and family needs and help improve the socioemotional experiences in these healthcare settings (Wittenberg, 2020). The data analysis suggests that the most utilised intervention by the CLS is the use of therapeutic play, which empowers children and their families in coping with the various stressful situations in the healthcare setting. Nonpharmacological pain management followed this to a lesser extent, however, still significantly through the use of distraction techniques, family involvement and topical ointments to create a sense of relief.

Geographically, the publications indicate that much of the research conducted on or by CLS and their roles and interventions are in the northernmost part of the world. This could be for various reasons, such as the fact that the accreditations are provided in English alone, the CLS could be referred to by another name in other countries, and this was not identified in the search. Much of the research included CLS in implementing the interventions rather than being the main author or developer of the research design. This could be an indication that the scope of CLS practice is still growing and not as universally recognised.

The data identified that the CLS is present in various forms of research methodologies, with the most prominent being in qualitative research methods. This could show the significance of the human interaction the CLS provides as being a vital role of psychosocial care.

Chapter 5 Discussion

5.1 Introduction

This literature review set out to meet the aim of identifying the existing literature on CLS and mapping the role of CLS and the interventions used by CLS within the paediatric healthcare setting. The following chapter will discuss the results from the previous chapter to meet the aim as guided by the following research objectives:

- To describe the role of the child life specialist within the paediatric healthcare setting.
- To describe the interventions utilised by child life specialists within paediatric healthcare settings.

5.2 Demographics of the included literature

Most of the articles included in this scoping review were published in the USA. As a profession, CLS originated in this part of the world. The recognition of CLS as a profession with board certifications and accreditations is also based in the USA. Some of the literature was identified in Canada, Ireland and the Netherlands.

The years of publication included in this scoping review were limited to the timeframe between 2020 and 2024. This was the onset of the COVID-19 global pandemic which impacted significantly on the healthcare system. However, there was a vast amount of research including the CLS in 2020, with some decline after this in 2021, with research falling to almost half the amount of publications identified. Hereafter, in 2022, there was an incline of research which included the CLS, with a downward trend again in 2024. These trends of research, including the CLS as a profession and important healthcare professional within the MDT team, could suggest that the roles of the CLS are possibly changing and evolving post-global pandemic.

The literature encompassed many various research designs and methodologies, as discussed in the results section of this scoping review. Many of the studies included were qualitative studies, which included the CLS as the key driver or service provider of the interventions, either through being research

participants, administrators of the interventions or first authors of the studies. Other studies, such as the pilot or cohort studies, included the CLS as the administrator mainly and the role or interventions they utilised.

Through the published research identified in this scoping review, CLS as a profession does have the opportunity to expand its global reach into the international communities, as there is a need for the role the CLS provides in paediatric healthcare settings. In other countries which do not have recognised CLSs, similar psychosocial support services could be implemented by other professionals, such as play therapists, recreation therapists or social workers. This could be a reason that the roles in interventions of the CLS were not identified during the literature search in a wide range of countries.

In the review of the published articles in this scoping review, the CLS was identified as a healthcare provider within the multidisciplinary team. Here, it was noted that they were not always the first authors of the published articles. This could indicate that CLS is still a growing profession and does not have a main agency in research specifically related to their scope of practice.

With the identified research, the scope of practice and interventions utilised by the CLS are important to adding to the depth and how the profession is continuously evolving and an array of fields of practice within an MDT or independently. The scoping review did not analyse research which did not include the roles or interventions of the CLS. However, through descriptive analysis of the publications, it is noted that the CLS was a main member in the implementation of the study, rather than in the conceptualisation and design process of the study.

Through the literature, it is identified that CLS is still a rapidly growing profession. Here, it was identified that through expanding evidence-based research related to the CLS and roles and interventions, information related to the outcomes of these interventions may become more recognised through research-based education.

5.3. Identified roles of the Child Life Specialist in Paediatric healthcare settings

The roles of the CLS are extensive within the healthcare setting. They provide forms of psychosocial support for children and their families during various stages of each patient's journey. Research suggests that the role of the CLS is broad and they have their roots in a family and child-centred care (Rosenblatt et al., 2024).

Identified roles of the child life specialist include promoting optimal development, facilitating coping and adjustment to unfamiliar hospital environments, procedural education and preparation of medical procedures, providing emotional support during medical procedures, aiding in parent support and advocating for problem-solving and support during palliative and hospice care and reintegration into the schooling environment through confidence building and support groups.

5.3.1 Promoting Optimal Development:

By promoting optimal development and growth, the CLS focus is on promoting optimal development, strengths and a sense of well-being of the child and their family whilst aiming to minimise the adverse effects of these potentially stressful settings (Jerriann et al., 2006; Romito et al., 2021). This involves ensuring that children's emotional, social, and cognitive development continues during a medical crisis, thereby minimising disruption to their normal growth (Matthiesen et al., 2024; Romito et al., 2021). Claridge et al. report that it is best practice to care for children and their families through a child and family-centred approach, which creates a sense of control and autonomy for the family. Herewith promoting optimal development of the child by meeting their needs first and tailoring medical spaces to be more inclusive and gaining the child and families' cooperation and by providing an overall better quality of care to the child and family (Claridge et al., 2020; Getchell at al., 2022; Ortiz La Banca et al., 2020).

5.3.2 Facilitating Coping and Adjustment:

This entails helping children and their families adjust to the changes brought on by illness or hospitalisation, thereby enhancing their ability to cope with stress (Getchell et al., 2022; Moerman & Jansens, 2021). CLS's assist children and their families

through the provision of coping and psychosocial support (Claridge et al., 2020). This is achieved through information sharing, about context, diagnosis or procedures which aid in the understanding their child's experience and coping mechanisms, by promoting that the parent or caregiver be involved in the process, build on communication and interaction not only with their child by also the medical team and other members (Claridge et al., 2020; Desai et al., 2020; Nader et al., 2016; Romito et al., 2021).

5.3.3 Education and Preparation:

The CLS plays a role in offering age-appropriate education about medical procedures, conditions, and hospital environments to reduce fear and anxiety (Claridge et al., 2020; Canares et al., 2021; Jones et al., 2020). This may involve using toys, books, or other visual aids to explain what to expect (Hill et al., 2024; Fraatz & Durand., 2021). Coleman et al. reported that through providing psychological preparation and education to the child and family, which utilises developmentally appropriate explanations about the sensory experiences, the medical procedures, and the step-by-step process of the procedures, aids in decreasing the pain and anxiety the child and family feel in medical situations (2021). The CLS further provide the child and their family with age-appropriate preparation for medical procedures through accessing social and support groups or peer mentors, which in turn create a support system for the child and family (Hill et al., 2024). In the study conducted by Burns-Nader et al. (2021) around support for paediatric assault patients, the CLS played a vital role in building rapport with the patient and the family. They further provided the patient and family with familiarisation of the equipment, comfort positioning and holds, and made use of medical teaching dolls to elicit interaction and engagement as well as education and information about the procedure, which in turn aided in reducing the fear and anxiety the child and family experienced before the procedure.

5.3.4 Support During Medical Procedures:

The CLS plays a vital role in providing medical or procedural support to the paediatric population (Boles et al., 2020). This involves assisting children during medical procedures by providing emotional support, distraction techniques such as the inclusion of a tablet or toy and comfort techniques such as positioning to reduce pain and anxiety felt during these procedures (Banca et al., 2020; Coleman et al., 2021). In the

research

A study conducted by Liu et al. (2024) found that the CLS played a vital role in providing the patient with preoperative preparations, which was a voiced concern by the patients. This helped them better understand the context and the process preoperatively.

In another study conducted by DeLone et al. (2024, cancer patients undergoing treatment who the CLS saw were recognised as the primary healthcare professional providing this form of support. This had a significant positive impact on the levels of anxiety, fear and distress; they presented with more cooperative behaviours and showed better coping and adjustment in future medical procedures (Claridge et al., 2021; DeLone et al., 2024; Romito et al., 2021).

5.3.5 Palliative and Hospice Care:

The CLS are present through all stages of each family's medical journey, and this includes offering emotional and psychological support to children and families facing terminal or life-threatening illnesses (Collette et al., 2021; Keller et al., 2023). The CLS achieve this by helping the patient and family cope with the processes involved in dying and providing comfort and support through inclusion of memory-making activities and supporting art-based therapies (Andrews et al., 2020; Claridge et al., 2020; Keller et al., 2023). In the study conducted by Andrews et al. (2020), the CLS formed part of the multidisciplinary team to ensure that care is provided holistically. The CLS provide support in the form of facilitating coping and creating remembrances and legacy making for the family, which in turn aids the family in better coming to terms with the diagnosis or end-of-life care.

5.4. Interventions utilised by the Child Life Specialist in a Paediatric Healthcare settings

In this scoping review, the data collected indicated that hospital and hospital-based medical settings were at the forefront of clinical domains in which the CLS services and interventions are being utilised. Hospital settings do have a unique set of psychosocial concerns impacting the services rendered by healthcare staff (Wilson,

2006). In these settings, the CLS has a unique skill set to help address these psychosocial concerns (Claridge et al., 2020).

Child life services form an essential part in paediatric healthcare, focusing on the psychosocial and emotional well-being of children and their families during medical experiences within various healthcare settings (Romito et al., 2021). The services provided by the CLS, who employ multiple interventions, including play therapy, education, and emotional support, to alleviate the stress and anxiety associated with hospitalisation or medical procedures, play a vital role in how the paediatric population experience these traumatic healthcare settings (Claridge et al., 2020; Chicas et al., 2023; Romito et al., 2021).

The interventions utilised by the CLS aid in providing holistic care to their patients and families, with modalities which are age-appropriate and consider the physical, mental and emotional well-being of each patient and their families. Research indicates that child life interventions significantly enhance the well-being of paediatric patients (Claridge et al., 2020). By utilising play and psychological preparation, child life specialists help children cope with potentially overwhelming situations, facilitating better adjustment and reducing immediate and long-term stress and anxiety (American Academy of Paediatrics, 2006; Romito et al., 2021). These interventions are associated with improved quality of care, better patient outcomes, and increased patient and family satisfaction (American Academy of Pediatrics, 2014).

Research indicates that Child Life Specialists (CLS) provide a comprehensive range of services and interventions within the healthcare setting (Rosenblatt et al., 2024). These services include therapeutic play, expressive modalities, psychological preparation, coping and pain management strategies, distraction techniques, family involvement, and bereavement support (Claridge et al., 2020; Rosenblatt et al., 2024).

5.4.1 Grief and Bereavement Support:

The CLS provide support during end-of-life situations, assisting families in coping with grief and facilitating memory-making activities during palliative end-of-life care (Andrews et al.,2020; Boles et al., 2020; Love et al., 2022; Thompson, 2009). The severity of grief and bereavement experienced by families who have lost a child is reportedly greater than that of another family member (Andrews et al., 2020). The CLS

Form part of the multidisciplinary team in providing holistic care to the family by providing support through the use of legacy-making activities, which include things such as memory books, writing, pictures and photography (Andrews et al., 2020; Boles et al., 2020). This has, in turn, shown to improve mental health outcomes and provides the families with better coping systems to come to terms with the loss of their child (Andrews et al., 2020).

5.4.2 Therapeutic Play and Distraction Techniques:

CLS engage children in therapeutic play to facilitate the expression of feelings and concerns, aiding in emotional processing (Claridge et al., 2020; Desai et al., 2021;Ortiz Le Banca et al., 2020). Erik Erikson suggests that to play out a scenario is the most natural way for a child to experience situations. Burns- Nader et al., 2016 discuss the different forms of play employed by the CLS in healthcare settings, including medical play, normative play and therapeutic play, which provides the child with age-appropriate coping mechanisms during stressful healthcare experiences. Children play to release their own frustrations and difficulties they may experience, despite the role it may have on development (Brown et al., 2020). Play has been found to help reduce the stressors and anxiety of a medical setting and experience for children. CLSs adapt the forms of play to suit the child's developmental and psychosocial needs (Boles et al., 2020; Brown et al., 2020; Romito et al., 2021).

The CLS employ distraction methods, such as storytelling, music, and interactive games, to ease anxiety during medical procedures (Boles et al., 2020; Grissim et al., 2020). Recent studies have indicated that the inclusion of virtual reality and robots has also proven to significantly improve on the stress, anxiety and fear children may experience in various healthcare situations (Gold et al., 2021; Moerman & Jansen, 2021). One publication reported the importance of play and distraction during P-SAFE examinations for patients who have been sexually assaulted (Burns-Nader et al., 2021). In this study, the CLS made use of various distraction techniques such as making use of the iPad, music, breathing exercises, conversations and relaxation techniques, anxiety and fear felt (Burns-Nader et al., 2021). Play in this study was primarily used for familiarisation with the medical equipment and to build rapport. Some of the most recent publications made use of virtual reality systems and robots, which created a form of interactive distraction for the child during a medical procedure

(Coleman et al., 2021; Burns- Nader & Goldstein., 2023; Wright et al., 2023; Chicas et al., 2023; Liu et al., 2024; Caruso et al., 2020; Gold et al., 2021). These studies found that the use of an interactive virtual reality system or robot with narratives provided by the CLS provided some support during medical procedures, where patients reported less pain and anxiety felt around the procedure, and increased patient cooperation during the procedures (Caruso et al., 2020, Gold et al., 2021; Moerman & Jansen 2021).

5.3.3 Nonpharmacological pain management:

Child Life Specialists assist with non-pharmacological pain management and coping strategies for children and their families (Boles et al., 2020; Chumpitazi et al., 2022). When age-appropriate strategies are combined with pharmacological intervention and non-pharmacological strategies, it has been found to provide better family experiences, reduce hospital stays, and improve staff experiences, as well as enhance the cost-effectiveness of medical procedures (Brown et al., 2020; Rokack, 2016). Non-pharmacological pain management interventions are used to reduce the fear, stress, and anxiety children have during medical experiences. This is achieved by the inclusion of distraction techniques, through creating a supportive environment and allowing for family involvement and participation, which are all services rendered by CLS staff (Caruso et al., 2020; Grissim et al., 2020; Liu et al., 2024). There is a growing body of research related to the positive impact non-pharmacological pain management strategies have on infants and children (Romito et al., 2021). The most common forms of non-pharmacological pain management are reported to be information sharing, providing comfort, support and positive reinforcement techniques, which are widely provided by the CLS (Bandstra et al., 2007).

5.2.4 Family Support and Advocacy:

CLS offer guidance and resources to families, helping them support their child's emotional and developmental needs (Boles et al., 2020). Psychosocial preparation is an important part of child life services (Liu et al., 2024). Preparing children and their families for clinical visits, medical procedures, or surgeries is an important part of ensuring that both the child and family’s experience of this does not result in negative outcomes and long-lasting negative effects on the child and family (DeLone et al., 2024). Children develop a significant fear or anxiety in any form of medical

intervention, helping them and their family's understand and work through these anxieties has better outcomes postoperatively as well as minimal behavioural changes (Liu et al., 2024; Kim et al., 2024; Zengin et al., 2020). The CLS advocates for family-centred care, ensuring that the family's role is respected and integrated into the child's healthcare plan (Fraatz & Durand, 2021; Kim et al., 2024). Families form an inherent part of a child's social circle. CLS partners with families to provide support to both them and the child (Boles et al., 2020). Family involvement is an important part of the patient- and family-centred approach, which CLS's role is guided by (Boles et al., 2020). Having family and parent involvement has been found to have a positive impact on the child's overall well-being and ability to adjust to the healthcare settings they find themselves in (Chicas et al., 2023; Desai et al., 2021; Kim et al., 2024; Romito et al., 2021).

Conclusion

The presence of child life specialists in healthcare settings has been shown to improve communication, alleviate anxiety, and create a more welcoming environment for paediatric patients (Lerwick, 2013). Their involvement leads to decreased procedure times and enhanced patient and family experiences (Claridge et al., 2021; Desai et al., 2021; Getchell et al., 2022; Sutter et al., 2022). By providing timely, individualised education and support, CLS empower children and families to actively participate in healthcare experiences, promoting positive coping strategies and building resilience for future medical engagements (Boles et al., 2020; Claridge et al., 2020; Desai et al., 2021).

In summary, integrating child life services into paediatric healthcare is essential for addressing the psychosocial needs of young patients (Fraatz et al., 2021; Wright et al., 2023). These services and interventions provided by the CLS not only reduce the challenges associated with medical environments but also promote holistic care of the child and their family, as well as aid in maintaining the long-term psychosocial well-being of children and their families (Chicas et al., 2023; Liu et al., 2024; Wright et al., 2023).

Chapter 6 Conclusion and Recommendations

6.1 Conclusion

Child life services form an essential part in paediatric healthcare in North America, focusing on the psychosocial and emotional well-being of children and their families during medical experiences within various healthcare settings (American Academy of Paediatrics, 2021; Wright et al., 2023).

The scoping review objectives were met by growing the understanding of the role of the CLS in the paediatric healthcare setting, as well as the various forms of interventions that they perform. The roles of the CLS in the paediatric healthcare setting include facilitating coping and adjustment, promoting optimal development and growth, providing education and preparation, offering support during medical procedures, and providing support for palliative and hospice care. These roles are completed in various medical healthcare settings with the multidisciplinary team to enhance the holistic care that children and families should be provided. The services or interventions provided by the CLS who employ various interventions, including therapeutic play, education, psychological preparation, distraction techniques, bereavement and emotional support, to alleviate the stress and anxiety associated with hospitalization or medical procedures play a vital role in how the paediatric population experience these traumatic healthcare settings (Chicas et al., 2023; Keter et al., 2023).

In summary, integrating child life services into paediatric healthcare is essential for addressing the psychosocial needs of young patients within the paediatric healthcare setting. These services provided by the CLS not only mitigate the challenges and trauma experienced by this population, which is associated with medical environments, but also promote holistic care and long-term well-being for children and their families.

6.2 Recommendation for Future Research in South Africa.

Recommendations for future research should illustrate the outcomes of the various interventions presented by the CLS within paediatric healthcare settings. This will aid in supplementing the information provided in this report by highlighting the importance of the CLS within the paediatric healthcare team and the value they hold in supporting

children and families in these circumstances. Further research in the field of Child Life and the impact it may have on the South African paediatric healthcare system will be beneficial in addressing the gap in psychosocial care provided in South Africa.

6.3 Strengths and Limitations

This study is not without limitations. The research completed in this study identified most of the evidence within HICs such as America, Canada, and European countries. However, this may suggest reporter bias as the search was limited to studies and literature published in English. Research published in other countries and languages possibly could have included further information on the importance of the CLS within healthcare settings.

A further limitation to this study was the timeframe, which was limited to a search within 2020-2024 of published and grey literature. This limited the amount of literature available about the role of the CLS. As CLS is a relatively new field of study, it was identified that the role of the CLS is expanding within varied paediatric healthcare settings, which could be due to a shift after the COVID-19 pandemic. Future research could benefit from identifying the change in the role of the CLS within healthcare settings after the COVID-19 pandemic as the need for psychosocial support was greater during this time.

6.4 Implications for the South African Context

Efforts to improve the healthcare experiences and outcomes of the paediatric population in South Africa are critical in ensuring that their emotional and psychosocial needs are being met to allow for optimal development and growth (Bezuidenhout et al., 2021). Through the inclusion of the CLS in various paediatric healthcare settings, this will allow for specific and more inclusive psychosocial services to be provided to this population. The University of Witwatersrand has taken the first step in providing training in psychosocial care to professionals who are already paediatric healthcare service providers. This, however, does not qualify the professional as a CLS, as clinical hours need to be completed in the field. By advocating for CLS services in our healthcare settings, will be a key driver in it being introduced into our healthcare settings. This will allow for professionals to gain expertise in psychosocial care, which

can be utilised in their everyday practices with the specific implementation of CLS services in various South African healthcare facilities and within communities.

Child life, as a profession, is a rapidly growing young profession with a growing base of research evidence which promotes the positive impact the CLS services have in the healthcare setting. In South Africa, there is a large paediatric population which is accessing healthcare services daily, which would benefit from services rendered by the CLS in the private, public, community or school settings.

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Appendix

Appendix A: Approval of title letter

UNIVERSITY OF THE
WITWATERSRAND,
JOHANNESBURG

Private Bag 3 Wits, 2050
Fax: 027117172119
Tel: 02711 7172076

Reference: Ms Sandra Munesar
E-mail: Sandra.munesar@wits.ac.za

16 January 2025
Person No: 2516879
PAG

Mrs VH Jhina
Unit 2410 Century Skye Apartments
Die Hoewes
Centurion
0157
South Africa

Dear Mrs Varisha Jhina

Master of Science in Medicine: Approval of Title

We have pleasure in advising that your proposal entitled *Role of the Child Life Specialist in a Paediatric Healthcare setting* has been approved. Please note that any amendments to this title have to be endorsed by the Faculty's higher degrees committee and formally approved.

Yours sincerely

Ms Sandra Munesar
Faculty Registrar
Faculty of Health Sciences

Appendix B: Record of literature searches

The following table provides record of the databases searched; search terms used; the total amount of articles found as well as the total amount of articles excluded based on no full-text available. The following limits were used on the databases:

- Only articles published between January 2020 and December 2024
- Only articles published in English

Database	Search terms	Total number of articles	Articles excluded: no full text
CINAHL	Child life, interventions, psychosocial interventions, child life roles, child life program, child life roles	97	6
Childlife.org	Child life interventions, child life roles, psychosocial care, child life therapeutic play	26	0
Pubmed	Child life scope of practice, child life interventions, child life and psychosocial care, child life roles	101	2

Appendix C: Turnitin Report

FINAL EXAMINATION

ORIGINALITY REPORT

11%	7%	6%	7%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	profiles.stanford.edu Internet Source	<1%
2	discovery.researcher.life Internet Source	<1%
3	read.qxmd.com Internet Source	<1%
4	Dana Kim, Morgan Perrotti, Briana Keller, Jessika Boles. "Piloting a Collaborative Psychosocial Intervention for Hospitalized Infants and Their Caregivers", Music Therapy Perspectives, 2024 Publication	<1%
5	Submitted to Harding University Student Paper	<1%
6	Rebecca Ortiz La Banca, Deborah A. Butler, Lisa K. Volkening, Lori M. Laffel. "Play-Based Interventions Delivered by Child Life Specialists: Teachable Moments for Youth With Type 1 Diabetes", Journal of Pediatric Health Care, 2020 Publication	<1%
7	www.ekla-prod.com Internet Source	<1%
8	Sarah Brown, Phillipa Cordner, Kelly A Weir, Tawanda Machingura. "A systematic scoping literature review on the use of child life therapy (CLT) in the perioperative setting", Journal of Perioperative Practice, 2021 Publication	<1%
9	ejtr.vumk.eu Internet Source	<1%
10	Submitted to Sheffield Hallam University Student Paper	<1%

11	mental.jmir.org Internet Source	<1 %
12	pubmed.ncbi.nlm.nih.gov Internet Source	<1 %
13	www.schoolandcollegelistings.com Internet Source	<1 %
14	Submitted to Clarkson College Student Paper	<1 %
15	Submitted to University of Dayton Student Paper	<1 %
16	Submitted to University of Iowa Student Paper	<1 %
17	Yaryan, Heather Renee. "Enhancing Provider Education on the Concomitant Use of Psychedelic Substances and Psychotropic Medications", The University of Arizona, 2025 Publication	<1 %
18	Abbott, Simon George. "South African Healthcare and the Fourth Industrial Revolution: New Applications of Technology.", University of Johannesburg (South Africa), 2024 Publication	<1 %
19	Submitted to Bowling Green State University Student Paper	<1 %
20	www.ncbi.nlm.nih.gov Internet Source	<1 %
21	Submitted to American Public University System Student Paper	<1 %
22	www.pubfacts.com Internet Source	<1 %
23	Submitted to University of Birmingham Student Paper	<1 %
24	Submitted to University of Bristol Student Paper	<1 %
25	Submitted to University of Queensland Student Paper	<1 %

26	Submitted to Vanderbilt University Student Paper	<1 %
27	Submitted to University of Colorado, Denver Student Paper	<1 %
28	www.ispad.org Internet Source	<1 %
29	www.liebertpub.com Internet Source	<1 %
30	tron.uttaradit.doae.go.th Internet Source	<1 %
31	ulspace.ul.ac.za Internet Source	<1 %
32	Submitted to Queen's University of Belfast Student Paper	<1 %
33	repository.up.ac.za Internet Source	<1 %
34	Submitted to University of Florida Student Paper	<1 %
35	www.um.edu.mt Internet Source	<1 %
36	www.sciencepublishinggroup.com Internet Source	<1 %
37	Submitted to CSU Northridge Student Paper	<1 %
38	Submitted to De Anza College Student Paper	<1 %
39	Luca Marie Dettmann, Sally Adams, Gemma Taylor. "Investigating the prevalence of anxiety and depression during the first COVID-19 lockdown in the UK: systematic review and meta-analyses", PsyArXiv, 2021 Publication	<1 %
40	kau.diva-portal.org Internet Source	<1 %
41	Submitted to Cardiff University Student Paper	<1 %

42	Submitted to Coventry University Student Paper	<1 %
43	Submitted to Midwestern State University Student Paper	<1 %
44	Submitted to Saint Joseph's College of Maine Student Paper	<1 %
45	Submitted to The University of Memphis Student Paper	<1 %
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47	Submitted to City University Student Paper	<1 %
48	www.leamingtoncourier.co.uk Internet Source	<1 %
49	Submitted to Widener University Student Paper	<1 %
50	onlinelibrary.wiley.com Internet Source	<1 %
51	Briana P. Keller, Terrah F. Akard, Jessika C. Boles. "Legacy in paediatrics: A concept analysis", Journal of Advanced Nursing, 2023 Publication	<1 %
52	Submitted to University of Wales, Bangor Student Paper	<1 %
53	www.joannabriggslibrary.org Internet Source	<1 %
54	www.jpedhc.org Internet Source	<1 %
55	Submitted to Grand Canyon University Student Paper	<1 %
56	Tan Yigitcanlar. "Urban Artificial Intelligence - A Guidebook for Understanding Perceptions and Ethics", Routledge, 2024 Publication	<1 %
57	www.coursehero.com Internet Source	<1 %

58	www.nhsrho.org Internet Source	<1 %
59	www.sciencegate.app Internet Source	<1 %
60	Julia Kontak, Caitlyn Macrae, Hilary Caldwell, Becky Feicht, Stephanie Heath, Camille Hancock Friesen, Sara Kirk. "The process of student engagement in school health promotion: A scoping review", Springer Science and Business Media LLC, 2023 Publication	<1 %
61	air.unimi.it Internet Source	<1 %
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66	www.wjgnet.com Internet Source	<1 %
67	Richins, Mark. "Adapting Family Centered Original Songwriting for Children with Chronic Illnesses: A Mixed Methods Case Study", Illinois State University, 2020 Publication	<1 %
68	erepository.uonbi.ac.ke Internet Source	<1 %
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70	www.fisiologiadelejercicio.com Internet Source	<1 %
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